

Building Weemala: an Indigenous Language Interactive Interface

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Abstract

In 2016, the State Library of NSW launched an exciting new interactive interface, that uses 100 year-old survey data to map the location and meaning of Indigenous Australian place names across the country. The project called Weemala, which means 'a big lookout' in the Sydney language, places historic survey information from the State Library's collection relating to Indigenous Australian communities in a digital landscape.

This paper will discuss the development of Weemala and explore the collaboration that took place build the platform, drawing on expertise from within the Library's Indigenous team and the Library's DX Lab. The collaboration drew on a range of skills, including input from Library staff, volunteers, an internship program (UTS Masters of Information Management) as well as engagement with a data specialist. Developer and data enthusiastic Chris McDowall worked with the DX Lab as a 'Digital Drop In' to create the test platform for the data using transcribed survey forms and correspondence received by the Royal Anthropological Society of Australasia between 1899 and 1903.

In developing Weemala, the Library was able to further expand the work of its Rediscovering Indigenous Languages project, which sought to make available the significant collections of Aboriginal language materials and word lists held within the Library's collections. Weemala extends this work, using data to create new ways of engagement. The focus of exposing collections, and connecting the wider public to Indigenous Australian people was a core component of the project. As well as the commitment to engage Indigenous Australian communities with the Library's collections to spark conversation and discussion about the nature and accuracy of the material that was historically collected.

The paper will demonstrate ways in which Libraries can effectively open up their data and build platforms that inspire curiosity, and in this case, connection with Indigenous Australian languages and place name meanings. It will also encourage participants to think about ways in which collections can be made more discoverable to enhance search and discovery of historic collections. It will also inspire others to think about respectful ways of opening up Indigenous Australian collections to deepen our understanding of place and history.

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Libraries and archives are changing, the work that's being done for Aboriginal people and by Aboriginal people being included – this is a big change. The Library used to be alien, we felt we had no ownership over information. I remember that from 20 years ago. What is happening here (this visit from SLNSW to Country with archival documents) now is appropriate and a very important change.” Worimi Senior community member (Nicholls et al, 2016)

Introduction

The State Library of NSW holds significant collections relating to Indigenous Australian peoples and communities. As more collections are digitised, it has been important for the Library to consider ways in which Indigenous collections can be made accessible, respecting cultural protocols, to both Indigenous and broader communities (Thorpe, Galassi, Franks, 2016). How can Libraries effectively open up their data to build platforms that inspire curiosity? How can Indigenous digital collections be opened up respectfully, to encourage greater understanding of Indigenous languages and history?

This paper will discuss the development of Weemala, a new interactive interface, that uses language materials from the Library's collections relating to Indigenous Australian placenames. Weemala, which means 'a big lookout' in the Sydney language¹, places historic survey information from the State Library's collection relating to Indigenous Australian communities in a digital landscape. Weemala was developed through a Library collaboration, drawing from expertise from the Library's Indigenous team and the Library's DX Lab. The collaboration also drew from work of volunteers and internship program (UTS Masters of Information Management) that enabled the development of a dataset that could be utilised as a 'Digital Drop In' through the Library's DX Lab.

Background to building Weemala (Kirsten Thorpe)

Rediscovering Indigenous Languages project

Language is intrinsically linked to Indigenous peoples' way of life, culture and identities. Language brings meaning to cultural heritage and articulates the intricate relationships between Indigenous peoples and their connection to their community. At the time of Australian settlement in 1788, there were some 250 known Indigenous languages across the country, but now only a small number are spoken comprehensively.

During the period 2011 to 2014, a landmark project - *Rediscovering Indigenous Languages* - highlighted significant Aboriginal wordlists and vocabularies collections held within the State Library which had been collected since the late 1700s. Supported by Rio Tinto,

¹ The Library refers to the Sydney Language broadly in reference to the work of Troy, Jakelin, and Shirley Troy. *The Sydney Language*. Canberra: J. Troy, 1994. The Library would like to respectfully acknowledge both the Eora and Darug people whose language encompass the broader Sydney Languages.

research experts were able to identify over 100 collections relating to Indigenous languages across Australia. These language collections have been made available on the Library's website:

<https://indigenous.sl.nsw.gov.au>

The Rediscovering Indigenous Languages project broadly aimed to:

- Make available, in a culturally appropriate framework, surviving language lists to Indigenous communities
- Develop protocols for the publication of language lists, to ensure that they meet community needs and allow communities to contribute their knowledge to Library records about their languages
- Locate previously dispersed language lists in the Library's collections Increase public awareness of Indigenous language and cultural history
- Be an effective educational resource contributing to school curriculum and further research (State Library 2016).

As well as being able to connect previously dispersed information, the Library aimed to open up conversations with communities regarding the enrichment and critique of these collections, as well as discussing ways in which these important historic documents may be revived in community settings. During the project, the Library sought advice from a high level Indigenous Advisory Group and chaired by project patron Mr Mick Gooda, Aboriginal and Torres Strait Islander Social Justice Commissioner.

Use of a Special Care Notice and Explanatory Notice

An explanatory statement was developed for the Languages project to provide context, and a statement of principles, under which the Library was providing access to its language collections. Users of the website are required to read the following text, before access collections online.

Please read the special care notice before entering the website.

SPECIAL CARE NOTICE

Deceased persons

Visitors should be aware that the Rediscovering Indigenous Languages website may contain images or documentation relating to Aboriginal and Torres Strait Islander people who are deceased.

About the word lists and vocabularies

This website is not intended to be an authoritative source for Indigenous Languages in Australia. The language lists available from the State Library of New South Wales were recorded historically by many individuals — both amateurs and professionals — who documented Indigenous words, placenames and meanings. This includes records from explorers, surveyors, first settlers, missionaries, anthropologists and linguists.

Visitors to this website should be aware that the language documentation may not reflect current understandings of the use of some languages. Some lists may also record words

and meanings inaccurately.

This website will change over time as more documentation becomes available. We encourage users to share their knowledge and information they may have about language of their areas.

Users are warned that there may be words and descriptions which may be considered sensitive and/or offensive in today's contexts.

Transcription Tool - Rediscovering Indigenous Languages material

Materials that were made available digitally on the *Rediscovering Indigenous Languages* website, were also made available on the Library's transcription tool. Hand written documents are sometimes difficult to read and the text in digitised images is not searchable. Producing transcripts of original manuscripts improves access to these historical documents for researchers, historians and members of the public. The language transcriptions are available here:

<http://transcripts.sl.nsw.gov.au/project/Rediscovering%20Indigenous%20Languages>

Members of the public can engage with the transcription tool online, to complete transcription of word lists and journals that are uploaded. To support the review process, a small and dedicated team of Library volunteers, worked with Indigenous Services to work through priority collections. The volunteer group also worked through questions of quality assurance, and continued dialogue as a small team, around tensions of transcribing material that may have in fact been recorded incorrectly ².

The transcription site featuring Indigenous language collections also notes that the Indigenous Services team are still in the process of consulting with communities about the collection items, and welcomes feedback as the transcriptions and projects develop.

Protocols and Guidelines for Indigenous Collections

The Library is guided by a number of mandates, guidelines and statement of principles, for access to Indigenous collections. The protocols guiding the Library are outlined on the Indigenous Services page of the Library website:

<http://www.sl.nsw.gov.au/about-library-services-indigenous-services/our-indigenous-australian-protocols>

In 2012, the Library Council of NSW formally approved the adoption of the ATSLIRN - Aboriginal and Torres Strait Islander Library and Information Resource Network - *Protocols for Libraries Archives and Information Services* (Thorpe and Galassi, 2015). These protocols are internationally recognised for their guidance in assisting information services to create

² See interview with Sandra Hawker 'Weemala project: Q & A with volunteer Sandra Hawker' at: <http://www.sl.nsw.gov.au/about-library-services-indigenous-services/connecting-community>

dialogue concerning the management of Indigenous collections (ATSILIRN, 2016). Since 2012, the Library has utilised the Protocols as a tool to for engagement, and for highlighting the importance of Indigenous collections and services.

Other guiding documents include those developed by the National State Libraries of Australasia (NSLA). Specifically, the *National position statement for Aboriginal and Torres Strait Islander library services and collections* (NSLA (A) 2014), and the *Statement Aboriginal and Torres Strait Islander Language Services and Collections* , which guides progressive action in the collection and preservation of Aboriginal and Torres Strait Islander language materials and resources (NSLA (B) 2014).

Indigenous Services Team and Advisory Board

The Library is committed to connecting Indigenous people to its collections both online and onsite. Two specific areas of support have been developed to progress Indigenous priorities at the Library. They include, bringing together and developing and Indigenous Services team, and establishing a high level Indigenous Advisory Board.

The Indigenous Services Branch provides support for engagement with communities around access to collections (State Library of NSW Indigenous Services Team, 2016). The role of the Indigenous Services team is broadly to connect with Aboriginal and Torres Strait Islander peoples to share and celebrate stories of Indigenous Australia, and help people locate them in the Library's collections (Thorpe and Byrne, 2016).

The Indigenous Advisory Board assists the Library Council and the State Library to respond to the needs of the Indigenous population of New South Wales and to build relationships with communities. The Board's role is to:

1. To advise the Library Council of NSW on matters relating to the Indigenous population of NSW including the needs for library and information services.
2. To assist the Library Council and the State Library to build relationships with the Indigenous communities of NSW.
3. To advise the Library Council on the development and progress of State Library of New South Wales strategies relating to Indigenous peoples.

With this context and background in mind. We will now discuss the intern and DX Lab collaboration that developed Weemala.

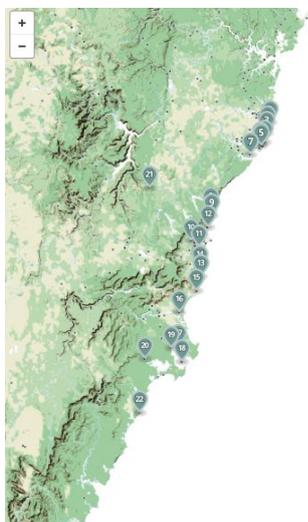
Introducing Weemala (Kirsten Thorpe)

Since joining the Library in 2014, I have been interested in how the Library can build engagement online with Indigenous digital collections. As an Indigenous Archivist, I am aware of the tensions that exist in terms of making historic records accessible. This is a particular challenge when considering making collections available online.

Across the NSLA network, National and State Libraries are considering ways in which Indigenous collections can be managed appropriately. For example, this may mean that some collections are made available digitally and online, but accessible only to those communities from which the material relates. Information on the NSLA Indigenous Digital Subgroup is available here: <http://www.nsla.org.au/projects/digital-infrastructure-indigenous-collections>

The opportunity to build Weemala came wide collaboration: building on the work undertaken during the *Rediscovering Indigenous Languages* project; utilising manuscript transcriptions created with the assistance of Indigenous Services volunteers and members of the public; engaging an Intern Marc Smith to develop a dataset; discussions with DX Lab leader Paula Bray regarding opportunities for collaboration; creating the 'Digital Drop In' and engaging Chris McDowall to work with the Library for five days to build the experimental interface.

The Weemala test platform utilising data transcribed from survey forms and correspondence received by the Royal Anthropological Society of Australasia (RASA) between 1899 and 1903.



The Anthropological Society of Australasia Survey

This is **Box 4 of MLMSS 7603 / Boxes 4-5**: Survey forms and correspondence received by the Royal Anthropological Society of Australasia regarding Aboriginal place names, 1899-1903. Floating pages have transcribed placenames.

Folder 1



Page 1

Page 1 is a **survey form**. The page is dated **Nov 1899** (?).

We have located the following placenames:

1. **Boondi** (*Bondi*): Noise made by sea wave breaking on beach
2. **Koojah** (*Coogee*): Bad smell, caused by the decay of large quantities of seaweed washed ashore
3. **Merooberah** (*Maroubra*): The beach was named after the tribe that inhabited the particular place
4. **Bunnabee** (*North Botany Head*)
5. **Givea** (*South Botany Head*)
6. **Kundul** (*Captain Cook's Landing Point*)
7. **Goonamarra** (*Cronulla*)
8. **Bulla** (*Bulli*): Two mountains

<http://dxlab.sl.nsw.gov.au/weemala/>

The RASA was formed in 1895 to study Anthropology in all its branches. After forming, the Society asked its members to collect information relating to Aboriginal placenames across NSW, and further afield. In 1899 a series of survey forms were circulated to governments of each colony with a requests for officials - police, surveyors, land officers and so on - for completion. The forms asked for 'Name of Place' and 'Meaning or reason why it was given'. Many of these placenames were then published by in the Society's journal, first called the *Australasian Anthropological Journal* then later, 'The Science of Man and Australasian Anthropological Journal', both of which were edited by Alan Carroll ³.

³ <http://archival-classic.sl.nsw.gov.au/item/itemDetailPaged.aspx?itemID=421736>

The RASA word lists have been published widely, and heavily circulated to communities. After being identified in the 1990's the lists have been analysed and studied by researchers, who urge that caution should be exercised when using the information contained in the historic documents (Windsor, 2009, p.73). Windsor notes:

As no Aboriginal language was written, we now have to rely heavily on word lists compiled by authors who, on the whole, had no linguistic training and, in some circumstances, a poor grasp of written English, to reconstruct authentic Aboriginal placenames in areas where traditional knowledge has been lost (Windsor, 2009, p.73)

Use of historical materials like those collected by the RASA, need to be considered in light of their potential inaccuracies of recording Indigenous languages incorrectly. Community input, and advice from community speakers and language experts is essential. By opening up these collections, we aim to encourage further discussion and critique of collections.

Intern Contribution (Marc Smith)

As a postgraduate student of Information and Knowledge Management, I had an opportunity to complete an internship with the Indigenous Services Branch at the State Library. As part of my internship I helped with the Weemala project. My role was to curate the data that was used to describe the places, by working with place names included in the original survey forms, researching and locating places, and creating location coordinates. These coordinates would be used to display the places in a visually appealing and accessible map form, with connections to the original records.

RASA Survey Forms

Encountering the survey forms was a fascinating process of engaging with intricate meanings of place and landscape that were not part of my education as an Australian. The surveys are handwritten and require close visual attention to details of script in order to decipher the information recorded in them. The surveys had already largely been transcribed by Library volunteers (<http://transcripts.sl.nsw.gov.au/project/Rediscovering%20Indigenous%20Languages>), but sometimes the places had been obscured by the course of history, and as I tried to find the places I also contributed to the transcriptions. Accurately transcribing the surveys is important because these may be the only written records of some of these words.

Location of Places

Depending on the level of informational detail recorded in the survey forms, and on historical events such as geographical movements of languages with their speakers, locating places was sometimes a complex process. In some cases, Indigenous place names have remained connected to Australian places throughout history since the time the records were made, but in many cases they have been replaced by European names.

I used a range of existing publically available online information resources to locate places. Trove Newspapers (<http://trove.nla.gov.au/newspaper/?q=>) was useful for finding articles that include place names in use at the time records were made, which in some cases this made it possible to locate places. I also used accessible digital records created by geographical naming standards groups to research place names, such as GeoNames (<http://www.geonames.org/>) and the Geographical Names Board of NSW (<http://www.gnb.nsw.gov.au/>).

Creating Coordinates

The freely available online map application OpenStreetMap (<https://www.openstreetmap.org>) allowed me to create coordinates. In describing places with coordinates I noticed relationships between places and geographical features in a way that I had not previously considered. I attempted to place coordinates at the center of locations, for clarity of identification and for aesthetic purposes.

All information that was obtained from the records and through researching the places was entered to a spreadsheet for building the web product. Data fields included original place names, current place names, location coordinates, and any meanings of the Indigenous place names that had been included in the original records.

Entering this information to a spreadsheet for use in a digital experience product sometimes involved modification of recorded terms to suit access purposes. The records are an artefact of their time, and sometimes include perspectives with offensive connotations. In order to enable more direct audience connection with the knowledge content of place names, there were occasions on which a contemporary description was chosen to represent the deeper meaning held in the record. These updated terms will also facilitate exploration of original records, where those terms originally appearing in the records might otherwise repel connection.

Reflecting on the internship

It was not possible for me to locate all the places, but these places might be located in future, both as greater historical resources become available through national digitisation efforts, and as the records themselves receive feedback from communities and individuals.

Many of these place names which have been lost in official records may still remain in living memory, which might also correct inconsistencies in the historical data. Rather than confusing Australian notions of place, this restored information increases precision by adding more specific detail to our knowledge and understandings. As more information is contributed, the web product will continue to develop as a digital knowledge repository.

It was enlightening for me to discover some of the changes that have occurred through language and place during the course of recent Australian history.

DX Lab digital drop-in program (Paula Bray)

The Library has pioneered digital innovation in the cultural sector through experimentation, rapid prototyping, and collaboration. In 2015 the Library established the DX Lab, the first digital humanities lab of its kind in Australia. The DX Lab has developed new models of digital access to heritage content held in libraries, galleries, and museums using open source technology, data visualisation, and big data analysis. A key tenet of the DX Lab's approach is to publish and share the open source code it develops with the community and to work in a fast-paced agile work methodology. The values that the Lab works with are: Collaborate | Experiment | Create | Engage | Be Open | Surprise.

A program that the DX Lab has set up to work with a range of technologists is the 'Digital Drop-In program. The DX Lab hosts two creative technologists placements per year from a range of creative sectors to collaborate on small and quick projects. This provides opportunities for people to work with innovative technologies and to publish a project idea very quickly.

We approached creative technologist Chris McDowall who does really interesting work in data- mapping visualisations to come and do a Drop-in with the DX Lab. The Indigenous Services team had shared with us the database of the work they had been creating with the volunteers to see if we could do something with it. This was then shared with Chris who immediately responded with great interest to work this fantastic data. The idea of the Drop-In program is to allow creatives/developers to test an idea and build it in a concentrated and quick pace.

Weemala was built in just over one week. Chris initially started to explore the data and the plotting of the points onto a map of NSW. This helped him to get a sense of what the data looked like and the potential of where he could take his idea. We then workshopped ideas with a range of people from the Indigenous Services team, and two external people, Emma Pike from Kaldor Public Art Projects alongside the artist Jonathan Jones. This discussion helped shaped the progress of Weemala and Chris was able to spend the rest of the time sketching first and then applying this in code. Chris has written a post on this process on the DX Lab website that goes further into the detail of this process.

<http://dxlab.sl.nsw.gov.au/building-weemala/>

Once the data visualisation went live there was a flurry of media interest for the tool and the importance of being able to easily access this information in relation to the locations on a map. Some feedback included the availability of this as a teaching tool in schools and the importance of community engagement in this process to be able to have debates around the levels of accuracy that was initially recorded. We are now keen to pursue V2 of Weemala with more data and the next iteration of the interface.

Conclusion

The development of Weemala has enabled the Library to develop new ways to share knowledge and information contained within the Library's unique and historic collections. Weemala invites new audiences to connect with Indigenous placenames and meanings. In developing Weemala, the Library was able to further expand the work of its Rediscovering Indigenous Languages project, which sought to make available the significant collections of Aboriginal language materials and word lists held within the Library's collections. Weemala extends this work, using data to create new ways of engagement.

The focus of exposing collections, and connecting the wider public to Indigenous Australian people was a core component of the project. As well as the commitment to engage Indigenous Australian communities with the Library's collections to spark conversation and discussion about the nature and accuracy of the material that was historically collected.

Some collection items in the Library's collections are the only known surviving records of some Indigenous languages. Making these language resources available digitally means enabling widespread access to highly significant parts of Australia's cultural heritage and providing the opportunity for all Australians, both Indigenous and non-Indigenous, to gain a better understanding of our nation's rich cultural landscape.

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