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Libraries and archives: trusted repositories of knowledge and vibrant engine rooms of creativity

Abstract:

Libraries and archives are widely regarded as trusted repositories of knowledge: by definition, these institutions collect and preserve information relating to almost every aspect of human existence. In terms of creative works, the thousands of kilometres of shelving in archives and libraries in Australia support a wealth of material. These institutions are not, however, merely passive storage facilities. Scholars in a wide range of disciplines utilise, re-imagine and re-interpret the creative works in these collections to generate new knowledge, while library and information professionals undertake specific research to facilitate these, and other, activities. Libraries and archives also offer a range of creative programs, and facilitate the activities of groups who meet to pursue creative activities either on site or, with the advent of digitisation, online via content co-creation, data visualisation and social media. The work of archives and libraries in placing content online also opens up new ways for users to creatively interact with collection materials. Using Sir Ken Robinson's important conceptualisations of creativity, this article explores libraries and archives as both creative spaces and as facilitators of creativity through the examination of some examples of creative best practice from across Australia and around the world in order to unpack how these institutions function as engine rooms, as well as storehouses, of creativity.

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Keywords:

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Introduction

Libraries and archives are widely regarded as trusted repositories of knowledge: by definition, these institutions collect and preserve information relating to almost every aspect of human existence. In terms of creative works, the thousands of kilometres of shelving within Australian libraries and archives support collections of art, audio items, books, ephemera, films, journals, objects, magazines, manuscripts, personal papers, photographs and realia. Of course, libraries and archives have always been 'more than just storage spaces for books – even before they were overrun by computers, DVDs, book clubs and ferocious pre-schoolers' because they 'have always been good at connecting people to the things they need' (Manuell 2012: 55). These institutions take many forms including: general public libraries; specialist libraries and archives; corporate and other private libraries and archives; and school, technical and university libraries. There are also a variety of state and national institutions, organisations that are charged with the important task of documenting our heritage through the active acquisition and preservation of items that tell both individual and collective stories. Taken together, the collections of these institutions are vast. In 2011, the National Library of Australia (NLA) alone held, apart from books, over 213,000 music scores, more than 81,000 paintings, drawings and prints, over 1,645,000 photographs and more than 14,770 linear metres of manuscripts (equivalent to approximately 2,172,000 items) (NLA 2011). The State Library of New South Wales (SLNSW) aims to 'collect, preserve and make accessible the documentary heritage of New South Wales' and in fulfilling this role has developed a collection of over 5.5 million items that has been valued at some AU$2.142 billion (SLNSW 2011). The collections of the SLNSW (as do most collections) continue to grow with additions over the 2011-2012 financial year including more than 62,000 discrete items including books as well as almost 200 linear metres of manuscripts and the in-house creation of over 31,000 digital images (LCNSW 2011: 93). The collection is so large that it requires 118 linear kilometres of shelving which, if placed end to end, would extend from the Sydney central business district to Mount Victoria in the upper Blue Mountains. The collection is currently growing at the rate of two lengths of the Sydney Harbour Bridge per year.

These collecting and lending institutions are not, however, merely passive storage facilities, they are active agencies that support creativity: 'the process of developing original ideas that have value' (Robinson 2011: 2-3). Public lending libraries provide Australians with access to a range of resources for purposes ranging from entertainment to scholarship, with the 1,494 public library service points (a total that includes mobile libraries) across the country now receiving an average of 9.5 million visits per month and facilitating loans of more than 41 million items each year (SLQ 2011). These public organisations operate alongside some 9,000 school libraries and an array of university and TAFE libraries as well as the health, government, prison, private and special libraries and archives that provide information services in Australia (ABS 2012). In addition to the facilitation of loans to the public and assisting with on site access to rare or specialist material, these institutions also offer a range of creative activities from rhyme-time for babies to educational courses for mature, lifelong learners. Libraries also facilitate the activities of groups who meet

within the public spaces they provide to pursue such creative activities as gaming (from traditional board games to modern computer games) and various forms of organised and individual reading and writing including book clubs and short courses. Archives and libraries also, as a result of various digitisation programs, facilitate 'meetings' online for participants to work on content co-creation, data visualisation and social media activities. The relatively recent work of archives and libraries in placing content online has also opened up new ways for users to interact creatively with collection materials including artists and scholars working in a wide range of disciplines who utilise, re-imagine and re-interpret the significant holdings of creative works for a wide range of purposes including that of generating both new art and new knowledge. At the same time, library and other information professionals undertake research to facilitate both these activities as well as those of their colleagues.

The Romantic conceptualisation imagines creativity as acts of muse-inspired genius, yet the idea of creativity being a skill or attribute that can be encouraged and developed is not new, with research from at least the 1950s onwards discussing how creativity can be facilitated and enhanced (see for example, Maltzman 1960, who cites studies back to 1898). Despite this timespan, very few of the key general texts that deal with nurturing and developing creativity mention libraries or archives as anything more than places where texts about creativity can be accessed. Taking this gap into account, we here explore the varied roles that libraries and archives play in encouraging and enhancing creativity. By examining examples of best practice from across Australia and internationally, we propose that these institutions are active and productive engine rooms, as well as storehouses, of creativity.

Information professionals: facilitators and practitioners of creativity

Without the work of information professionals, many researchers would discover that trying to locate information in large collections can be akin to finding it on the Internet, which has been described as the world's largest library, but one where 'all the books are on the floor' (Paulos 2011). Librarians, archivists and their colleagues, moreover, do far more than merely facilitate access to information. These professionals also actively work with, and research their collections, in order to curate and interpret their vast holdings. In addition to these efforts are a multitude of research projects on topics that revolve around the library profession and library services.

To discuss just one of the ways in which library professionals facilitate creative activities, we profile some of the activities of the librarians of Public Library Services at the SLNSW who provide 'advice and support to all local councils providing public library services to the people of New South Wales' (SLNSW 2012). This team facilitates creativity through the design and delivery of a wide range of professional development programs and seminars for those working in public libraries across metropolitan and regional New South Wales. In addition to organising such events, these practitioners display their capacity for creativity through commissioning, coordinating and supporting research on public library services. Recent efforts include *The Bookends Scenarios: alternative futures for the public library network in NSW in*

2030 (2009), which acknowledges the 'remarkable abilities [of public libraries across NSW] to reinvent themselves and remain relevant to community needs over many years' (Neville Freeman Agency 2009: 3). This work is particularly, and purposefully, imaginative as it specifically utilised a process of 'imagination and analysis' to develop strategies to visualise and assess 'the complexity of future environments' in order to ensure information organisations that are not only sustainable into the future but also flourish (Neville Freeman Agency 2009: 6). Other research publications commissioned by this team, on behalf of the Library Council of New South Wales, include *Enriching Communities: the value of public libraries in NSW* (JL Management Services 2008), which explores both the creative and economic value of public libraries and how these organisations contribute to social capital; *A Benefit Cost Analysis: outsourcing of acquisitions, cataloguing and processing in NSW public libraries* (Macroplan Australia 2009), which analyses how outsourcing some services can allow public libraries to focus on providing creative programs and revitalising their spaces; and *Living Learning Libraries: standards and guidelines for NSW public libraries* (Libraries Alive! 2011), which provides information for public libraries to use in benchmarking their own services against similar organisations to assist them in thinking more creatively about how to continue to meet the needs of existing members while attracting new audiences. Another important piece of such research is *People Places: a guide for public library buildings in NSW*. First produced in 2000 by Heather Nesbitt Planning in association with Bligh Voller Nield, with a second edition in 2005 and a new edition published in 2012, this work covers every aspect of the planning and design of new public library buildings, as well as extensions and refurbishment projects, including the provision of craft and activity tables and the installation of public art. We believe these publications reveal the ability of library staff to engage creatively with not only pressing questions such as effectiveness and cost efficiency but also address future needs, such as the size libraries need to be to best service the next generation of readers, and what those libraries will look like. Especially creative is current work around how the physical structures of libraries might interact with repositories holding increasing amounts of digital content.

In addition to coordinating such research, library staff design, develop and present a range of creative activities. In his work *Out of Our Minds* (2011), Sir Ken Robinson discusses how creativity is often thought of as being an activity limited to certain (artistic and creative) individuals and how some believe such people can be identified by appearances – 'they don't wear suits' (3). No such stereotypes exist within libraries and archives because, as the steel magnate and philanthropist of the late nineteenth and early twentieth centuries, Andrew Carnegie, pointed out at numerous public library dedications, the very idea of the library is one of a 'republic of letters, where neither rank, office, nor wealth receives the slightest consideration' (1992: 237). This accessibility allows for, and encourages, an equality of the individuals who use libraries and thus an equality of both the questions they bring and the answers produced in response. It has been suggested that everyone can be creative 'if the conditions are right' (Robinson 2011: 3) and we argue here that the right conditions can be found in libraries and archives as these institutions, in Norman Cousin's modification of 'the famous metaphor of Socrates', act as 'the delivery room for the birth of ideas' (2012), also providing spaces conducive to the cogs and wheels of

ingenuity, imagination and invention being able to challenge, develop and re-imagine ideas.

Creative and educational activities can be found within the public programs offered by most public, state, territory and national libraries, as well as the legion of special libraries. These programs are designed for a wide range of age groups from the very young to more mature learners. Baby-related programming aims to stimulate creativity with pre-literacy activities that encourage little ones to read, while the most cursory glance at library web sites reveals a range of offerings for adults such as classes on researching and writing family history; lectures and seminars on a wide range of topics including art, the environment, history, literature, food studies, philosophy, politics and religion; literacy classes; and workshops that guide participants through creative experiences as varied as drawing cartoons, taking photographs and using social media; as well as a wide range of writing courses from those that cover business needs (such as writing employment application letters and resumes); to highly creative activities, such as writing novels, poetry and short stories.

Fostering creativity

While major institutions such as state and national libraries and archives foster creativity both on site and online in a range of ways, smaller and more specialised collections can also display these attributes. The William Angliss Institute of TAFE (WAI) in Melbourne has, for example, established a unique collection of historical culinary materials in its library's special collections. These resources include historically significant cookery books from around the world, including extremely rare Australian items. It also holds an important archive documenting its own history, as, under various titles, the WAI has been a training centre for the culinary arts and hospitality since 1940 (Nunn 1990: 1). What shifts this collection from being a repository of information is the way the WAI conceptualises and resources this collection to be utilised by a wide variety of users. Not only can the Institute's culinary students access these materials to use in the recreation of historic menus, but outside researchers and cooking professionals are actively encouraged to engage with it. In 2009, this was reportedly, for instance, the only Australian TAFE to employ a full time Special Collections Coordinator – whose remit is, in part, to 'promote' (Kloppenborg 2009) this collection to internal and external users. The recent institution of research fellowships at WAI is also facilitating access to this collection. An illustration of this is how, at a number of recent food studies symposia organised by internal and external researchers, themed dinners prepared by the WAI culinary students have been based on menus researched through this collection.

Manning Clark House (MCH) similarly has a dual function, in this case of heritage conservation as well as taking a role as an intellectual and creative centre. Designed by Robin Boyd in 1952 as the home of Australian historian Manning Clark and academic Dymphna Clark, the physical structure of MCH is a house museum situated in Forrest in the Australian Capital Territory. This preserves the house, outbuildings and their contents including Manning Clark's rooftop study, where his six volumes of *A History of Australia* and other works were written, the Clarks' unique library of

10,000 volumes, and their large cool-climate garden. Beyond this, MCH serves as the location for a series of inclusive creative events including creative writing workshops, poetry readings and book launches alongside monthly book clubs, annual lectures and the well-patronised Weekend of Ideas. MCH also hosts a number of residential fellowship programs which explicitly aim to foster creative outputs, specifically to 'promote, encourage and nurture' the creation and dissemination of literature, history and visual and performing art works (MCH 2012). Alongside these on site activities, MCH offers access to information about its programs and activities, and a number of downloadable papers and presentations are archived online. The MCH website also encourages social media connections among its community with links to its Facebook site and Twitter account.

Creativity and collaboration

These cultural institutions facilitate the activities of groups who meet regularly to pursue an increasingly varied suite of creative activities. Below we focus on some unusual creative activities in the areas of gaming, reading, family history, content co-creation, data visualisation and social media. These activities are particularly important because they not only emphasise, as in Robinson's terms, that 'creativity is for everyone' (2011: 257), but also demonstrate that creativity is everyone's responsibility: partnerships with educational systems are vital to stimulate and support creativity with the cultural sector playing an important role in such partnerships (Robinson 2011: 264).

Gaming

Play is an important part of any creative pursuit (Russ 1999) and libraries have increased their offerings in this field dramatically over recent years. Games open up opportunities for libraries to attract new audiences both on site and online, with online games providing 'an environment where people can easily interact, even people who may not be able to come to the library … because of disability, family commitments or a whole range of other reasons' (Forsyth 2010: 117). Some games also creatively encourage engagement with library services such as the Ann Arbor District Library's Summer Game. This Michigan public library was one of the first in the United States to use video games to attract young people to the library and, in addition to running video game tournaments (Barack 2005), has created a game where patrons earn points by participating in library activities such as borrowing books, joining a library club or making a correction to the catalogue. Points can then be spent to purchase items including library T-shirts and stationery or to pay overdue item fees. The game has become very popular with 9,000 people playing last summer (AADL 2012). At the other end of the spectrum is Zombie Climate Apocalypse, a game facilitated by The Edge, the digital cultural centre at the State Library of Queensland (SLQ). This extremely popular real-time, real-world game is played out over 36 hours and is promoted as 'the best un-dead gig in town' (Waite 2011). Those wanting to play must apply with only 'A-Grade zombies' being selected: players are then expected to 'arrive looking the part (costume and makeup)' (Waite 2011). This game also features

a team of survivalists who need to test their ingenuity as they try to evade the marauding hordes of zombies.

In addition to library services developing their own games, many libraries facilitate gaming via access to commercially available products. M. Brandon Robbins, who reviews these types of games for the *Library Journal* focuses on those that meet the following criteria: 'usefulness to library services and programming, reinforcement of various literacies, and overall quality of mechanics and presentation' (2011). The game rated as the 'Best Game for Social Interactivity & Shared Creativity' for 2010 was *The Lord of the Rings Online* (for PC) for ages 13 and up. This is classified as a multiplayer online role-playing game, that is, a game in which players meet one another in a virtual space and work together to accomplish common goals while sharing resources. Robbins argues that this game builds social and leadership skills, while the role-playing element allows 'participants to let their imagination run wild' (2011). Robbins goes on to explain that participants can also use the game to master a variety of creative skills other than the (expected) art of combat including learning about music and playing an instrument, and the skills of farming and cookery. Those unfamiliar with the stories that unfold within the game based on the realm of J. R. R. Tolkien's Middle Earth then find that their library can lend them the books as well as the film adaptations of these classic fantasy works either from their own collections or via inter-library loans.

Reading

Reading in libraries is nothing new. However, considerable creative and innovative effort is invested in designing programs that attract and involve non-readers in this activity. Each year the Australian Library and Information Association, for example, coordinates the National Simultaneous Storytime project during which a story is selected and read at the same time of the same day, in venues across Australia. In 2012, Nick Bland's *The Very Cranky Bear* was read on 23 May at over 2,400 locations to over 380,000 children (Mandurah 2012). Libraries are also innovative in designing and running different types of reading groups to attempt to meet the needs and interests of their communities. The Riverina Regional Library Book Club, for instance, works to appeal to a range of demographics across a large geographical area, and the library even runs a specialist book club for parents (RRL nd). The book club kits include 10 copies of the same title along with background notes on the text and discussion questions. Titles selected aim to inform, inspire, generate meaningful conversations and encourage people to read books that they might not have had they not been a member of a book club. The Wyong Shire Council Library Service also has book club kits available for loan to promote club start-ups as well as support ongoing book clubs in the community. It also runs the Missing Chapter Book Club for young people, where the final chapters of novels read are kept hidden from club members who have to come up with their own endings (WSCLS nd).

Such creative approaches to encouraging reading are not just a 'value-add' service that libraries provide, but one that is essential in assisting to address an urgent need within the community. 2012 is the National Year of Reading in Australia. A recent

report on the project has described reading as a 'gift' that is 'an engaging, rewarding, mind expanding and emotionally enriching activity' (ABS 2012). The inspiration for a national year of reading in Australia was twofold. Firstly, there were the results of the Adult Literacy and Life Skills Survey conducted by the Australian Bureau of Statistics in 2006 which revealed that 46 per cent of Australians aged 15 and over lacked the 'minimum skills required to meet the complex demands of everyday life and work in the emerging knowledge-based economy' (ABS 2012), meaning that almost half of all Australians were then unable to 'confidently read newspapers, follow a recipe, make sense of timetables, or understand the instructions on a medicine bottle' (NYR 2012). Secondly, there had been a similar year-long reading promotion in the United Kingdom in 2008 that had been very successful (NYR 2012). The Australian National Year of Reading campaign has three goals: 'For all Australians to understand the benefits of reading as a life skill and a catalyst for wellbeing; to promote a reading culture in every home; and, to establish an aspirational goal for families, of parents and caregivers sharing books with their children every day' (NYR 2012). Australian libraries are playing a central role in both this campaign and in pursuing its aims in following years.

Family history

The number of amateur and professional researchers creating family trees has increased dramatically over recent decades. This type of research highlights the value of diversity in any creative enterprise as family history research demonstrates what can be achieved when people are brought together 'from very different backgrounds: people who think differently, who may be of different ages and genders, or with different cultural backgrounds and professional experiences' (Robinson 2011: 233). The results include histories that forge a genealogical path back to the First Fleet and those that trace the trauma of relocating to Australia out of a war-torn Europe. Part of the appeal of family and local history projects is how easy it is to locate the various branches of a particular tree in the Internet age. Indeed, family history has grown to become 'the second biggest subject on the web with sites receiving billions of hits per year' (NFHW 2012). Such is the popularity of undertaking genealogical-based projects that many libraries currently offer the services of specialist family history librarians as well as local studies librarians to assist with this type of research as well as to offer training which ranges from sessions for beginners to more complex courses around the use of specialist software for capturing family history information and ancestry databases. This type of research has always required a creative approach, particularly in relation to historical problem solving and the writing up of a multi-generational history. Today, such creativity is also more visually apparent as researchers supplement and illustrate their written narratives with a variety of the other types of pertinent information that libraries and archives make available such as maps, house plans, newspaper clippings and photographs.

Content co-creation

Content co-creation is the process whereby libraries and archives work with members

of the public to create and refine content on a wide range of topics, capitalising on the opportunities for creation and innovation provided by 'the power of the Internet and of social networking' (Robinson 2011: 266). For many years, readers have been creatively adding to publicly available content by tagging items in library catalogues or on image sharing sites such as Flickr. These tags provide additional search terms for those seeking information to utilise in their own creative pursuits. Library clients can, however, now do much more that this – they can be content co-creators, with one of the better-known Australian examples of this, the NLA's Australian Newspapers Digitisation Program (ANDP). This initiative, begun in 2007 in collaboration with the Australian state and territory libraries, is working to make out of copyright Australian newspapers freely available to anyone with Internet access (NLA 2012a). The ANDP digitises the newspapers, then volunteers correct the text, making the searching of these valuable resources easier as well as much more accurate. This crucial but time-consuming task has been enthusiastically embraced; as early as November 2009, over 6,000 registered users had corrected approximately 7 million lines of text (Holley 2009) and, at the time of writing, volunteers had applied over 9 million tags (NLA 2012b). These volunteers can also communicate with each other in a user forum, which also becomes a site of peer-to-peer learning. This is a very creative enterprise in both idea and design, perhaps most especially because the provision of more accessible data thus facilitates the more creative use of it.

Another (international) example is the Old Weather Project which aims, through transcription efforts similar to those outlined above, to assist those working in the field of climate change by recovering weather observations made by those on board Royal Navy ships around the time of World War I. There are approximately 250,000 British sea logbooks – presented in handwriting that ranges from beautiful copperplate to bordering on the illegible – that computers cannot transcribe (Old Weather 2010). The transcriptions contribute to two quite different aspects of creativity: scientific and social as they inform climate change projection models; and narrative as they are used to illuminate the stories of the ships themselves and those who served on them (Old Weather 2010). Just as the NLA creatively collaborates with other libraries on such projects, the Old Weather Project is also a collaborative effort involving the National Archives at Kew, National Maritime Museum, Oxford University and the Citizen Science Alliance. The project website offers a highly interactive environment offering tutorials, blogs and a user forum and, as in the ANDP, a large project community has been created, bringing together almost 30,000 volunteers who co-create valuable content that can be utilised by a range of disciplines around the world.

Closer to (our) home, there are numerous content co-creation projects that have resulted from the collaboration of libraries and community groups in regional Australia. Other projects are realised through the Australian Broadcasting Corporation's ABC Open, a division of the national broadcaster that works with local organisations to facilitate the telling and sharing of stories about particular regions and localities or on particular themes (ABC 2011). There are also examples of content co-creation by local studies groups as, for example, the Mosman Library, which posts images from their collections on their website and allows members of the community

to add text to these photographs (and in some cases contribute additional photographs from private collections). Specific initiatives such as Mosman Memories of your Street and Mosman Faces bring together the library and the community to co-create new histories of this Sydney North Shore area. In a reversal of the more usual process, those without computer skills or access can handwrite their narratives and library staff will then type up the contributions so that these can be placed on the web site (Mosman Library 2012).

Data visualisation

Data visualisation is the art of creating visual presentations of information. Joseph Priestley made the first efforts in this field in the mid-1700s with the development of timeline charts (Spence 2005: 353). This important innovation was closely followed by William Playfair who devised the bar chart and also popularised the use of the line graph to display time series in statistics. As the 18th century turned into the 19th, Playfair published *The Statistical Breviary* (1801) which featured the first appearance of one of today's most easily recognised data visualisation tools: the pie chart (Spence 2005: 353). One of the great pioneers of data visualisation was Florence Nightingale. Although most well known as 'the lady with the lamp', Nightingale also had a gift for turning statistics into images, as she believed this was 'the most effective way of bringing data to life' (Rogers 2010). This simple, but very effective, way of communicating large amounts of, often complex, information proved vital when she prepared reports for Parliament after tragic losses during the Crimean War – as she was able to clearly demonstrate that most deaths were the result of poor sanitation (Rogers 2010). Similar charts were developed to show that, even during peacetime, the death rate of British soldiers was twice that of civilians, and thus began a long and successful campaign for policy changes around sanitation and general health care (Rehmeyer 2008).

More recently, innovators such as Mitchell Whitelaw have worked on projects such as the Visible Archive, which is supported by the National Archive of Australia (NAA). This ambitious project set out to create prototype visualisations of the NAA's entire collection, which contains 60,000 series, overwhelming in itself, but more so when it is realised that one single series within that collection contains approximately 64,000 documents (Hinton & Whitelaw 2010: 53). The results make information more accessible as well as visually stunning: from simple term clouds and word clouds to more sophisticated thumbnail grids that 'provide rich but unstructured visual clues', placing a cursor over a tile within the grid will reveal the full image and accompanying textual information (Hinton & Whitelaw 2010: 56). Another contemporary example can be found in the work of Tim Sherrett and Kate Bagnall whose Invisible Australians project is harvesting photographs and scanned documents from the NAA and from State Records of New South Wales to creatively tell the stories of minority groups, in this case of the Chinese, Japanese, Indians, Afghans, Syrians and Malays, as well as the Indigenous Australians who lived in Australia during a time when they 'found themselves at odds with the nation's claim to be white' (Sherrett & Bagnall 2012).

Data visualisation is a complex field, and one that is further clouded by digital rights management issues. It is, however, of considerable interest in this context because it reveals how cultural institutions such as libraries and archives are fostering creativity. Through the digitisation of their materials they are providing individuals with 'the tools to work with collections to construct their own pathways and to develop their own perspective on the material rather than providing them with a single institutionally constructed view' (Kelly, in Hinton & Whitelaw 2010: 52). This is, in turn, generating materials and resources for users to utilise in various creative ways.

Social media

The work of archives and libraries in placing content online also opens up new ways for users to creatively interact with these organisations as well as each other. One of the more obvious environments in which these creative interactions occur is in the sphere of social media, as new technologies 'are transforming how we think, work, play and relate to each other' (Robinson 2011: 19). There is a range of popular social media tools available to libraries and archives such as blogs, Facebook and YouTube. Twitter is proving to be a very effective tool for creatively promoting collections and encouraging interaction with those collections. This has been demonstrated by many archives and libraries across Australia and New Zealand and their '#collectionfishing' tweets which provide links to images within their collections – relevant to changing themes – and that encourage other libraries, and their clients, to do the same. Such themes are designed to be topical as seen in the 'collection fishing' that took place to celebrate the start of the Games of the XXX Olympiad in London. This series of tweets saw the NAA and the NLA, as well as a variety of other cultural institutions including the Australian War Memorial, National Gallery, National Maritime Museum and a range of New Zealand museums tweet links to images of Olympic athletes, sporting equipment and memorabilia from their collections. Not all themes relate to a specific event such as the recent theme of 'weddings', which saw a wide variety of wedding themed photographs tweeted. These images included a photograph of the 500 cases of canned pineapple that were the wedding gift to HRH Princess Elizabeth from the State of Queensland (QSA 1947) and a photograph of Winston Churchill on his wedding day (NLA 1908). Tweets can also provide links to other types of materials. The Australian War Memorial, for example, used the #collectionfishing wedding theme to tweet a link to a short silent film of the first Army wedding to take place in the Northern Territory (AWM 1943). This activity, a form of community curatorial endeavour, is driven by, in Robinson's terms, 'a primal human impulse to connect with each other and share ideas and information' (2011: 210). The use of social media clearly allows archives and libraries to advertise and encourage the use of their collections, yet it is important to realise that these interactions allow for something considerably greater. As the examples above show, they importantly place digital archivists and librarians 'back in the centre as chief negotiators of the knowledge creation and education that occurs as a result of user-user and user-library interactions' (Schrier 2011), while also enabling unprecedented community/user access, input and communication.

Conclusion

As collections become more and more digital in nature, information professionals, far from becoming obsolete as the Internet facilitates more independent research, are creatively re-inventing aspects of their roles and, in the process, facilitating and demonstrating creative action and thought. In particular, they are playing a central role in encouraging and enhancing creativity for a range of age groups, for those working across a variety of disciplines, and for the professional as well as the recreational researcher. For those who want to play, read or write on site as well as for those who want to work online in content co-creation or data visualisation activities or participate in social media communication: we have profiled a selection of the activities and programs at libraries and archives that can assist in fostering these creative pursuits. In addition, this article has explored how library and information professionals themselves model creativity and innovative thinking through not only their facilitation of new ways to access collection materials, but also in their own production of new knowledge through the undertaking of research projects that advance the profession and thus benefit their clients. In this way, libraries and archives are active and productive engine rooms, as well as storehouses, of creativity. As these cultural institutions belong to us all, so too, does creativity: the idea that only some people are creative is nullified in these arenas where everyone has the capacity to be creative – to take an imaginative, innovative and often unpredictable, but always vibrant, concept and make it his or her own.

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