

# Preserving a living archive of Indigenous language material

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## **Abstract:**

*This paper describes how Charles Darwin University Library is directly helping to sustain and preserve Aboriginal languages and culture that have been facing hurdles for long-term survival. The Library, in partnership with an ARC-funded research project known as the Living Archive of Aboriginal Languages ([www.cdu.edu.au/laal](http://www.cdu.edu.au/laal)), supports this effort with a repository, web application and digitisation program to preserve endangered Indigenous resources and facilitate both Indigenous community engagement and international linguistic research. The project serves as a rich case study demonstrating how academic libraries can work with researchers to support the archiving of cultural heritage.*

# Introduction

## Background

Globally, over the last 10 to 20 years there has been a major push by libraries to preserve, through digitisation, valuable resources that hold cultural, historical or linguistic importance. Added impetus was given by the World Summit on the Information Society (2005) in Tunis in 2005. The signatories to the Tunis Agenda for the Information Society committed themselves to “working earnestly towards multilingualisation of the Internet” and “local content development, translation and adaptation, digital archives, and diverse forms of digital and traditional media, and recognise that these activities can also strengthen local and indigenous communities” (World Summit on the Information Society, 2005, §53). Furthermore, in the UN Declaration on the Rights of Indigenous Peoples (2007), under Article 13, Indigenous people have the right “to revitalise, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures”; and under Article 14, “to have access, when possible, to an education in their own culture and provided in their own language”. Remarkably, Australia was one of four countries to vote *against* the Declaration.

Preservation and access to Indigenous knowledges continues to be a cornerstone of many global as well as national agreements. In this context, both preservation *and* access are equally important areas to be addressed. Nakata (2007) talks about libraries playing an ever-increasing role in the provision of services to their Indigenous communities, and to improving digital access to Indigenous knowledge, and about the “need to bring information closer to the community through new technologies and multipurpose venues” (p. 99). This is a core issue because it assumes the focus is the Indigenous community, whereas in actuality the Indigenous community often has the least access. In reality, there are terabytes of documentary knowledge materials residing in institutions across the world, collected as part of projects or ‘initiatives’ that “come and go” (Nakata, p. 100), but are rarely accessible by the people with a vested interest in the content. However, in his paper, Nakata notes work being carried out in the Northern Territory and Queensland, at Libraries and Knowledge Centres (Northern Territory) and Indigenous Knowledge Centres (Queensland), to document and store relevant knowledge locally (p. 101). What needs to be done, in Nakata’s opinion, is to carry out a “form of repatriation” (p. 100) of those knowledge resources that are not necessarily held locally, but that have a significant bearing on upholding and strengthening Indigenous communities. Thus, in terms of the value and significance of preserving written Indigenous language materials, this is incalculable when culture and language are inextricably linked.

Sadly, in the current context of Indigenous communities in Australia, there are problems and challenges on many different fronts. Whilst it is not the purpose of this paper to document these, it is relevant to note the consequences. Most significantly, there has been an interruption of knowledge pathways – the way or manner in which knowledge is communicated between the generations – through the loss of intermediate generations due to dysfunction, leaving only an elderly generation (grandparents), and a traumatised younger generation (grandchildren). Given the Indigenous tradition of knowledge transfer – primarily orally, through stories, dance and music – when the old people die along with the language they spoke, so too does the knowledge contained in the language. Knowledge transfer is also

interrupted when the recipients belong to a less-rooted generation, in the sense of place and social structure, and a generation more comfortable with an information-connected world that is nevertheless less tangible. This is an issue not just in Indigenous communities, but also in non-Indigenous communities. However, the impact in terms of cultural loss is hugely significant within Indigenous communities, which cannot fall back on written knowledge materials as easily as Western societies. Therefore, access to available written cultural materials is not just important, it is critical to the wellbeing of Indigenous communities.

First Languages Australia's report on its National Indigenous Languages Collections Strategy (2015) notes that "Little contemporary material representing the lives, knowledge and cultures of Aboriginal and Torres Strait Islander people is being collected within many of the key collection agencies" (p3) and asserts the imperative for agencies and institutions to reconceptualise these collections and the needs of Indigenous peoples in respect to access to their own materials.

This paper introduces the *Living Archive of Aboriginal Languages*, an open access, online repository of written materials in Indigenous languages of the NT, established in 2012. The Archive was conceived to collect and digitise Aboriginal language materials developed for the bilingual education program in the Northern Territory, and make these resources accessible within the communities where they were originally produced, as well as to the wider population. This major initiative consolidates the work being done in the knowledge centres across the Northern Territory and northern Queensland.

## **Situation in Northern Territory**

The Northern Territory (NT) of Australia represents a land area of 1.4 million km<sup>2</sup>, with a population estimated to be 244,300 (Australian Bureau of Statistics, 2015). What is unique about the NT is that more than 30% of its population is Indigenous, and that they are now recognised as owners of 49% of the land. Over two thirds of the Indigenous community live in remote communities. The majority speak an Indigenous language at home but have low literacy rates for English, which is a second, or often third or fourth language for them. There are approximately 40 distinct Aboriginal language groups across the NT (NT Department of Local Government and Community Services, 2015), each with its own set of cultural traditions and practices.

A large number of written resources are available in Indigenous languages of the Northern Territory. In 1973, the Australian Federal Government established a program for children in remote NT schools to be educated first in their mother tongue, before transitioning to English. During this era of bilingual education, a series of resources were produced in Indigenous languages to support these programs. Literature Production Centres (LPCs) were established to produce books and teaching materials in the Aboriginal languages of those communities selected for bilingual programs (Bow, Christie and Devlin, 2014). The LPCs employed Aboriginal literacy workers who were fluent and literate in the local languages, a 'teacher-linguist', and often a supervisor who operated an offset printer, and later more sophisticated printing tools.

As described by Christie, Devlin and Bow (2014), "the LPC workers would collect stories, often recorded on tape from community elders, then transcribe, translate (sometimes), edit, illustrate, format, print and distribute them" (p. 49). The subject content was richly varied: "old time children's stories, pre- and post-contact histories, books about the environment, hunting, bush medicines, ghost stories, creation stories, stories of memorable events ... life stories, conception stories, and cautionary tales" (p. 49). Teacher-linguists led the teams in developing vernacular literacy programs and produced teaching materials that included these readers. The books were always very slight, only a few pages in length, with production runs of between 100 and 200 copies. In addition, bilingual newspapers and magazines were also sometimes produced.

The preservation of this wide range of published materials from these and other language programs around the NT has been unsystematic. Some institutions have established collection and preservation projects; for example, Batchelor Institute's Centre for Australian Languages and Linguistics (CALL) maintained a physical archive of materials produced in its training programs, as well as previous initiatives such as the Aboriginal Languages Fortnights and the School of Australian Linguistics. Some materials are stored in the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), which has specific access restrictions. The Northern Territory Library (NTL) and Charles Darwin University (CDU) Library maintain collections of materials, and in the case of CDU Library, many of these materials are safeguarded in a special collection under restricted access conditions. There have been some efforts at preservation by digitisation; for example, the NT Department of Education has funded some small, local digitisation efforts in Papunya and the Katherine regions. NTL has invested heavily in achieving its mandates: to collect, preserve and make accessible the Territory's documentary heritage; and to provide public library services in partnership with local government authorities. This has been achieved through the development of Knowledge Centres in a number of remote Indigenous communities, the establishment of the *Community Stories* database, a digital archive of historical and culturally significant materials in NT communities, and the *Remote Indigenous Public Internet Access* (RIPIA) project, which aims at "developing digital literacies that can help communities develop cross-generational engagement with culture, history and language" (Northern Territory Library, 2015).

## The problem

From the late 1990s, Government support for bilingual programs in the Northern Territory was gradually reduced (Devlin, 2009), and many programs and LPCs closed (though some schools still maintained programs). In many areas, the books they had produced were being lost. A few educators even actively sought to destroy the Aboriginal language books they found in the formerly bilingual schools (Bow, Christie and Devlin, 2014), but overall there was alarm that a unique body of Indigenous literature was in danger of being lost, contrary to Article 13 of the UN Declaration on the Rights of Indigenous Peoples (2007). Digital archiving provides a means to preserve these materials of enormous cultural value, as well as opportunities to allow access for a wide audience.

## The response

In 2011, Professor Michael Christie and Associate Professor Brian Devlin of Charles Darwin University, concerned by the endangerment and loss of these valuable materials, applied for and were successful in securing funding from the Australian Research Council (ARC) to recover, archive and share these language resources. The *Living Archive of Aboriginal Languages* began in 2012 as a research facility, to enable academics to access these materials. In addition, a major goal of the project was to make the language materials accessible to the Indigenous communities that originally produced them, thus instigating the “repatriation” called for by Nakata (2007, p. 100). Building on the existing institutional support for preserving these materials, the Charles Darwin University team invited partnership from the Australian National University (ANU) and the Northern Territory Department of Education; and when funding was renewed in 2014, they were joined by Northern Territory Library, Batchelor Institute of Indigenous Tertiary Education, and the NT Catholic Education Office.

## The role of the Library

The remainder of this paper will focus on the role of CDU Library in developing and making accessible the language archive, in particular. The Library was responsible for the repository, web application and digitisation program to preserve the endangered Indigenous resources and to facilitate both Indigenous community engagement and international linguistic research.

A key contribution to the project was the Library’s expertise in knowledge and resource organisation and its management in relation to creating, storing, preserving and sharing the type of materials included in the *Living Archive*. Furthermore, the Library played a crucial role in the establishment of the Archive by providing ongoing technical information management support needed to ensure its success and sustainability. The CDU Library hosted the Archive in its institutional repository, known as CDU eSpace, which uses Fez, a web interface to Fedora that was developed by the University of Queensland library. The repository allowed the project team to upload metadata and digital artefacts, which could be accessed through a custom-made website, as well as be harvested by OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) and other relevant harvesters, such as OLAC (the Open Language Archives Community).

## Challenges

The *Living Archive* project had specific requirements that made it unlike other Indigenous language archives, in that it contains only works in the languages of the Northern Territory, focusing on stories in the language rather than works about those languages. Instead of linguistic notes and wordlists and elicited sentences, it is populated primarily with a unique body of literature in the Indigenous languages. It was also intended to make this collection open access: it was to be a tool not only for linguists and other researchers but also for the members of the Aboriginal communities that produced the literature in the first place. Other language archives,

such as those of AIATSIS, have wider collection policies, but they are not always readily available to the public.

There were considerable challenges when handling this material, to do with scanned formats, optical character recognition (OCR), language, text versions and non-standard language characters. It is important to note that from the outset, the Library worked closely with the project team, as well as other project partners. The Library brought its special skills and knowledge and combined them with the skills and knowledge of others in the project. Given the unique challenges surrounding this project, described in more detail below, a collaborative approach was taken.

## **Digitisation of materials**

The first step was for the Library team to digitise the materials using its Atiz scanning equipment to create image files. As for the quality and technical aspects of the digitisation process, the Library had the equipment, the software and expertise, so it paved the way by doing the initial digitisations, learning the settings required for the equipment and software editors, the appropriate workflows, and so forth. From there *Living Archive* editors were trained to take over the responsibility. The Library collaborated with ANU where other materials were being scanned, to ensure consistency of quality, size, and so on.

Given that the focus was on preservation of the texts, it was decided it would be preferable to scan materials to PDF/A<sup>i</sup> rather than PDF files, given that PDF/A was said to be the standard for longer-term preservation. However, after having scanned a few batches as PDF/As, it was found that OCR did not work with PDF/A files that contained special characters, so staff reverted to PDF file creation.

## **Text variations**

For the materials to be maximally useful to both researchers and the local community, it was decided that text versions should be available for each item. The Library used ABBYY FineReader<sup>ii</sup> as the OCR software to extract the text from the PDF files. While the OCR software gave a reasonable first draft of the text, each page needed to be carefully edited to match the source image. This was challenging, with some of the materials using a variety of fonts, and some even handwritten, and some images faded or words cut off the edge of pages. Once the PDF was created with ABBYY FineReader, it was discovered that any errors within the OCR text were preserved, making the PDFs not fully searchable. After some time, an image-only PDF was created, which then provided the searchable text in a separate plain-text (Unicode) file.

There were other more awkward dilemmas faced, even at this level. For example, some printed stories contained annotations, or certain words were crossed out and corrected by hand. There was no way of knowing the origin of the alternative text or why it had been entered. Was the original script wrong in places? Or was the amended text someone's effort to use the same book to teach another dialect of a language? Which text should then be selected to be OCR'd? Not only were occasional words like this, but in some books whole paragraphs, even every paragraph, were re-written by hand in a script with alternative spellings or words.

It should be recalled that these books were an endangered species. The copy in hand may have been the only copy known to still be in existence. Advice from Aboriginal language experts was sought, and as a rule, OCR options for text variants were entered, together with the many handwritten alternative spellings. In some cases that meant there were two alternative OCR searchable text files for the same book. Further development of the Archive involves language authorities verifying these texts and annotations. The Library became an integral part of the *Living Archive* project team.

### **Languages and non-standard language characters**

Another challenge was in working with non-standard language characters. While all Australian languages are written in a Latin script, some languages, for example, Anangu and Yolŋu, include special characters such as underscored letters (ḏ, ṭ, ḷ, ṛ, ṛ) and other such as ä and ŋ (plus their capitalised forms) (AuSIL, n.d.). The use of Unicode fonts in both the metadata and the content solved many of these problems; however, it added an additional layer of complexity. The use of an Australian font and keyboard program from the Australian Society for Indigenous Languages (AuSIL) made the input of special characters less complex; however, some adjustments needed to be made within the CDU eSpace repository and the website, to correctly display these characters. In addition, the multilingual support available within the OCR software does not extend to Australian Indigenous languages, so special Unicode characters were added to the language set used. Initially, the Library experimented with adding custom dictionaries to assist the OCR process, but with over 25 languages to work with this became untenable.

Following best practice in language documentation (Bird and Simons, 2003), it was decided to follow the international standard for identification of languages, that is, ISO 639-3. The Standard worked well in the majority of cases, despite some discrepancies in the spelling of language names; however, in some cases these did not meet the requirements of Aboriginal languages with their own unique structures and relationships and naming conventions. There was little the Library could do that was standards-based to meet the specific requests of the *Living Archive* team and there was a reluctance to resort to an *ad hoc* solution. Based on advice from Aboriginal language experts, modifications and additions to the existing standard were suggested (Bow, Christie and Devlin, 2014), retaining the ISO 639-3 codes where possible, and supplementing these with internal-use language codes.

### **Organising the collection**

The Library team was also able to offer expertise, specifically to support the project team in organising the collection. Many of the books, about 3,000 titles, were recorded in Trove, the National Library of Australia (NLA) database, but many of the records were sparse or incorrect. Some were attempts to record books that consisted entirely of a language that no one at NLA understood. What was needed were ways of structuring the collection according to languages that were not widely known and that themselves often involved sub-languages and groupings that defied conventional structures, and according to a diversity of formats, topics and genre types, some of which would be distinctive in terms of the particular knowledges represented and the local Indigenous themes of the different books.

Even where the NLA's records were accurate, they were far from complete. They lacked the richness of detail that was needed to create a *living archive* to be used by both Aboriginal peoples and researchers, and the general community in a "living" sense.

The project team was also interested in ensuring that their collection would be harvested by the National Library's Trove database. Owing to existing links between the Library and Trove, special arrangements were made to ensure the *Living Archive* was harvested and presented as a discrete collection, that is, not mixed up with other collections that had been harvested (for example, research papers, historical photographs).

### **Making the collection accessible to researchers**

The language metadata question was critical for both of the intended audiences of the *Living Archive*: the linguistics researchers and Indigenous communities. The most useful and recognisable terms and structures needed to be available for the Indigenous communities; and it was essential that the repository "talked to" others interested in linguistic research. The project team had to ensure the *Archive* could be linked to other language archives, which meant using OLAC (Open Language Archives Community)<sup>iii</sup> standards. OLAC is an extension of Dublin Core, so in principle it was not difficult to add to the repository, and create a crosswalk to map between terms used in OLAC, MARC and MODS.

The Library was able to advise the project on options for searching and browsing terms of interests in inter-archival sharing. This enabled the Library and the project to identify properties that would be of potential interest to other specialists, and to select and add those extensions that it was felt the *Living Archive* could usefully contribute. The selection of fields from those recommended by OLAC was negotiated based on the metadata contained in the published resources and considered of interest to the target audiences. The Library and project team worked closely together to facilitate this critical function of the project.

### **Metadata**

Various iterations of edit forms to be used by data entry editors were assessed. Where it was possible to assist with quality control by creating controlled vocabulary lists, this was done. A long list of 'author types' was added, including illustrators, photographers, translators and editors. However, in some cases books listed a whole classroom of children as the authors (all first names only). Then there were 'original story tellers' as well as the transcribers who were writing down what they were hearing from a 'storyteller', and were often distinct from 'authors'.

A workflow was designed to maintain a record of 'actions', to enable tracking each item through the various stages of processing (as the item is digitised, OCR'd, uploaded, and so forth). This was related to processes required to establish intellectual property rights. Legally, the copyright of most of the books belongs to the Northern Territory Department of Education. However, the project was to be a *living archive*, involving the communities for whom the literature was intended and from whence it was produced. Therefore, before any work could be permitted to be on open access in the repository, attempts were made to locate the original storytellers and those responsible for putting the books together. Often this meant talking to their



descendants; or, where individuals could not be identified or were no longer living, the communities responsible. Records were therefore kept of attempts made to track down copyright permissions from the respective communities and individuals.

In terms of quality control, the Library designed and trialled data entry forms. This allowed an exploration of variations in how the data was to be displayed; following which revisions would be made. For example, special needs were configured such as warning notices, to appear at appropriate landing pages to inform users when a resource was likely to include photographs of deceased persons, community sources and the geographic origins of a story that may in fact be different from the community that produced it, along with notices about rights permissions.

## Organisation

The collection of materials consisted of basic readers, stories of historical reminiscences, creation stories, stories of daily life, and so forth. The traditional way of organising various formats, genres and subject matter in libraries is well known, but would there be any point in organising material intended to be a daily resource for Indigenous communities in this way? Would it even be appropriate for linguistics researchers?

The Library expertise was able to contribute towards determining the various ways the resources were to be described, browsed and searched. It is not always easy to distinguish form from genre from subject when trying to sort unique materials for diverse audiences. Where there existed no standard controlled vocabularies specifically catering for this special language material, cataloguing and metadata librarian skills were able to make significant contributions to the way the materials were organised, structured and described.

Western organisations of knowledge are not always appropriate for Indigenous ways of knowing, and that this needed to be kept in mind when engaging with the “knowledges” of Aboriginal peoples (Christie, 2005). It was agreed that the materials should be primarily organised according to two criteria: language and community. In only a few cases was there a one-to-one mapping between these two fields, in most cases either one community included several languages; or one language was spoken across several communities. Language identification was fairly straightforward, since it was known which languages were used in which communities, and inferences could be made based on the origin of the materials.

What resulted was a dialogue between the Library and project staff, which resulted in solutions for classifications and controlled terms. The Library was able to contribute its knowledge of how the software worked, how internet searching worked, how indexing for browsing worked, and so on, as well as having experience and understanding in how standards applicable to controlled vocabularies and knowledge organisation worked.

Below are some of the controlled vocabularies that were finally approved as an example of the way the collection is being shaped for specific purposes and functions:

Type of Resource (Dublin Core)	Category and Related Genre
Interactive Resource	Instruction
Interactive Resource (EPUB) Moving Image	Interview
Sound	Language instruction
Still Image	Map
Text	Memoir
	Narrative
	Song
	Translation
	Traditional

Ensuring the open access status of the collection was not a routine outcome of simply adding the records and attachments to the repository. Ongoing testing to ensure the Library's repository was being harvested as comprehensively and regularly as had been anticipated resulted in troubleshooting and learning curves that drew upon the expertise of colleagues interstate. Given the improvements being made to the repository and the way its data was becoming increasingly accessible, both the Library and *Living Archive* project itself were benefitting.

## Accessibility

The language materials are primarily useful to speakers of those languages, and to others willing to engage with the owners of the languages, thus bringing the community of speakers into an engagement with interested people from around the world, and enhancing the "living" nature of the archive. For this reason, developing an interface useful for people who may not have advanced text or computer literacy skills is a high priority and makes this archive quite different from those designed specifically for researchers.

The standard interface to the Library's eSpace repository was not suitable for users who are not familiar with library online databases. What was needed was primarily a graphical public webpage where potential users with relatively little experience in navigating library pages could access and use the materials in the archive. It was essential that this graphic interface work seamlessly with the repository collection. The result was a highly visual webpage with an interactive map of the Northern Territory and clearly marked access points via language areas (represented by coloured shapes), and communities represented by geo-location points (Figure 1). A video screencast demonstrates the use of the archive site ([http://laal.cdu.edu.au/app/public/images/videos/LAAL\\_demo\\_complete.mp4](http://laal.cdu.edu.au/app/public/images/videos/LAAL_demo_complete.mp4)). An accompanying project site gives background and topical information about the project and related activities, and a social media presence is also in place.

Another detail attended to was the thumbnail images of the books (Figure 2). For the *Living Archive* collection, these were not just decorative extras, but were crucial for a service to be provided for an audience that was to include users in remote communities with limited literacy skills. Using the map and thumbnails allows users to navigate the site without needing to type or read much text.

## Community engagement

The establishment of the Living Archive has created many opportunities for communities to re-engage with the materials in digital formats. This engagement has taken a number of forms, with anecdotal evidence for positive responses to the availability of the materials in digital form. Examples include:

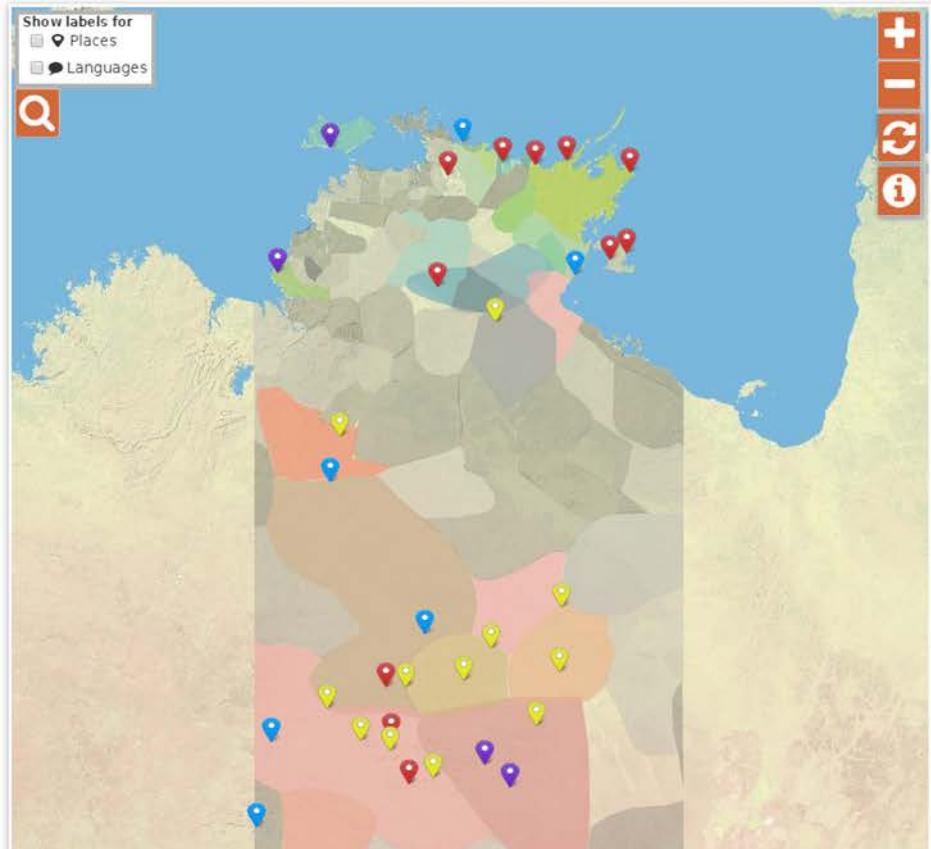
- In a central Australian community, books previously available only in hard copy through the school library were shown to other members of the community in digital form on the Living Archive. People at the local Women's Centre, Arts Centre and other community groups expressed interest in studying the materials to develop their literacy skills and engage with stories published in their language 30 or more years ago.
- In an English-only school in southern Arnhem Land with no history of bilingual education, a non-Indigenous teacher shared a Kriol story from the Living Archive with her class. Hearing their language used in the classroom, the teacher said the students were "at such ease ... I was asking them to recount and they were recounting with 100% accuracy ... I had kids who rarely speak answering questions."<sup>iv</sup>
- In another community with a very short history of bilingual education, previous principals had cleared out all language books from the school as they were no longer being used and were taking up space. The local missionary salvaged a few boxes that were destined for the tip, and after storing them for some years, sent them to Darwin to be included on the Living Archive. In this way, books that had previously been completely inaccessible to community members can now be viewed on computers, tablets and phones in the community. Internet use among older Indigenous people is minimal in this community, and hard copies of the material have been printed from the digital versions on request.
- A digital story competition invited users to select a story from the archive and - with the permission of the story owner - bring it to life, for example, by animation, adding audio, acting it out, creating a dance, etc. This has created opportunities for engagement with the stories, as well as intergenerational language work, and produced a range of multimedia materials in various formats which have been added to the archive, with additional materials being invited.

# Living Archive of Aboriginal Languages

A digital archive of endangered literature in Indigenous languages of the Northern Territory

[Home](#)[Map](#)[Place](#)[Language](#)[Author](#)[Books](#)

Home > Map



The **Living Archive of Aboriginal Languages** is a digital archive of endangered literature in Australian Indigenous languages from around the Northern Territory.

**Click on the map to start looking at books**

Click on a coloured section to see Languages  
Click on a place marker to see Places

[Click here to watch a short video demonstrating how to use the site](#)

MAP KEY:

-  Literature Production Centre (LPC)
-  Literacy Centre
-  Catholic or Independent School LPC
-  Language Centre
-  Community

Figure 1

# Living Archive of Aboriginal Languages

A digital archive of endangered literature in indigenous languages of the Northern Territory

Home Map Place Language Author

Home > Map > Books

## 2423 books

Grid List Title (A - Z)

**Filter**

**Author (169)** +

- 80 Marrganyin
- 69 Manyjarrri
- 59 Mátjarra
- 51 Kerinaiaua, Marguerita

**Place (34)** +

- 424 Yuendumu
- 258 Milingimbi
- 231 Yipirinya
- 190 Papunya

**Category (7)** +

- 1219 Narrative
- 370 Language instruction
- 330 Instruction
- 237 Traditional

**Illustrator (99)** +

- 90 Stevens, Thomas
- 69 Puruntatameri, Ancilla
- 59 Rrikili
- 58 Yambal

**Language (48)** +

- 1215 English
- 538 Warlpiri
- 283 Pintupi-Luritja
- 207 Kriol

**29a**

Marrganyin'  
Djambarrpuygu  
Gallwin'ku

**7a**

Marrganyin  
Djambarrpuygu  
Gallwin'ku

**A-bona Gandin**

Ngalwaringa, Daisy  
Burarra: English  
Manningrida

**Aherre**

Arremte, Eastern  
Ltyentye Apurte (Santa Teresa)

**Aherre**

Arremte, Eastern  
Ltyentye Apurte (Santa Teresa)

**AIBIN GO LA HOSPII**

Aibin go la hospil  
Friday, Miriam  
Kriol: English  
Barunga

**AIBIN FAINDIM BIGISWAN WODA**

Aibin faindim bigiswan woda  
Galmur, Judy  
Kriol  
Barunga

**Aherrele arikweme**

Arremte, Eastern  
Ltyentye Apurte (Santa Teresa)

**Aibin album main mami**

Kriol: English  
Barunga

**Aherre**

Arremte, Eastern  
Ltyentye Apurte (Santa Teresa)

**AI gona go la Bulmun.**

Kriol: English  
Barunga

**2 MAHYA NGARIKORIMIYA NGINI NGINJA NGIRRAMINI**

AIDS ngini Kwampini

**AI gin plei tu?**

**AKATJIRRI**

Brown, Priscilla

**PUPUWI**

**AYIYE OTEKE NO 3**

Figure 2

VALA2016 Conference

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## Conclusion

The *Living Archive of Aboriginal Languages* project serves as a rich case study, demonstrating how academic libraries can work with researchers to support the archiving of cultural heritage. In this instance, the cultural heritage brought with it unique challenges relating to digitisation processes – language and non-standard language characters, multiple text variations – as well as other issues to do with metadata and familiarity with the technology.

Collaboration between University academics, project staff and CDU Library staff has resulted in the development of an innovative online resource containing valuable materials from endangered languages in the Northern Territory. Some of the lessons learned from this collaboration between the University Library and the academic team in preserving and providing access to materials of cultural heritage may be useful to other libraries seeking to address similar issues.

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## Endnotes

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- <sup>i</sup> <http://www.pdfa.org/2011/10/key-differences-between-pdf-and-pdfa/>  
<sup>ii</sup> <http://www.abbyy.com.au/finereader/>  
<sup>iii</sup> <http://www.language-archives.org/index.html>  
<sup>iv</sup> Story shared at <http://www.cdu.edu.au/laal/naja-kriol-one/>