

A History of Aboriginal Sydney...digitally delivering the past to the present¹

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For more than two centuries, the history of the Indigenous people of the Sydney region has remained locked away in archives, held within families, or obliterated by the dominant culture. Now, with community approval and co-operation, our project, *A history of Aboriginal Sydney*, is beginning to use digital tools to restore Sydney's Aboriginal history in forms which can be appreciated and shared by the families themselves, by high school students and by everyone who values the history and culture of Australia's first peoples. Our project is based on the developing knowledge management platform, which integrates historical records, methods and tools of e-scholarship, and solutions for delivering research data for different uses. The project team employs methods such as marking of topic threads, and linking data with interactive timelines and digital maps to enable online learning and information discovery on the website². The project itself is based in the Department of History, University of Sydney and is funded by an Australia Research Council, Australian Professorial Fellowship and Discovery Grant. The research data are archived in ATSIDA (Aboriginal and Torres Strait Islander Data Archive), which provides long-term preservation and manages appropriate access to the data.

Introduction

Aboriginal voices were largely absent from Australian public consciousness well into the twentieth century. As most Australians are aware nowadays, Aborigines were recognised as citizens only in 1969 when all (previously only some) were awarded full citizenship rights. Since then, a significant paradigm shift moved the public debate from the acknowledgment of basic rights for Indigenous people to demands for the acknowledgment of the past wrong doings, healing of Aboriginal communities and reconciliation between Indigenous and non-Indigenous Australians. These demands have been part of a broader awareness that dominant practices in Western societies have excluded many marginalised voices. The paradigm shift is reflected in changes in education and in democratising influences of technology, both providing new opportunities for inclusion while carrying the baggage of old divides.

The shift is reflected also in new paradigms of research. In the past, anthropological and linguistic interests tended to follow explorers, missionaries and administrators to the far corners of the continent: for decades the principal academic interest focused on the Indigenous remote, the exotic and the comparatively untouched rather than the regions where the great majority of Aborigines actually lived. Yet the many thousand Aboriginal people living in Sydney, thought to be academically uninteresting for so long, have rich and complex lives in which the internal life of communities is at least as significant as the interaction between those communities and government bodies which had been the prime focus of historical enquiry. The project stems from a renewed interest in the Indigenous people of Sydney not seen perhaps for two centuries, and from the desire to return the available information to the people who are most affected by it.

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² www.historyofaboriginalsydney.edu.au

Why an Aboriginal history online?

Educators have recognised benefits of culturally inclusive education and, as Gunstone (2008) pointed out, numerous government documents recommended teaching of Australian Indigenous studies at all levels of education. In New South Wales, all students are required to learn Aboriginal Studies for a semester in Year 9. While learning about Indigenous issues and cultures is beneficial for students, the course may be demanding for teachers because of their limited expertise and the shortage of adequate resources. Teachers rely on on-line material such as reports of government enquiries (Australian Human Rights Commission 1997), study kits (Council for Aboriginal Reconciliation 1991-2000) or genealogical and personal material from Aboriginal communities in the central desert (Ara Irititja Project 2007; TKRP 2010). As a result, students may finish the course knowing something about remote parts of Australia, but very little about Sydney. While the course was developed with Aboriginal students in mind, a big proportion of Indigenous students in NSW will have very few opportunities to study the history of their own people or events in their neighbourhood. The few resources about Aboriginal Sydney developed for the public, such as *Barani* (Sydney City Council 2002), a volume in the Aboriginal Women's Heritage series on the Nepean River (*Aboriginal women's heritage: Nepean* 2007), and several pages on the Australian Museum website (<http://australianmuseum.net.au/>), are insufficient to support formal and informal learning about Sydney's past. There is a need for reliable, place-specific information about the history of Aboriginal people in Sydney to support formal learning in the class and informal learning at homes and in community groups.

As an academic research project based on many years of Read's experience in Indigenous Australian history, *A history of Aboriginal Sydney* is in a position to finally provide much needed reliable sources. The project brings together an academic interest in gathering and investigating historical materials with a commitment to the repatriation of these materials to Aboriginal communities and to the provision of necessary sources for learning in schools. The project team³ believes in the benefits of preserving research data for future use as well as in the importance of presenting research results for educational and community use. This is why we decided to make research data available in archival forms through ATSIDA and to develop a website as an interface for use in schools and the community.

Internet for urban Aborigines

The Internet has provided fast developing online environments with unprecedented opportunities for the inclusion of materials, which were either excluded from or made invisible in traditional institutional collections. The Internet appears to be a natural environment for a presentation of a marginalised Indigenous history but, at the same time, it may be inaccessible to Aboriginal people who need it the most.

Studies have consistently shown that the Internet usage coincides with higher levels of educational and socio-economic status. Holloway (2005) confirmed this trend in his analysis of results of Australian Census 2001, where he observed that a lower computer

³ The core members of the team are Prof. Peter Read (Director), Dr Suzana Sukovic (Research Associate), Julie Janson (Senior Research Officer), Andrey Inkin (Web Developer) and Sheena Kitchener (Cinematographer and Editor).

and Internet usage in the west and south west of Sydney is aligned with areas of socio-economic disadvantage. Like Internet users elsewhere, users in Sydney are predominantly younger, non-Indigenous people with a better education and higher income (Holloway 2005).

On the other hand, Sydney has a comparatively reliable Internet connection and, as pointed out by Holloway (2005), somewhat higher computer and Internet usage than the rest of Australia as a whole. Our analysis of the Census 2006 data showed that 51 per cent of households with Indigenous persons in Sydney had Internet connection compared with 66 per cent of other Sydney households (Australian Bureau of Statistics 2008). In Australia as a whole, 40 per cent of households with Indigenous persons were connected to the Internet compared with 61 per cent of other households. The gap in the Internet connection between households where Indigenous and non-Indigenous lived was statistically smaller in Sydney than in Australia as a whole. Households with Indigenous persons in Sydney had 11 per cent more Internet connections than Indigenous households in Australia. Non-Indigenous households showed a five per cent difference for the same measure (Table 1).

Table 1. Internet connection by Indigenous status of household (based on Census 2006)

	Households with Indigenous persons	Other households
Internet connection in Sydney	51%	66%
Internet connection in Australia	40%	61%
Gap	11%	5%

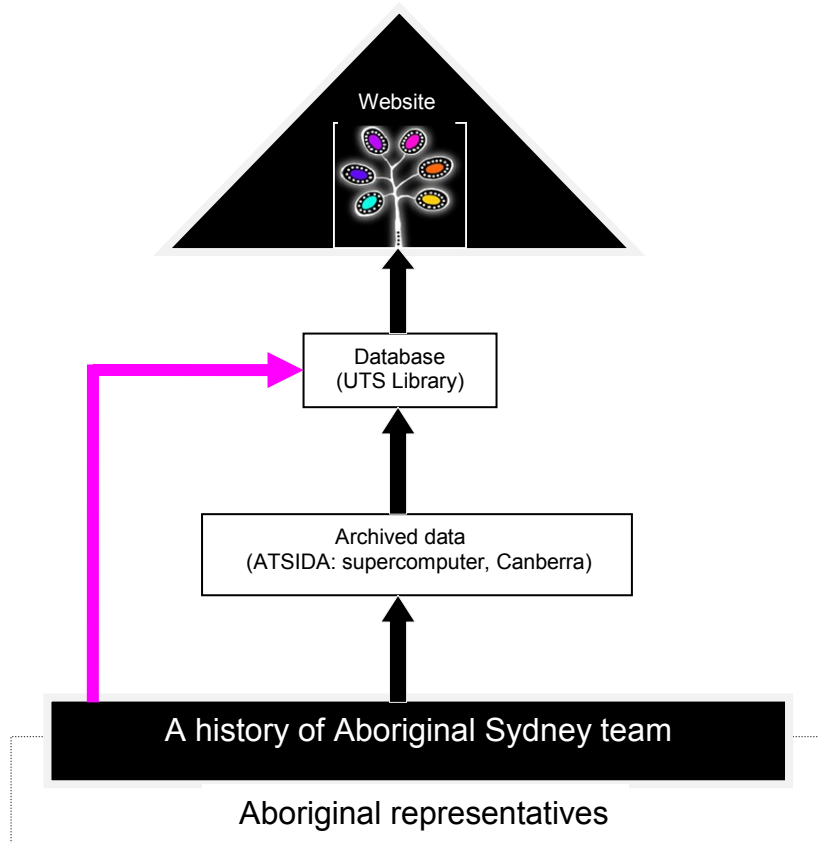
A socio-economic and educational disadvantage of a significant part of Indigenous population and a lower level of Internet access at home are likely to limit the use of online sources in Aboriginal communities, but it is reasonable to assume that older people are more likely to be affected by obstacles in physical and intellectual access to online sources. Indigenous Sydneysiders who are relatively young, study and/or have a higher socio-economic status are likely to use the Internet in the same way as other comparable groups. Teachers also use the Internet regularly for their work. Despite the limitations, the Internet is widely accessible to the majority of Sydneysiders and it is particularly appropriate for students and teachers as the main audience of our website.

The project structure

A history of Aboriginal Sydney operates as a cross-institutional project. It is situated in the Department of History at the University of Sydney and funded by an Australian Professorial Fellowship and Discovery Grant from the Australia Research Council. The website database is hosted in the University of Technology, Sydney Library, which also provided initial support in setting up the website in Drupal. Research data is archived in ATSIDA (the Aboriginal and Torres Strait Islander Data Archive). ATSIDA was established as a national archive for Indigenous data in 2008. This node of the Australian Social Sciences Data Archive (ASSDA) is situated in Canberra.

The *A history of Aboriginal Sydney* team provides research material for archiving on the ATSIDA's supercomputer in Canberra. Some of that data will be streamed directly from the archive to the website, but most of the material for the website is organised in a Drupal database hosted by the UTS Library.

Figure 1. Project structure



The project team has consulted Indigenous representatives throughout the project, aiming to keep a balance between traditional descendants and those who have moved in more recently. We rely particularly on the locally-based Aboriginal Education Consultative Groups, and have established an Advisory Group comprising three senior Indigenous academics, Professors Larissa Behrend and Dennis Foley, and Dr Kaye Price. However, we are aware that histories differ, antagonisms are active and some family rivalries are so intense that it will be impossible to resolve many historical issues. In cases of conflicting information, we are guided by our commitment to return materials, provide links, suggest new avenues of thought, and establish a multi-purpose knowledge-base. Many issues are much disputed on the basis of oral and other evidence, and for our team to attempt to arbitrate would be regarded as patronising and tendentious. In areas where more than one narrative exists to explain, say, the recent emergence of a certain clan, we plan to publish all the current narratives without making a judgement on the accuracy of any of them.

The website

The research team has developed a large collection of historical material, which documents the multifarious though fragmented nature of our knowledge about Indigenous Sydney. Information from historical documents and pictures are complemented by our photographs of contemporary sites where historical events happened, traditional plants and objects, and video interviews with Indigenous elders. We wish to present information from different sources in a way that will allow users to follow their own interests and construct the meaning of these materials in an environment which is open enough to allow free exploration while providing sufficient structure and navigational aid. The site uses a range of digital tools such as an interactive map, timeline and tagging to provide multiple access points to information and support for contextualising material in different ways.

Place is the primary organising principle of the knowledge-base and the website for several reasons. Indigenous Australian people have a strong affiliation with land and an intense sense of loss of physical and spiritual place. The whole project is defined by Sydney as the locality, aiming to strengthen the connection with the local history. For the project purposes, we divided Sydney into six main areas: North Coastal, Central, South Coastal, South West, West and North West. For areas whose boundaries are contested (for example, Darug/Gai-mariagal or Caimariagal), or in a place historically important to many clans such as Liverpool, we will include the same entry in all relevant zones.

Considering the importance of visual representation in traditional Aboriginal culture we gave a careful consideration to the site design. Our primary audiences are, equally, Aboriginal people and high school students, so the site design aimed to reflect a modern sense of Aboriginal identity. Jessica Birk, a young Koori woman and a university-trained artist, created the project logo and had the role of design advisor. The logo combines traditional Aboriginal symbols for groups of people and movement with modern design elements to reflect the energy and spirit of young Aboriginal Sydneysiders (see the picture of tree in Figure 1). Each leaf represents a Sydney locality and their respective colours are used throughout the site as navigational clues. The fact that digital tools were used intensively throughout the design process is one of many indicators that the website relates to the past from a position of modern urban people.

Topics for teaching Aboriginal studies in high school were used in developing a set of tags, which allow users to select a relevant subset of text and multimedia. Drupal supports tagging of whole pages, but this level of granularity was not sufficient for our purposes. Sukovic developed a method of marking particular sections of text by using pre-determined tags to indicate relevant textual passages, and Inkin applied this method in Drupal (Figure 3). The approach is based on principles of tagging and scholarly text encoding. It provides a mechanism for retrieving all passages related to a particular topic such as 'Environment', 'Culture' or 'People' regardless of wording in the text. Some topic tags have subcategories such as 'Political leaders' and 'Community leaders' for the category 'People'. 'Women and children' is a separate tag to enable easy identification of a study topic. The user can retrieve all relevant textual information about North Coastal historic sites, for example, by clicking on the appropriate tag (Figure 2). From the tag, the

user can see this information in the context of textual description organised by time periods (Figure 4). The same topical tags are used to mark images. For example, the tag 'Sites: historic' on the image gallery will retrieve all relevant pictures and provide access to further details about the image (Figure 5).

Figure 2. Topic tags (some examples of text passages tagged by Sites: Historic)

The screenshot shows a website interface with a sidebar on the right containing a list of topic tags: All, North Coastal, Central, South Coastal, South West, West, and North West. A callout box labeled 'Topic tags' points to this list. The main content area shows a text passage titled 'Before Cook - North Coastal - view'. A callout box points to this passage with the text 'A passage retrieved by clicking on the tag 'Sites:Historic''. The passage text includes: 'The Kayimay (Kayyemy) occupied Manly Cove, Spring Cove and North Head which is called Car-rang-gel. Cammi (Kamai), a spear, is possible the root word of Cameragal and Kayimai. The Terramerragal were at the Lane Cove River and Turramurra is named for them. On the Lane Cove River are shell middens dating 20,000 years BP. The Goralgal Inhabited Fig Tree Point now Northbridge. The Birrabirragal lived at Middle Head. (Smith 1992) Bennelong's wife Barangaroo was a Cameragalleon (leon indicating female) and was abducted from Manly Cove on Governor Phillip's command. Bennelong was a Wangal and his clans land spreads from Balmain along the Parramatta River to Parramatta. Colby was a Cadigal from South Head to Warrane (Sydney Cove).'

Figure 3. Tagging in Drupal

The screenshot shows the Drupal tagging interface. At the top, there are two dropdown menus: 'Place:' set to 'North Coastal' and 'Time Period:' set to '1900'. A callout box labeled 'Nested tags' points to these dropdowns. Below is a text editor with a rich text toolbar. A callout box labeled 'Tags can be applied by selecting an option from either the main or right-click menu' points to the 'Select tag...' option in the toolbar and a right-click context menu. The context menu lists various tags such as 'People:Political leaders', 'People:Community leaders', 'Families and children', 'Environment', 'Sites:Community', 'Sites:Politics', 'Sites:Institutions', 'Sites:Historic', 'Sites:Paths/waterways', 'Sites:Other', 'Events', 'Culture', and 'Government policy'. The text in the editor includes: '<Culture><Sites:Community>Aboriginal people reported still living at Quakers Hat Bay near Beauty Point, Middle Harbour.</Sites:Community> (D Keed, 28 May 1984, Manuscript, Local History section, North Sydney Library) Another important area where the northern clans gathered is Narrabeen Lagoon.</Culture>' and '<Sites:Community>Numbers of Aboriginal people at Sackville Reserve are diminishing. By the 1930s only one person remains. Many descendants now live around Black... munity>'. There is also a reference to an image: '[!img:2012+1535]'. At the bottom, there are 'Save', 'Preview', and 'Delete' buttons.

Figure 4. Text organised by time period

1700s 1700s 1700s 1700s 1700s

Search...

North Coastal
Time Periods
Before Cook
1700
1800
1900
2000
Glossary

Before Cook


Before Captain Cook...

Koori people are living on the east coast of Australia. Observers of the first fleet note many formal ceremonies including burying and cremating the dead, and initiation rituals such as 'ave-bad-djong' where the upper right incisor tooth of young males is loosened and knocked out (this called yootheey in Cameraiagal language). Kowadji (c lever men) carry out ceremonial rituals, often in the higher, sandstone country. Young girls have the first two joints of the little finger removed by pressure from spider web or wild string tied children. They become 'wa'gum' fisher women.

Observers in the First Fleet also note the very large number of rock engraving (at least 180 art sites in the Hawkesbury River region). Some are sacret-sacred sites for men and women, other are for the education of young people to be initiated. Subjects represented in carvings include Daramulan, the one-legged god who is present at initiation ceremonies and Baiamj, the sky-culture hero. Other subjects represented on rock platforms are m undoes (footprints), fish and ancestral beings and stories engravings. Koories also produce ochre paintings of animals and handprints. In both cave and on rock platforms, totemic figures were also reproduced in soil and sand during ceremony. (See NSW Department of Education and Training nd, <http://www.num.balare-esc.hoob.nsw.edu.au/publications/mypeople1.pdf>)


Many blade and axe grinding sites are still to be found, mostly near running water.

Trade items like chert stones from the Upper Hawkesbury are traded to make axes and for artifacts used in ceremonies. Also traded are stones for tool making, food, clay, whale blubber and ochre. Koori women and men use bone awls (needles) to sew possum skin cloaks, and fashion fishhooks by grinding sea shells.




Inter-tribal fights and ritual spearings are not uncommon.

Koori people are camping near coastal creeks and inlets and make huge middens (piles) of discarded bones, shells and artifacts. Investigations have allowed archaeologists a glimpse of the coastal Koori diet. Bones of birds discovered in middens include shearwaters and little fairy penguins, reptiles like the diamond python, and fishbones of snapper, bream, wrasse, blue groper, catfish, flathead, shellfish, and wild seeds of the cycad *Macrozamia*. At a site in a rock overhang at Balmoral Beach, a boy's tooth is found amongst the shells. Important midden sites include Great MacKerel Beach, Forty Baskets Beach, Balmoral Beach, Long Reef, Palm Beach.



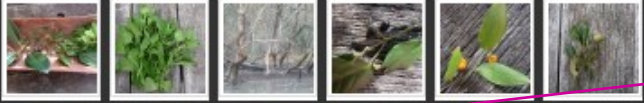
Other discoveries in middens include bone points with drilled holes or grass-tree resin glued to them, and small stone tools.



Women collect shellfish. Men use spears for fish, eastern grey kangaroo, swamp wallaby, red necked wallaby. Men and women hunt bandicoot, echidna, goanna, snake and birds and many other species. Huts are made of grass and bark/kokowe'.

A drink is made 'Bool' from soaking Banksia blossoms in water and allowed to ferment to make an invigorating drink.

Koories carry out annual burn-offs in late winter to assist in the capture of grass-eating animals. The green pick attracts game such as kangaroos and emus so they can be managed in a sustainable way. They gather sometimes annually at sites where traditionally food is available, for ceremonial business or for settlement of grievances, initiation ceremonies, betrothal and marriage, corroborees for the renewal of the natural environment and benevolent spirits. Bora grounds are used for some ceremonies. Clan meetings attract large numbers from Manly Cove, Collins Cove and Farm Cove. (Attenbrow 2009)



Language and society

The Guringai (Kuringai) speakers are thought to be the original inhabitants of northern Sydney and the inner eastern harbour regions. Guringai-speaking clans of about 40 to 60 people were made up of smaller extended family groups of perhaps a dozen people.

Guringai speakers (some of whom called themselves by the clan names below) met the first fleet when it arrived in 1788 and they were the first Indigenous people in Australia to resist Phillip's fleet. They inhabited the north shore of Sydney Harbour, living along the coast from Kirribilli then north to Manly up along the northern beaches to Broken Bay and as far as Wyong. Inland they extended to the Lane Cove River. The word for man or person is *kuri* (Koori) and *kuriyige*, the possessive means 'belonging to kuri'. Within the language area were many tribal names such as Garigal, Gayamaygal, Gal-mariagal and Borogegal.

Text organised by time periods

A contemporary picture from the site illustrates the passage above.

The passage from Fig. 2 in context

Figure 5. Topic tags (Image Gallery)



Information about a topic or place can be accessed in different ways and viewed from different perspectives. For example, information about the former Aboriginal town camp at Narrabeen Lagoon can be retrieved via topical tags or free text search, which will retrieve all textual passages, images and, later, videos associated with search terms (Figures 5 and 6). Information about events in Narrabeen Lagoon can be viewed in chronological and geographical contexts on the interactive timeline (Figure 7) and map (Figure 8). Historical information is also complemented by recordings of interviews with contemporary people. For example, a description of the destruction of the town camp in the Narrabeen Lagoon relates to a video commentary by the Gai-mariagal (Camaraigal) elder Dennis Foley, who was a regular site visitor as a young boy and saw the site a few days after its destruction in 1959. Foley remembered the event in an interview, which was recorded at the site:

Uncle Gar came out here to talk to the old fellers to see about going fishing. Anyway, he come home and there were tears rolling down his face and he just said, 'It's all gone... It was all bulldozed, they've bulldozed everything, it was just bits of tin'. The huts were built out of odd bits of tin, kerosene tins all flattened out, all this here was bulldozed, all the trees were bulldozed, all levelled, all this was bulldozed, all the trees were bulldozed down and all just smoke and glass and just where the fires had been, all gone. We came back a couple of days to see if anyone had run away, up in the hills, but they were all gone (Transcribed excerpt from on-site interview, April 2010).

At this stage, we have worked only on presenting North Coastal history. Material for other areas will be presented by the end of the project. At the time of writing, we have prepared around 250 images and looked at best ways of presenting excerpts from eighty video interviews. Additional details about our approach to presenting this material for the reconstruction of dispersed historical knowledge and information discovery in education can be found in Read and Sukovic (2010).

Figure 6. A result of keyword searching

Search

Enter your keywords:
narrabeen

Search results

1900s
... important area where the northern clans gathered is **Narrabeen** Lagoon. </Culture> <Sites:Community> ...
07/13/2010 - 08:02

Aboriginal people reported still living at Quakers Hat Bay near Beauty Point, Middle Harbour. (D Keed, 28 May 1984, Manuscript, Local History section, North Sydney Library) Another important area where the northern clans gathered is **Narrabeen** Lagoon.
... important area where the northern clans gathered is **Narrabeen** Lagoon. Parent node: ...
07/13/2010 - 08:02

1910s
... men photographed fishing from a rowing boat on **Narrabeen** Lakes. (c1914, Mitchell Library Small Picture file) ...
06/05/2010 - 07:10

Narrabeen Lagoon
(North Coastal, Historic) ...
07/13/2010 - 06:33

Herald Newspaper article about Narrabeen lakes camp 1950's
(North Coastal, Events) ...
07/13/2010 - 06:30

William Govett survey
... draws Garigal people fishing at Bilgola Beach and North **Narrabeen**. </Sites:Community> [img:1611] Year: ...
07/08/2010 - 09:10

Narrabeen Lagoon
(North Coastal, Historic) ...
07/08/2010 - 04:30

Two Aboriginal men photographed fishing from a rowing boat on Narrabeen Lakes.
... men photographed fishing from a rowing boat on **Narrabeen** Lakes. Parent node: ...
06/05/2010 - 07:10

1830s
... Until the 1900s Koories travel by foot from Burns Bay, **Narrabeen** and Manly via the Field of Mars camp to Cowan Creek camp ...
07/09/2010 - 03:47

[Koori men fishing in Narrabeen Lagoon, 1910, courtesy of State Library NSW](#)
(North Coastal, Historic) ...
07/13/2010 - 06:36

1 2 [next »](#) [last »](#)

Free keyword searching retrieves all relevant images and textual passages

Information about the picture shown in Fig.5

Figure 7. Timeline

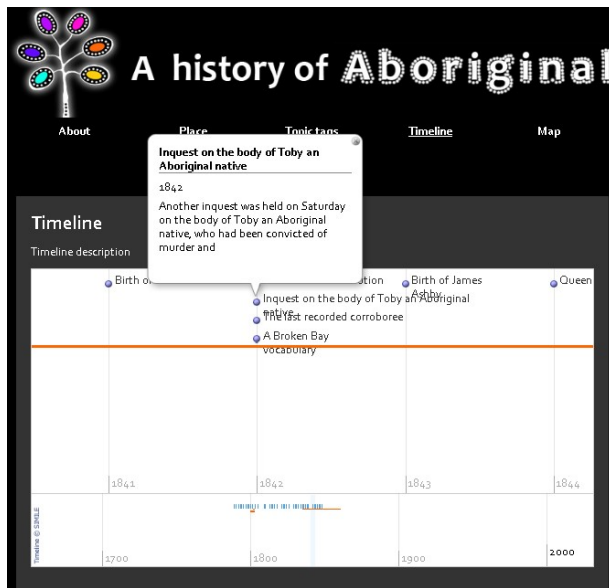
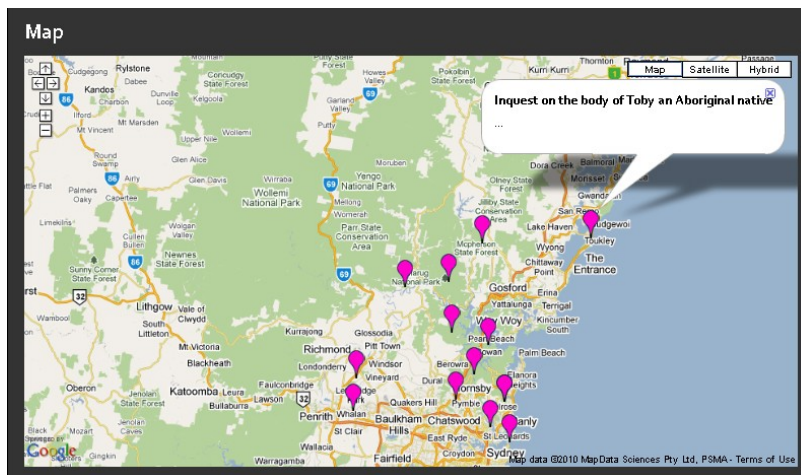


Figure 8. Map



The archive

Short video clips on the website, illustrative as they are, will not provide access to the rich research data. For example, a three minute video of memories of a particular site, which will be provided on the website, however critical in Sydney Aboriginal history, is a small proportion of the six hours analysis and commentary made on video camera by Foley when he and Read drove round the CBD and western Sydney. Currently we have some eighty hours of video recorded in the past three years for this project, with several hundred hours more of recordings planned. Future access to these complete original materials will be important to family members of interviewees, local historians, and to Aboriginal and non-Aboriginal future researchers. It is important that, insofar as it is consistent with the wishes of the speaker, the material remains available as personal, family, anthropological and historical information. Without secure, long term storage under agreed access protocols, the video and sound materials will be likely to disappear,

be destroyed, lost or in some other ways become inaccessible. In seeking secure and protected long-term storage, we made arrangements with ATSIDA as a suitable archive for data about Indigenous Australians to curate the full data set and provide access to the data as appropriate. While the website provides opportunities for exploration, the archive will provide searchable records in the future.

Permission to hold this material permanently is, of course, different from permission to initially record or to present the information publicly and on-line. Therefore, different protocols developed by the Jumbunna House of Learning at the University of Technology, Sydney are presented to interviewees in addition to the more familiar protocols such as permission to record an interview and terms of use. Our project has developed a form, based on the Jumbunna principles, to enable interviewees to control access to their material (Appendix A).

The future of the project

It has been claimed that the introduction of the computer to historical studies may be as critical a watershed as textual deconstruction (Drucker and Nowviskie 2004). Applying GIS and other forms of spatial data opens exciting possibilities for the deployment of 3D visualisation to our website, for example, to digitally reconstructing some of the now-destroyed and lost Aboriginal town camps of Sydney. Thomas noted that

[e]xtending historical GIS, they [historians] might attempt to create 'lost landscapes' in ways that fully allow readers to move and navigate through them. These four-dimensional models might restore buildings, roads, and dwellings to historic landscapes... Readers might do more than query these datasets; they might interact with them too, taking on roles and following paths they could not predict but cannot ignore (Thomas 2004, 66).

More recently scholars have begun to see the potential of GIS learning as more than a medium of instruction only. By visualising a town camp in four dimensions (that is, including time lapse), we hope to incorporate anthropological, historical, sociological, environmental, oral and photographic data. By understanding how, why and where the people lived, where they came from and where they went to in one location, researchers may begin to predict the locations of other sites, and why they too, were abandoned or destroyed. Visualization promises a research tool which text alone does not afford. As Jessop (2008, 282) noted, 'Of far greater importance is the ability of these tools to allow visual perception to be used in the creation or discovery of new knowledge. However, knowledge is not transferred, revealed, or perceived, but is created through a dynamic process'.

In this way the 'historyofaboriginalsydney.edu.au' team plans a progression from two-dimensional presentation to three dimensional historical reconstructions.

Suppose, then, we set out to create a three dimensional digital model of the Narrabeen Town Camp in order to answer the question: 'Why, at the peak of the assimilation policy, was the Narrabeen town camp allowed to survive until 1959?'

First we must animate the historic landscape by considering which of the visualised topographical elements will be most helpful in enabling users to answer the puzzle of

why the camp survived until 1959. We need a view of the lake from the viewpoint of the Wakehurst Parkway, descending the plateau from Oxford Falls and following closely the northern edge of the Lagoon all the way to Narrabeen township. For this we will need a very dense series of photographic images of landscape, sometimes through 360 degrees, as the traveller, as it were, looks in all directions. What does the 1950s traveller see? To recreate the Lagoon scenery we have to texture the trees, bushes, creek, sandy beach the sandstone escarpment and wind on the water; we need to model and texture any huts or humpies revealed in appropriate aerial or other views. Our designer needs to animate tidal flows, vegetation sometimes waving in a breeze, and changes in mangrove growth and siltation.

The area now digitally animated, we now attempt to answer our question. Firstly - could the camp be seen by our traveller? Immediately noticeable in the re-creation will be that from its nearest point on the bumpy track of the Wakehurst Parkway - the camp is out of sight! Oral history confirms that the Narrabeen Aborigines, like other Sydney peoples, preferred to live in rocky caves for security and protection. The simulated Aboriginal viewpoint in the *opposite* direction, from the caves to the road, will reveal that the cave-dwellers could very clearly see our visualised traveller. An animated trip in a 1950's 'putt putt' boat across the 1950s-configured lagoon will replicate how community members travelling to Narrabeen township could avoid any 'white' houses on the lakeside if they wish. A simulated view from the eastern end of the Lagoon, that is, from the centre of the White population, looking four kilometres west in the direction of the camp, will make it plain that the Narrabeen town camp was one of the most hard to see, remote and inaccessible, of all the Sydney town camps of the twentieth century. Yet that revelation is by no means obvious on a cadastral map even today.

Though the Narrabeen town camp was predominantly a camp of old people, the wetland to the west, and the adjacent Deep Creek to the north, were essential for gathering and hunting ducks, eels, fish, prawns, berries, grasses and wildlife. A walk-through recreation will show the area to be unattractive to the Whites of the 1950s, who quite probably would have referred to it as 'the swamp'. Yet simultaneously the animated appearance of edible vegetation, frogs hopping or ducks flapping away will demonstrate its great value to the Koori residents. Finally, the higher plateau country to the west, were still visited for spiritual and educational reasons in the 1950s by both the younger residents and their visiting relatives. After fulfilling appropriate protocols and permission from elders, a simulated walking tour up the steep slope of the plateau edge to some of the existing sites will indicate the continuing close economic and spiritual connection of the community to the hinterland.

The visualization, then, will demonstrate the economic life of a community that was partly self-sufficient and partly dependent on a cash or barter economy with the whites. It will reveal its sources of spiritual sustenance and, most significantly, its near invisibility at a time when, fortuitously, the area was not wanted by anybody else. Through such a visualised topographic understanding, users will be much closer to an intuitive grasp of the social, religious and economic mainsprings of the Narrabeen town camp.

Our intention is to continue with the construction of a digital space where users can dynamically construct their own understanding of Indigenous history, which will, in turn, deepen their understanding of Australian historical heritage.

ACKNOWLEDGMENTS

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Appendix A

Permission to deposit material in the Aboriginal and Torres Strait Islander Data Archive

At the conclusion of your interview, we would like to invite you to allow us to place the video or other material on the ATSIDA website, a Data Archive established exclusively to hold Australian Indigenous electronic materials.

If you agree, it will be held under strict protocols developed by the Jumbunna Indigenous House of Learning, University of Technology, Sydney.

If you agree to have this material deposited, we would be grateful if you could choose – by a tick – which of the options for access which you prefer.

1. No access conditions; quarterly report to depositor indicating who is using the interview or photo.
2. Low access conditions – must be researchers from a recognised grant scheme like the Australian Research Council or the Australian Institute for Aboriginal and Torres Strait Islander Studies. Plus a declaration that the data will be used for research or study and it will not be used for other purposes; quarterly report to depositor indicating who is using the data.
3. Medium access conditions - must be researcher from a recognised grant scheme; and a declaration that the data will be used for research or study and it will not be used for other purposes: acceptance of ethical conditions imposed on the original study and declared understanding of the sensitivity of the data; quarterly report to depositor indicating who is using the data.
4. High access conditions – Permission to use the data must be sought with the depositor. If the depositor is not available to respond to the data request within 6 weeks, the ATSIDA Reference Group will decide whether access is permitted.