Recent digital developments at the National Library of New Zealand

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This presentation is an update on some recent digital developments at the National Library of New Zealand. First I will talk about phase one of the National Digital Heritage Archive (NDHA), a major project enabling the National Library of New Zealand to collect, preserve and make available New Zealand’s documentary heritage in digital form. The NDHA will house electronic publications, such as harvested websites, and digitally born materials such as manuscripts and photographs. It will also allow digitised copies of collection items, reformatted from more traditional formats, to be preserved over time.

The second part of the talk briefly describes the Library’s web harvesting activities, followed by a description of the new Manuscripts and Pictorial website. The website provides access to selected digitised collections and items from the Alexander Turnbull Library, and the first of these collections is the McLean Papers. Finally, there is a quick look at a recent digital acquisition, the scanned travel diaries of an English visitor to Fiji and New Zealand in the 1920s.

The National Digital Heritage Archive

The National Library of New Zealand in partnership with Ex Libris Group has developed the NDHA project in the last five years with funding from the New Zealand government. The Alexander Turnbull Library, under the National Library of New Zealand (Te Puna Mātauranga o Aotearoa) Act 2003, is required to keep its collections in perpetuity. Digital materials – both those created digitally, and those reformatted digitally from traditional formats – are fragile and ephemeral, and provide many challenges for long-term preservation.

As an example of the problems inherent in digitally born materials, a donor recently gave us a large reel of IBM computer tape from the early 1970s. The donor provided a general description of the data on the reel, but knew nothing about the computer application used to create it. We will need to establish if the tape is in sufficiently good physical condition to be read, and whether we have the equipment, software and hardware to access the information on it. Digital materials present particular challenges: the likely deterioration and obsolescence of the storage medium, possible obsolescence of the software and hardware required to run it, and the need for data about the items.

If we can access the information on that IBM tape, and want to keep it for our collections, it will need to be reformatted so that it will be accessible and accurately rendered over
time, with its content authenticated. The NDHA provides the technical and business solutions to enable this to happen. A new business unit has worked on the development of the NDHA, with input from many members of staff throughout the various divisions of the National Library. This involved them in documenting business processes, planning the processes for handling digital materials, and then testing them and training staff.

The first stage of the NDHA went live in October 2008, and it is now taking in, storing and providing access to digital materials. The second phase, providing preservation facilities, will be completed by 2010. More information about the NDHA can be accessed through the National Library of New Zealand website www.natlib.govt.nz or through the NDHA wiki http://ndha.wiki.natlib.govt.nz/ndha/. The system is being built with two business partners, Ex Libris Group for the software design and build and Sun Microsystems for the technical architecture. Together, the partners are developing the environment and standards to manage and operate the digital repository as a commercially viable system.

There are three ways for digital objects, as we now call them, to be ingested into the system. There is the open source Web Curator Tool for harvesting websites; INDIGO for staff submission of digital objects (donated born digital materials, as well as internally produced digital objects created by our digitisation and sound conservation programmes); and the Web Deposit Tool which enables publishers and creators of digitally born materials to deposit them directly through the website. The digital objects are stored in the Digital Preservation System, where they can be virus checked, appraised and worked on by staff. If they meet the Library’s collection policies and are accepted for the collections, they are moved into the permanent part of the repository. Figure 1 shows the Digital Preservation System workflow.

![Figure 1, Diagram of the Digital Preservation System.](image-url)

![Figure 2, Archived copy of a scanned photograph in the NDHA, showing the zoom facility. Photographer: William Hall Raine. Countryside and homestead in Rakiraki, Viti Levu, Fiji, ca 1930s. Reference Number 1/4-020896-G. Alexander Turnbull Library.](image)

**Web harvesting**

The National Library Act of 2003 extended the Library’s responsibilities to include the collection and preservation of online materials, with other electronic publications being covered in regulations passed in 2006. So much of today’s information, and so many of today’s information sources, are carried on the Internet. The Library’s web harvesting programme ensures that in decades to come, researchers will be able to view political party websites for the 2008 general elections, for example - just as we look now at the political party manifestos printed in the 1930s.

The Alexander Turnbull Library has a small team of about three people carrying out the archiving of New Zealand websites. Using a thematic approach, they survey the sites in a chosen subject area, evaluate and select them, then organise their acquisition, or harvest, using the Web Curator Tool. Sites are evaluated for their research, cultural and information value, using the same guidelines as those used for acquiring other published materials for the Alexander Turnbull Library’s collections. There is a focus on the history and development of New Zealand and the Pacific, and on websites available from within New Zealand and the Pacific.
Decisions are made as to the frequency of harvest. Some harvests might be set for a short term only, covering particular events such as the death of Sir Edmund Hillary. Others are periodic, covering regular events such as the general elections (including the websites for political parties, lobby groups, blogs and media commentary that are available during that time). Others are set at regular intervals, covering sites that are updated regularly, such as government websites. Access to the archived websites is through the National Library of New Zealand Catalogue for published materials, at http://nlnzcat.natlib.govt.nz/.

Complementing this selective approach is the New Zealand Web Harvest. The first such whole-of-domain harvest was carried out under contract by the Internet Archive in October 2008. It harvested websites with the “.nz” domain, and about 500 more outside the domain that have New Zealand content. During October, it gathered 105 million URLs, giving as full a snapshot as possible of the New Zealand websites available at this time. Although there are various issues that need to be resolved first, the intention is to provide public access to these archived websites. More information about the harvest is available at http://www.natlib.govt.nz/about-us/news/15-october-2008-update-on-web-harvest, and on linked pages.

**Manuscripts and Pictorial database**

A new National Library of New Zealand website is being launched in Wellington on the day of this talk. The Manuscripts and Pictorial database allows the Library to present large and complex collections of original materials in a standard archival manner, moving from the collection as a whole, through the series, to the items themselves. It is on the Library’s website, at http://mp.natlib.govt.nz/.

The first featured collection on the website is the papers of Sir Donald McLean and his family. A civil servant and politician, McLean was the dominant figure in government relations with Māori in the turbulent years of the mid-19th century. His papers are a mixture of the personal and the official. They include a large body of correspondence with Māori, in the Māori language, which constitute the largest surviving group of 19th century letters in Māori.

With more than 100,000 pages scanned from McLean's papers, this is the largest project to date in New Zealand for the digitisation of personal papers. It includes scans of the original items in selected series, transcriptions of some of the items, and translations from Māori into English of some of those items (figure 3). It allows keyword and subject searching, and filtering of search results. Much contextual information is given also; for example, in the biographical essays and series descriptions.
Dora Foljambe’s travel diaries.
To end this presentation, we will look at some delightful watercolours that are part of a recent digital acquisition. Dora Margaret Foljambe toured New Zealand with her husband and daughter in 1919-1920, and kept illustrated travel diaries. Descendants in England now hold the original diaries, and this year they provided the Library with copies of the watercolours and sketches in the New Zealand volumes. These scanned images are held in the NDHA and are available through the TAPUHI database, together with transcriptions of the written diary entries and captions.

The Foljambes made their journey to New Zealand by sea on the RMS Niagara, visiting Hawaii and Fiji on the way. They then travelled in the North and South Island, and visited the Governor-General, Lord Liverpool, who was a relative of Colonel Foljambe. Dora had a wry and observant eye, and her lively watercolours record the landscapes and people she encountered on their trip (figures 4 and 5).
Figure 4, ‘Figi’, 1919, by Dora Margaret Foljambe, in Dora Margaret Foljambe New Zealand diaries. MS-Group-9208. Alexander Turnbull Library. With permission of Polly Clarke.

Figure 5, ‘The Maoris of Whakarewarewa give an entertainment…’, 1920, by Dora Margaret Foljambe, in Dora Margaret Foljambe New Zealand diaries. MS-Group-9208. Alexander Turnbull Library. With permission of Polly Clarke.
Redevelopment of the National Library of New Zealand building
Please let your colleagues and researchers know that the National Library building is being enlarged during 2009-2011. In preparation for this, all staff and all the collections are being moved to temporary locations in the second half of 2009. This relocation will mean changes to the services offered by the National Library and Alexander Turnbull Library during 2009-2011. Updates on the redevelopment and altered services are available on the National Library website at [www.natlib.govt.nz/building-redevelopment](http://www.natlib.govt.nz/building-redevelopment).

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