

# Aboriginal Knowledge, Digital Technologies and Cultural Collections

Policy, Protocols, Practice

Poppy de Souza, Fran Edmonds, Scott McQuire, Michelle Evans and Richard Chenhall





# Aboriginal Knowledge, Digital Technologies and Cultural Collections Policy, Protocols, Practice

Melbourne Networked Society Institute Research Paper 4 October 2016

#### **Authors**

Poppy de Souza, Fran Edmonds, Scott McQuire, Michelle Evans and Richard Chenhall

#### Contact

Fran Edmonds, edmondsf@unimelb.edu.au

#### Acknowledgements

The authors of this report acknowledge the support and contribution of the Reference Group associated with the ARC LP (130100733) *Aboriginal young people and Digital Storytelling*. This includes all contributors to this report, many of whom are named within.

The ARC LP (130100733) partners: VicHealth; the Australian Centre for the Moving Image (ACMI); and SistaGirl Productions, Brunswick are also acknowledged for their overall support for this project.

We would also like to especially thank the Korin Gamadji Institute (KGI) at Richmond Football Club, including the Indigenous Community Engagement Manager, Luke Murray, and the young participants from KGI, whose digital stories inspired the concept for this report.

#### ISBN

978-0-7340-5323-7

#### Licence



This work is published under a creative commons licence. http://creativecommons.org/licenses/by-sa/3.0/au/



This report arises from research conducted for the ARC LP (130100733), Aboriginal young people in Victoria and Digital Storytelling. It responds to the increasing use of digital technologies to provide access to all kinds of information that reside in collecting institutions, which relates specifically to Indigenous people, their culture and heritage. While individual collecting institutions have their own policies, procedures and protocols concerning access and distribution of digitised material, there remain many new avenues for consideration regarding the production and control of digital content. This is particularly the case with respect to the explosion of digital-born material (such as the digital stories made by Aboriginal young people for the ARC LP) and how it is collected and managed now and into the future.

Here, we discuss the management and use of digital collections in relation to the experiences of curators, collections managers, archivists, production managers and librarians, including members of the Aboriginal community in southeast Australia, who currently work in collecting institutions or with digital collections. We highlight their concerns and ambitions as we seek to understand how the current suite of collection policies and protocols contributes to new and progressive approaches to the care of these collections.



	ADSTRACT	
1	Introduction	
2	Research methodology	8
	2.2 Interviews	8
	2.4 Scope and limitations	
3	Aboriginal Voice	
4	Collection Management and Cultural Control	
	4.1 Cultural Protocols and collection policy	
	4.2 Aboriginal and Torres Strait Islander Data Archive (ATSIDA).	
5	Navigating knowledge systems and digital ethics	
	5.1 New pathways, new connections	
6	Access	
7	Database management	34
•	7.1 Managing complexity	
	7.2 Ara Irititja	38
8	Education and knowledge exchange	41
	8.1 Indigenous digital heritage	
9	Considerations and conclusion	47
	9.1 Prioritising Aboriginal voice	
	9.2 Developing cultural indicators	
10	References	50

1 Introduction

The growing intersection between cultural heritage, digital technologies and archival practice raises both challenges and creates opportunities for the sustainable and appropriate treatment of Indigenous digital cultural heritage collections. With the rapid development of digital technologies and the recent 'digital turn' in archival and museum practice, collecting institutions globally have had to address new ethical tensions and practical challenges with regard to existing and future Indigenous cultural materials held in their care. As increasing Indigenous representation, agency and control demands a critique of the institutional structures that organise, classify and manage cultural materials, fundamental notions of 'access' and 'information' are contested. This raises a specific set of legal, cultural, technical, institutional and epistemological concerns, both for current practice as well as future directions. Some of these relate to the ongoing refinement of institutional protocols and frameworks for best practice; others are concerned with cultural protections and legal categories of ownership; while others are centred on the affordances, limitations and very meaning of digital technologies themselves. Digital technologies provide opportunities for new forms of intercultural knowledge exchange and cultural custodianship (for example 'digital keeping places' and distributed models of digital access), yet also - and paradoxically - the proliferation of the digital also brings a risk of reduced control (Museums Australia, 2005: 9).

The ATSILIRN Protocols¹ acknowledge that the digitisation of Indigenous materials 'poses some complex issues for organisations' (Section 12). As Nakata et al., (2008: 233) identified in their examination of Indigenous digital collections almost a decade ago, 'Indigenous interest in the digitisation of Indigenous materials is not just based on a nostalgic yearning from the past'; rather, digital access is vital for 'future utility, for creative endeavours and, importantly for emotional and spiritual restoration of a people'. The rise in digital-born materials - including the digital stories co-created with Aboriginal young people as part of

<sup>&</sup>lt;sup>1</sup> The ATSILIRN Protocols were developed in 1995 (updated in 2012) by the Aboriginal and Torres Strait Islander Library, Information and Resource Network (ATSILIRN) and published by the Australian Library Information Association (ALIA). They provide a guide for developing best practice in the sector for the management, care of and access to collections relating to Aboriginal and Torres Strait Islander communities. They are described in more detail further on.

the ARC-Linkage Project - highlights a need for institutional acquisition policies to be 'proactive rather than reactive' (SLNSW Digital Collecting Strategy, 2014: 7) when it comes to collecting digital material, including community-generated digital content. The rise in digital technologies, participatory models of cocreatorship and 'records as social entities' - made possible by social media and web 2.0 - hold the 'potential to support the "decolonisation" of the archive' (McKemmish, et al., 2011). Central to this de-colonising project might be a focus on building collections that 'better represent Aboriginal people and Aboriginal voice' (Kirsten Thorpe, Manager of Indigenous Services at the State Library of NSW).

## 1.1 Project aims and structure of the report

This research is part of a broader Australian Research Council (ARC) Linkage project, Aboriginal young people in Victoria and Digital Storytelling (LP130100733; 2014-17),2 which explores the role of digital storytelling and technologies as a creative forum for Aboriginal young people, which can support connections to their culture and their cultural knowledge, and contribute to social and emotional wellbeing. As part of this broader project, we aimed to understand how Aboriginal knowledge, including material culture, images and other information that resides in cultural institutions and communities is currently collected, managed and disseminated, and the collection policies, protocols and practices that exist for digitally-mediated dissemination and display. Digital-born and community-generated content increasingly circulates online, through social media and digital sharing platforms, including digital material connected to Aboriginal culture, knowledge and identity. The digital stories co-created with Aboriginal young people as part of our research during a series of workshops from 2014 to 2016 contribute to this increasing digital archive. How is this material managed and circulated? How do collecting institutions respond? How might digital technologies provide new pathways for communities to control their own materials? And what are the implications of the increased reliance on privately owned, commercial platforms for the circulation and storage of cultural materials? It is in this context that we were interested to understand the suite of

<sup>&</sup>lt;sup>2</sup> Full details available at: <a href="https://researchdata.ands.org.au/linkage-projects-grant-id-lp130100733/516938">https://researchdata.ands.org.au/linkage-projects-grant-id-lp130100733/516938</a>

policies, protocols and frameworks that inform how institutions manage their Indigenous collections, including connected issues relating to the digitisation, digital access and digital distribution of Aboriginal knowledge, and the extent to which procedures and practices on the ground reflected these. We were also interested in the development and use of digitally distributed models for community-based archives and databases.

Here we report on the key themes and issues that emerged from our interviews and analysis, drawing on direct quotes from interview respondents and supported by relevant policy and literature in the field. It begins with a brief overview of the research methodology; discusses the key themes and findings; provides some provisional recommendations; and concludes with directions for further research.

# 2 Research methodology

#### 2.1 Literature review

Since the 1990s, a growing body of literature has emerged identifying the key challenges and opportunities for collecting institutions in relation to the management of Indigenous heritage materials and knowledge in the digital age, both in Australia and in relation to First Nations communities internationally. Our research builds on, and is informed by, important contributions from Aboriginal and Torres Strait Islander scholars in the field - including Marcia Langton and Martin Nakata (2007), Terri Janke (1998; 2007), Lyndon Ormond-Parker (2009; with Sloggett, 2011; and et al., 2013) and Sandy O'Sullivan (2013).

In addition to this body of work, our research surveyed collection management, digitisation and Indigenous policy documents from several cultural institutions; key legal and Intellectual and Cultural Property frameworks; protocols and guidelines for the management of Indigenous material culture and heritage; reports and theoretical research. This provided us with a broad overview of the policy context and existing frameworks around Indigenous cultural heritage materials, including digital collections, with a focus on Victoria in particular. The review was not comprehensive, and focused primarily on a selection of National and Victorian institutions. It aimed to provide a snapshot of the key debates, policy gaps and ongoing challenges in the management and control of Indigenous cultural material in the context of contemporary collecting institutions and the digital.

#### 2.2 Interviews

We conducted fourteen interviews between November 2015 and February 2016 with librarians, collection managers, curators, academics and cultural practitioners working with Indigenous digital collections, materials and/or communities in various capacities. This included four (4) Aboriginal<sup>3</sup> and ten (10) non-Aboriginal respondents, including members of the Reference Group and Partner Investigators on the project. One of the four Aboriginal respondents

<sup>&</sup>lt;sup>3</sup> In this report we use Aboriginal or Indigenous people as an abbreviated term to include Aboriginal and Torres Strait Islander peoples of Australia.

chose not to have their interview responses included in the report. We have chosen to identify Aboriginal and non-Aboriginal respondents in order to accurately reflect where in our report the Aboriginal voice is being represented and whose voice is being heard.

Among the expert Aboriginal respondents interviewed and who appear in this report, were:

- Kirsten Thorpe, Manager, Indigenous Services Unit, State Library of NSW;
- Maxine Briggs, Koori Librarian and Manager, Cultural Permissions program, State Library of Victoria; and
- Kimba Thompson, Director, SistaGirl Productions and Director of the Indigenous-run Blak Dot Gallery.

#### Further expert respondents were:

- Nerissa Broben, Senior Curator (Collections), Koorie Heritage Trust;
- Charlotte Christie, Senior Collections and Exhibitions Manager, Koorie Heritage Trust;
- Miriam Troon, Senior Curator Indigenous Collections and Community Engagement, Museum Victoria<sup>4</sup>;
- Lindy Allen, Senior Curator, Northern Australian Collections, Museum Victoria;
- Nick Richardson, Collections and Access Manager, Australian Centre for the Moving Image;
- Helen Simondson, Head of Public and Education (Acting), Australian Centre for the Moving Image;
- John Dallwitz, Project Manager (South Australian Museum), A<u>r</u>a Irititja Project;
- Dora Dallwitz, Digital Archivist, Ara Irititja Project;
- Dr Jennifer Green, School of Languages and Linguistics, University of Melbourne; and

<sup>&</sup>lt;sup>4</sup> Since conducting our interview with Miriam Troon in November 2015, she has since left Museum Victoria and is currently Art Curator/Collection Manager at Bayside City Council.

• Associate Professor Gavan McCarthy, eScholarship Research Centre, University of Melbourne.

Fran Edmonds and Poppy de Souza conducted the interviews around four key themes identified through the literature review and with input from the Reference Group. Where possible, interviews were conducted in person. Kirsten Thorpe and John and Dora Dallwitz were interviewed over the phone and via Skype respectively. Interviews took the form of semi-structured conversations to provide an opportunity for respondents to answer at length if they wished, and to offer ideas or insights from their experience. The majority of our respondents spoke to us for around an hour and all provided thoughtful and engaged responses to our questions. All interviews were audio recorded and full transcripts were written up. Throughout the report, we have edited direct quotes for readability and grammar, where necessary. While we have not included direct quotes from all respondent interviews in this report, the expert contributions of all the people we spoke to have shaped and informed our thinking.

# 2.3 Key themes for discussion

We identified four key themes for discussion in consultation with the Reference Group and review of the literature:

- The ownership and management of digital cultural archives
- The control and management of metadata
- The role of digital heritage archives/collections in enhancing community, cultural and individual aspirations
- Aboriginal control of Aboriginal knowledge online

With reference to the four key themes, our questions were generative and used as a starting point for reflection. Respondents were asked to reflect on established protocols and practices in place within their institutions; their experience with projects that worked with digital and/or digitised collections; and the challenges and opportunities of the digital access to, and dissemination of, Aboriginal knowledge. We also asked them to draw on specific examples that illustrated how policies and protocols are being implemented and put into practice. Interview respondents and members of the Reference Group were

given the opportunity to review a draft version of the report and provide additional feedback; their comments are incorporated into the final report.

The term 'archive' invokes a range of associations and meanings both within and beyond the cultural sector. It is attached to specific definitions for professional archivists and institutional archives (or capital-A Archives) in particular. In our report, we refer to the archive in two main ways. First, we used the term in its general or everyday sense, as a repository or collection, in our interviews and this is reflected throughout the report. The majority of our respondents who were not archival professionals understood and discussed the term in this way in relation to our key themes. Second, from a critical and postcolonial perspective, we understand the archive as a contested site where power/knowledge intersect, where the archive is a system that structures 'the law of what can be said (Foucault, 1972)'. Postcolonial scholars who have written on the archive - in particular Stuart Hall (2008) and Linda Tuhiwai Smith (1999) - remind us that 'the archive not only contains artefacts of culture, but is itself an artefact and construct of culture (Smith, 1999: 51)'. Further, Jacques Derrida's (1996:4) claim that 'there is no political power without control of the archive' resonants strongly in this report, particularly in relation to respondents who insist on greater control over the representation of Aboriginal people and their cultural heritage within the cultural archive, as detailed further on. In this respect, the notion of archival autonomy as proposed by a group of archivist academics, including Gavan McCarthy, is also useful: 'the ability for individuals and communities to participate in societal memory, with their own voice, becoming participatory agents in recordkeeping and archiving for identity, memory and accountability purposes' (Evans et al 2015: 338).

The research was informed by grounded theory, a qualitative methodology where the gathering and analysis of data proceed simultaneously, with each 'informing and streamlining the other' (Bryant and Charmaz, 2007). The researchers regularly debriefed during the data collection phase to refine interview questions and themes as the research unfolded. Interview transcripts were analysed thematically, with close attention to the way respondents understood and described their experiences and emerging themes across the interview data set. Denzin (2007: 456) suggests that because of it's 'commitment to critical, openended inquiry', grounded theory can be a 'decolonizing tool for Indigenous and

non-Indigenous scholars alike', but that it can also 'perpetuate neo-colonial sentiments, while turning the Indigenous person into an essentialised 'other'. In presenting the experiences, values and worldviews of our respondents, our analysis inevitably involves interpretation and representation.

# 2.4 Scope and limitations

There has been significant critical work done on the intersection of Indigenous knowledge and digital technologies, including the management of Indigenous digital collections in particular (Nakata et al., 2008; Ormond-Parker et al., 2013). Our research is necessarily more modest, aiming to understand the current 'state of play' through the perspectives of six cultural institutions based on small scale, qualitative research. However, we have found there continues to be open and unresolved questions that resonate, more than a decade on, with findings from earlier research. This suggests the terrain that connects policy, protocols and practice in the management of Indigenous digital collections requires constant critical attention. Developments in technology, such as the rise of social media and web 2.0, further complicate the landscape and prompt new challenges. *How* this complex environment is negotiated is of continued interest and our report aims to contribute to these debates.

Our interviews focused primarily on Victorian collecting institutions, both for practical reasons, and to align with the aims of the broader ARC project. However, the broad policy context and perspectives from the State Library of NSW and the Ara Iritija project were also included to complement our geographical focus on southeast Australia.

The research was also limited by the disproportionate number of non-Aboriginal (10) to Aboriginal (4) respondents we interviewed. There are several possible explanations for this. First, it reflects a current and ongoing underrepresentation of Aboriginal staff within the Galleries, Libraries, Archives and Museums (GLAM) sector – particularly in senior collection management or other decision-making positions – and the associated under-representation of Aboriginal voice. This situation was raised in many of our interviews and will be discussed in the following section. Second, it highlights the pressures of competing priorities for the small number of Aboriginal people in the sector often called upon to represent an Indigenous perspective in both research and

public policy forums. A third and more challenging issue, is the role of active non-participation. Specifically, the extent to which Indigenous non-participation might signal an 'inclusion gap', where the decision whether or not to contribute to, or collaborate on, any given project is contingent upon the very terms of participation. Exclusion and misrepresentation of Aboriginal voices continues in subtle and often unintended ways, including in community-based and cultural research.

With these points in mind, our research cannot be interpreted as being representative or comprehensive, given both the nature of our inquiry and the limited number of people interviewed. While we privileged the knowledge and expertise of our Aboriginal respondents, and support this by drawing on the strong body of critical literature written by Indigenous academics and cultural workers in the field, the report does not claim to speak for the diversity of Aboriginal communities. We present descriptions and examples drawn from the experience and expertise of our respondents that highlight some of the distinct challenges and opportunities in the sector, and which is necessarily selective and partial to Indigenous concerns (Nakata et al., 2008). At the same time, while we do not claim to speak on the behalf of our respondents, our research necessarily provides both frame and context to their words. Along with perspectives from the non-Indigenous respondents we spoke to, our report presents a range of understandings, relationships and commitments to Indigenous digital material and cultural collections, to provide a rich picture of the field from both a practical and policy perspectives.

# 3 Aboriginal Voice

In recent years, there has been an increasing desire and expectation for collecting institutions to empower Indigenous communities to 'participate in the active management of their cultural representation' (O'Sullivan, 2013: 140). Drawing on the postcolonial theorist Edward Said's concept of 'reversing the gaze', the Wiradjuri academic Sandy O'Sullivan (2013) acknowledges the centrality of supporting Indigenous-centred perspectives and 'resetting relationships' (McKemmish et al., 2011), between Aboriginal people and collecting institutions. Such a concept has been central to the de-colonising project in collecting institutions, first catalysed by the repatriation of Aboriginal human remains to communities of origins and more recently in response to pathways opened up by digital and networked technologies. While our conversations suggested that progress has been made in this direction, many of our respondents - including all the Aboriginal people we spoke to - identified an ongoing critical need to value Aboriginal/community voice within institutions, placing it at the centre of how cultural heritage collections, including digital collection materials, are represented, contextualised and managed. Despite a stated aspiration in the ATSILIRN protocols for the libraries, archives and information services sector to 'facilitate organisational change to accommodate Aboriginal and Torres Strait Islander perspectives' (Section 1.5), the inclusion and privileging of Aboriginal voice in this context remains uneven at best. Respondents offered a variety of ways in which Aboriginal voice could be better supported, through both institutional and policy changes, summarised in Table 1 below:

Table 1: Supporting Aboriginal voice in collecting institutions

#### Supporting Aboriginal voice in collecting institutions

- Including community voice (stories, perspectives and values) in the cataloguing, presentation and contextualisation of Indigenous material culture.
- More pathways, training and support for Aboriginal cultural workers to enter the sector
- Increased representation of existing Indigenous staff in decision-making positions
- 'Progressive policy' development that supports diverse Aboriginal perspectives
- Designing processes and systems that explicitly 'benefit community'
- Allocation of increased time and money for sustained community engagement

The need for sector-wide, institutional change that moved beyond the often adhoc, problems-based approach to the management of Indigenous heritage materials and collections has been identified as an aspiration for at least a decade. As Nakata and Langton (2007: 3) have insisted, this requires more than understanding Indigenous concerns and perspectives; it demands 'an unsettling of established practice, and the questioning of some of the assumptions on which accepted practice rests' (Nakata and Langton). In addition to all our Aboriginal respondents, Nick Richardson, Collections and Access Manager, Australian Centre for the Moving Image, and Miriam Troon, Senior Curator, Indigenous Collections and Community Engagement at Museum Victoria also critically reflected on the need for their own institutions to operate differently, acknowledging the under-representation of Aboriginal staff within existing structures:

We are not, as an institution, doing a very good job at embedding a deep understanding and responsibility of Indigenous issues. We don't have an Indigenous board member; we don't have any Indigenous members of staff; we don't have an Indigenous Unit. [There are] lots of pros and cons of having staff distributed within an organisation, or having a specific unit, pros and cons to both of those structures. We're very aware that that's a shortcoming in the institution and we're committed to addressing it. Personally, I don't think we're addressing it with quite enough speed.

Nick Richardson, ACMI.

Kirsten Thorpe, Manager, Indigenous Services at the State Library of NSW, spoke to us about Indigenous communities at the 'core' of what institutions do. A first step for some institutions, including the State Library of NSW, the State Library of Victoria and the National Film and Sound Archive, for example, has been to establish dedicated positions, units or programs that act as a cultural interface between the institution, their collections and Aboriginal communities. For example, Kirsten Thorpe describes Indigenous Services at the SLNSW as a strategically 'outward-facing' branch of the library:

Part of our whole vision was that Indigenous content perspectives, Indigenous services, is everybody's business. And the role of our team is to provide advice and guidance and direction, and to be a conduit to community, and to set some priorities. But we want everyone to build their capacity and really feel confident in working with Indigenous people and content.

Kirsten Thorpe, State Library of New South Wales.

Similarly, the Cultural Permissions program at the State Library of Victoria, managed by Koori Librarian Maxine Briggs, is another practical shift in procedure that incorporates Aboriginal voice into the management of the SLV's cultural heritage collections:

[The Aboriginal community] have some authority in not only protecting the integrity of the images of their ancestors, they are also privy to information they may not have had an opportunity to see or to interact with [...] So it means dialogue can take place.

Maxine Briggs, State Library of Victoria.

For collecting institutions, the re-orientation of priorities requires a corollary shift in power relationships (O'Sullivan, 2013), presenting a challenge to established authorities and hierarchies. Miriam Troon contrasted her experience with the Koorie Heritage Trust - a community organisation established in 1985, with an explicit agenda to prioritise and support southeast Australian Aboriginal communities and their culture, as 'the only Koorie cultural collection wholly owned and managed by Koories themselves' (Culture Victoria 2016), compared with Museum Victoria - a large, public institution with a history that extends back to the mid 19th century, and was initially dominated by the traditional Western scientific approach to 'collecting', including that associated with Aboriginal and Torres Strait Islander peoples (Russell 2001). Lindy Allen, Senior Curator, Northern Australia Collections at Museum Victoria, acknowledged that the museum has worked hard over the past 30-40 years to integrate Aboriginal people, their histories and cultures as part of the core business of the institution. Lindy highlighted several of the Museum's achievements in this respect, including: the Aboriginal Cultural Heritage Advisory Committee; the Bunjilaka Aboriginal Cultural Centre, with Aboriginal and Torres Strait Islander staff; an Aboriginal board members; a successful repatriation program; and a substantial Aboriginal and Torres Strait Islander collection, acquisition and research budget for Aboriginal and Torres Strait Islander collections. Lindy also acknowledged the significance of having Indigenous curators in the museum, who 'bring a whole other additional layer of contacts and familiarity with people in the community', which reflects the importance of continuing to support Indigenous employment and representation in the sector.

# 3.1 Representation and self-determination

Increased Indigenous employment and representation within the sector also resonated with all the Aboriginal respondents, who emphasised the cultural importance of having Aboriginal curators, collection managers and archivists involved in the institutions. This was acknowledged as necessary for the *inclusion* and *valuing* of Indigenous perspectives and epistemologies within collecting institutions, as well as being a catalyst for broader policy change within institutions. Yet *how* this is achieved is neither clear nor straightforward. As Sandy O'Sullivan (2012, 147) reminds us, 'Indigenous people are often not included in the most central of questions over policy and engagement, and instead relegated to consultation on isolated moments of representation'. Koori Librarian Maxine Briggs supported this view:

Because there are so few Aboriginal people in the field, most programs and policies are created by non-Aboriginal people who ... It's not a bad reflection on them as such, but it's just the fact that you do need to have an Aboriginal perspective to be relevant.

Maxine Briggs, State Library of Victoria.

Maxine's response signals broader questions of cultural value and Indigenous knowledge systems that were often just below the surface in many of our conversations. All our Aboriginal respondents spoke about these questions in terms of representation, responsibility to Ancestors and cultural integrity. In other words: self-determination and cultural control.

# 4 Collection Management and Cultural Control

Australia's national collecting institutions – galleries, libraries, archives and museums (or GLAMs) - are guided by a suite of ethical, legal and cultural frameworks and protocols that shape the collection development policies and institutional priorities for both preservation of and access to the Indigenous cultural heritage items held in their collections, including: the Declaration on the Rights of Indigenous People (United Nations, 2007), the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003), and the Berne Convention for the Protection of Literary and Artistic Works (1886/1979) which implements copyright law internationally. At a Commonwealth level, the Aboriginal and Torres Strait Islander Heritage Protection Act (Commonwealth of Australia, 1984), Australian Government Policy on Indigenous Repatriation (Commonwealth of Australia, 2013) and Best Practice Guide to Collecting Cultural Material (Commonwealth of Australia, 2014) also inform the cultural sector's engagement with Indigenous material culture. The majority of national and state collection policy documents surveyed for this report make either explicit or implicit reference to these international treaties and Commonwealth legislation. Our survey of collection policy documents also noted several references to principles of self-determination, and related notions of 'respect', 'custodianship', 'duty of care' and 'cultural safety' (for example AIATSIS, 2013; MCA, n.d.; Museums Australia, 2005).

Cultural institutions seeking to digitise Indigenous collection materials for public access need to consider several areas of law, including: 'intellectual property, confidentiality, contract law, data protection law, and specific cultural heritage legislation' (Jackson et al, 2011). The Commonwealth Copyright Act (1968) and the Copyright Amendment (Moral Rights) Act 2000 ('the Moral Rights Act') are the primary legal instruments that protect individual intellectual property rights. However, as Indigenous legal scholar Terri Janke (1998, 2001) and others have argued, Australian intellectual property laws, including moral rights, only protect some forms of Indigenous Cultural and Intellectual Property (ICIP), and existing legal frameworks struggle to capture communally held, cross-culturally created or collaborative forms of intellectual property, as well as with alternative systems of custodianship, ownership and control (Arts Law Centre of Australia, 2011). Anderson and Christen (2013: 122) insist the 'laws of copyright have acted as an effective tool of dispossession' and deny the cultural authority of Indigenous

communities over their cultural materials. Yet beyond existing legal frameworks, there are several other considerations regarding Indigenous Cultural and Intellectual Property (ICIP) that fall outside of, and are sometimes in tension with, such arrangements. The imperatives of Western archival practice do not always or easily accommodate or account for the distinct needs of Indigenous communities when it comes to the treatment of their digital cultural heritage. Some legal scholars, for instance, have argued for *sui generis* systems and models of protection that address the unique and singular nature of Indigenous expressions of culture and knowledge (see Janke, 2005; Nakata and Langton, 2007; Sand, 2002). Further, the liberal discourse of property and individual ownership can itself be contentious, sitting in tension with alternative systems of knowledge transfer and custodianship. As Maxine Briggs observed, Aboriginal communities have obligations and responsibilities connected to protecting cultural knowledge and language that is not simply about 'ownership of information':

Ownership of information is one of the issues [...] It's a general thought out in the community now about different value systems and where people do own, or have responsibilities for their Ancestors and also protecting the knowledge of their language group or ... it's a difficult space that we reside in at this time and we're fighting all the time to maintain our cultural identity and cultural values.

Maxine Briggs, State Library of Victoria.

As a 'Keeping Place' for the Koorie community in southeast Australia, the Koorie Heritage Trust is both responsible for protecting Koorie cultural heritage and advocating for the Koorie community (KHT Collections Policies and Procedures, 2014). Aboriginal voices and stories, along with protecting the integrity of the collection and maintaining respect for southeast Aboriginal communities is paramount. As Senior Curator (Collections) Nerissa Broben explained:

We just have to be very protective of the cultural material that we have here, particularly being an Indigenous organisation we have more responsibility than other institutions to be protective of that culture and knowledge and make sure that it's treated with the integrity and in the manner that it deserves.

Nerissa Broben, Koorie Heritage Trust.

Most policy documents we surveyed relating to digitisation covered general principles of digital preservation and access, but with the exception of AIATSIS, did not generally mention the digitisation of Indigenous materials outside of broad reference to adherence to existing cultural protocol frameworks. Some state libraries have developed policies that do address the intersection of Aboriginal material and digitisation policies. For example, the State Library of Queensland's *Protocols for Aboriginal and Torres Strait Islander Collections* recognises that digitisation is used in some cases as an 'interim means of repatriation' (Section 9); while the State Library of South Australia developed its *Digital Repatriation Policy* to digitally repatriate relevant material from collections back to their Community of origin, in response to requests from Indigenous Knowledge Centres (IKCs) and community-owned projects.

While the promise of digital opens up the possibility for Aboriginal communities to be the 'gatekeepers of their own digital cultural heritage', as Nick Richardson observed, there is an increasing pressure on institutions to find alternative models for digital preservation and access, including outsourced, distributed and crowd-sourced models of preservation which bring with them their own set of problems, as discussed further on.

# 4.1 Cultural Protocols and collection policy

Since the 1990s, protocols for the use and treatment of Indigenous material culture, along with appropriate methods of engagement with Indigenous community stakeholders, have provided the ethical and moral frameworks for best practice in how collecting institutions address and correct the colonial legacy of their collections. However, as Ormond-Parker and Sloggett (2012) have identified, there is no nationally integrated policy framework that coordinates or governs this diverse and disparate suite of policies and protocols. Further, the ongoing need for 'nationally coordinated agreements that are supported by effective frameworks, strategies and funding' (207) involving government, industry and community is yet to be fully addressed. The need for practical outcomes also remains a pressing issue.

The Aboriginal and Torres Strait Islander Library, Information and Resource Network (ATSILIRN) Protocols – the ATSILIRN Protocols – provide a key ethical framework collecting institutions working with Indigenous cultural heritage materials and communities, including within the digital environment (ATSILIRN 1995/2012). The ATSILIRN Protocols recognise the 'need for institutions to accommodate different access conditions for materials that contain sensitive Indigenous knowledge, and the need for institutions and communities to deal with conflicts around different concepts of intellectual property associated with Indigenous and Western knowledge systems' (Section 12). So while the ATSILIRN Protocols provide a strong statement, they are not prescriptive; libraries and archives are encouraged to adapt each protocol to suit their own institutional frameworks (Garwood-Houng and Blackburn 2014). Yet while they provide principles that guide institutional direction and aspirations, they provide little concrete and practical detail. Clear protocols and frameworks on their own do not necessarily provide practical pathways that support and empower cultural sector staff to make informed decisions when working with Indigenous material or communities (Thorpe et al. 2015). The Innovation Project at the State Library of NSW (2012-14) addressed some of these issues by developing procedures for staff informed by the ATSILIRN Protocols, including the use of social media for community engagement. This included the use of a yes/maybe/no flow chart with examples or case studies, along with the rationale for each in the decisionmaking processes (Thorpe et al. 2015).

While all institutions were guided by some form of cultural protocol framework which were often reflected in individual collection policy documents (such as the ATSILIRN Protocols or Museum Australia's (2005) Continuous Cultures, Ongoing Responsibilities - principles and guidelines for Australian museums working with Aboriginal and Torres Strait Islander cultural heritage), it was not uncommon for our respondents to speak about a gap between what Nick Richardson called aspirational 'motherhood statements' and a clear action agenda to implement and enact protocols in practice. This can make it difficult for staff to respond consistently to Indigenous requests for access. As Miriam Troon noted:

[There needs to be] something for individual staff members to fall back on and say, "Ok, this isn't my opinion, this is how [we] conduct business". At the moment [at MV] it is left up to each staff member to make their own way... And that is both ineffective and confusing for the people at the other end, the community that you're interacting with ... that's a lot of responsibility to have, on your own, to work out 'well, what's the most appropriate way to work with Indigenous communities"? Particularly if you're not Indigenous yourself and you're not embedded within those communities and the protocols and so on.

Miriam Troon, Museum Victoria.

Kirsten Thorpe strongly advocated for the development of indicators to quantify and evaluate progress in this area:

There has to be a strategy that comes under each of the areas, or a policy, or some structure for people... Because I think the issue is, how are you performing in this area? If you set KPIs for your Strategic Plan, what aren't you setting them for your ATSILIRN protocols? We have to have some sort of accountability aligned to them; otherwise they're just feel good statements.

Kirsten Thorpe, State Library of NSW.

Despite the absence of clear procedures within some institutions, we found examples where staff developed flexible systems for managing rights and cultural permissions on a case-by-case basis at the point of acquisition, learning valuable lessons along the way. In relation to the acquisition of the artwork *Mother Courage* by the Aboriginal filmmaker Warwick Thornton, which contains a multimedia component showing footage of an Indigenous Elder, staff at ACMI had to consider the future permissions required to exhibit the work. Nick Richardson, who worked as an archivist at AIATSIS in the 1990s, described the acquisition process:

So the issue that was raised then was: how do we manage the inevitable death of both of the participants in that moving image? And who really has the right to adjudicate whether the film can continue to be viewed, whether the artwork can in fact continue to be mounted? Is it the artist? Is it the family of the deceased, or is it the Land Council most connected to the family of the deceased? I can't remember the exact wording of the contract but [...] it puts the responsibility of making that decision back within the family, but adjudicated through someone closer to the family [it's a cultural process] we've developed for that work.

Nick Richardson, ACMI.

This example highlights the way institutions can respond to principles of cultural authority, custodianship and self-determination while also meeting legal/contractual obligations of deposit. It also emphasises the importance of thinking through future-orientated issues at the point of acquisition in collaboration with Indigenous creators.

# 4.2 Aboriginal and Torres Strait Islander Data Archive (ATSIDA)

Increasingly, academic researchers and research projects produce significant amounts of digital research data relating to Indigenous communities. The Aboriginal and Torres Strait Data Archive (ATSIDA) manages the 'collection and storage of Aboriginal and Torres Strait Islander research data' (ATSIDA, n.d.) and was developed in 2008 with the collaboration of University of Technology, Sydney, the UTS library and the Jumbunna Indigenous House of Learning. ATSIDA is designed to

[...] become a digital counterpart to the extensive collections of physical research materials held in many institutions and, notably, the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) whose collections are the largest resource on Australian Indigenous peoples (ATSIDA, n.d.).

Along with housing research data, the website contains 'protocols for the preservation, access, reuse and repatriation of research data relating to Aboriginal and Torres Strait Islander communities', as well as information for researchers wanting to deposit research data with the archive. ATSIDA is guided by three principles: respect, trust and engagement.

# 5 Navigating knowledge systems and digital ethics

The digital age brings both opportunities and challenges for the management and ownership of Aboriginal cultural collections, including their preservation, dissemination and repatriation. The digital offers new pathways of connection for Aboriginal people to identify through story, language, people and material culture via access to collection items online. At the same time, the push for cultural institutions to make their collections more accessible online and through digital platforms demands an ethical framework for systems and processes that protect the integrity of digital collection items. Collecting institutions navigate 'incommensurable ontologies' (Nakata and Langton, 2005: 147) when managing Indigenous cultural heritage items in their care. As Kirsten Thorpe reflected 'we have to step back and say, actually we've got two fundamentally different knowledge systems and structures that are in play. It's not about naming stuff as 'sensitive'. This 'ontological incommensurability' (Russell, 2007: 179) presents both a challenge and opportunity for the sector. As Miriam Troon put it, the Western scientific eye 'marries quite poorly with some of the needs or wants of the Indigenous community collection'. This raises an important question: whom do collections serve? In the digital sphere there is an equal tension. Maxine Briggs observed:

The online environment actually suits white culture better than it does black culture, or Indigenous culture... I don't think it was a black person that created the online environment.

Maxine Briggs, State Library of Victoria.

While Maxine's statement identifies structural concerns with online and digital environments, Indigenous young people in particular are avid users of social media, including in remote parts of Australia. A 2014 study into media use by Aboriginal and Torres Strait Islanders found that they spent twenty per cent (20%) more time on social media than the rest of the Australian population, with Facebook being used by sixty per cent (60%) of Aboriginal and Torres Strait Islander Australians in contrast to forty per cent (40%) of the general population (McNair Ingenuity Research Institute, 2014). Despite real tensions between creators of digital platforms or social networking sites – often large corporations – and the needs or aspirations of end users, social media can and has been used to transmit intergenerational knowledge and 'enable young and old Indigenous

people to reconnect and understand each other better through collaborative efforts between the generations' (Rice et al. 2016: 14).

## 5.1 New pathways, new connections

Digitisation, or digital reproduction, has become a popular way to disseminate and share knowledge (Brown and Nicholas, 2012). For cultural institutions, digitisation is driven by twin imperatives: to preserve vulnerable collection items from physical deterioration or format obsolescence; and to facilitate access to collection materials, including Indigenous collections. Our respondents identified several benefits brought by digital technologies and infrastructures, particularly the potential for networked and online modes of distribution and display for new connections and pathways between and across institutions, collections and communities. Many maintained that the digital and the material were inter-related or complementary, and together could provide new pathways for community engagement: as Nerissa Broben put it, they can 'bring each other to life'. Some benefits were expressed in general terms and apply to digital collections more broadly; others had a clear added benefit and significance when applied to Indigenous cultural materials, summarised in Table 2 below:

Table 2: The benefits of digital technologies for Indigenous collections

# The benefits of digital technologies for Indigenous collections

- New ways to link databases, creating new pathways into collections
- Connecting or reconnecting dispersed collections across institutions and geographies
- Transmitting content back to communities and digital repatriation
- Developing distributed networks for presentation and preservation
- Providing context for collection items in a curated online space (for example, Culture Victoria)
- Opportunities for co-creation and co-curation
- Highlighting important aspects of a collection
- Linking stories and histories to Aboriginal collection items and objects

Miriam Troon provided a vivid example of the way high-resolution digital scanning provides a new level of detail for digitised historical/archival photographs, revealing evidence of Indigenous cultural practices and traditions:

You scan that at super-high resolution and you can get it up on your computer screen, and you can zoom in and look at the material culture that's in the background, what people are wearing ... maybe a possum skin cloak, maybe a pattern on a shield, the beautiful incisions on a club, the pattern on a basket, the way a Coolamon is placed up on some stilts off the ground. Those details are now revealing themselves again, after being hidden [in the original photograph] ... [and now...] it has been shown up in the high-resolution digitisation.

Miriam Troon, Museum Victoria.

Importantly, these intimate and granular-level details can be catalogued and documented in the collection database, providing information that was not previously searchable. Charlotte Christie, Senior Collections and Exhibitions Manager at the Koorie Heritage Trust saw the potential of linking collections digitally, creating new contexts and connections:

I think that's where talking about being able to link things digitally is really valuable. So for example, we've just created ten oral histories with young, Indigenous filmmakers telling stories about their Elders and their communities. You've just created a suite of three little films [digital stories], and it's great that they both exist in different places, but wouldn't it be great if you were looking, as a kid, I guess, looking at stories related to you and your community, and to be able to search both of those things and find them both in the same space.

Charlotte Christie, Koorie Heritage Trust.

Nick Richardson identified distributed models of community dissemination that could bring both community benefit and redistribute the institutional burden of preservation and access:

There's an interesting model there [...] In some of those Aboriginal communities that have done Local Area Transmission, the Tanami Network [in Yuendumu] springs to mind and the BRACS [Broadcasting for Remote Aboriginal Communities Scheme] system and some of the places in Western Australia and Townsville and TI, and so on. We can work with those communities to shoulder some of the burden for the long-term preservation, but the short-term preservation and distribution of access material can perhaps be a shared responsibility. And in that way, we're bringing in the community members. They're trained in that management without necessarily having to leave home.

Nick Richardson, ACMI.

The reproducibility of digital heritage items brings with it the potential to show and present culture 'without the removal and rehousing of objects' (O'Sullivan, 2013: 146). Notions of 'virtual repatriation' (Hennessy, 2009; Salmond, 2012) 'digital return' (Anderson and Christen, 2013; Bell et al. 2013; Geismer 2013) and 'digital reciprocation' (Hogsden and Poulter, 2012) all reconfigure the relationship to digital objects, Indigenous communities and collecting institutions. At the same time, Maxine Briggs insisted material culture holds a unique and special connection to community that can't be replicated digitally or online and strongly advocated for Keeping Places on Country:

For me, I think our future is the Keeping Place on country because it's all very well to have this digital environment and its wiz bang and all that, but it doesn't really touch you. You have to have tangible things and we live in an environment that really requires that sense of touch and closeness [...] If we can make our Keeping Places a core activity of the community, everything goes through there, it's a living space - it's not just an archive, you use the archive to enrich what you're doing.

Maxine Briggs, State Library of Victoria.

Our conversations supported a favourable view of locally-controlled or distributed digital models of archiving and dissemination for Aboriginal material and collections, particularly if the new or existing technical infrastructures embedded cultural conditions for digital circulation and use. Whether this was about digital access hubs in community; digital Keeping Places on country; locally-mediated digital portals for curated content run from a central database; or the adoption of community-driven Knowledge Management Systems like Murkutu or Ara Irititja, described below.

## 5.2 Digital challenges

Collection items now exist within a complex, interdependent digital environment with many variables and moving parts. Digital strategies for the management and preservation of collection materials – some of which exist on unstable, vulnerable or fragile formats – are constantly evolving, and policies are struggling to keep up with rapid changes in technologies, standards and formats. The risk of a 'digital dark age' (Cherchi Usai, 2001) is an ever-looming concern. For moving image collections in particular, format obsolescence, intensified by the rapid development of digital technologies, is one of the pressing threats to the survival of cultural collections globally. For institutions with large audio-

visual collections like ACMI, this threat is even more pressing with accelerating demands on format migration and duplication. Nick Richardson explained:

[...] when we talk about digital, it still requires ongoing migration from format to format; it's still got some of the long-term onerous responsibility and preservation actions that we've always had to do. We've always had to migrate material from one format to another. In fact, the crisis we have now is the time between the technological obsolescence of one format to another is much shorter than it used to be.

Nick Richardson, ACMI.

Our conversations revealed a series of related challenges for the sector in relation to changes in digital technologies and digitisation of Indigenous material, including:

Table 3: Challenges for archives and collections in the digital age

# Challenges for archives and collections in the digital age

- Ensuring the long-term sustainability for the future safeguarding of materials
- Finding expanded storage capacity solutions, including distributed preservation models
- Maintaining digital platforms, websites and online portals for digital access and display
- Determining acquisition policies in the face of increased born digital and community-generated content
- Determining preservation priorities and standards in a rapidly changing digital environment
- Uneven distribution of communications technologies and infrastructures in remote and regional Australia, impacting on community-based digital archives

The question of archiving and digitisation of Indigenous material is also a concern beyond formal collecting institutions. Community-based audiovisual archives in remote Aboriginal communities, for example, are at risk with fragile collections in challenging physical environments (Ormond-Parker et al. 2016). Further, as one researcher told us, working on multimedia projects undertaken with Indigenous communities raises a number of issues around how to archive objects as a collection:

Video technology creates massive files that bring with them many issues about storage and curation and that's one of the things that exercises my mind: how you keep well-curated sets of data that nevertheless get very big? And how do we have good workflows where you can keep your options open for making films down the track, but at the same time archive objects so that they're curated in a way that the metadata reflects the structure of the deposit?

Jenny Green, University of Melbourne.

Meeting the aspirations of community control not only requires the redistribution of power and resources, but also continue to be contingent on communications technologies and digital infrastructures (see Ormond-Parker et al., 2013: xiii; Rennie et al., 2016). For the researchers we spoke to working with Aboriginal communities in remote and regional parts of the country, the uneven distribution of communications technologies and infrastructures was a pressing factor limiting the potential benefits of digital dissemination and usable digital archives on Country. Gavan McCarthy spoke about this in relation to three communities he works with:

[In] the Torres Strait they just don't have mobile phones in most places, let alone Internet, it's very, very flaky. We've had quite a few meetings and workshops down the Coorong [in South Australia] and ... where Camp Coorong is, the mobile connection is really, really intermittent, and there's only one provider that works, and their internet connectivity is very poor as well [...] and KALACC [Kimberley Aboriginal Law and Culture Centre] has similar problems. So we know, you go out a little bit from the major cities and you're connectivity drops off [...] where's the NBN when you need it?

Gavan McCarthy, University of Melbourne.

Nick Richardson spoke about the potential for distributed models of digital preservation, such as the use of bit torrent - a peer-to-peer file sharing system - to potentially redistribute the burden on an individual institution's infrastructure and capacity, simultaneously providing access to remote communities. At the same time, smaller institutions with limited preservation budgets to acquire the technical hardware needed for format migration and digital transfer are outsourcing their preservation activities to third party companies. Charlotte Christie, Senior Collections and Exhibitions Manager at the Koorie Heritage Trust raised these questions in our conversation:

Do we spend the time and money and energy in keeping all of that hardware ourselves? Or do we think about outsourcing our digitising? And that just made more sense for us to outsource, so that's the way we will be digitising in the future.

Charlotte Christie, Koorie Heritage Trust.

The ethical implications of both distributed and outsourced models for digital preservation for Indigenous heritage collections are far from clear.

6 Access

The digital has driven increased access to collections as well as increased pressure more broadly for institutions to 'democratise access' and open up their archives. Our conversations elicited a range of responses to questions of digital access, not only with regard to competing notions of what access means to different stakeholders, but also challenges around how best to facilitate access for Aboriginal communities. The recent push towards Open Access (OA) and Creative Commons (CC) frameworks – which themselves emerged as a challenge to Western notions of intellectual property rights, corporate monopolies on digital knowledge, and individual categories of ownership – can be at odds with Indigenous cultural protocols that restrict access to 'culturally-marked digital objects' based on community-determined practice (Salmond, 2012: 214). Kimberley Christen (2012: 2874), in her examination of Indigenous knowledge systems and notions of open access, argues that 'entrenched notions of the public domain, appeals to openness, and the contours of information circulation' often stand in tension with 'different notions of collaboration, collection, and curation'.

Further, while digital access provides a way for Aboriginal communities located outside of major metropolitan areas to access or view their material culture online, this exposure also requires institutions meet these growing community needs. For smaller institutions with limited budgets or staff, this presents a very real challenge. Nerissa Broben, for instance, expressed concern over how to fulfil the Koorie Heritage Trusts' obligation to respond to increased needs and requests from Koorie communities who want to access their cultural materials, as well as the need for differential access:

I think it's difficult to manage the different needs because Koorie community have a need to access their cultural material and I think that's a different need, and should be treated differently, to the non-Indigenous community and I think that is going to be a difficult one to balance ... Increasing access to the cultural material here for the community is obviously very important, but increasing access to cultural material to the public can lead to increasing misuse of access by the public, it can be difficult to get the balance right.

Nerissa Broben, Koorie Heritage Trust.

While all respondents acknowledged that digital and online access provide pathways for remote Aboriginal communities and communities outside major metropolitan areas to access their cultural heritage, our conversations exposed concerns over how the priorities and pressures that drive the digitisation did not always account for the needs of, or impacts on, Aboriginal communities - both in terms of what material is prioritised and by whom. Our conversations also picked up on this tension between the perceived push by cultural institutions to 'digitise everything', as Maxine Briggs noted, and the need for digital access to cultural material to be culturally adjudicated. The priorities that inform digitisation and access policies, therefore, must embed Indigenous priorities into the decision-making process to be culturally relevant (Nakata et al., 2008). While the push to increase digital access, and access more broadly, is often framed in terms of a call to 'democratise' or open up collections to the public, Nerissa Broben talked about a needs-based approach to access for Indigenous communities which shifts the focus from collections to communities: What are the needs of the community? How do they want to access material? How can access be set up for community? Gavan McCarthy talked about an obligationsbased approach to material and how digital items are described in terms of metadata to make them navigable for Aboriginal communities, connecting collection items to stories and histories, for instance.

Respondents working in institutions identified both inadequate community consultation and a legacy of mistrust between Aboriginal communities and government institutions as factors complicating digital access to Indigenous digital heritage. At the same time, when online access is done well, communities are often supportive:

When online access is done well, when it's given enough time for community consultation or family consultation, and people feel involved, and it actually suits them to have things online and they've had a say in how its presented and what story sits with it, and what portal it sits in [...] I've had very few experiences where people don't want things to go online.

Miriam Troon, Museum Victoria.

Similarly, Kirsten Thorpe spoke about the need to build trust around Indigenous access to collections online, with pathways that support Aboriginal people wanting to access material that relates to them or their families:

We need some kind of portal that people can come in and engage with our collections in ways that are meaningful to them, so that space of extra curation. If you were in an institution like Kinchela Boys' or Cootamundra Girls', that you come to our catalogue and you'll have an entry point to find that, and you'll be given some of the warnings, so that people have an understanding of some of the context before they enter. And you don't get that process if you just go to the library catalogue.

Kirsten Thorpe, State Library of NSW.

Many cited Collections Victoria as a useful digital portal to highlight aspects of their Indigenous collections; at the same time, organisations such as Museum Victoria tended to preference Indigenous collection items that were easier to manage legally (such as out of copyright, public domain or 'orphaned' works), or select material to digitise from communities that Curators had existing relationships with. Lindy Allen said this probably 'works against other communities who we don't have such close relationships with'. Lindy also described the process of selecting material to put online:

[...] Often we don't have copyright. So as institutions, we have to work through all those legalities of who owns copyright and whatever, but also in a sensible way. And often there are orphaned collections where we don't know who actually took them, and we manage that risk in terms of putting it out there, rather than just locking it down, you actually have to have material out there.

Lindy Allen, Museum Victoria.

# 7 Database management

One of the strong themes that emerged from our interviews was the central role that databases play in how knowledge and information is structured and valued both within institutions themselves, and more broadly in the public sphere, including the digital realm. Databases form the technical backbone of how information is categorised, indexed, linked and mapped to online interfaces and digital portals. But, as Gavan McCarthy from the Social & Cultural Informatics Lab at the University of Melbourne reminded us, databases and catalogues are not static: they are 'living things'. Further, they embed within them 'particular culturally and historically contingent assumptions about the nature of the world, and the nature of knowledge; what it is, and how it can be preserved and renewed' (Christie, 2004: 1). For Nerissa Broben, the idea of a digital archive was strongly connected to the idea of a database, precisely because of the need to structure, connect and manage the way information is mapped out online. But it was also a problematic concept because of the potential loss of context for an item.

For several of our respondents, questions around database management lay at the heart of Aboriginal control of Aboriginal materials and cultural knowledge held within institutions. Key questions raised are presented in summary in Table 4 below:

Table 4: Indigenous knowledge and database management

# Indigenous knowledge and database management Who controls the database? Who determines entry fields? What values/categories are given importance and/or priority? What information/knowledge is included, and who is consulted? How is information classified, identified and made searchable? Is Aboriginal voice and story embedded? Are variable spellings of names and places accommodated? Can multiple stories and/or knowledge be connected to a single collection item? What standards are used? How is information/knowledge structured? How are complex and changing cultural permissions managed over time?

Respondents also described the ongoing challenge of how best to capture shared histories, relationships and 'shifting materialities' (Dourish, 2014), both between Indigenous communities and collection items, and between related collection items themselves. Gavan McCarthy described the need for non-hierarchical thinking and contextual information management when designing a database to reflect Indigenous knowledge and information:

[If] you think of standardised data... even standardised archives, libraries and museums, gallery stuff - it's all about catalogues. It's lists of 'the things'. It's not about the world in which the things belong to. Whereas in contextual information management, you [endeavour to] map the world of things, ... the world of entities, of people, organisations, places, relationships, events.

Gavan McCarthy, University of Melbourne.

Gavan was cautiously optimistic about the use of alternative methods of presenting information and connecting digital collection items to community stories and country. They are exploring digital interfaces and portals that incorporate data visualisation and geo-mapping as additional pathways into community collections that better support Indigenous cosmologies and epistemologies.

# 7.1 Managing complexity

While developing standards for data and linked data facilitates better linking and sharing of data across institutions, flexibility to manage complexity is also necessary. This can pose a challenge for established institutional databases that manage large, broad collections. These systems are not set up to accommodate flexible data entry fields or categories that reflect the needs or interests of Aboriginal communities and their collections. The EMu CMS used by Museum Victoria, for example, supports some aspects of collection management better than others:

You can't just customise this bit [of the database] because that affects this other part. And so what you end up with is fields of data that [...] seem pretty irrelevant to a lot of the Indigenous material that is mapped out [online]. So lots of classifications, and the ordering, as well of where things sit, the name of collecting areas, and the collectors et cetera ... That takes precedence over the story or the cultural group. Miriam Troon, Museum Victoria.

Another challenge is retrospective cataloguing to collect contextual information and metadata for collection items that includes Aboriginal perspectives and stories. Collection management is not about finding the 'perfect' system, it requires being reflexive about inevitable exclusions and limitations. As Nick Richardson told us: 'collection management is always a series of compromises'. Retrospective cataloguing takes time, money, community engagement and expertise:

Our ability to retrospectively gather more in-depth cataloguing data is completely controlled by the resources that we have to do it [...] So we have to exercise some judgement over the exhaustiveness of the cataloguing record, versus getting the material out there and accessible. It is at times a compromise between exhaustive cataloguing, and satisfactory cataloguing, but getting the material made accessible.

Nick Richardson, ACMI.

As cultural institutions struggle to keep up with the demands for increased digital access and digital database management more broadly, this challenge is made more evident. Constantly adapting to the affordances of existing systems rather than building new systems is an additional barrier to progress, as Kirsten Thorpe explained to us:

I find one of the biggest barriers is that we're always relying on particular systems to deliver what we want, and without having 'systems' people around who can build the proper infrastructure, we end up not meeting our solutions because we're relying on those systems. [With] the Library catalogue, we have material we don't link or make accessible online, because we say it's too hard to put it out there. So we need to build systems that can deal with complexity and library and archive systems typically don't do that.

Kirsten Thorpe, State Library of NSW.

The identification, description and classification of collection items necessarily involve the use of metadata, or data about data. Geismer (2013: 258) describes how, through metadata, 'objects and voices, information, experience, knowledge, images, and sounds become part of the same "thing". Like databases, metadata is also a form of knowledge production.

In the same way that people are connecting with digital archives, I don't know that one size fits all. I think that you need to have room for the structure and all of that descriptive data, to use some level of standards. But we know the standards aren't right, we need community to be able to add perspectives. And hopefully one day those two worlds will combine a little bit so that we shift the standards instead of having systems all the time that live 'outside'.

Kirsten Thorpe, State Library of NSW.

While comprehensive, well-structured metadata can assist in the discoverability of collection materials, Gavan McCarthy described the unanticipated consequences of sensitive information being made more publically visible than anticipated, as has happened in relation to recent government inquiries and Royal Commissions:

There's a difference between something that's published [in print], and something that's published [online]... we only have to link to something and it becomes much more available, discoverable. And some people are not happy with that. It's not just that it's published, it's that it's easily available [...] So we thought, because it's all done through relationships between things, what we can do is degrade the metadata. [The item is] still discoverable, but it's just that, [for example] your name won't be discoverable. So, we haven't broken the fabric, but what we've done is reduced that findability or discoverability.

Gavan McCarthy, University of Melbourne.

The desire for a culturally regulated digital space for the sharing and circulation of cultural materials has prompted institutions to think about ways they can support this. Both the State Library of Victoria and the State Library of New South Wales have investigated the use of the open-source Knowledge Management System (KMS), Mukurtu, for use in their institutions to digitally manage and share Indigenous content. Mukurtu grew out of the Mukurtu Wumpurrarni-kari Archive Project in 2007 and was developed in collaboration with members of the Warumungu Aboriginal community of Tennant Creek, NT. The KMS can be adapted to the 'local cultural protocols and dynamic intellectual property needs of any indigenous community' (Christen, 2012: 2873), including cultural protocols that guide how digital information is accessed and shared. It provides 'both the technical framework and the ideological structure that underpin all of the technological decisions, design choices, and functionality that define Mukurtu CMS' (2883). For both Kirsten Thorpe and Maxine Briggs, part of the appeal of Mukurtu is that it is an open-source, flexible and scalable system that can handle complex data and accommodate sophisticated cultural protocols

attached to each collection item. Kirsten told us that Murkutu offers a digital interface for the State Library of NSW to work with community:

You can build in protocols, and you can also have a database that you pay them to manage for you as well. For the Library here we're thinking we'd like to examine the idea of offering it to communities, so it's a way of us working with community, like a portal and they can set up their own database separate to the library's but can interact with that.

Kirsten Thorpe, State Library of NSW.

Further, Mukurtu has the capacity to support community users to upload their own material or contribute additional data. As Thorpe and Byrne (2014: 10) describe, for the State Library of NSW, Mukurtu has the potential to support a range of library activities:

The Library wishes to be able to use such software, and accompanying protocols, to manage materials itself but also to be able to assist public libraries, Indigenous knowledge centres and other keeping places to manage materials appropriately. This will provide a significant opportunity for communities to have digital access to content relating to their local community and a mechanism for collections to be enhanced and amplified.

### 7.2 Ara Irititja

Ara Irititja is the longest running and largest community-based, multimedia digital archive in Australia (Scales et al., 2013: 162), providing an interface between Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara (Anangu) communities of Central Australia and their cultural heritage materials. Developed and designed in the mid 1990s at the request of Anangu, the Ara Irititja project 'identifies, records and electronically copies historical materials and information about Anangu (Ara Irititja Strategic Plan, 2013), acquiring, preserving and providing access to Anangu cultural heritage. As well as acquiring material from the community, the project team has also developed partnerships with cultural institutions to facilitate 'virtual repatriation' of cultural heritage items held in dispersed collections (Scales et al., 2013: 158). Community members exhibit a high degree of ownership and use of the database; Thorner (2010: 126) argues the 'archive's social role has far over-flowed its original political intent of digital repatriation'.

Ara Irititja Project Manager John Dallwitz, based at the South Australian Museum, reflected on the early development of Ara Irititja, explaining:

[The project] arrived at exactly the time when it was just, only just, possible for images and movies to be seen on Macintosh computers - only on Macintosh computers - and only on limited types of software. And it was absolutely brand new as we were developing, or thinking about, the idea for the Ara Irititja project.

John Dallwitz, South Australian Museum.

At the outset, the database (then using FileMaker Pro software) was structured to reflect the needs and priorities of Anangu communities: accommodating local cultural protocols for access into the metadata schema, prioritising Anangu lanauages in both command functions and item names, and providing visual pathways (including icons and buttons) for search and navigation rather than a text-heavy design to support access for community members with poor vision or low literacy levels. From both a technical and cultural perspective, digital heritage items within the Ara Irititja software circulate within a community-controlled, culturally regulated, closed system: it is not networked or distributed online, and is managed through a central, cloud-based server delivered to standalone workstations across Anangu communities: it is a 'private collection for Anangu and is not available to the general public' (157). John Dallwitz, along with Dora Dallwitz, continues to manage the software development, digitisation and archival aspects from a central server based in Adelaide at the South Australian Museum, as directed by the community.

'Since moving to a browser-based interface in 2010 (now the cloud-hosted Keeping Culture Knowledge Management System), Ara Irititja has expanded from a dozen images on a single Power Mac in 1995 to a sophisticated Knowledge Management System that houses over 170,000 multimedia records and, as John described, now includes a 'mobile device interface so that iPads and mobile devices can all [use] the touch screen and finger manipulation, lack of a mouse, lack of keyboard' to navigate the database. It also has the capacity for Anangu community members to upload annotations and their own multimedia content. As Dora Dallwitz described to us:

It's also got a facility where people can add stuff. Each profile, as well as each photograph, has the facility for people to come in and sit in front of it ... they can make a movie of themselves [...] with the camera on the computer [...] talking about how they use that [object] in their daily life, or how they used to use it. And those stories are limitless and ... you can do that as a movie, as an audio file, or as text.

Dora Dallwitz, A<u>r</u>a Irititja project.

The proliferation of digital content circulating via social media challenges the established channels through which Ara Irititia has collected and digitised materials in the past, and poses a challenge for future collection and management of digital-born materials:

I've been working on [the Ara Irititja project] for 15 years and the shift in that time from digitising these very precious little historic collections of photos - might be 150 photos - to now you get sometimes 25,000 digital images coming in [... But] I think we're not capturing Aboriginal material that we should or could be getting. [...] The Art Centres have got this absolute wealth of knowledge, a wealth of digital material out there, of paintings and stories and biographies and we're not getting that because they are all so stretched, they are working so hard and they're overworked, underpaid and they just literally don't have the time to sit down and organise that material and put some data with it, that's always an issue, no point sending 1000 photos if there's no information.

Dora Dallwitz, Ara Irititja project.

The *Keeping Culture* KMS is licensed to external communities (Indigenous or non-Indigenous) to adapt to their needs, and was used to develop the pilot Koorie Heritage Archive (KHA) in 2003. The KHA has not been developed beyond the pilot stage, although it still resides at the KHT. Long-term sustainability of the Archive is contingent upon software upgrades and licenses of the Ara Irititia system, digitisation costs and community consultation - all of which require funding (Huebner, 2013: 181).

## 8 Education and knowledge exchange

Most respondents we spoke to who worked within cultural institutions recognised the ongoing role that institutions play in providing context, stewardship or infrastructures that support connections between Aboriginal communities and their cultural heritage materials. This is particularly important when items circulating in the digital sphere can be easily disconnected from their cultural context. As Nerissa Broben told us, for organisations like the Koorie Heritage Trust, cultural leadership and inter-generational knowledge exchange is integral to their overall mission; this took on extra significance in relation to digital and online contexts:

I would hope places like the Trust and the museum [Museum Victoria] can facilitate some of that research. We both have really strong collections here and it would be really exciting to be hubs of cultural knowledge. Places where young ones can start those discussions [...] That would be an investment in the community too if you're investing in those young ones and bringing in elders. Everybody benefits. The institutions benefit from knowing more about their material and facilitating that process.

Nerissa Broben, Koorie Heritage Trust.

Following the 1997 National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families, the Bringing Them Home report made a series of recommendations relating to community access to records and information relating to Indigenous communities. This included the establishment of a Records Taskforce in each state and territory (the Victorian Koorie Records Taskforce in Victoria) and the provision of Indigenous Repositories and Indigenous language, culture and history centres for the transfer of historical and cultural information relating to that community and its members (AHRC, Recommendation 29). More recently, some institutions, like the State Libraries of Victoria and New South Wales, as well as the National Film and Sound Archive, have established dedicated Indigenous positions or Indigenous Units to respond to Aboriginal community needs and requests for access, made more urgent by digitisation and digital display of collection materials. As described earlier, the State Library of Victoria has developed a Cultural Permissions program - where requests for access to SLV collection materials with connections to Aboriginal communities are negotiated in collaboration with those communities and in a way that protects the integrity of the collection item(s). Cultural protocols are a way of Aboriginal people having

authority in collecting environments and the SLV's Cultural Permissions process functions as an important cultural interface between the general public and Aboriginal communities: it invests cultural authority with communities in determining the conditions of access and use for their cultural materials and provides an educative function for non-Aboriginal people wanting to access Indigenous materials. In the first instance, the direct descendant(s) of the people or community represented in the collection item wanting to be accessed are contacted. If they can't be located, the descendant community is approached. Maxine Briggs also noted that native title can also come into play where traditional owner groups may also be consulted where appropriate. This provides a framework and process for Aboriginal communities to negotiate the terms and uses of cultural materials relating to them.

While there is widespread acceptance of commercial restrictions on use in an online environment, cultural regulations on use are less often recognised.

Maxine Briggs explained:

A lot of people do query the idea that materials could be restricted in an online environment and the Cultural Permissions program isn't about restricting material; it's about providing better access to the Aboriginal community for their cultural purposes.

Maxine Briggs, State Library of Victoria.

The importance of educating non-Indigenous people about respect for Aboriginal communities and their material culture was noted by several of our respondents. In follow up conversations with the Reference Group and interview respondents, Maxine Briggs, Nerissa Broben and Jenny Green, raised the point that in Aboriginal culture, access to knowledge was something that had to be earned. Today, however, tensions can exist in relation to the broader push within the cultural sector towards open access to digital content. For Kirsten Thorpe, developing proactive strategies for community engagement is key:

We're developing strategies that aren't just about waiting for people to come in through the reading room, but looking at those challenges of online access and how we complement that online work with actual physical relationships and engagements with [Indigenous] communities.

Kirsten Thorpe, State Library of NSW.

This has included developing an Indigenous Services team, a Branch of the Division of the Mitchell Librarian and Education & Scholarship within the library, and therefore more visible to the public.

### 8.1 Indigenous digital heritage

The proliferation of Indigenous digital content and its circulation online was met with both excitement and hesitation by many respondents, reflecting broader concerns around cultural control, differential access and mediated forms of knowledge transmission already discussed. Digital literacy and intergenerational knowledge exchange were raised as important ways that communities understand how to control and protect cultural knowledge and information in the digital sphere. Nerissa Broben identified the need for education for Aboriginal young people around what's appropriate to share through social media and other digital platforms, both in terms of general education in schools around digital literacy, and the need for intergenerational knowledge exchange when discovering cultural material online:

Some of the European museums have some really amazing collections online, so obviously young ones are more likely to be able to do these searches and they may not know that they're available and even then there's issues around how things have been catalogued and sometimes they've been miscataloged [...] We need to look at ways to strengthen elders and youth to be sharing that information so that if they're coming across something, they can actually say 'this says its from Queensland, but it looks really Victorian'.

Nerissa Broben, Koorie Heritage Trust.

For Kimba Thompson, director of SistaGirl Productions and Blak Dot Gallery, creative re-use of cultural material held in collections was appropriate, as long as the integrity of the original work was respected:

We live in a contemporary today, so the majority of our [Aboriginal] artists are reinterpreting what it is in a new format - with still the integrity of the story and the culture behind it.

Kimba Thompson, SistaGirl Productions and Blak Dot Gallery.

Kimba also identified the need for Indigenous people making content to understand issues of copyright, including how to protect their cultural rights, as important, particularly when young people are sharing or posting images on social media:

You have to look at what the world's about. So if you SnapChat - I'm talking about the youth - if you SnapChat, you Instagram, you do whatever, you're putting that out there - so it's a free zone for them. So that's where it hasn't quite been challenged yet about copyright issues. So the underlying thing is out there - you can either acknowledge it's a re-post, so you can acknowledge it came from somewhere, or what most people are doing and completely ripping it off. So then you have to protect yourself.

Kimba Thompson, SistaGirl Productions and Blak Dot Gallery.

At the same time, this also raised the question as to what extent institutions are responsible for managing the potential misuse of Aboriginal collection items made available online, including creative re-use by artists and re-circulation on social media:

The museum can't be the police in all of this... The artists themselves have to take responsibility. But I also think it would also get adjudicated in the community and people soon learn what they can and can't do, and that's really where it belongs.

Lindy Allen, Museum Victoria.

The broader dilemma raised by Lindy's comments is that not putting cultural material 'out there' risks invisibility, potential irrelevance and disconnection from communities, while making it available online – and on social media in particular – makes it difficult, if not impossible, to guarantee legal and cultural protections.

Community-based repositories and digital archives, like A<u>r</u>a Irititja, provide another model for communities to control and manage their own knowledge digitally. More broadly, the role of institutional collections is changing in the face of increased user-generated and online content:

One of the challenges for ACMI is then: how do we harvest that sort of material from the World Wide Web in all its magnificence? How do we find it? How do we harvest it? What rights to we seek? Do we become the holder of the preservation material [...] Is our role perhaps less the preserver of that material, but more the facilitator of access?

Nick Richardson, ACMI.

Many respondents we spoke to could see the future value and importance of acquiring community-created content like digital stories made by Aboriginal people, particularly for future generations.

Digital stories, personal memories, are seen as a really important part of the collection of what ACMI has contributed. So the whole digital story projects, and the regional outreach that ACMI's done over the last ten years, has been really important. We've naturally enough collected all of the output of that material, and we have identified that that's a strength of the collection, and that it's an important part of the collection, so we will continue to collect personal stories.

Nick Richardson, ACMI.

For an institution like Museum Victoria, digital stories were not something traditionally collected, but their value was clearly evident for Miriam Troon:

I think it would be a real shame if those kinds of stories weren't saved, or became some sort of digital archive, or collected by collecting institutions, because at the end of the day it's storytelling, it's voice. It's a different way of doing it - it's multimedia, it's adding images and so on together with the story - but at the end of the day it's a new way of telling stories. So, yep, they need to be safeguarded for the future.

Miriam Troon, Museum Victoria.

The proliferation of digital-born and community-created content made by Indigenous people presents a challenge for archives and researchers alike. Communities must be empowered to determine if, how and where their cultural materials and information are accessed, shared and used. This includes material created in the course of research, such as the digital stories made by Aboriginal young people as part of this project. Conversations around informed consent are necessary when thinking about where community-created digital content might end up in the future. As Kirsten Thorpe reminded us, this needs to be worked through with communities at the beginning of the process, rather than at the point of thinking about how such materials might become part of an archive:

Whether it's oral histories or photographs taken in a community context [...]I don't know that people think in that long-term continuum of 'this might be deposited somewhere' [...] In talking about your research data - it might change from this interview, to being in a book. Where does that stuff spread itself out over the long term? And if you don't have that conversation in the beginning, and validate that, I think there needs to be room for people to say 'please get rid of this stuff', 'I didn't want this to be recorded', 'I didn't want to put it into a repository or an archive'... Some things aren't meant to be archived.

Kirsten Thorpe, State Library of NSW.

This raises the important point that policy solutions while necessary, are not sufficient, and must be connected to broader conversations that extend beyond institutional collection development and management to include ongoing discussion between Aboriginal and non-Aboriginal people working with cultural materials to identify and determine whether, how, where and in what context their cultural heritage is disseminated and displayed.

#### 9 Considerations and conclusion

Based on consideration and analysis of the data, including over 15 hours of stakeholder interviews, review of the policy context and academic literature and ongoing discussion with the Reference Group, we have found that much of our research supports existing work in this field, and re-affirms some of the pressing issues that remain unanswered questions for the sector. While digital technologies provide the opportunity for increased access to cultural heritage materials, Ormond-Parker and Sloggett (2012) caution that 'how Aboriginal people are enabled to access their information remains an issue'. Our research confirms this is still very much the case.

Below, we offer three key areas that warrant further consideration in relation to Aboriginal knowledge, digital technologies and cultural collections: prioritising Aboriginal voice, developing cultural indicators and policy for community-generated digital content.

### 9.1 Prioritising Aboriginal voice

It is clear from our interviews and existing research that prioritising Aboriginal voice is critical to supporting both cultural change within the collecting sector and furthering Indigenous self-determination more broadly. Our Aboriginal respondents all stressed the need for respect, integrity and Aboriginal authority as central to the appropriate collection and dissemination of Aboriginal knowledge and material culture, including digital content. These values were not seen as abstract principles, but rather the necessary starting point for thinking about how to maintain cultural control in a digital environment which can de-contextualise, re-use, inappropriately circulate and otherwise misuse Aboriginal information and knowledge. In terms of the digital, a paradigm shift that incorporates the imperatives of informational self-determination and digital sovereignty for Indigenous people could perhaps signal a way forward in this area. This could push beyond debates around management and control to one that places at its heart the very terms, frames and procedures through which Aboriginal cultural materials and knowledge are understood and valued.

Prioritising Aboriginal voice necessarily requires a fundamental shift in power relations between collecting institutions and Aboriginal people and there have been positive moves in this direction. However, there is significant work yet to be done. This includes increased involvement and participation by Aboriginal people in re-orienting priorities, developing policy, designing technologies and creating procedures that privilege Aboriginal voice. It also demands critical reflection of how current practice and discourse excludes, de-prioritises or devalues Aboriginal perspectives, stories and knowledges. In the digital sphere, including more Aboriginal voices in contemporary digital humanities and digital heritage debates more broadly would strengthen existing critiques of the effects of commercial providers and global digital platforms like Facebook and Youtube for online cultural expression.

### 9.2 Developing cultural indicators

It is clear from our interviews that there are ongoing questions about what best practice looks like on the ground when it comes to meeting the aims and aspirations of the ATSILIRN Protocols and broader frameworks for engaging with Indigenous collections. Gaps continue to exist between broad policy frameworks and specific procedures or processes in place that support individuals and organisations to respond to the needs and interests of Aboriginal communities within a complex digital environment. While there are examples of best practice and models that privilege Aboriginal voice, systematic measurement and evaluation is not always present. This is also reflected more broadly in the difficulties that arise in embracing Aboriginal employment targets in some sectors - including educational institutions - as part of their Reconciliation Action Plans, while for other institutions, measurable targets are seen as essential. Kirsten Thorpe's suggestion around the development of Key Performance Indicators for institutions to measure progress against the ATSILIRN Protocols is perhaps one way to move the agenda forward in this area, and warrants further consideration. The development of a Cultural Indictor framework could be one way to think about this, initiated and developed by Indigenous cultural workers in the sector to prioritise values, benchmarks and outcomes important and of use to them.

### 9.3 Policy for community-generated digital content

While there is a body of literature that address key issues connected to Indigenous cultural collections in the digital landscape, beyond existing legal and cultural frameworks there is a dearth of policy or protocols that respond to the specific challenges of web 2.0, co-creative and community-generated digital content, including digital stories. This is despite recognition – within the library sector at least - that 'born digital' materials must be proactively collected 'now' so there won't be a 'black hole' in heritage collections in the future (NSLA, 2013) and the fact that Indigenous young people are creating and sharing digital content through a range of digital platforms and social media. In relation to Indigenous digital collections specifically, Nakata et al. (2008: 224-5) warned nearly ten years ago that 'the priority for specific standards, practices and protocols for Indigenous digital collections is [...] still to gain traction'. Our research found that this was still largely the case, despite efforts made by some institutions and individuals to proactively collect digital born content, including material created by Indigenous communities. Further, while Section 12 of the ATSILIRN Protocols (developed in 2010/12) address the 'digital environment', it does not fully account for the rapid rise of social media in the last five years and the way this is reshaping how cultural heritage materials are created, used and circulated online. Future policy development must consider the implications of this changing digital landscape, with updated protocols to reflect this.

- 10 References
  - Aboriginal and Torres Strait Islander Library Information and Resource Network. (ATSILIRN) (2012). ATSILIRN Protocols for Libraries, Archives and Information Services.
  - Anderson, J. and K. Christen (2013). "Chuck a Copyright on it": Dilemmas of Digital Return and the Possibilities for Traditional Knowledge Licenses and Labels', *Museum Anthropology Review* 7(1-2): 105-126.
  - Arts Law Centre of Australia. (2011). 'Artists in the Black Information Sheet: Indigenous Cultural and Intellectual Property (ICIP)'. Available from <a href="http://www.aitb.com.au/information-sheets/entry/indigenous-cultural-and-intellectual-property-icip">http://www.aitb.com.au/information-sheets/entry/indigenous-cultural-and-intellectual-property-icip</a>
  - Aboriginal and Torres Strait Islander Data Archive (ATSIDA). (n.d.). 'About'. Available at: <a href="http://www.atsida.edu.au/node/846">http://www.atsida.edu.au/node/846</a>.
  - Australian Human Rights Commission (1997). Bringing them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families.
  - Charmaz, K. (Eds.). The Sage handbook of grounded theory. London: Sage: 454-471.
  - Christen, K. (2012). 'Does Information really want to be Free? Indigenous knowledge systems and the question of openness', *International Journal of Communication* 6: 24.
  - Christie, M. (2004) 'Computer Databases and Aboriginal knowledge', *International Journal of Learning* in Social Contexts, 1: 4-12.
  - Culture Victoria (2016). 'Koorie Heritage Trust', Culture Victoria website. Available from http://www.cvvic.gov.au/organisations/koorie-heritage-trust/
  - Denzin, Norman K. (2007). 'Grounded theory and the politics of interpretation'. In Bryant, A., &
  - Derrida, J. (1996). Archive fever: A Freudian impression. University of Chicago Press: Chicago.
  - Dourish, P. (2014). 'NoSQL: the shifting materialities of database technology', *Computational Culture*, 4.
  - Evans, J., McKemmish, S., Daniels, E., and McCarthy, G. (2015). 'Self-determination and archival autonomy: advocating activism', *Archival Science*, 15(4), 337-368.
  - Foucault, M. (1972). The archaeology of knowledge and the discourse on language (Trans: A.M. Sheridan Smith). New York: Pantheon.
  - Garwood-Houng, A. and F. Blackburn (2014). 'The ATSILIRN Protocols: a twenty-first century guide to appropriate library services for and about Aboriginal and Torres Strait Islander peoples', *The Australian Library Journal*, 63(1): 4-15.
  - Geismar, H. (2013). 'Defining the Digital', Museum Anthropology Review 7(1-2): 254-263.
  - Hall, S. (2001) 'Constituting an archive', Third Text, 15:54, 89-92,
  - Janke, T. (2005). 'Managing indigenous knowledge and indigenous cultural and intellectual property', Australian Academic & Research Libraries, 36(2): 95-107.
  - McNair Ingenuity Research Institute (2014). Media Usage Amongst Aboriginal and Torres Strait Islander
    People. Available from http://mcnair.com.au/wp-content/uploads/Media-Usage-amongstAboriginal-and-Torres-Strait-Islander-People-McNai...pdf
  - Museums Australia (2005) Continuous Cultures, Ongoing Responsibilities: Principles and guidelines for Australian museums working with Aboriginal and Torres Strait Islander cultural heritage. Canberra, ACT.
  - Nakata, M., V. Nakata, A. Byrne, J. McKeough, G. Gardiner and J. Gibson (2008). Australian Indigenous Digital Collections: First generation issues. Sydney, University of Technology Sydney, UTSeScholarship.

- Nakata, M. and M. Langton (2007). Australian Indigenous Knowledge and Libraries, Sydney: UTS ePress.
  - Ormond-Parker, L., A. Corn, C. Fforde, K. Obata and S. O'Sullivan, Eds. (2013). *Information Technology and Indigenous Communities*, AIATSIS.
  - Ormond-Parker, L. and R. Sloggett (2011) 'Local Archives and Community Collecting in the Digital Age'. *Arch Sci*, 12, 191-212.
  - Ormond-Parker, L; Langton, M; Huebner, S; Coleman, J; Pearson, C; Sloggett, R; Nordlinger, R; Smith, K; Clarke, K. (2016). When Magnets Collide: Digital Preservation and Access of At-Risk Audiovisual Archives in a Remote Aboriginal Community, Melbourne Networked Society Institute: The University of Melbourne, 1 28 (28).
  - O'Sullivan, S. (2013). 'Reversing the gaze: Considering Indigenous perspectives on museums, cultural representation and the equivocal digital remnant' in Ormond-Parker, L., Corn, A., Fforde, C., Obata, K., & O'Sullivan, S., *Information Technology and Indigenous Communities*. AIATSIS Research Publications, Canberra, A.C.T, pp. 139-150..
  - Rennie, E., E. Hogan, R. Gregory, A. Crouch, A. Wright, and J. Thomas (2016) *Internet on the outstation: the digital divide and remote Aboriginal communities*, Institute of Networked Cultures: Amsterdam.
  - Rice, E. S., Haynes, E., Royce, P., & Thompson, S. C. (2016). 'Social media and digital technology use among Indigenous young people in Australia: a literature review', *International journal for equity in health*, 15(1), 1.
  - Russell, L (2007). Indigenous Knowledge and Archives: acessing hidden history and understandings. Australian Indigenous Knowledge and Libraries. Nakata, M. and Langton, M. UTSePress., Sydney:161-172.
  - Russell, L. (2001). Savage imaginings: Historical and contemporary constructions of Australian Aboriginalities, Australian Scholarly Publishing, Melbourne.
  - Salmond, A. (2012). 'Digital Subjects, Cultural Objects: Special Issue introduction', *Journal of Material Culture*, 17(3): 211-228.
  - Sand, S. (2002). 'Sui Generis Laws For The Protection Of Indigenous Expressions of Culture and Traditional Knowledge', *University of Queensland Law Journal*, 22: 188.
  - Smith, L. T. (1999). Decolonizing methodologies: Research and indigenous peoples. Zed books.
  - Thorner, S. (2010). 'Imagining an Indigital Interface: Ara Irititja Indigenizes the Technologies of Knowledge Management', Collections: A Journal for Museum and Archives Professionals 6(3): 125-146.
  - Thorner, S. and J Dallwitz (2015). 'Storytelling photographs, animating Anangu: how Ara Irititja'an indigenous digital archive in Central Australia facilitates cultural reproduction' in Decker, J. (ed.) Technology and digital initiatives: innovative approaches for museums. Rowman and Littlefield: London.
  - Thorpe, K. and A. Byrne (2014). 'Indigenous Voices in the State Library of NSW', conference paper, Library History Forum. State Library of NSW.
  - Thorpe, K., M. Joseph and State Library of New South Wales (2015). Digital Engagement and the ATSILIRN Protocols: Indigenous Australian experiences and expertise guiding the use of social media in Libraries. Australian Library and Information Association Online: Sydney.

# Aboriginal Knowledge, Digital Technologies and Cultural Collections Policy, Protocols, Practice

Melbourne Networked Society Institute Research Paper 4 October 2016 ISBN: 978-0-7340-5323-7



Level 4, Building 193 University of Melbourne Victoria 3010 Australia

w: networkedsociety.unimelb.edu.au e: networked-society@unimelb.edu.au

