

“The songline is alive in Mukurtu”: Return, reuse, and respect

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Abstract

This chapter examines the return, reuse, and repositioning of archival materials within Indigenous communities and specifically within the Warumungu Aboriginal community in Central Australia. Over the last 20 years there has been an uptake in collecting institutions and scholars returning cultural, linguistic, and historical material to Indigenous communities in digital formats. These practices of digital return have been spurred by decolonisation and reconciliation movements globally, and at the same time catalysed by new technologies that allow for surrogates to be returned and concurrently reinvented, reused, and reimagined in community, kin-based, and place-based social and cultural networks. Examining the creation, use, and ongoing development of Mukurtu CMS, this article focuses on the implications for digital return as a type of repatriation that promotes decolonising strategies and reparative frameworks for engagement.

Keywords: digital return, archival studies, repatriation, digital archives, Warumungu

Opening¹

In May of 2017 I sat with several Warumungu and Warlmanpa women in the Cultural Resource Room at the Nyinkka Nyunyu Art and Culture Centre in Tennant Creek, Northern Territory (NT), Australia, listening over and over again to Milwayi and Mungamunga songs recorded by researchers over several decades. The women were from several family groups in the Barkly region, related through these songlines. The connections were known intimately by the women, and their responsibility for the songs, the country, the language, and their ancestors wove through those connections (Barwick et al. 2013: 198–203). After the deaths of several senior women and knowledge-holders for these songlines in 2011, this group of women embarked on a process to both repatriate recordings and associated materials related to the songlines and record new versions of the songs, body decorations, and dances that make up the bundle of knowledge surrounding the songlines. After the bulk of the material had been repatriated from scholars and archives, and the recordings the women had made with a professional filmmaker were completed, the focus turned to providing appropriate access to the digital corpus – now and in the future.

We were accessing and listening to the songs that day through the most recent version of the Mukurtu Wumpurrarni-kari Archive, a community resource and digital access platform that had been in use since 2007. Up to this point, however, the majority of the community material uploaded and circulating using Mukurtu had been photographs. Indeed, the catalyst for the platform’s creation had been the repatriation of hundreds of photos from the Aboriginal Inland Mission (AIM). The reason for our meeting and listening session that May afternoon in 2017 was to begin a more in-depth conversation about the potential of using the newly updated Mukurtu CMS platform to provide access to the songs as well as the videos, photos, and documents that made up the newly repatriated and assembled collection. The women had had many discussions over the previous years of work to define the protocols for access and use through a more static hard drive, but the potential for more interactive usage and modes of sharing through Mukurtu prompted another set of discussions (K Webeck, pers. comm., 2017).

1 This article was written as part of my collaboration with the Warumungu community, who are the traditional owners, caretakers, and stewards for the country in and around the present-day town of Tennant Creek, in the Northern Territory of Australia. I pay my respects to Warumungu people past, present, and future and acknowledge their ongoing connections to and relationships with their country, kin, and ancestors and the continuing knowledge they hold for their country. I want to thank E Nelson Nappanangka, K Fitz Nappanangka, E Graham Nakkamarra, D Dawson Nangali, TR Nappanangka, Dianne Stokes Nampin, LG Namikili, Rose Graham Namikili, Patricia Frank Narrurlu, Ruby Frank Narrurlu, Michael Jones Jampin, and Jimmy Frank Juppurula for their time, patience, and willingness to share. Any omissions or mistakes are mine. Kim Webeck and Samantha Disbray have been fantastic collaborators, interlocutors, and dinner mates in and around Tennant Creek and I appreciate their willingness to work together on our many overlapping projects. My graduate assistant, Jesslyn Starnes, produced the references and formatted the article and so much more; her labour was central to this piece seeing the light of day. The ongoing development and support for Mukurtu CMS is provided by an amazing team of dedicated developers at the Center for Digital Scholarship and Curation led by Alex Merrill, Steve Taylor, and Michael Wynne. Finally I owe a debt of gratitude to my colleague and friend, Dr Jane Anderson, whose intellectual rigour, compassion, and depth of knowledge about how to enact acknowledgement is something I strive for daily.

Table 1: Brief timeline of Mukurtu’s development and distribution

Release type	Year	Distribution	Core features/updates
Mukurtu alpha – MySQL server and PHP scripting	2007	Warumungu	Local protocol-based access; community commentary
Mukurtu beta – LAMP stack Linux Centos 5.4, Apache 2, MySQL and PHP	2009	3 Plateau tribes (USA)	Expanded metadata + Dublin core; audio/video comments
Mukurtu .5 Drupal 7.08	2011	6 Plateau tribes (USA)	Community records; expanded admin roles
Mukurtu 1.0 Drupal 7.22	2012	Australia, New Zealand, USA	Integrated sharing/ cultural protocols w/user roles; additional media; multipage documents
Mukurtu CMS 1.5 Drupal 7.24	2013	Australia, New Zealand, USA, Canada, Thailand 100+	External hosting options; Mukurtu mobile app; document viewer
Mukurtu CMS 2.0 Drupal 7.3	2015	Global 300+	Round-trip sync; TK Label customisation; SCALD media integration
Mukurtu CMS 2.1 Drupal 7.6	2018	Global 800+	Nested collections; dictionary; customisable front page

The discussions then centred on how access, use, reuse, and transmission might operate through the Mukurtu platform as one point of return. Initiated in 2005 from a community-driven conversation around the circulation of and access to Warumungu community-specific material previously held in national archives, libraries, and museums (Christen 2007, 2011, 2012), Mukurtu has grown into a free and open-source content management system and community digital access platform used by Indigenous communities around the world.

The impetus for Mukurtu’s transformation from a one-off, locally hosted community platform in Tennant Creek to a flexible and customisable software package was the similar concerns that Indigenous communities worldwide have expressed regarding community-based protocols for the circulation, access, and use of cultural materials, traditional knowledge, and language.² It was fitting then that we were at Nyinkka Nyunyu having these conversations about digital return and access. As we listened to the songs, watched videos, and viewed archival photos, the conversations turned to the circulation of the songs – through these women as stewards, caretakers, and knowledge-holders, and in many formats. So, when one Mungamunga track ended and Dianne Stokes Nampin spontaneously announced that

2 This table provides a brief history of Mukurtu’s development and its shift to a technical platform base through Drupal and a browser-based model for access. Mukurtu’s code is open source and freely available on GitHub. From 2011 onwards, the Mukurtu team delivered workshops in Indigenous communities in the United States, New Zealand, Canada, Thailand, Mexico, and Central America.

“the songline is alive in Mukurtu,” I was struck by her positioning of the Mungamunga songs within a larger set of circulation routes that include physical and digital spaces, recorded and live performances, tracks over the land, and tracks playing from the MP3s.

I use this quote to frame this chapter in order to foreground the dynamic, coexisting spaces, histories, and networks in which archival returns take place, move, and are negotiated. Nampin wasn’t suggesting some type of anthropomorphism, nor am I. Her spontaneous assertion that the “songline is alive in Mukurtu” was at once a recognition of the primacy of orality, listening, and group circulation, and at the same time a nod to the multiplicity of networks through which knowledge can travel, change, be extended, and grow. Her statement also frames the capacities of Mukurtu CMS as a platform designed to facilitate both the return of and access to cultural heritage materials in culturally responsible ways. That is, the primary role of Mukurtu is to function as part of a network of already existing cultural exchange that includes humans, non-human ancestors, geographical places, analogue systems, and digital technologies and platforms. In this article, I examine a series of archival returns within the Warumungu community that spurred the development of Mukurtu CMS and subsequently were catalysts for the production of cultural materials, expanded collections, and extended relationships. By exploring the specific engagements and the networks created through these digital returns, I situate digital return, reuse, and repatriation as modes of decolonising practice, aligning it more generally with global debates and discussions about repatriation, sovereignty, and decolonising movements with, in, and through potentially reparative archival returns.

Return

This section returns to the beginnings of Mukurtu in order to trace the history of its development both locally and within larger conversations and concerns about archival practices, scholarly research priorities, and social and cultural policies related to Indigenous collections, repatriation, and traditional knowledge. I started working with and collaborating on recording and documentation projects with Warumungu women in 1995 as a graduate student. A senior group of women including K Fitz Nappanangka, E Nelson Nappanangka, D Dawson Nangali, E Graham Nakkamarra, and D Stokes Nampin invited me to record songs and stories about their homelands and traditions with the express intent of passing these recordings on to their children and grandchildren. They specifically asked me to record audio and video of places they were raised, stories of their ancestors, songs about their countries, and the many languages they spoke. Between 1995 and 2005, I worked steadily with this group of women and their extended kin to record oral histories, songs, dances, and stories that were significant to them (Christen 2009). As we did so, we also made trips both to the women’s country – specific tracks and sites in and around Tennant Creek – and to national and regional archives, libraries, and museums to complement the women’s stories.

Recording at the locations of ancestors and kin was never in doubt. The interest in connecting archival collections to these places emerged as a small group of women and I set out to retrace a specific ancestral track that connected three waterholes they traversed when young. As we were doing so, two of the women recalled similar trips in the early 1970s as part of the Warumungu land claim effort (Christen 2009). I contacted the Central Land Council

office in Tennant Creek and located a set of the full land claims transcripts at the Tennant Creek library. Sifting through thousands of pages of testimony, I found the passages the women recalled and together we were able to use these to help us further connect physical tracks. As we traced the tracks of their non-human ancestors over the landscape, we also traced the tracks of their kin in the pages of the land claims case – connecting the two and positioning the archival documents within the present as both evidence and knowledge.

During this time Warumungu traditional owners were planning the design of the Nyinkka Nyunyu Art and Culture Centre in town – built on the ancestral Dreaming track of the Nyinkka (spiky tailed goanna). As part of the planning phase, community members made several trips to museums, archives, and libraries throughout Australia to view materials taken from Warumungu country, with the goal of repatriating some of these physical materials for the community. Once the centre opened in 2002, the work to bring cultural materials home continued. In 2004, I accompanied a group of Warumungu men and women to the National Archives in Darwin to locate materials. After an emotional few days in the archives, we left with a stack of photocopied documents that would be housed at Nyinkka Nyunyu and the promise of digital photos that would be returned via a hard drive. On the drive back to Tennant Creek, Trisha Frank Narrurlu suggested we stop at the house of former missionaries Richard and Sue Davies. Many of the community members present remembered them fondly from their time in Tennant Creek in the late 1970s and early 1980s. It turned out that Mr Davies was in possession of the entire collection of the Tennant Creek photos from the AIM from the 1930s to the 1980s and he had been slowly digitising them. In boxes and now on his computer’s hard drive was a partial 50-year community history that Warumungu community members had yet to see. Trisha told him about Nyinkka Nyunyu and the plans for a community cultural resource room located within the centre to house Warumungu archival materials and provide a space for community members to engage with and reuse the materials in various contexts (Christen 2007). Mr Davies was eager to provide us with the digital files. With some trepidation, I loaded some 700 digitised images on to my laptop and we took them back to Tennant Creek.

I spent the following weeks in Tennant Creek with community members, family by family, clicking through the photos on my laptop reviewing the images and sorting them into folders by family. In the community cultural resource room at Nyinkka Nyunyu, Michael Jones Jampin – one of the cultural managers and a senior knowledge-holder in the community – had already defined access protocols for the physical archival materials returned. On the metal file cabinet in the resource room Jampin affixed a sign reading: “Restricted men only: Permission applies (contact Mr Jones).” As I sat with Jampin, he made it clear that these newly returned photos needed to be managed within the existing social and cultural protocols the community already had for viewing and circulating cultural materials. These protocols are based on a number of factors, with family and country being among the most important. The application of the protocols is, in practice, dynamic and depends on specific contexts. When we discussed the digital materials that had been returned by the missionaries and now school teachers as well, Jampin and Trisha confirmed they wanted this same notion of permissions and community access applied to these newly returned digital materials. She reviewed and explored other software options, but none met the criteria for the fine-grained access levels that were needed. With a view to creating a local community digital access point, we therefore set out to create

a platform that would allow for digitally returned materials to be accessed, viewed, managed, and circulated within the community following their own clearly articulated set of community protocols and kin-based knowledge system.

Over the next two years we worked together – myself, designers, software engineers, workers at Nyinkka Nyunyu, and Warumungu community members – to design, test, and implement the Mukurtu Wumpurrarni-kari Archive to meet the specific cultural needs and social values of the community, modelling the architecture itself on the dynamic information and knowledge transmissions already in place.³ Jampin gave the name Mukurtu, which means dilly bag in Warumungu, to the platform we were creating. We had seen a dilly bag at the South Australian Museum on one of our trips to view Warumungu belongings in the museum. Some of the younger Warumungu community members in their 20s and 30s had not heard the word, nor seen one before. Jampin explained to us that in the “old days” elders kept sacred items in the dilly bag. Novices had to approach the elders who had the obligation and social responsibility to “open up” the items – to share the knowledge that went with them. He said, “See in them old days, it was hard law, you couldn’t look.” But, Jampin also reminded us that elders had to “open them up” under the proper conditions – through respectful and “right-way” relationships (M Jampin Jones, pers. comm. to K Christen, 2004). It is through ongoing dialogues and interactions between kin that knowledge transfer and generation take place. The dilly bag – *mukurtu* – embodies these dynamic relations and one of its primary roles is prompting, strengthening, and maintaining relationships of respect within the community and between generations. Those relationships can also be strained and tested in the face of emergent social systems and political structures.

Jampin choose Mukurtu as the name for the platform we imagined because it denotes a set of relationships, obligations, and ongoing intergenerational knowledge sharing based on systems and networks of reciprocity and respect recognised by community members. The dilly bag, he translated further, is a “safe keeping place” – not only physically secure, but a safe space for “holding up” relationships and knowledge. We needed a system that could uphold and embody (not replicate) the same types of social relations and cultural protocols. The technology was not a replacement for kin and territorial relations. But it was the networks of kin, country, and ancestors that animated the design and development process. Over two years I flew back and forth with versions of the platform, testing the features with people and managing expectations – what the system could and could not do. In 2007, we launched the Mukurtu Wumpurrarni-kari Archive at Nyinkka Nyunyu. Within the Mukurtu platform, community members defined viewing and access of country, family, and kin, based on their own cultural and social protocols, and using a detailed user-profile system. At the time, the community designated eight protocols for access, and all content had to be tagged with at least one family and one country. Unlike most content management platforms of the time, we had designed Mukurtu to foreground social relationships – not items, collections, or records.⁴

3 For other such work, see Verran & Christie (2007), Becvar & Srinivasan (2009), Gardiner et al. (2011), Geismar & Mohns (2011), Hennessy et al. (2012), Bohaker et al. (2015), and Powell (2016).

4 On the limits of standard content management systems and the systems of cataloguing, classification, and metadata they rely on to encompass Indigenous knowledge and exchange systems, see: Toner (2003), Hunter (2005), Salmond (2012), Rowley (2013), Littletree & Metoyer (2015), O’Neal (2015), and Ghaddar (2016).

At the same time as we were building the Mukurtu platform, Trisha and Jampin, as the cultural managers at Nyinkka Nyunyu, were engaged in a series of digital return and repatriation projects. Trisha had created a detailed list of school teachers, missionaries, academics, lawyers, and others who had worked in Tennant Creek and she was relentlessly following every lead to have their materials digitally returned to Nyinkka Nyunyu. The filing cabinets in the resource room grew, with CDs and the iMacs expanded with digital files, all sorted by family. As mentioned above, the structure outlined for the Mukurtu Wumpurrarni-kari Archive was designed with family and country as the primary modes for defining access: thus any material uploaded was required to have a family and country protocol, with subsequent protocols such as elders, male, or female only added as needed. The protocols, importantly, could be mixed and matched to provide very granular levels of access, say for women from one kin group, all of whom had obligations to a certain country. I trained the staff in the then labour-intensive process of uploading – our maximum at that time was set at 50 images – and the inputting of metadata fields was all one by one. Although this would change radically in future iterations, we learnt through that process that literacy and cultural values around the significance of metadata guided the process more than did the technical infrastructure. People were simply less interested in defining file types than in naming family members.

Reuse

In the first few days, weeks, and months after the AIM photo collection was returned to the Warumungu community, there was a flurry of activity. The excitement was palpable. This was coupled with a sense of Warumungu pride and purpose that accompanied the opening and programming at Nyinkka Nyunyu Art and Culture Centre. Community members working there set in motion a series of projects, ventures, and collaborations that were all grounded in the vision of Nyinkka Nyunyu as a hub for Warumungu people – and a larger Barkly region Aboriginal community – to narrate, reframe, create, and share their stories, histories, knowledge, art, and culture. It was during this time that the senior women with whom I had been collaborating expanded the notion of the book they originally envisioned. They wanted to use the photos and videos taken during our excursions, the archival materials repatriated from the National Archives in Darwin and the South Australian Museum, and the photos from the Davies as well as one of the school teachers, Peter Brand, to create a community DVD and book, *Anyinginyi manuku apparr: Stories from our country*.

It was two of the most senior women, K Fitz Nappanangka and E Nelson Nappanangka, who drove the production of the DVD as a necessary part of the “paper stories” we had already been writing and collecting. Diane Stokes Nampin framed some of their intentions for both the initial recording and the viewing later this way:

Well, a lot of children, a lot of children who see us sitting in front of old ladies, want to do painting on us, we get strong, the kids really want to join in and take part in dancing and take part in painting. So, kids feel happy 'cause they want to learn, for when they see their mother or their auntie or their grandmother in the front there they want to get up and dance. So, they want to dance so they feel happy and we feel happy that they going to

learn. We want them to get up and do something, we don't say no to them, we want them to learn, we want them to come in there and sit down and do the paintings on their chests.

(D Stokes Nampin, pers. comm. to K Christen, 2003)

These sessions (which I attended) moved between instruction, to teasing and scolding for missteps, to larger conversations about 'holding' and upholding the knowledge of country and ancestors embedded within the songs, body designs, and dances. We completed the DVD in 2004, and multiple copies circulated between the women for years (Christen 2005). I uploaded this corpus of videos and audio we created together along with the digital copies of archival materials we amassed during our work together into the Mukurtu Wumpurrarni-kari Archive in 2007 for access by the women. Instead of only the edited clips on the DVD, we uploaded the complete video and audio files into Mukurtu to provide access to the women and girls. This, in turn, spurred the women to direct Nyinkka Nyunyu cultural resource staff, led by Trisha Frank Narrurlu and Rose Graham Namikili, to seek more materials specific to women, especially Mungamunga. Watching and listening to these recordings created an interest among the women to record more – especially family histories. Rose was also using the growing content uploaded to Mukurtu to produce booklets for the new Wumpurrarni Tours offered through Nyinkka Nyunyu. Rose took tourists to Kunjarra – a site just outside of town – and took them on bush tours and told them about the Mungamunga women and the importance of the site to Warumungu people.

Through these multiple returns, cultural materials were repurposed, reused, and reimagined as vehicles for community empowerment, re-narrating misunderstood events, and reconnecting family histories.⁵ I was able to go with Rose on a few tours in 2007 and 2009 and record her as she narrated the history of Kunjarra. In May 2017, I sat with Rose at the Training Centre in town (she no longer worked at Nyinkka Nyunyu), and we watched videos of her mother, and my mentor, E Nakkamarra Graham. I wasn't sure at first if she would want to watch the videos, since her mother had passed away in 2014 and protocols over viewing are more and more dependent on individual preference. She was not only interested in watching, she also sat with me for hours as we translated one of her mother's videos from Warumungu into English. In the video Nakkamarra discussed the "old ways" women from all over the region came together to sing and dance:

Old people coming from everywhere to dance, we show them that this *yawulyu* is our own.

We only dance one time to share with others and after people scatter going back to their country, from camp to camp. They take that *yawulyu* to another country to show them.

(E Nakkamarra Graham, pers. comm. to K Christen, 2007)

We watched the full video several times, along with others from earlier trips out bush. On one of the videos we watched a trip to a nearby soakage where both E Graham Nakkamarra and D Dawson Nangali described the movements of their kin and wove in stories of ancestral tracks and the movements of settlers in the area. We laughed too at the children on the video as they darted in and out of the frame variously listening and telling their own stories. Rose

5 See Barwick et al. (2013) for more on reuse within Central Australian communities.

commented, “See, that was good, taking them kids out to that place, they’re happy I reckon.” The intention of that elder group of women was not only for instruction – passing on their knowledge – it was also to stimulate new knowledge, connections, and relations to country and kin. This use of the technology was decidedly purposeful.⁶ This particular group of women knew that part (not all) of their legacy would be mediated through new forms of capture, return, and circulation. It was their kin who were now watching, listening, and reusing these materials to reach outward, within and between their community, families, and different publics.

Access and circulation

By 2015, Mukurtu CMS was at a 2.0 release with much more functionality than previous iterations – particularly around displaying content, adding traditional knowledge, and linking content across the platform (Christen et al. 2017). While people were familiar with, and comfortable, accessing the content on Mukurtu through the Nyinkka Nyunyu staff, there had not been much content added to the site in the previous few years. While Nyinkka Nyunyu was going through its own set of financial and organisational challenges and changes, fewer staff meant that the archive was a lower priority and that original excitement was absent. During this time, Nyinkka Nyunyu also expanded its focus to the larger Barkly region. Extended relations across the region have always been evident and acknowledged by community members through their own family and social networks, as well as through the structures of ceremonial systems. During meetings at Nyinkka Nyunyu in 2015–2016, we discussed the varied stakeholders, and the types of contributions to the content and knowledge in the Mukurtu site up to that point. As we looked over the photos and documents in the current Mukurtu site, Jampin explained:

See, this is for all Wumpurrarni people, some of the photos we have we don’t know the people ’cause they weren’t from here. We have photos from the Barkly region here, we have some photos here of old Alyawarr people, you got Warlpiri, we got those Warlmanpa lot too, their stuff is here. (M Jampin Jones, pers. comm. to K Christen, 2016)

Because the scope had expanded over the last 10 years, with digital collections being returned from researchers, national, and regional archives, and school teachers, Jampin suggested a new name for the Mukurtu site: *Wurppujinta Anyul Mappu – a gathering place*. With the updated name, we also took the opportunity to rethink the categories, the structure of the site, and how – once it went online – people could access the site from their homes, on their phones, or at other organisations in addition to Nyinkka Nyunyu. When Nyinkka Nyunyu temporarily closed for renovations in 2017–2018, the need for more access points became even more relevant. And successive layoffs of staff in the preceding years had slowed the addition of content to the site, highlighting the need for more trained staff across a range of organisations.

⁶ For specific discussions of Indigenous communities’ use of technology within and beyond return projects see Cha chom se nup et al. (2013), Hollinger et al. (2013), Hennessy et al. (2012), Lempert (2018), Nakata et al. (2014), and Solomon & Thorpe (2012).

We'd been having discussions around making Mukurtu accessible online for years. In 2006–2007 when we were in active development of the original platform, the idea of having content accessible via the internet was impractical. In the ensuing decade, the digital infrastructure, including broadband access, in Tennant Creek – and the Northern Territory more broadly – changed alongside the rapid uptake of mobile devices by Aboriginal people. In fact, where once I was continually asked for prints of photos, and then CDs, now it is a “stick” – a USB or flash drive. While it is still the case that personal computers are rare in Aboriginal homes in Tennant Creek, gaming devices such as the Xbox and mobile phones are prevalent. People are adept at using Bluetooth-enabled devices to share, copy, and circulate digital files, including photos and audio and video files.

Reflecting the expanded purview of the new Wurrppujinta site, we were able to use the updated architecture of Mukurtu CMS to emphasise the types of contributors and returned collections in a way that we were not able to do in previous iterations of the software. Since the new site was to be online, there was a conscious decision to delineate the types of public materials on the site. The main page now highlights the contributions to the site that Aboriginal organisations, researchers, and others have made. So, for example, within the ‘Aboriginal Organisations’ track, there are currently three organisations in town that are contributing content. Similarly, researchers who may have collections deposited in national archives can also upload copies to Wurrppujinta to allow for easier community access. The original family materials that formed the core of the content over the last decade remain viewable only by family members and those protocols are defined and updated by them. During 2018–2019, I returned to Tennant Creek and walked through the new functionality with various stakeholders and traditional owners. Some were eager to use the platform, while others preferred to watch. The continued lack of training opportunities to upload materials – as opposed to accessing them – remains a challenge.

At the same time as we were updating the Wurrppujinta site, linguists Samantha Disbray and Jane Simpson, who had both worked in the community for decades, started work with community members “to repatriate and repurpose a collection of Warumungu language audio materials” that had been digitised from the Prith Chakravarti collection at the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) (S Disbray, pers. comm. to K Christen, 2018). In fact, Samantha and I coordinated several of our field trips and worked simultaneously with community members. As I was showing people videos and we were looking at old photographs on Wurrppujinta, Samantha was playing the Chakravarti recordings and soliciting transcriptions of the materials. The Chakravarti recordings include “language materials, such as wordlists, sentence elicitation and explanation, along with oral history, personal narratives, descriptions of cultural practice, country, flora and fauna, and an extensive range of dreamtime stories” (S Disbray, pers. comm. to K Christen, 2018). The tapes had been largely inaccessible to the community and so their digital repatriation was welcome, for both linguistic content as well as the knowledge they held about people, places, and kin.

The audio repatriation project will ultimately produce several aural and visual products. In December 2018, I was able to meet with several Warumungu artists at Barkly Arts who have now created new paintings depicting their renditions of several of the stories recounted on the recordings. Samantha was eager to allow more people to hear the recordings and so after

securing family permissions to play some of the recordings for others, in 2017 she worked with several community members to produce a SoundCloud playlist of the recordings and set up a listening station at the Desert Harmony festival – a set of public events in and around town. We also uploaded a few of the recordings to the Wurrppujinta site to allow those I was working with to listen to them directly. Once the project is completed and the protocols are defined by those families, the recordings will be available through the Wurrppujinta site – with the option to ‘save to USB’ as part of the functionality. Community members, once logged in to the site, will also be able to access copies on their own devices. It has become fairly routine in the last five years for people to use mobile phones to store (temporarily) and access media of all types.

Protocols and process

The update to the Wurrppujinta site overlapped with discussions about access, use, and reproduction of the repatriated Mungamunga and Milwayi collections with which I opened this chapter. While there had been discussions about accessing songs and other ceremonial material using the Mukurtu Wumpurrarni-kari Archive since its inception in 2007, the platform had in practice been used almost exclusively for photos and documents, the bulk of which were under family-based protocols. That is, the majority of the materials were primarily accessed through family protocols, whereas the songs and other ceremonial material would require a more granular set of protocols for access and sharing based on territorial knowledge and ritual status. From a software structure perspective, not only was this possible, it was exactly what the platform was designed to do and many communities in North America using Mukurtu CMS had done just that.

The process for implementing cultural protocols within Mukurtu CMS requires discussions and decisions about social relations and circulation expectations prior to upload. Because all materials uploaded are required to have a cultural protocol (regardless of the type – that is, even if it were ‘public’) decisions about what cultural protocols to add must be determined in advance of ingestion of content to any site. Amelia Wilson, the director of the Huna Heritage Foundation in Alaska, discussed how they are implementing Mukurtu CMS to provide responsible access to their archival materials:

In Tlingit culture songs have protocols for sharing. And so, much like copyrights, I can’t sing a song from another clan without having permission. I belong to the Chookaneidí, the Bear Clan. But say we have something from another clan, the Kaagwaantaan, the Wolf Clan, in our archives, and I approach the clan leaders and they say, “We would like the site to house our songs and our stories, but we don’t want other people, or other clans even, to be able to access those.” So, the protocols that are available on Mukurtu, then, makes that possible. We can make sure that the right clans and clan members have access. (Wilson et al. 2017)

What Wilson points to is the underlying structure of Mukurtu that has been built to facilitate diverse sets of access, circulation, and exchange models and systems grounded in Indigenous

relationality. Similarly, Jason Wesaw, the archivist for the Pokagon Band of Potawatomi, worked with members of his community to define not only the ways materials should circulate, but also how they imagined Mukurtu building from and working within their own social, moral, and linguistic system. They thus named their Mukurtu site *Wiwkwébhëgen* and sought to define their goals from this established set of values. Jason explains:

So, *Wiwkwébhëgen*, in our language is just basically talking about a bundle. All of our tribal communities, in one way or another, use bundles. So, bundles are physical things where a man might keep their pipe, [a] woman might keep a water bundle, a young girl that is transitioning into womanhood might have a certain kind of bundle that helps her in that time of life. So, it's a physical thing, but it's also like a spiritual, emotional, knowledge-based thing. So that's what the *Wiwkwébhëgen* Mukurtu site is, because we are trying to connect all of these dots in the minds of our community, and how you can use technology to help push that knowledge forward. We want to be able to use the history, the photographs and the objects as a way to help people understand that story of how our people lost our land and how [we] lost our federal recognition and the way that we used our culture to regain that. Because the culture is a huge aspect of our sovereign status as a nation and how we have to hold on to it if we are going to keep that status. (Wilson et al. 2017)

For the Pokagon, Mukurtu is a part of a social and cultural system of tribal values. It is one tool to express sovereignty and tribal status by retelling a story of loss and at the same time narrating a history of survival – linguistic, cultural, and political.

In Tennant Creek, the repatriated Mungamunga and Milwayi materials – which included content from researchers (including myself) deposited in the original Mukurtu Wumpurrarnikari Archive – prompted a set of discussions by women and men about the potential to use the new Wurrppujinta site for storing, accessing, and circulating ceremonial materials, which up to that point had not occurred.⁷ While most of these discussions in previous years had centred on community control and family decisions, this newly repatriated content led to conversations that ranged from contemplating unique shared sets of passwords, to restricting copying and downloading of some materials while allowing for in-person viewing at the centre, and to the need for shared sets of understandings about how access is defined between the performance and the digital recordings. As community members grappled with these questions, both in our in-person meetings and between themselves, we created several different versions of access and use scenarios within the Wurrppujinta site to provide viewable examples of the scenarios through which the materials could be accessed. The biggest sticking point was around the ability to download materials. Everyone wanted to be able to download content for which they

7 It should be noted that Mukurtu CMS is an access platform and as such is one part of any necessary digital ecosystem in which preservation and access are two necessary and separate processes. The Mukurtu support site has documentation suggesting that access files should be created from originals or high-quality master files for ingestion and uploading into Mukurtu CMS. Through the Mukurtu CMS web interface, access to and use, annotation, and curation of content is possible. The preservation of original or master files (TIFFs, WAV files and the like) is either handled by another institution, the original source (as is the case for much of the repatriated material), or through tiered systems built for the hosting institution.

were stewards to their own devices. They also wanted to protect very sensitive materials from being downloaded. However, within one instance of Mukurtu there is no means to disable functionality for some but not all content. That is, protocols to define access cannot manage whether download is an option for some but not all materials. If the download function is enabled, it would apply to all materials across that instance of Mukurtu, and could not be selectively applied to any songline material within it. Therefore, either they could not upload the most sensitive material, or they had to disable download for all materials. No one was happy with the choices.

In December 2018, after the initial conversations and successive meetings with the women in 2017, we added a test track within the Wurrppujinta site for *Winkarra* ‘Dreaming’ materials to demonstrate how access and use could work through Wurrppujinta. Over a week, Kim Webeck, from the Central Land Council, and I held demo and listening sessions with men and women both in separate and mixed groups, walking them through the site to show how materials could be accessed using collections and sub-collections and protocols throughout. Webeck had worked with the women on the Mungamunga and Milwayi repatriation project and had been part of discussions about how, or whether, to use Mukurtu to provide access to the materials. Several senior men were keen to discuss the possibility of having men’s songs within Wurrppujinta. At one meeting, Michael Jampin Jones noted that Mukurtu could be used now so that younger generations could listen with elders to songs on their phones. Another Warumungu senior man wanted to embark on a similar repatriation and recording project as the women had, and as we showed him the Wurrppujinta site, he noted the possibilities for continued access in town, and also worried about having the materials on the same platform as the women’s materials.

Hopi scholar Trevor Reed notes that replaying archival songs within Indigenous contexts, especially those of songs still in use, can perform “a kind of meaningful connecting that acquire[s] affective power through the revoicing of the past into the present” (2018: 5) – wherever that present moment takes place. When negotiating digital return, concern around access unfolds in many ways. In her work in Western Australia, ethnomusicologist Sally Treloyn suggests that in the Australian case, “it is important to note that songs and repertoires traditionally fall in and out of usage” (Treloyn & Emberly 2013: 165). That is, individual songs and song repertoires don’t necessarily die, although of course they can. But what is “of more concern is a decrease in opportunities for elder and younger generations to share knowledge about songs and the information attached to them” (Treloyn & Emberly 2013: 165). Indeed, the conversations with Warumungu women that I participated in centred more on how to provide a space for intergenerational sharing and learning within the context of a life that is mostly based in town. That is, they were worried that “young girls” wouldn’t have the time or space to listen and learn. Ethnomusicologist Linda Barwick documented these concerns in 2010 in a series of interviews specifically directed at understanding the sustainability of women’s *yawulyu* (country-based ceremonies) – of which Mungamunga songs are one. In Tennant Creek, Barwick worked with the same women who were part of the Mukurtu projects. She found that the senior women expressed “anxiety about the extent to which the younger generations would be able to uphold the traditional performance practice” (Barwick et al. 2013: 201). Some of their anxiety came from how to facilitate both

the showing and sharing of the materials in spaces that would allow younger generations to get over some of their fear of not knowing, or not being able to perform properly (Barwick et al. 2013; Christen 2006). One aspect of having the materials digitised and accessible within Mukurtu was to ensure not only that cultural protocols could be applied, but also that this specific group of women could access and view the recordings in their own spaces, on their own time, and share them as needed – through mobile phones, on USB drives, or on other networked devices.

As I was leaving Tennant Creek in December of 2018, I got an urgent text message from Trisha. She wanted to know if there were any photos of “that old woman” within Wurrppujinta or on any of my hard drives. Her follow-up text provided more clues and I was able to piece together that she was seeking photos of a senior woman who had just passed away that week. I did a quick search and found several photos within the Wurrppujinta site and I also opened up several of the remaining files we had been organising and cleaning up for upload and found several more. I loaded them onto a flash drive and met Trisha at Nyinkka Nyunyu for one last look through the site. We did indeed find more photos by searching some alternative names she suggested. I recalled discussing this practice a few years earlier with TR Nappanangka, who was working at Nyinkka Nyunyu in the community resource room. She said that one of the most popular uses of the Mukurtu Wumpurrarni-kari Archive at the time was families looking for images of deceased relatives. She said that funerals almost always prompted a search through the archive for photos to use on the handouts at the service. Similarly, as I was showing a group of related Warumungu women photos of their families in the Wurrppujinta site in order to add in family names, stories, and any other information, a black and white photo from the “mission days” came up and one woman whispered the name of her deceased brother. I hadn’t heard her, and I did not know he had passed away, so I asked her to repeat what she said so I could add it to the metadata correctly. More whispers ensued and I began to understand why. Then Trisha said loudly, “Sing out, you gotta say that name for the archive, it will be here in 50 years, you won’t.” I was somewhat taken aback by Trisha’s insistence, but at the same time I understood her point. Who would be there to pass on that old man’s name for future generations? The women spoke to each other and after some more hushed conversation they spelled out his name for me, letter by letter, as I typed it into the name field and clicked save.

Repatriation

Although Mukurtu CMS was primarily envisioned as an access platform, what it has become is a platform for access, return, reuse, and repatriation. That is, while the return of digital materials from archives and other collecting institutions is a primary reason that Indigenous communities use Mukurtu CMS, return is imagined as a whole set of practices that include future access, use, and circulation. Getting archival materials back from collecting institutions is not limited to an ingestion model where content and metadata are understood as a complete, or even trustworthy, source of knowledge. In fact, distrust in these materials is part of the reason for wanting their return (Koch 2018; McKemmish et al. 2011). Archival returns are motivated by histories of surveillance, dispossession, violence, and documentation (O’Neal

2015; Sanborn 2009; Thorpe 2014), and that scaffolding thus needs to be replaced before return can rightly move to reparative repatriation work.

Part of the return process that Mukurtu can facilitate is a repositioning and reframing of materials, through expanded and enriched metadata, customisable categories and vocabularies, and a focus on Indigenous knowledge through fields that are not wholly reliant on text, but can include video and audio as metadata. We have developed import and export functions that provide avenues for return based on Indigenous systems of circulation. Notable among these are a suite of tools known as ‘round-trip’ that allow both content and metadata to be imported and exported using a CSV spreadsheet that comes prepackaged in the software. As a part of round-trip, the selective sync option allows Mukurtu CMS users to define which metadata fields they want to share with institutions. A feedback loop is thus created whereby communities can receive content and metadata, enhance the institution’s metadata, and return it – or parts of it – to the institution to update their records.⁸ For example, it could be that Warumungu women add annotations to some of the songlines for their own knowledge sharing. They may also add map markers and names of singers for specific caretakers, and in the traditional knowledge metadata field they might add an audio file of discussions between senior women about the Dreaming track. If they want to share the content (the songs) as well as any of the metadata they have added, they can choose which metadata fields within the Mukurtu export spreadsheet to share, and only the fields they choose and the information they permit to be shared will be exported. The effect is reparative in that the knowledge, values, social systems, and protocols of the communities drive the display, circulation, and access, thus undoing the emphasis on archival or scholarly notions of value and valuable data, metadata, content, and information.

Within this framework of digital return, digital repatriation thus explicitly acknowledges histories of dispossession and disruption as a fundamental part of the return practice. That is, digital repatriation is one mode of return that overtly acknowledges histories of taking along with the harm done to individuals and communities. In her work returning cultural materials including films, photos, and documents to Native communities in the United States at the National Museum of the American Indian, Grande Rhone scholar-archivist Jennifer O’Neal remarked that:

Thus, the physical and the digital form must work together and complement one another to achieve the major goals of the diverse needs of each tribal community that seeks for the preservation and reinvigoration of traditional knowledge for future generations. (2013: 180)

In these cases, the harm – and violence – is reflected in the categories, metadata, and classifications that define the collections and must be undone, recreated, and directed through Indigenous systems and protocols. Digital repatriation as a restorative process must therefore include: recognition and documentation of harm; collective solutions towards remaking and undoing settler colonial structures of classification and categorisation; pathways for Indigenous metadata to expand, replace, or update records; options for updating or replacing copyright or other intellectual property rights that function to dislodge Indigenous stewardship; and a

8 Linda Barwick (2004: 260) notes the need for this type of distribution model and decentralised system as new digital platforms and archives are created.

commitment to developing ongoing relationships of stewardship. Digital repatriation includes practices framed by purposeful acts of restitution and repair that include multiple types of exchange and are dependent on creating new types of relationships. Ts'msyen scholar Robin Gray argues that, "The politics of Indigenous repatriation – whether it involves human remains, objects, or songs – requires that it be restorative so that the source community can find a sense of resolution from historical injustices" (2018: 1). What that resolution may look like from community to community – and within communities – varies and can only be shaped through long-term engagement (Treloyn & Emberly 2013; Campbell 2014; Gray 2018; Reed 2018). And indeed, resolution may only be partial: returning, as a single act, is not digital repatriation. Instead, digital repatriation takes on local meaning according to different histories and needs, and the types of materials being returned and restored. As Hopi scholar Trevor Reed argues:

Repatriation need not be only a mode of remedying misappropriation of culturally affiliated properties, but may be a way of enabling voices of the past to become present again within Indigenous communities. (2018: 21)

Reed's work leading the Hopi Music Repatriation Project highlights the flexibility and possibilities associated with sonic repatriation when positioned alongside the challenges posed by western legal systems through which Indigenous archival music collections remain owned and governed. Reed argues against defining repatriation as "property transactions between two sovereigns" (2018: 2); instead he suggests an inscription of sonic/musical repatriation processes through Indigenous networks that do not replicate notions of ownership, authority, or authorship derived from western systems and legal frameworks.

In the last 10 years since we created Mukurtu CMS, issues of digital return and repatriation have been even more closely aligned with specific goals of effecting the decolonisation of museums, archives, and libraries as part of the explicit expressions of Indigenous sovereignty and self-determination movements globally. Decolonisation movements are not new, nor are critiques of collecting institutions as colonial storehouses. However, the specific focus on reparative return in these calls for decolonisation is more expressly manifested in global networks, and is tied to legacies of territorial dispossession. It is linked to the current resistance to sustained disenfranchisement and continued expressions of rights to, and stewardship over, lands, resources, cultural materials, traditional knowledge, and languages (Christen & Anderson 2019).

Respect

It was just a year after Nyinkka Nyunyu officially opened in 2003 that Michael Jampin Jones and I walked through the exhibit space with my then one-year-old son toddling in front of us. We talked about our families and caught up on events in town, and then we discussed the permanent *Puntu* exhibit that Jampin and other Warumungu community members had created. *Puntu* is routinely translated as 'skin' in English and it is part of the larger kinship system signifying the subsection within the moiety system of which all Warumungu people are a part. Non-Warumungu people who have long-term relationships with the community are often given a skin as well. I still remember the bumpy Toyota ride off the side of the Barkly

Highway when E Graham Nakkamarra gave me my skin: Namikili. The Punttu exhibit is a series of self portraits, each depicting one of the 16 skins. As we talked, Jampin’s commentary moved between the relationships people have with one another, to those they have with ancestors and country. He talked about his stockman days and about the close connections he still had to places throughout the region. As we walked past the land claims display, he paused. “See,” he took in all of the centre and the landscape outside with one swipe of his arms, “respect is the ground we walk on.”

The decolonisation of museums and archives – in their physical and digital forms – begins with a recognition of the harm and hurt caused not just by removal, but by ongoing erasure through systems of cataloging, categorisation, curation, and circulation. Maori scholar Moana Jackson argues that “museums are dangerous places because they control the storytelling” (Jackson, cited in Cairns 2018). The danger that Jackson names is the power of naming, in itself, to reroute local understandings, places, and people, through many subtle or explicit acts. Museums are not the only dangerous places in this sense. When practices of return are grounded in Indigenous sovereignty and self-determination, they demand a recognition of territorial rights, autonomous political structures, ongoing systems of governance, and communal forms of stewardship over cultural resources and knowledge. Decolonising strategies must move from recognition toward repair – from acknowledgements to action. These moves can be a part of return practices where Indigenous knowledge and naming systems and structures are foregrounded within curatorial conventions to refocus on Indigenous understandings rather than perpetuate fictions of erasure and invisibility. Warumungu women continue their discussions of how best to access, use, circulate, and exchange their repatriated materials, well after the return of the digital files. This is another reminder that digital return, in whatever form, is always part of larger systems of accountability, attribution, and acknowledgement grounded in place, in ancestral relations, and through kinship networks that span generations and continue to be animated in the present by multiple types of relations.

As an access platform, Mukurtu CMS extends and overlaps with existing, embodied kinship networks and territorial relations. Mukurtu is a tool, one part of a number of cultural toolboxes that can be used to meet some of the needs and desires of community members as they envision and enact returns and futures. Like mobile phone applications for learning language, or GIS maps on tablets that are used to document ancestral tracks, digital access platforms and other newer technologies are part of a continuum of technology that works with, alongside, in relation to, and as a part of conscious Indigenous future-making (Ginsburg 2018; Lempert 2018). The multiple futures imagined by Indigenous communities and their collaborators are constrained by political, economic, and social structures enacted by nation-states and filtered through violent histories. Within this landscape, an ‘ethics of possibility’ opens up different types of mediated futures (Ginsburg 2018: 225). It is sometimes easy to fall back on the old versus the new, or narratives of tradition versus modernity, especially when it comes to technology. I was reminded again of how this false binary has endured, when, in December 2018, I sat discussing the Wurrppujinta site with Jimmy Frank Juppurula, a Warumungu man and cultural manager at Nyinkka Nyunyu in Tennant Creek. We had been working all week together. As the days unfolded, more and more community members interacted with Mukurtu and discussed what they wanted to do with it. As we listened, what we heard was that the possibilities for what Mukurtu could become, and enable to happen,

were not limited by any one overriding sense of tradition or technology. As we wrapped up our talk that evening, Jimmy said to me, “People always talk about bringing the new to the old, but I think we have to bring the old to the new.” And it struck me that this was exactly what digital repatriation as a decolonising strategy could be, at its best – a way to dislodge both technological determinism and technological utopianism. A way to insist on seeing a cultural continuum. It could be a way of intentionally entangling the old and the new, of making technology traditionally modern.

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