

# Chapter 7

## Digital Preservation of Cultural Heritage

Nonja Peters, Dora Marinova, Marijke van Faassen and Glen Stasiuk

**Abstract** This focus of this chapter is the state of the art of digitisation of cultural heritage in Australian archives and libraries from a comparative perspective. Globalisation, mobility and the new techniques that spin off from the digital age bring about new possibilities that stimulate and enhance our capacity to ask new questions about how we perceive ourselves and how we want to preserve our history. It also seeks to make this archival documentation accessible to scholars and community members alike looking for their own family’s history in its societal context—within and across the national borders that hold their records. As migration in all its forms can be seen as a metaphor for the journey of the self and the collective, migrant heritage can also serve as a way to prioritise digitisation projects in cultural heritage institutions. However, more global collaboration and partnerships are needed to achieve this “virtual reconnect” the cross-national scattered nature of migrant histories and heritage held in archives around the world.

**Keywords** Digitisation · Digital age · Migrants · Migration · Heritage · Transnational · Partnerships · Globalisation · Mobility · Virtual

---

N. Peters (✉) · D. Marinova  
Curtin University, GPO Box U1987, Perth WA6845, Australia  
e-mail: N.Peters@curtin.edu.au

D. Marinova  
e-mail: D.Marinova@curtin.edu.au

M. van Faassen  
Huygens Instituut voor Nederlandse Geschiedenis (Huygens ING),  
Amsterdam, The Netherlands  
e-mail: marijke.vanfaassen@huygens.knaw.nl

G. Stasiuk  
Murdoch University, Murdoch, Australia  
e-mail: g.stasiuk@murdoch.edu.au

## Introduction

Communication technologies have been undergoing swift radical change and this in turn is revolutionising research related to preservation of cultural heritage, as we have understood it in the past. Debates that envision the coupling of the human brain with computers were first introduced into the public scene by one of the fathers of cyberspace—Joseph Carl Robnett Licklider of the Massachusetts Institute of Technology (MIT) in 1965 (Waldrop 2001). Years later at a conference in the Netherlands in 1982, Licklider admitted that although he had foretold many of the technical trends now developed, he had not concerned himself with the more fundamental choice between evolution and goal-oriented change that would accompany computerisation. This is particularly true for libraries, galleries and museums that are trying to collect and preserve cultural heritage. For example would libraries use information technologies mainly to improve the functions and procedures they were using already in the 1960s or would they try to develop new functions and procedures? Together with somewhat radical institutional arrangements such as consortia and associations, would they embark on real goal-oriented change in the organisation of the collections, by finding what is needed and making it available to viewers?<sup>1</sup>

At the same 1982 conference, John Michon of Groningen University contended that the only way to connect a library with a mind was to provide “inputs maximally compatible with representations already held by the user” (Michon 1984, p. 151). In addition, both Licklider and Michon agreed that librarians should commit to the development of knowledge bases rather than provide access to individual documents.<sup>2</sup>

In 1988, at the 11th International Congress on Archives in Paris, Eric Ketelaar, Professor of Archival Studies University of Amsterdam, commented on the dilemma relating to archives often being physically at a distance from their users; and how inevitably, the Internet would obviate the user having to visit holding institutions—in person (Ketelaar 1988). Concurrently, he believed a shift would take place from interest in the place where information is held to how the information could best be retrieved! Ketelaar (1988) also conceptualised a transposition from André Malraux’s “musée imaginaire”—museum without walls—to “archives without walls”. He visualised this transposition as a removal of the boundaries between archives, libraries and museums since they were based to a large extent on the physical properties of the information objects preserved in them. Indeed he saw the future mission and vision of archives (or information services) without boundaries—as providing access to their information from the home or business computer (Ketelaar 1988).

---

<sup>1</sup>Also cited by Ketelaar 2003, p. 1

<sup>2</sup>ibid

However, to accept this as the future would also entail recognising that the needs of such an innovative entrepreneurial service would be continually evolving. By way of example, Ketelaar (1988) refers to Bert Looper, Director of the Historisch Centrum Overijssel. To ensure that archives function as a living component of society, Looper, described as an archival entrepreneur, advocated not only a conceptual switch in archivists' thinking from archives to information but also a paradigm shift as our postmodern society moves along from a goods-producing, through to a services-performing and experience-generating economy. In this transition, the new information society is shaping not only the way goods and services are delivered but is also influencing human culture, including how we perceive ourselves and how we preserve our history.

This chapter looks at the digitalisation of cultural heritage as a new way to preserve important historic information. We refer to the Australian experience as an example of innovative ways of implementing digitalisation under budgetary and time constraints.

## Connecting Memories

The Internet provides access to various sorts of information and offers exciting new possibilities that people quickly take up. According to Ketelaar (2003:10), the linearity of a paper document has been replaced with interactive relationships, "there is no 'original' any more, only different representations... The information will be presented to every user, at every moment, in a different form and with a different content". He asserted that digitalisation of archives entails not just preserving and providing digital documents but also a techno-cultural challenge to connect the memories in the archives with the memories in people's minds.

Margaret Hedstrom (2002) argued that making the memory metaphor work for scholars and users of archives would require not only a more refined sense of what memory means in different contexts but also sensitivity to the differences between individual and social memory. Such sensitivity is a particularly important issue for countries which have become the new home of migrants, displaced persons, prisoners of war and refugees. In them, the emphasis on national remembrance or social memory has shifted to individual memory and the expression of one's own experience (Raben 1999). Digitalisation further blurs these distinctions and offers individuals the opportunity to connect their personal stories with memories in the social realm.

The current interest in family and personal history is the most significant expression of digitalised connection between social and individual memories. In the globalised world with fading national identities and mass migration, it is increasingly improbable for museums to cope with housing collections that reflect their nation's ethnic diversity. Moreover, the nature of population movements, including for work, family reunion and search for asylum, often makes it impossible or impractical to establish permanent relationships with a particular country

or place (NSW Heritage Office and NSW Migration Heritage Centre 1999). The Internet has therefore become the new shared space where individuals can construct, transmit and reflect on the historical knowledge that shapes their own and family's history and identity.

Niche industries emerged and thrive everywhere in response to the need to find out and preserve ethnic cultural heritage. For example, as well as the popular immigration museum exhibitions, Welcome Walls (e.g. in Fremantle, Western Australia) and history books about migrations, we now also have on Australian TV programmes, such as: "Who do you think you are?", "Find my Family" and "Can we help?" with the aim to unravel personal stories and connect people with their historical heritage. There are also innovative consultancies, such as Ancestry (ancestry.com.au), as well as a lot of free advice on the Internet, such as Instructables (<http://www.instructables.com/id/Record-Your-Familys-Oral-History-before-it-dies-/>), all motivated by people's desire to link with their ancestors but also leave memories for their descendants. The company 'Family Record: For your Future Generations' uses a digitalised documentary style to record the lives of prominent Australians (Macken 2010). The great football star Ron Barassi explains: "You can't show that to anyone but I want copies for my family... Because this is the representation of Ron Barassi that I want my family to see..." (Macken 2010, p. 44). Peter Ivany, the former chief executive of the Hoyts Cinemas, explains: "It wasn't just about capturing family stories but about understanding them better... My parents went through the Holocaust and to understand what the people did at certain times, you have to know what they are thinking. I know their stories, how my father spent 11 months in a concentration camp and came out weighing 32 kilos and then came out here to Australia at the age of 24, but without knowing what he was thinking at the time, it's hard to understand his drive to give his children opportunities, how he went about inventing a life. If my parents had done this, it would have put it in context why they did things and why they seemed so tough at times" (Macken 2010, p. 44).

## Digitalisation of Archives

A more meaningful understanding of the person and the influences that impacted and motivated them is achieved by locating their experiences within the socio-cultural, economic and political context of the times. This is best accomplished by reference to research and the documentation and artifacts in national, state and local archives, libraries and museums. Australia is host to an estimated 180 ethnic groups including the dominant British. Should a member of any one of these immigrant groups wish to research and write a comprehensive family history, this requires their access to archival documentation in both Australia and their country of origin. The question is: How readily they can electronically access birth, death and immigration records, shipping lists, passport requests, health clearances, Alien

registration, citizenship papers and school or business records in Australia? How close are we to the archives without walls?

Europe has made substantial progress with the digitalising of archives with many initiatives co-funded by the European Union and participant countries. An excellent example is the Archives Portal Europe (portal <http://www.archivesportaleurope.net/>) where a search for Bulgaria, one of the newest European Union members, generated close to 6000 entries. Other wonderful digital heritage preservation sites include Europeana (<http://www.europeana.eu/portal/en>); Minerva ([www.minervamagazine.co.uk](http://www.minervamagazine.co.uk)), the Planets project which terminated in 2010 ([www.planets-project.eu](http://www.planets-project.eu)), its successor the Open Planets Foundation ([www.openplanetsfoundation.org/](http://www.openplanetsfoundation.org/)) and the Rijksmuseum collection (<https://www.rijksmuseum.nl/en/search>).

By comparison, in Australia the digitisation of the records of ethnic groups and of ethnic newspapers, has been slow on the uptake, probably because of the lack of an overarching body. Despite the fact that archives are extremely important because of the multicultural and diverse ethnic heritage, in the scheme of things very little appears to have been digitised.

## **Digitising Australian Archives**

The key institutions, which hold archives in Australia, are the National Archives and National Library, and the various state archival institutions and libraries. National and state libraries also often hold images and other documents relevant to family historians. Whether an immigrant's records are held in state or national archives is directly related to their time of arrival. Until postwar immigration commenced in 1945, which occasioned the founding of the Commonwealth Department of Immigration, arrival and departure records were held in the various state archives. Afterwards, they are kept in the national institutions.

To overcome the budget restraints imposed by the Commonwealth Government, and perhaps the Global Financial Crisis which in fact did not affect the country as much as other parts of the world, the National Archives of Australia (NAA) has been searching for innovative ways to digitalise its rich collection spread over 249 km of shelving. They include business partnerships and digitalisation on demand.

### ***Partnerships***

Since 2008, NAA started negotiations and established a relationship with Ancestry.com.au. In 2012, the first official partnership around a specific archival collection was announced. The aim of this project is to create an index and digitise the records of millions of passengers who arrived in Western Australia between

1897 and 1963. It covers most people arriving in Australia by ship (at Fremantle and other Western Australian ports) and aircraft (at Perth Airport), even if they continued their travel onto other ports. According to the project's press release: "Passenger arrival records are an excellent source of genealogical information. They usually include information such as name, nationality, race, age, sex, place of embarkation, occupation, name of the ship, and date and place of arrival" (NAA 2012, n.p.). As this information is made available through NAA, many online users will be able to reconnect social and individual memories creating the picture of Australian life.

### *Digitalisation on Demand*

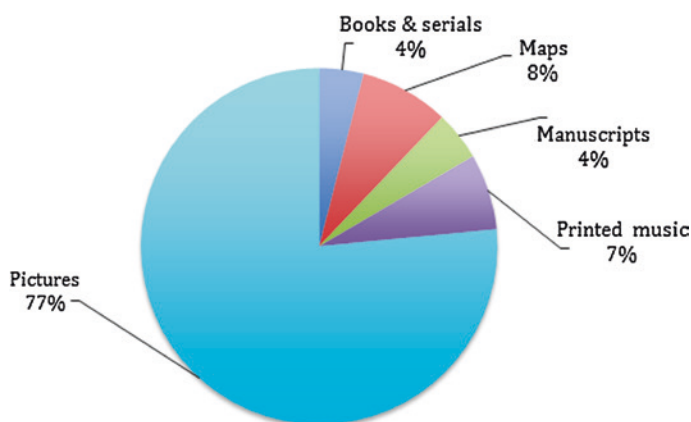
The NAA collection is located in repositories in all capital cities, and all Australians have a right of access to these documents in accordance with the Archives Act 1983. As each record is unique and many are quite fragile, they cannot be moved from one city to another. Traditionally, this meant that researchers must visit the Archives where the records are located, pay someone else to conduct research on their behalf or pay for photocopies (if possible). Since 2001, NAA started making copies of selected records available on its website, but in 2007 it launched its national digitalisation service as *digitisation on demand* (NAA 2013).

The NAA considered a number of strategies to promote greater awareness of both its collection and public's access to it. From the outset, it was apparent that producing digital images and making them available on the website was one of the most effective ways to do this. Through digitisation on demand, records in the Archives collection are made accessible through images loaded onto the Archives website, which can be consulted via the Internet at any time without cost. Originally the digitisation request was also free; more recently, however, NAA introduced a price starting from A\$32.60 with a turnaround time of approximately 30 days. Researchers are no longer constrained by their physical distance from the Archives offices. Further, digital images are available not only to the person who requested them, but to anyone who has access to the Internet.

*Digitisation on demand* was an immediate success with very high demand of around 2000 requests each month (Ling 2013). The service is very popular with family historians, teachers and students.

The NAA continues its proactive digitisation programme in which each of the states and territory offices select particular whole series to digitise. Some of them are specifically migration records such as Alien registrations, migrant selection documents and passports. It takes more than a year for some of the larger take to complete, and statistics are hard to find as to how many records have been digitised. The importance of digitisation programmes for remote communities, academics and individuals is enormous.

Digitalisation is also a strategic direction for the National Library of Australia (NLA) "so that Australians can engage online with their past, as well as with their



Source of data: NLA 2013.

**Fig. 7.1** Digitised items at National Library of Australia, as of June 2013

present” (NLA 2012, n.p.). Collections that have already been digitised include Australian newspapers (e.g. The Sydney Morning Herald with the help of the Vincent Fairfax Family Foundation). The main selection criteria for digitalisation include: cultural and historical significance of the documents; uniqueness and rarity of the material; copyright status; high demand; risk because of physical condition or impending format obsolescence, such as sound and audiovisual recordings (NLA 2012). As of 2013, there were a total of 201,909 digitised collection items, with the bulk of them (71 %) being pictures (see Fig. 7.1).

Digitalisation of museum collections is another important area of connecting memories and stories. Some have started to develop databases relevant to particular projects but a lot more systematic work to digitise documents, photographs and artefacts needs to be done. Further on, a number of heritage websites contain some interesting stories and are proving to be important virtual institutions despite not collecting information in any systematic manner nor having a plan for the site’s longevity and technology obsolescence.

## Conclusion

Migration in all its forms is a metaphor for the journey of the self and the collective, and increasingly, to preserve this cultural heritage will require partnerships between communities, the business sector, government, national archives, national libraries and museums, genealogical organisations and other cultural institutions. Because of positive digitalisation practices by the Europe Commission, migrants from member countries have a far greater chance of accessing their records there than in other parts of the world. Australia, the country most exposed to the tyranny of distance, is gradually making progress.

Digitalisation is revolutionising the way in which cultural institutions preserve their collections as well as make them more widely known and accessible. More work, however, needs to be completed to fully transform these collections, provide the most needed connections between personal and social stories, and create the history of Australia. Postsript since completing this chapter, the National Library of Australia's (NLA) TROVE - a revolutionary new free search engine (<http://trove.nla.gov.au/>) about Australia and Australians, has become world renowned. TROVE users can access a wealth of resources - derived from more than 1000 libraries around Australia as well as personal, educational institutions and some international collections with relevance to Australia. Its contents include pictures, unpublished manuscripts, books, oral histories, music, videos, research papers, diaries, letters, maps, archived websites and Australian newspapers from 1803 to 1954. A wonderful resource, it has as yet, however, few ethnic newspapers digitised. On the other hand, the National Archives of Australia (NAA) has over the last couple of years, dramatically improved on the digitisation of its migrant records. See Destination Australia' (<https://www.destinationaustralia.gov.au/site/>).

## References

- Hedstrom M (2002) Archives, memory, and interfaces with the past. *Arch Sci* 2:21–43
- Ketelaar E (1988) Exploitation of new archival materials. Report for the 3rd plenary session of the XIth international congress on archives, Paris. Reprinted in *Archivum* 35(1989):189–199
- Ketelaar E (2003) Being digital. *Arch Manuscr* 31(2):8–22
- Ling T (2013) Digitisation on demand. Data issue 6. [www.archive.dcita.gov.au/2004/10/issue\\_6/data\\_issue\\_6\\_-\\_digitisation\\_on\\_demand+The+Archives+currently+receives+about+2000+requests+each+month+digitisation+on+demand&cd=1&hl=en&ct=clnk&gl=au&client=safari](http://www.archive.dcita.gov.au/2004/10/issue_6/data_issue_6_-_digitisation_on_demand+The+Archives+currently+receives+about+2000+requests+each+month+digitisation+on+demand&cd=1&hl=en&ct=clnk&gl=au&client=safari). Cited 20 Dec 2013
- Macken D (2010) This is your life. *AFR Mag* 42–44
- Michon JA (1984) How to connect a library with a mind. In: Reedijk C, Henry CK, Koops WRH (eds) Large libraries and new technological developments. Saur, Munich, pp 137–152
- National Archives of Australia (NAA) (2012) Archival passenger records to go online. <http://www.naa.gov.au/about-us/media/media-releases/2012/31.aspx>. Accessed 20 Dec 2013
- National Archives of Australia (NAA) (2013) The National Archives digitisation service. Fact sheet 249. <http://www.naa.gov.au/collection/fact-sheets/fs249.aspx>. Accessed 20 Dec 2013
- National Library of Australia (NLA) (2012) Collection digitisation policy. <http://www.nla.gov.au/policy-and-planning/collection-digitisation-policy>. Accessed 20 Dec 2013
- National Library of Australia (NLA) (2013) Digitisation of library collections, <http://www.nla.gov.au/digitisation>. Accessed 20 Dec 2013
- New South Wales (NSW) Heritage Office and NSW Migration Heritage Centre (1999) Rich rewards: cultural diversity and heritage practice. NSW Migration Heritage Centre, Sydney. <http://www.migrationheritage.nsw.gov.au/mhc-reports/rich/index.html>. Accessed 20 Dec 2013
- Raben R (1999) Representing the Japanese occupation of Indonesia: personal testimonies and public images in Indonesia, Japan and the Netherlands. Waanders Publishers, Zwolle
- Waldrop MM (2001) The dream machine: J.C.R. Licklider and the revolution that made computing personal. Viking Penguin, New York