Advanced Discipline Project 2 (MEDA6006 Sem 2 2017)

Identifying Elements of Participatory Culture Within the Crowdsourcing Activities Aimed at Digital Volunteers: A Qualitative Analysis of Australian State Libraries' Websites

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ABSTRACT

This research project investigates the presence of the elements of Henry Jenkins' theoretical framework of participatory culture within the digital volunteer programmes of Australia's State libraries. Using the publicly accessible information that is available to prospective digital volunteers, a qualitative research methodology was used to produce a thick description of the programmes and activities being offered by the state libraries in the area of digital volunteering.

A rhetorical and ideological analysis allowed a close reading of how each state library's website content relates directly to the theoretical framework of participatory culture, and to the themes of volunteering and crowdsourcing. Evidence of all of the elements of Henry Jenkins' theory of participatory culture is present within the state libraries' websites. This finding suggests that the state libraries have seemingly evolved away from the cultural heritage model of 'crowdsourcing' and towards a participatory culture. Opportunities to further embed participatory culture principles within their programmes are evident. Future iterations of digital volunteer programmes could further adopt participatory culture principles through the expansion of open communication channels, and the inclusion of the new media literacies.

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Introduction

As twenty-first century libraries reposition their services to engage with existing and potential patrons in an online space, there are lessons that can be learned from the integration of the disciplinary field of media studies. Libraries and other memory institutions (museums, galleries and archives) are actively pursuing engagement with their patrons through a strategy known as 'crowdsourcing', asking members of the public for help (Ridge, 2014, p. 2). This large-scale interaction is only possible through the utilisation of information and communication technologies (ICTs). Alongside the growing adoption of these tools and the development of practices around them, there has been a small but increasingly relevant body of research (Deodato, 2014; Liew, 2013; McShane, 2011), exploring the theoretical framework of 'participatory culture' that was developed and proposed by media studies scholar Henry Jenkins and his colleagues (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006). The white paper, *Confronting the challenges of participatory culture: Media education for the 21st century* (Jenkins et al., 2006), defined specific elements, identifying the occurrence of participatory culture as:

A culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices. A participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one another (at the least they care what other people think about what they have created).

(Jenkins et al., 2006, p. 3)

Since the release of the white paper, several library and information scholars have utilised it as a framework for discussion to highlight the underutilisation of the phenomena (McShane, 2011) and the important role participatory culture could play if integrated into the delivery of library services and memory institution practices (Deodato, 2014). The direct research that has been undertaken acknowledges the inherent lack of trust shown by institutions in fully adopting participatory practices (Liew, 2013, 2014, 2016).

Within the cultural heritage sector, the implementation of crowdsourcing platforms has enabled a wide range of projects, from aiding digitisation, to improving access, as well as the inclusion of new derivatives of content. The relevancy of the participatory culture phenomenon has emerged because information no longer sits inside 'bricks and mortar' buildings. In our newly networked society (van Dijk, 2012), information is now readily available outside of spatial and temporal boundaries. Rather than limits to the amount of information available, the amount of attention that an individual has to spend is the true commodity now (Koltay, 2010).

For this reason, libraries and memory institutions are beginning to invite public contribution into collections through online projects. Libraries and memory institutions are adapting to this new environment, and they are finding ways to develop meaningful relationships with communities that are no longer based on the traditional user/service-provider relationship frameworks (Hvenegaard Rasmussen, 2016). As a result of these newly forming relationships, there has been an explosion in the availability and diversity of knowledge and narratives (Liew & Cheetham, 2016). The traditional organising principles of information collection and management have been affected by this, which subsequently affects institutional policy and strategy.

Traditionally, institutional directives are implemented using a top-down approach, they are contingent on information professionals to assess and assert significance and authority. Yet in a participatory culture, professionals are no longer the only experts. Therefore, as an increasing number of libraries and memory institutions invite online engagement, cross-discipline theories about online practices, like Jenkins' theory of participatory culture, are useful. These theories facilitate greater understanding of the specific impacts facing libraries and memory institutions as they move their engagement strategies into online spaces. The aim of this research therefore is to contribute to a growing body of scholarship on new media and participation that addresses "the implications of participatory culture and the participatory democratic nature of the Internet" (Larabie, 2011, p. 71).

The Australian State Libraries of New South Wales, South Australia, Queensland and Victoria have adopted a variety of mechanisms and strategies in attempts to encourage their patrons to become involved in their institutional collections ("Coo-ee! South Australia," n.d.; State Library of NSW, 2016; State Library of Queensland, n.d.; State Library Victoria, n.d.). Each state library has positioned their programme using a 'digital volunteer' title. However, the roles and responsibilities as well as expectations of digital volunteers are relatively undefined in Australian professional literature. There are other areas of emerging research on digital volunteering, however, they largely centre around emergency support and humanitarian aid (White, 2016; Weinandy, 2016). Within the cultural heritage sector, it is a growing area of interest (de Villiers, Laurent, & Stueven, 2017).

This thesis examines the publicly accessible web pages, the available activities and tasks, and the public policies and reports that are accessible to potential digital volunteers. It aims to determine whether the linguistic and conceptual elements of Jenkins' participatory culture as expressed in *Confronting the Challenges of Participatory Culture: Media Education for the*

21st Century (Jenkins et al., 2006) are evident within the crowdsourcing activities of Australia's state libraries that invite involvement from 'digital volunteers'.

Because of the ubiquitous nature of participation within the World Wide Web and the Internet, it is extremely likely that the state libraries of Australia are already actively embedding elements of the theory of participatory culture within their websites. Establishing this conclusively will provide opportunity for analysis and discussion exploring the incongruities between theory and practice. This examination aims to identify whether it is just the rhetoric of participatory culture that is being used to encourage public engagement or whether there are indicators that an active participatory culture is engrained within the wider strategies and objectives of the state library. Discussion on this topic also considers the existing concepts of crowdsourcing and digital volunteering and how they interrelate with one another, and with participatory culture posited as the overarching concept.

The specific research questions guiding this study were:

- 1) Are the elements of participatory culture, as outlined by Henry Jenkins and colleagues, present within the publicly accessible information of the Digital Volunteer Programmes of Australia's State Libraries?
- 2) Within the Digital Volunteer Programmes how do the concepts of participatory culture, crowdsourcing, and volunteering relate?

Scope

At the time of initial investigation for this research project (March-July, 2017) the state libraries of Australia that were actively encouraging online engagement in activities deemed 'digital volunteering' were the State Library of Victoria (SLV), the State Library of New South Wales (SLNSW), the State Library of Queensland (Queensland) and the State Library

of South Australia (SLSA). The National Library of Australia could be considered as offering digital volunteer activities through Trove (http://trove.nla.gov.au/). This was excluded from the study as the national scale of the service and contributions of content from State Libraries makes it difficult to compare to individual State Library initiatives.

Literature Review

To explore the research questions, it is necessary to review the theoretical background of Jenkins' framework of participatory culture and investigate existing research and the application of its concepts by libraries and memory institutions. This section also examines the origins of the terms 'digital volunteering' and 'crowdsourcing' and how they relate to one another. Finally, the inherent conflation of digital volunteering with the act of onsite volunteering is considered.

What is Participatory Culture?

Our world is being transformed by participatory knowledge cultures in which people work together to collectively classify, organise, and build information – a phenomenon that collaboratively updated websites that review books, restaurants, physicians and college professors. Participatory knowledge cultures flourish on the Internet each time we exchange advice on programming, cooking, graphic design, statistical analysis, or writing style.

(Delwiche & Henderson, 2013, p. 4)

Henry Jenkins was not the first to explore the concept of participatory cultures as a phenomenon and cultural movement. Pierre Levy's (1997) investigation of an emergence of a 'collective intelligence' proposed that while nobody knows everything, each of us knows

something, and by pooling resources and combining our skills, common goals can be achieved. Jenkins' framework of participatory culture is underpinned by this concept, and builds upon it to suggest that the free expression of artistic talent is what creates civic engagement. He asserts that by sharing their creations though published media, members of an online community establish social connection with others (2014, p. 14). For Jenkins, participatory cultures are productive, creative and collaborative, and if used correctly they can be mechanisms for promoting diversity and enabling democracy.

In 2006, Henry Jenkins and colleagues at the Massachusetts Institute of Technology released a white paper that proposed a series of markers and challenges detailing the new digital media and learning environment that was emerging during the beginning of the twenty-first century. Within this paper, a participatory culture was defined as containing five broad concepts. A participatory culture is one: -

- 1) With relatively low barriers to artistic expression and civic engagement
- 2) With strong support for creating and sharing one's creations with others
- 3) With some type of informal mentorship whereby what is known by the most experienced is passed along to novices
- 4) Where members believe that their contributions matter
- 5) Where members feel some degree of social connection with one another (at the least they care what other people think about what they have created).

(Jenkins et al., 2006, p. 7)

These key elements do not refer to the detailed applications of technology that enable participatory cultures. Instead they purposely focus on the indicators of a participatory culture

and the decisions made by individuals that determine culture. Technologies are considered instead under four broad categories of types of activities that support participatory cultures:

- 'Affiliations' being a part of an online community Affiliations (e.g. Facebook)
- 'Expressions' producing new creative forms (e.g. Zines)
- 'Collaborative problem-solving' working together in teams (e.g. Wikipedia)
- 'Circulations' shaping the flow of media (e.g. Podcasts)

(Jenkins et al., 2006, p. 8)

Jenkins refers to the key challenges facing community members of networked societies as the 'Participation Gap', 'Transparency Problem', and the, 'Ethics Challenge'. The Participation Gap reframes concerns with access known as the 'digital divide' towards the notion of a 'participation gap' as a more meaningful measure (p. 12). The authors suggest concern and interventions should not be focussed solely on access to ICTs, but also take into account an individual's ability to develop skills to avail opportunities within an increasingly online society. The Transparency Problem recognises that mediated environments influence perceptions and an individual's ability to distinguish between commercial and noncommercial messages. Finally, the Ethics Challenge, emphasises the lack of formal media training received by individuals before they begin contributing to online environments (p. 12).

A set of 12 'new media literacies' were proposed by Jenkins' et al. as opportunities for development of skills that would begin addressing these key challenges:

> • Play — the capacity to experiment with one's surroundings as a form of problem-solving

- Performance the ability to adopt alternative identities for the purpose of improvisation and discovery
- Simulation the ability to interpret and construct dynamic models of realworld processes
- Appropriation the ability to meaningfully sample and remix media content
- Multitasking the ability to scan one's environment and shift focus as needed to salient details.
- Distributed Cognition the ability to interact meaningfully with tools that expand mental capacities
- Collective Intelligence the ability to pool knowledge and compare notes with others toward a common goal
- Judgment the ability to evaluate the reliability and credibility of different information sources
- Transmedia Navigation the ability to follow the flow of stories and information across multiple modalities
- Networking the ability to search for, synthesize, and disseminate information
- Negotiation the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

(Jenkins et al., 2006, p. 7)

The New Media Literacies proposed by Jenkins contain parallels with the competencies recognised within information literacy standards. Information Literacy seeks to increase

individual capacity in understanding, not only how information is formed and the sociocultural attributes contained within, but also the role such understanding has on a person's
ability to participate within a community and to assist in building shared knowledge (ACRL
Board, 2015, para. 4). Libraries have spent the last 15 years creating a niche role for
themselves as the premier purveyors of information literacy teachings (Johnson, Clapp,
Ewing, & Buhler, 2011). As such, they are well placed to embrace the interdisciplinary
approach of participatory culture aimed at addressing the key issues facing our networked
society.

One of the delicate issues of an investigation within the theme of participatory culture, is the extensive range of interpretations of 'participation' and 'participatory' activities.

Interpretation varies immensely from opportunities to email feedback right through to implications of ethical purposes for memory institutions (Huvila, 2015). Jenkins' work and the theory of participatory culture has become entrenched within a number of other methodologies and theories. The decision was made within this research project to restrict the literature discussed and used to work that subscribes directly to Jenkins' own definition of participatory culture rather than to the vast areas of participatory activities that have sprung up from and around it.

The previous section has outlined specifically what participatory culture is. The sections that follow move on to consider, through the research and scholarly investigations that have been undertaken, how libraries and memory institutions are already incorporating activities deemed by Jenkins as Affiliations, Expressions, Collaborative Problem-solving and Circulations into their everyday operations.

Participatory Culture in Libraries

Jenkin's theory of participatory culture has been introduced into the library and information sciences by numerous proponents in different forms. Use of this theory ranges from describing the role of librarians and libraries within existing participatory cultures (Anderson, 2008), to involving users and creating opportunities for dialogue (Hvenegaard Rasmussen, 2016), to the identification of participatory culture tools that are being used within libraries without knowledge of the broader concept (Hopkins, Hare, Donaghey, & Abbott, 2015). There are also a number of discourse and comparative analyses that identify the specific challenges facing libraries in the adoption and involvement of participatory cultures (Deodato, 2014; Huvila, 2015; E. Johnson, 2016; McShane, 2011).

According to Anderson (2008), the library and librarian's role within Jenkins' white paper is obvious. Libraries play an integral role in addressing the participation gap through expansion of facilities and outreach programs (p. 82). By directing patrons to appropriate sources, librarians can assist in enabling the successful development of relationships with media, not only for consumption but also production. Patrons can also be supported to develop skills that enable the identification of commercial and non-commercial information beyond the controlled environment of schools and libraries. Anderson concedes that this does, however, require a change to the everyday management. This is because in a participatory culture, patrons expect opportunities for interaction within the library environment, such as the ability to access their own account and loan history (p. 83).

The broader challenge for libraries is moving away from notions of access towards userparticipation, and from the traditional one-way communications to establishing ongoing dialogue (Hvenegaard Rasmussen, 2016). Within a Danish public library setting, current library mechanisms for establishing a participatory culture includes the involvement of

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volunteers, interactive displays, workshops, co-creation, user-driven innovation and book clubs (Hvenegaard Rasmussen, 2016, pp. 552–553). Enabling participation in these ways can produce valuable outcomes but is recognised as time and resource intensive.

Circumnavigating the challenges of limited funding and staffing capacity is possible through the adoption of certain ICT applications that support participatory culture.

Applications such as *Instagram*, *Historypin*, *SoundCloud*, and *Vine*, are already commonly being used within libraries (Hopkins et al., 2015). Such applications are considered by Hopkins et al. as instruments of participatory culture because they deliver the simultaneous benefits of building the capacities of users as well as the adopting institution (p. 21). Several of these same tools are being utilised within the digital volunteer programs of this study. Understanding the tangible benefits of implementing participatory culture tools is important, as it serves to ensure the activities are adopted at a strategic level; at a level that understands that the greater intention and outcome of encouraging a participatory culture is the grass-roots involvement in systematic change within our society (Jenkins, 2014, p. 268).

Captured within this changing technological environment is the current array of change-strategies that libraries are presently applying. Our newly networked society has reoriented the traditional library-model, which was designed for the purpose of serving visitors in a physical place, towards meeting user expectations of accessing information from any place at any time (McShane, 2011, p. 388). McShane recognises several successful initiatives by libraries that provide collaborative opportunities to engage with library collections, such as the State Library of Victoria's, young adult literature project, *Inside a Dog*, and the National Library of Australia's *Australian Newspaper Digitisation Project* (p. 389). Projects like this, that embrace a participatory culture model, counteract the inherent bias and marginalisation that exists within the Western ideological framework of information systems and services

As the above analysis shows, libraries are already engaging with and embracing the tools and ideologies of participatory culture, consequently, they are impacted by the wide range of issues contained within.

Crowdsourcing Cultural Heritage

The term "crowdsourcing" was coined in 2005 by Jeff Howe (Carletti, 2016). Within other sectors crowdsourcing is framed around small acts of labour performed by non-employees, for pre-agreed amounts of payment. However, within the cultural heritage sector, crowdsourcing is related to the notion of volunteering (Carletti, 2016, p. 199). Two main types of crowdsourcing projects have emerged within the heritage sector. The first is where the public are invited to interact with existing collections by adding descriptions, correcting transcripts, or mapping content. The second is where the public are invited to provide physical or digital contribution to build collections, such as providing personal narratives or contributing photographs or audio recordings (p.198).

In 2014, Mia Ridge, digital curator of the British Library, published *Crowdsourcing our Cultural Heritage* (Ridge, 2014). A definitive work on the subject of crowdsourcing, it contains several case studies and a variety of experiences within the cultural heritage sector. Crowdsourcing is defined by Ridge, as the "act of taking work once performed within an organisation and outsourcing it to the general public through an open call for participants" (Ridge, 2014, p. 23). This work suggests successful crowdsourcing projects require an understanding of people's motivations for participation, suitability of the set tasks, and a knowledge of design practices in participation, content validation, marketing and community building (p. 24).

With such a broad set of skills being required to run crowdsourcing projects, it is no wonder that not all crowdsourcing activities are successful. A lack of contributors adding tags within the library catalogue software, *BiblioCommons*, adversely affected the search results across a conglomeration of fifty libraries (Ajiferuke, Goodfellow, & Opesade, 2015). Even more detrimental than a simple project failure however, is the loss of engagement found to occur when power balances are not carefully maintained. The active presence of supervisors can deny volunteer contributors decision-making powers (Zacklad & Chupin, 2015). Instances of crowds turning on an organising entity, are often well-circulated as amusing anecdotes of engagement gone-bad and are incredibly damaging to the brand and reputation of an organisation (Delwiche & Henderson, 2013).

The very nature of the open accessibility of crowdsourcing activities means the risks of failure (or worse) are high. As the mechanism provides opportunity for the expression of a diversity of viewpoints and gives voice to minority perspectives (Flanagan & Carini, 2012). Issues of trust and concerns with information legitimacy, bias, and contested histories require

An absence of reference to Jenkins' theory of participatory culture is notable within Ridge's work and within other papers focusing on crowdsourcing in the heritage sector. Yet, in *The* Participatory Cultures Handbook (Delwiche & Henderson, 2013), crowdsourcing, as applied in the cultural heritage sector by Ridge, is identified as a very specific part of the participatory cultures phenomenon. It is recognised as occurring when organisations are the instigators in online communities, to generate outputs and knowledge. The distinction between crowdsourcing and other types of participatory culture is that while other participatory cultures are developed and sustained by their users, crowdsourcing is mediated by an organising entity (Brabham, 2013). The typologies of crowdsourcing are presented by Brabham as opportunities whereby crowds find and collect information, solve empirical problems, create and select creative ideas, or analyse large amounts of information (p. 122). In an interview on Jenkins' blog, co-editor of the handbook, Aaron Delwiche, expressed after publication, a broad concern about the development of participatory cultures, whereby organisations of all sizes, including governments, are using the 'rhetoric of participation' to engage with citizens' (Jenkins, 2013, para. 13). Responsiveness, transparency and accountability within practices of participation is what Jenkins proposes to address this issue (Jenkins, 2014, p. 271). It is uncertain whether it is the lack of application of participatory culture philosophies within cultural heritage crowdsourcing projects are resulting in a loss of sustained engagement.

Libraries and memory institutions are already incorporating a variety of participatory culture activities, including some that are included within the banner of crowdsourcing. For

Australian state libraries, some of these activities, identifiable as both participatory culture and crowdsourcing have been labelled as 'digital volunteering'. The next part of this paper investigates the use of the term 'digital volunteer' and how this might relate to the concepts of participatory culture and crowdsourcing.

Digital Volunteering in the State Libraries of Australia

The term "Digital Volunteer" is used on the websites of Australian State Libraries to describe programs that involve opportunities for members of the public to contribute to the correction or addition of information contained within their in-house cultural collections. The State Library of Queensland asks users to "Pitch In!" (State Library of Queensland, n.d.), South Australia makes a call out through its "Coo-ee!" program ("Coo-ee! South Australia," n.d.); the State Library of New South Wales invites patrons to "Engage with the Library's collections and help enrich our stories" (State Library of NSW, 2016, para. 2), and Victoria asks visitors to simply "help fix Victorian newspapers" (State Library Victoria, n.d., para. 2). Each of the programs differs slightly in the delivery of activities and tasks on offer. Some digital volunteering opportunities are developed and hosted by the institutions, others use third-party applications, and direct patrons to external websites. Whether it be by enabling text transcription, text correction, adding social meta data through tagging or by adding a personal perspective on a certain event or topic, each of the libraries are offering an opportunity to their patrons to contribute to the collections and collecting themes of the institution.

Digital Volunteering and Onsite Volunteering

For most of the state libraries, information on opportunities available within their digital volunteer programs is placed on their websites alongside or near the programs they run for

onsite volunteers. The term 'volunteer' on occasion is used interchangeably with the term 'digital volunteer' within the research data. For example, in the 2015-16 Annual Report of the State Library of NSW, 'volunteers' are thanked for the projects listed on the website as 'digital volunteer' projects. Posing the invitation to prospective participants as a 'volunteer' activity is a functional and motivational call-to-action reflecting Australia's strong volunteering tradition. According to the Australian Bureau of Statistics, a third of Australia's population over 15 years of age (5.8 million people), participated in voluntary work in 2014 (Australian Bureau of Statistics, 2015). Economic value from volunteering within Australia is deemed higher than from mining, agriculture and retail sectors combined (Rogers, Noble, & Volunteering SA&NT, 2013).

Volunteering is unregulated in Australia. While there are calls for schools to teach 'citizen scholarship' (Carletti, 2016), volunteering remains very much a self-directed and individualised activity. It relies on the mutually beneficial arrangement attributed to 'altruistic' or 'strategic reciprocity', enforced by the cultural norms of both voluntary activity and social obligation:

The reciprocal concept "what goes around comes around" remains an important principle of human interaction, which facilitates cooperation as it contributes to the social capital and, thus, the social cohesion of societies.

(Manatschal & Freitag, 2014, p. 227).

Volunteering Australia, the peak body representing individuals and organisations involved in the activity in Australia, changed their official definition of volunteering in May 2015, from a statement discounting anything other than formal volunteering performed through not-for-profit organisations, to "Volunteering is time willingly given for the common good and

without financial gain" (Volunteering Australia, n.d.). The broader and more inclusive definition was specifically made because of a growth in activities which include 'digital or virtual volunteering' (Volunteering Australia, 2017).

As with onsite volunteering, the role of a digital volunteer varies with each task and organisation. As described below, the mechanisms for contribution, the instruction and the support offered, vary across the different Digital Volunteer Programs considered in this study. Such slight differences are understandable, since there is no authoritative measure that can be used to determine whether one library is using the term more accurately than the other. Determining the precise meaning of the 'digital volunteer' label is difficult as it has been rarely defined within the literature of the cultural heritage sector. It more often appears within the professional literature as the label given to a specific activity, without first defining what is meant by 'Digital Volunteer'. A recent study on motivating factors for volunteers in Australian archives discussed volunteering in the sector generally (de Villiers et al., 2017). Although it deemed digital volunteering to be out of scope (p.119), it suggested that an increasing number of institutions are either already employing or considering this method of engagement, and calls for further research on motivations for digital volunteers. As the adoption and usage of ICTs in volunteering increases, participatory culture values correspondingly become more relevant (Stokes, 2013, p. 148). The increase of activities and

Where did the Term Digital Volunteer Originate?

Within the Australian Library and Information Science literature, the very first mention of the term 'digital volunteer' came in 2010, when the National Library of Australia's, Rose Holley,

opportunities available to digital volunteers will continue to broaden the label. It is a concept

that is still very much fluid in definition, and as this research demonstrates, in application.

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released a personal research paper based upon the *Australian Newspapers Digitisation*Program and other large-scale crowdsourcing projects. Positioned as a guide for libraries who might be considering embarking on crowdsourcing projects, Holley provides twelve best-practice tips. She suggests that, as non-profit agencies, libraries are well-placed to run such projects and should harness the power of digital volunteers. Holley refers often to her experience working with 'digital volunteers' on text correction activities and uses that term 11 times. A specific definition for the term, however, is not offered in this work. Holley's original delivery of the same research to the Pacific Rim Digital Library Alliance annual meeting of 2009 contains no use of the term.

At the *Europeana Open Culture 2010* conference, Liam Wyatt, the British Museum's first Wikipedian-in-Residence, foreshadowed the future role of Digital Volunteers within the GLAM sector. He suggested that, because Wikipedia and others were already utilising their content, most cultural institutions had 'e-volunteer' programs whether they knew it or not. Wyatt proffered that cultural institutions must decide if they would embrace "messiness and engage back" (EuropeanaEU, 2010). In reporting on the conference, Fuegi and Segbert-Elbert (2010) chose instead the words "digital volunteer programmes" which they described as an "area of significant opportunity" (para. 19).

The Australian Museum embraced this "messiness" in 2011, when in collaboration with the Atlas of Living Australia, they began offering patrons opportunities to participate within their *DigiVol* platform. *DigiVol*, a portmanteau of syllables in "The Volunteer Digitisation Project" ("About us," n.d.), offers opportunities to online visitors to transcribe, validate and assist in making data discoverable. Australian Museum Director, Kim McKay, describes their program as an entry-point and an investment in creating future benefactors (Funnell, 2015,

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para. 23). McKay's insight into Museum's long-term strategy aligns with another large-scale digital volunteering program, that of the Smithsonian Institution.

In 2013, the United States' Smithsonian Institution, which is touted as the world's largest museum, education, and research complex ("Smithsonian Institution," n.d.), launched *The Smithsonian Transcription Center* ("Smithsonian Institution," n.d.). Their program calls out for assistance to "make historical documents and biodiversity data more accessible". A native web-browser portal instructs global participants to 'type what you see'. Each completed document is then marked for review. Social engagement and connection between digital volunteers is encouraged via Twitter on the front page of the site. The College & Research Libraries News review of the platform described as "Crowdsourcing at its best" (Repplinger, 2016, para. 5).

Outside of the cultural heritage sector, the terms 'digital volunteer' or 'digital volunteer programs' are also used within the field of emergency management and humanitarian response (White, 2016; Weinandy, 2016). The response by individuals to contribute to information sharing using social media during times of crises have been the focus of much academic research (Norris, 2017; Starbird, 2012). In 2012, the *American Red Cross's Digital Volunteer Program* began formalising and organising such responses, encouraging individuals to sign up to monitor, engage, and report social media activity in four-hour shifts (Clolery, 2012). In 2013, New York University adjunct professor, Brian Honigman, writing in the Huffington Post, offered '5 Ways to Become a Digital Volunteer'. The first suggestion was to volunteer with the American Red Cross, but he also suggested The United Nations and several non-profit opportunities (Honigman, 2013). By 2014, the term 'digital volunteer' was being used to describe micro-volunteering tasks such as organised online voluntary contributions of parents commenting on children's school project blogs (Couros, 2014;

Kracht, 2014). Regardless of sector, the proposed opportunities outline ways for individuals to contribute or 'volunteer' within a community of interest to them.

Methodology

Qualitative research is a form of research enquiry that analyses information within its natural setting. It allows observations through understanding that reality is socially constructed.

Because of the lack of statistical information relating to the state libraries' digital volunteer programs, as well as the fact that there are so many similarities and yet vast variations between how the programmes are being delivered, a qualitative analysis was a good fit for this research project.

Research methodology employing the qualitative research techniques contained within textual analysis, namely: content, ideological and rhetorical analysis, was used to address the basic aims of this study, i.e. to draw conclusive connections between the languages and concepts being used to invite digital volunteers' participation, and the theoretical framework of participatory culture. This section describes the data collection and analysis plan. Figure 1 portrays the process graphically.

Research question one, investigating whether the elements of participatory culture are present in the information available to digital volunteers of Australia's State Libraries, was answered through a comprehensive content analysis of the publicly accessible information available to prospective digital volunteers. A direct survey or contact with the programme staff was not used, as this would contribute information that is not available to the participants themselves. Instead, data sources examined were the public-facing webpages of the state libraries, as well as the messages created by the state libraries on the third-party platforms used to deliver digital volunteering activities. Due to limitations of time and size of this study, information

created by the digital volunteers in acts of participation such as transcripts or tagging were not examined. Similarly, social media outputs from the state libraries or volunteers, such as Facebook and Twitter, were also determined to be outside of scope of this research project. Because the data was taken from information that was publicly available via the Internet, specifically, webpages and PDF documents, there was no need to anonymise the results.

Research question two, investigating how the concepts of crowdsourcing, volunteering and participatory culture overlap within the documents studied, was answered based on a synthesis of the codes derived during the methodology formulated to answer research question one.

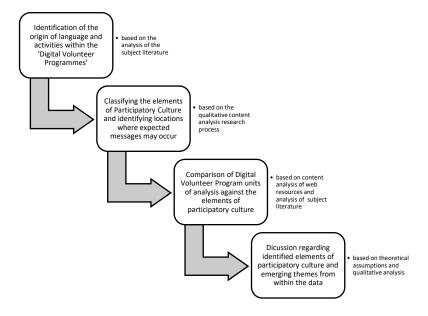


Figure 1. Research design

Population

Reference to 'state libraries of Australia' throughout this report, refers only to the four state libraries discussed earlier - SLSA, SLNSW, SLV and SLQ. During the research period, the websites and documents available online for state libraries in Western Australia, Northern

Territory, and Tasmania did not indicate that any of the 'digital volunteering' activity opportunities were on offer to their patrons. In structuring the research topic around the state libraries that did have the activities on offer, a process of purposeful sampling took place. Purposeful sampling is a widely accepted technique in qualitative research that enables the selection of appropriate groups or individuals to take part in a study in order to compare and contrast them to one another (Palinkas et al., 2015). Purposeful sampling resulted in limiting the size of the sample, a requirement of qualitative research that enables close, reiterative analysis (White & Marsh, 2006). Focusing on the four state libraries that were delivering similar services directed attention to the uniqueness of the text and the information being analysed, this enabled a close examination and the development of multiple interpretations.

Other Participatory Activities

Determining boundaries on a study focussed on participation is complex. Digital volunteering is not the only banner under which the state libraries are engaging patrons in activities that may count as participatory culture. There are other offerings by state libraries which include potential opportunities for patrons to engage in participatory culture through activities such as producing new creative art such a writing, videomaking, graphic design, or through collaborative problem-solving such as Wikipedia or by helping to shape media flow through blog contribution (Jenkins et al., 2006, p. 3). During the research period, new opportunities for patrons to engage with the state libraries arose. New South Wales and Victoria offering a range of disaggregated participatory activities, such as blogs, remixing images, Wikipedia campaigns, and accessible data sets. Such activities create multiple touch-points for engagement by patrons and do not rely on the notion of "volunteering" in order to attract participants. This is reminiscent of the 'Public Projects' on offer at the New York Public Library, which utilises the same calls-to-action of 'connect', 'community', 'help', 'unlock' to

similar activities of text correction and tagging, however the term 'digital volunteering' is absent (The New York Public Library, 2016). Despite the presence of activities that could notionally be considered as participatory activities, for the purposes of this research it was the classification of an activity as 'digital volunteering' that qualified the selection for this research. Furthermore, similar investigations might consider the impact of these ancillary activities. Comparison with the branded digital volunteering activities, and what the role of a 'digital volunteer' is, might be found within this intersection.

Qualitative Research/Textual Analysis

Textual analysis is a wide area of Qualitative Research aimed at deciphering the meanings and patterns within how we use language to communicate (Brennen, 2012). This study used three methods of textual analysis, qualitative content analysis, rhetorical analysis and ideological analysis.

The aim of the study was to first identify whether the language and concepts of participatory culture were present, and then to analyse themes around the occurrences of the elements, including how the positioning of those activities as volunteerism is carries throughout the data. To enable this endeavour several forms of analysis were employed.

Qualitative Content Analysis

Qualitative content analysis (QCA) is a form of qualitative research within which language is the fundamental subject. It is a commonly used research technique that enables controlled and systematic analysis of communication content (Brennen, 2012). Deeply subjective in nature, it draws on the knowledge of the researcher to identify patterns and themes within the area of study. It was used in this work to develop a coding scheme aimed at determining whether the elements of participatory culture were present in the messages available to digital volunteers

of the state libraries. The coded data then enabled the identification of emerging themes from within the carefully chosen activities and the placement of the digital volunteer programmes in relation to the onsite volunteer programmes.

QCA was selected for this study because of its suitability of analysis on large amounts of content. While remaining flexible and allowing the emergence of data-driven categories around volunteer and digital volunteering activities as well as themes relating to Jenkins' theory of participatory culture, the QCA approach meant that the amount of data was reduced through the systematic deduction and development of a coding schema, (Schreier, 2014). As QCA instructs the thoughtful preparation of the data, the assignment of codes, and then the identification of themes and categories within the content, this provides opportunity for the development of new frameworks and concepts or enables researchers to validate existing ones (Zhang & Wildemuth, 2009, p. 2). This capacity for flexibility, close examination as well as providing the opportunity to support existing and emerging concepts is the hallmark of the QCA approach. It is significant in research methodologies for this ability to code deductively as well as inductively (Cho & Lee, 2014, p. 4). A deductive approach is aimed at testing a theory, which in this case is Jenkins' often quoted definition of what a participatory culture is. The inductive approach is used in the generation of new or emerging theories from the data. The process revealed three inductive areas for examination: the association of the terms 'digital volunteer' and 'volunteer'; the types of activities available to digital volunteers; and, the state libraries strategic approaches to digital volunteers and digital projects.

The selection of QCA for this project was also made based on its ability to effectively deal with web-based content. The *Content Analysis Guidebook* (Neuendorf, 2002) states the unobtrusive and unstructured format of QCA makes it ideal for dealing with web-based content. This was found to be useful in this way by Carliner *et al.* (2015), in an analysis of

job descriptions where the critical benefit was the ability to seek out recurring patterns, and, as in their case, to determine a dominant one. Kim and Kuljis (2010), who adopted the commonly used eight-step approach for QCA as prescribed by Neuendorf (2002), found these eight-steps to be "easy and useful" (p. 373), however, they observed a lack of specific direction for web-based project and as such, reinforce the importance of due consideration to the sampling method as critical for ensuring manageable parameters. Accordingly, for this research considerable time and effort was spent determining the boundaries of the document groups and the coding scheme, and a Computer-Aided Qualitative Data Analysis Software technology, *Atlas.ti*, was adopted to aid the collection and analysis of the data.

Rhetorical Analysis

Rhetorical analysis refers to the process that was undertaken to determine meaning using the data and coding schema derived from the content analysis. Rhetorical analysis is also known as Aristotelian analysis (Weerakkody, 2015, p. 271). This method of analysis examines how a message is structured using metaphor and language choice. Brennen (2012) suggests that this analyses method is appropriate when analysing the persuasiveness of a writer or speaker's words, and the choices made in order to influence (p. 205). In an example of rhetorical analysis, a study of librarians and their relationship to the library (Hicks, 2017), rhetorical analysis identified the impetus for librarians to connect their role and identity asynchronously with that of the library itself. The analysis enabled the establishment of a series of 'identity repertoire' (p. 323-325). As expected with rhetorical analysis, in the current work, consideration was given to the relationship between the text (type of document), the author/producer (state library) and the audience (prospective digital volunteers). Examination went beyond the literal meaning and translation of the words also focusing on visual aspects

such as placement, typology and images and how they supported the role of inviting and attracting prospective digital volunteers.

Ideological Analysis

Ideological analysis is described by Brennen (2012) as a central concept for textual analysis. It is the observation and analysis of ideas being presented that appear to have been made through sound judgement or out of sensibility. During ideological analysis, emphasis can also be placed upon the absence or presence of certain text and messages (p. 203). Information contained on the World Wide Web has long been considered an ideal setting for ideological analysis, as it is an "object of cultural discourse" (Swiss, 2000, p. 89). Within this research there are several emerging themes that present excellent opportunities for ideological analysis and discussion. Such as the conflation and positioning of the state libraries' crowdsourcing activities as digital volunteering opportunities, and the connection and tie-ins with the established onsite volunteering programmes. Analysis of the location of messages on the website and in documents is considered, as is the absence of messages in critical places where such communications might be expected.

Data Analysis Tool

To navigate the wealth of data being analysed, a Computer-Aided Qualitative Data Analysis Software (CAQDAS) technology was employed. CAQDAS tools enable the "identification and development of codes, themes, concepts and processes with CAQDAS facilitate the construction of explanations/theories or the testing/expansion of an existing theory" (Rambaree, 2014, p. 347). *Atlas.ti* supports the inductive and deductive approaches of QCA discussed above. Functionality allowed quotes to be recorded as codes and then later

clustered and combined with similar quotations to develop emerging codes which related to volunteering, strategic digital projects and the activities.

Analysis of Data

In conducting the content analysis, this study followed the aforementioned eight-step process proposed by Neuendorf (2002): 1. Prepare the data; 2. Define the unit of analysis; 3. Develop categories and a coding scheme; 4. Test the coding scheme on a sample of text; 5. Code all the text; 6. Assess the coding consistency; 7. Draw conclusions from the coded data; 8. Report methods and findings. This eight-step approach has been used successfully and further described by Zhang & Wildemuth (2009) and Schreier (2014).

The starting point for analysis was the home webpage for each library. Project and invitation

Step 1 - Prepare the data

pages aimed at digital volunteers were identified through their use of the term 'digital volunteer' or 'digital volunteering'. A snapshot of each web page was taken using *PDF Mage 1.1.1*. The Firefox browser extension which preserves OCR text and saves webpages as a PDF, this was necessary to allow the data to be loaded into the Atlas.ti CAQDAS tool.

After the initial entry-point webpages of the digital volunteer programmes were captured, each website's inbuilt search-tool was utilised to identify other mentions of the term 'digital volunteer' throughout the site. Near-terms encompassing similar themes, such as 'online volunteer', were identified and used to navigate to data that met the criteria for analysis (authored by a state library). During this process, several other projects relating to 'digital' or 'digitisation' practices were observed. This spurred a line of enquiry into whether digital volunteer invitations were incorporated into the other digital and digitisation projects running throughout the libraries. The framework of a formal enquiry emerged. Data relating to:

digital volunteering; onsite volunteering; and, digital or digitisation projects was found and captured using each website's navigation menus and sitemaps.

While some documents were published before the data collection period (July 2017 – September 2017), they were included if the information could still be considered recent and not superseded by further information at the time of collection. The criterion used was whether a potential digital volunteer could encounter the information during their initial visits, during the period of decision making on whether to become involved as a digital volunteer.

The initial capture of the data resulted in the classification of 174 documents into the following document categories:

Table 1. Document Groups

Туре	Description
Invitations	Web pages hosted by the state library, relating directly to the
	digital volunteering activities.
Auxiliary Webpages	Web pages not directly related to the digital volunteering
	activities and yet are accessibly by the digital volunteers and
	relatable through their mentions of volunteer activities or digital
	projects.
Activities	Web pages within which digital volunteers may participate by
	contributing content or knowledge within the determined digital
	volunteering activities of tagging, text correcting, transcribing,
	or contributing cultural heritage /personal narratives.

The annual reports of each State Library, dating back to the
launch of each of their digital volunteer activities; Media
releases or blogs based on the activities or outcomes of digital
volunteering.
Policies taken and analysed were those relating to online
outreach with patrons and to the development of digital
collections.

Step 2 - Define the unit of analysis

QCA determines that a unit of analysis is critically important and most effective when considered as thematic, rather than a definite linguistic form such as a specific word, sentence or paragraph (Zhang & Wildemuth, 2009, p. 3). As such, units of analysis for this project were taken as any arrangement of text, small or large.

Step 3 - Develop categories and a coding scheme

The coding scheme for this research, as previously discussed, was developed using inductive and deductive methods, the outline of which was developed during the initial treatment of the documents.

Deductive coding

Developing a coding scheme using the deductive approach relies on the usage of an existing theoretical framework. This research used the following five broad codes consistently used by Jenkins to describe participatory cultures throughout his work (2006, 2006; 2014).

- 1. With relatively low barriers to artistic expression and civic engagement
- 2. With strong support for creating and sharing one's creations with others

- 3. With some type of informal mentorship whereby what is known by the most experienced is passed along to novices
- 4. Where members believe that their contributions matter
- 5. Where members feel some degree of social connection with one another (at the least they care what other people think about what they have created).

(Jenkins et al., 2006, p. 7)

Each element was summarised in coding as: Low Barriers; Support for Creating and Sharing; Informal Mentorship; Belief in Contribution; Social Connection.

Inductive Coding

Units of analysis containing 'Digital Volunteer', the descriptions of digital volunteering activities and instructions were recorded. Additionally, the term 'volunteer', other volunteering activities, as well as any mention of digital projects being identified as 'strategic' or as a 'strategic objectives' were also record using *Atlas.ti's* inductive tools. In the following step these units of analysis were synthesised and clustered into actual codes.

Step 4 - Pre-testing the coding scheme on sample

In the initial pre-testing of the coding scheme, observations and decisions were made regarding units of analysis into certain codes

The following decisions were made in relation to coding the elements of participatory culture:

• Statements detailing level of experience and skill needed to participate, such as "it's easy"; "it can be as simple as correcting a spelling error", were considered as relating

- to **Low Barriers.** Also captured within this code were messages relating to the ability to get involved in the community, such as, "this is a community effort".
- Support for Creating and Sharing were identified as involving connection with
 other social platforms and social media mechanisms such as hashtags or handles.
 Other messages such as calls for information, reports on the completion of activities,
 or thankyou messages and acknowledgement of completed projects were also
 recorded here.
- In the pilot treatment, no obvious instances of **Informal Membership**, whereby what is known by the most experienced is passed along to novices, were seen. However, instances of offers to contact library staff and to learn more by way of help guides and instructions were later grouped together within this category, as they could be considered mechanisms for learning and obtaining support.
- Calls for action to get involved as well as statements of purpose of the projects, such as: "it helps researchers, family members and anyone interested in history to locate stories from that time"; "Help us correct"; "help us improve the transcripts"; "you can help us add value to these photographs by tagging them"; "you can contribute by sharing your knowledge and expertise", were all identified as **Belief in Contribution** contributing to making *members believe that their contributions matter*.
- Opportunities for Social Connection where found to be present in mentions of other digital volunteers and opportunities to meet in person. Units of Analysis that contained information on what the digital volunteers are working on, or the number of volunteers required to complete a project, as well as opportunities for the digital volunteers to meet offline (such as the SLNSW Transcribe-a-thon) were recorded within.

The following decisions were made in relation to developing the inductively formed codes:

- The use of the term "Digital Volunteer", any description or instructions relating to the activities were recorded as **Digital Volunteering Activities.**
- All mentions of onsite volunteering opportunities or volunteers were recorded under
 Volunteer (only).
- Digital projects initiated by the library, as well as any mention of strategic objectives relating to digital specifically were recorded as **Digital Projects Strategic** Objectives.
- Lastly, the mention of digital projects that were initiated by the library and contained an offer for participation were recorded within **Digital Projects Invitation**.

Step 5 - Coding all the text

Each state libraries' set of Document Groups were reloaded into individual *Atlas.ti* Projects. A record for the State Library of New South Wales was created first. While the QCA approach allows for new codes to emerge at this stage (Zhang & Wildemuth, 2009, p. 3), the codes appeared to consistently fit, no new emerging themes were identified. The 3 other state libraries were then imported and systematically coded.

Step 6 - Assessing the consistency of coding employed

Upon completion and following the reiterative eight-step process, the data was re-examined. Also, before the final statistical analysis of the coding scheme was exported, each document within each Atlas.ti Project was reviewed to ensure validity and reliability of the qualitative data.

Step 7 - Drawing inferences on the basis of coding or themes

Upon completion of the coding each code was examined independently, using visual network graphs and cross tabulation tables. From within the coded data, inferences relating to document type and the prevalence of codes aided conclusions on the associations between strategy and policy for each of the digital volunteer programme.

Step 8 - Report Your Methods and Findings

The findings of this research work are described in the following section.

Results

To answer research question 1 – 'are the elements of participatory culture, as outlined by Henry Jenkins and colleagues, present within the publicly accessible information of the Digital Volunteer programmes of Australia's State Libraries?', a comprehensive content analysis using inductive and deductive coding techniques was performed.

Of the 174 documents analysed, 345 pages were coded with 694 individual codes. 53.8% of the codes related to the deductive elements of participatory culture, compared with the 46.2% of codes that were inductively formed relating to the activities of the digital volunteering programs, relation to the onsite volunteer programmes, digital and digitisation projects, and the strategic objectives of the library.

Conclusions regarding the similarities and variances between each digital volunteer programme were established, as well as an analysis of the activities on offer and on the juxtapositions of the digital volunteer and onsite volunteer programmes. Observations and conclusions were also documented relating to each Document Group (Invitations, Auxiliary Webpages, Activities, Reports, Policies).

Areas of interest that were developed inductively related to emerging or conflicting matters around the positioning of crowdsourcing activities as volunteerism. The placement and assignment of these concepts in relation to the deductively identified presence of participatory culture elements within the data is what was considered in order to answer research question 2 – 'Within the digital volunteer programmes how do the concepts of participatory culture, crowdsourcing, and volunteering relate?'.

The inductive method, examining the instructions and activities being offered by each state library enabled a breakdown of the variety and differences of approaches in the delivery of the digital volunteering programmes. While each library has chosen to engage their audiences through activities unique to their institutions' capabilities, similarities in the choice of tools and approaches is meaningful and helps to contextualise the preceding discussion. The following section aims to provide understanding of the arena under which each institution invites participation through crowdsourcing activities within a digital volunteer label.

Crowdsourcing

Activities being undertaken by each state library

State Library of New South Wales

SLNSW currently displays three types of activities promoted to digital volunteers:
Transcripts (https://transcripts.sl.nsw.gov.au/) is an in-house developed web-based
transcription tool providing opportunity for visitors to contribute to the transcription of many
handwritten documents thereby creating text searchable records. They have continued down
the path of developing their own platforms internally and now also offer Amplify
(https://amplify.sl.nsw.gov.au/), an audio transcription tool developed from open-source code

provided by the *New York Public Library*. Within this tool, computer-generated transcripts are combined with audio-files that allow participants to confirm and correct the transcripts. Lastly, digitised versions of *The Gazette* are available on *Trove* and aggregations of editions are linked to from the invitational pages.

SLNSW also reference a completed crowdsourcing project which used the 'Klokan crowdsourcing tool'. SLNSW cite as having run successful geo-tagging projects with promises of more projects to coming online soon, although no timelines of when. While this activity was not counted in the study, the enduring messages being directed to digital volunteers were recorded and analysed.

State Library of Queensland

PitchIn! (http://www.slq.qld.gov.au/about-us/pitch-in) is SLQ's digital volunteer program. The program officially launched in July 2013, yet evidence of the activities being active can be traced as far back as August 2011. Digital volunteer contributions appear to fall under a collection known as the 'Queensland Memory Collection', also listed as the 'Queensland Memory' program.

PitchIn! utilises a variety of external/ third party platforms and labels them as Tag, Text

Correct, Transcribe and Share your story: The Tag activity is practiced partly through Flickr

(https://www.flickr.com/), a photo sharing web-based application that provides the

opportunity for digital volunteers to add tags to records and images. Tagging opportunities

are also available within the library's 'One Search' catalogue. The Text Correct activity links

to Queensland newspaper articles within Trove. The Transcribe activity is run through

DigiVol (https://volunteer.ala.org.au/) the aforementioned online transcription tool developed

by Australia Museum. Finally, 'Share your story' connects through to campaigns managed by

the *PitchIn!* team on the external, digital storytelling website, *History Pin* (https://www.historypin.org/en/).

State Library of South Australia

SLSA utilises a range of off-site platforms to deliver its suite of offered digital volunteering activities via the SA Memory portal (http://www.samemory.sa.gov.au/site/page.cfm). All the activities are focused on World War events and collections. Digital volunteers are asked to correct text in specific South Australian newspapers within Trove. They are asked to tag photos loaded by the SLSA onto external, photo sharing website, *Flickr*. They are also requested to contribute their own photos by uploading them to SLSA's *Flickr* collection.

State Library of Victoria

SLV invites participation through their 'Vicfix' campaign. Digital volunteers are offered the opportunity to 'engage' with Victorian newspapers by assisting in transcribing the digitised artefacts via *Trove*. The available articles refresh monthly each time within a different collection/theme. Digital volunteers are encouraged to return at the start of each month to discover new campaigns.

Participatory Culture

Which parts of participatory culture are present?

All elements of participatory culture were identified as being present within each of the state libraries digital volunteer programmes.

An interesting outcome from the data, observable in Figures 2-5, is that the proportioning between the participatory culture elements were similar for each library, with the most frequently observed elements being *social connection* and *belief in contribution*. The variation between each element across all four state libraries did not exceed 13%. Most of

the participatory culture elements coded as units of analysis are contained within *reports* (37.7%) and *invitations* (32.9%). *Policies* contains the least number of coded messages (2.1%).

Table 3

Participatory culture elements through State Library websites and digital volunteering activities

	State libraries				
	SLV	SLNSW	SLSA	SLQ	Totals
Low Barriers	7	21	9	25	62
Support for Creating and	2	22	7	18	49
Sharing					
Informal Mentorship	2	18	3	13	36
Belief in Contribution	13	63	12	41	129
Social Connection	10	46	5	37	98
Totals	34	170	36	134	374



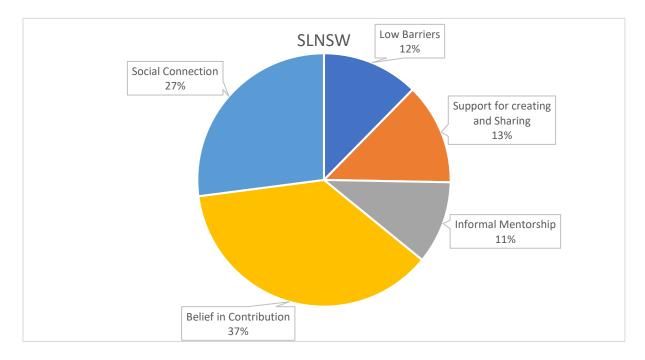


Figure 2. State Library of New South Wales evidence of participatory culture elements

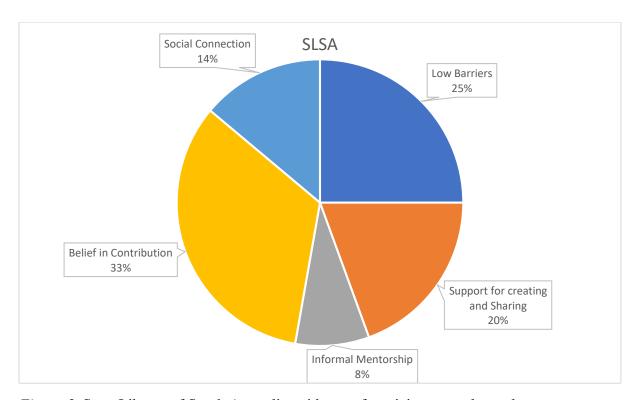


Figure 3. State Library of South Australia evidence of participatory culture elements

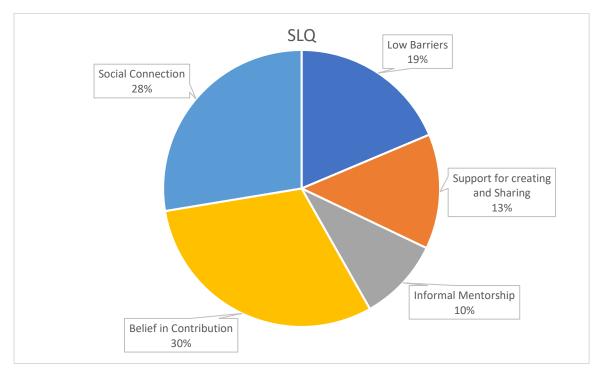


Figure 4. State Library of Queensland evidence of participatory culture elements

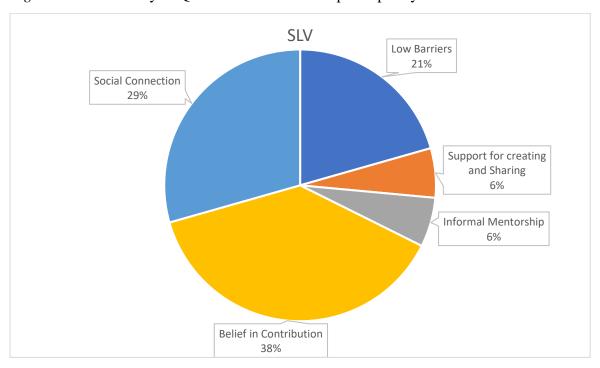


Figure 5. State Library of Victoria evidence of participatory culture elements

Observations across each of the elements of Participatory culture

Relatively low barriers to artistic expression and civic engagement

Each of the libraries emphasise that anybody can participate as a digital volunteer, and suggest that all that is required is an Internet connection. Across all of the webpages, *low barriers* was the second most heavily recorded code. The promise of ease of access is used in several different ways to entice digital volunteers to participate. For SLNSW "working from the comfort of your own home" is the draw card. SLSA mention working "from a café", in another instance "office" suggest participants might consider contributing as part of their job or as a break from their work environment. SLQ advise prospective digital volunteers that distance is no barrier, "it doesn't matter if you're from Thargomindah, Toowoomba, Toowong, or Taipei. All you need is an internet connection and you can Pitch In!", time commitment is minimal "you decide what you'd like to work on and for how long".

Across the programmes, the absence of a need to log in is used as a draw-card to increase engagement. If registration is required, it is quantified by taking only a few minutes. SLSA, is the only library that provides information to prospective digital volunteers about costs advising that creating a (Flickr) account is free. Several of the activities do not require an account to participate, however, for a variety of stated reasons (completion rates, returning to specific projects) it is advised that it is better if the volunteer does take the time to set up an account.

The practice of providing projects on a variety of topics and themes, aimed at attracting wide ranges of audience also appeared to be a prevalent method by SLQ, SLV and SLNSW for creating low barriers for participation. Conversely, SLSA narrowed the focus of their program to items pertaining to war and wartime activities only.

With strong support for creating and sharing one's creations with others

Opportunities to share your work

There is evidence of support for creating and sharing through a variety of mechanisms. SLSA and SLQ provide project specific Hashtags for sharing information on Twitter and Facebook (#cooeeSA, #PichInSLQ, #onthisday, #qanzac100). SLNSW provide the hashtag #madewithSLNSW, however it is situated within the 'Further information' section of the digital volunteering invitation page. It links to an opportunity to use the SLNSW's Open Access data-sets. There are no distinct social media connectors relating to the three currently available digital volunteering activities. Set within the *Amplify* activity pages there are social media share options through to Facebook and Twitter. SLV encourage participants to share their work with 'friends and family'.

Acknowledging the work of the digital volunteers

Each of the state libraries give thanks to contributors when completed projects are mentioned. Within the annual reports, a trend appears for the substantial reporting in the digital volunteer programme's inaugural year, with little or no mention in reports following.

SLV's *Vicfix* is mentioned in the 2015-16 annual report as an avenue for a 'growing community of interest' to interact. While volunteers, more broadly, are thanked many times, yet there are no statistics or mention of digital volunteers anywhere in the report. The following year's annual report contains no mention of the programme.

Similarly, SLSA's 2014-15 annual report contains a summary of the programme, its aims and achievements along with links and offers to participate, there is no mention of the programme in the 2015-16 report.

SLQ went to great effort in their 2013-14 Annual Report, including statistics of usage and outputs of their *PitchIn!* program. In the following three available annual reports the program is mentioned without going into any level of detail.

In 2014-2015 SLNSW's programme reported 1216 online volunteers contributed towards 60,000 pages of transcription. In 2015-16 the reported number halved with just 600 people using the Library's purpose-built tool to produce 15,000 pages.

With some type of informal mentorship whereby what is known by the most experienced is passed along to novices

No personal email addresses, names or images of staff were found on the invitational pages of any of the digital volunteer programs. SLNSW, SLSA, and SLQ offer generic project email addresses as well as links to the 'Ask a librarian services'. Victoria provides no opportunity for direct contact with programme staff, offering a 'How-To-Guide' webpage. This is consistent across all the state libraries' programmes; instructions for activities are offered via textual information through FAQs and webpages. SLNSW provide a click-through instruction guide. SLSA provide an externally produced video for how to use Flickr. SLV just provided hyperlinks to *Trove's* help guide.

Where members believe that their contributions matter

One of the repeating *belief in contribution* messages is a positioning of the digital volunteering activities as improvement and enrichment of each of the library's collection holdings.

"Everytime [sic] you add more information you are adding value to the collections and helping others to discover State Library collections now and in the future." – SLQ

"The State Library is dedicated to making our collections more accessible and you can help us achieve this goal." - *SLNSW*

"The State Library of South Australia needs your help to make our digital collections more accessible and more meaningful so that everyone can use and share them." - SLSA

"Whether you correct a line, a paragraph or an entire article, your contribution will bring to light the fascinating stories that make up Victoria's rich history for everyone."

- SLV

Evidence of connection to the library catalogue holdings is made through the presence of catalogue call numbers, and through hyperlinks to the actual catalogued item. Within SLNSW's *Audible* transcription tool, this interoperability is not yet active, however, in a program update via their blog SLNSW report that achieving this is a high priority. SLSA informs in relation to information added to images in *Flickr*, that "we may even add this information to complement our records". SLQ has progressed the connection of activity to catalogue the furthest, utilising *Flickr* as their community engagement tool and linking each record directly to its catalogued duplicated. Each blog post that they publish advising digital volunteer project outcomes has been entered into their library catalogue. Each blog post contains an invitation to participate in the digital volunteer program, thus creating a 'feedback' loop for attracting new participants.

Where members feel some degree of social connection with one another (at the least they care what other people think about what they have created).

Each of the state libraries uses the term 'community' as inducement for participation. The boundaries of 'community' differ for each library. SLQ invite participants to 'join a like-

minded group of people'. SLSA propose digital volunteering makes you part of a national or global 'virtual team'. SLV proposition entrance to the state focused 'Vicfix community'. SLNSW describe *Amplify's* own inbuilt functionality that requires 3 different approvers to correct a line of text as a 'community effort'.

SLV contains the only instance of naming specific digital volunteers, they have chosen to embed their *Trove* lists within their activity pages, which includes the names of contributors appearing directly on their own webpage. It was noted during recording of the data that the *DigiVol* application (adopted by SLQ) provides a 'Honour Board', it also identifies how many volunteers contributed to a specific project and who the latest contributors where. *Trove* offers a 'Text correction hall of fame', it aggregates contributions based on all-time, monthly and article type level.

Volunteering

Placement of Digital Volunteering Programmes in Relation to Onsite Volunteering Programmes

The SLNSW, SLSA, and SLQ all include invitations to participate in the digital volunteering programmes on their general 'Volunteer' webpages. SLSNW describe digital volunteering as the third part of their regular volunteer programme (alongside front of house and back of house volunteering). Within their annual reports, completion statistics and thank you messages to 'volunteers' include the online projects completed by digital volunteers. SLQ and SLSA have positioned digital volunteering as an alternative to their onsite volunteer programmes. For each of these libraries, the information about digital volunteering is in a distinctly separate section of their Volunteer webpage.

Strategic directives relating to volunteers and digital projects

The role of volunteering and digital projects was identified within the strategic objectives of each of the state libraries. However, each state library's level of integration of their digital volunteering programs within their strategy varied.

SLNSW's *Digital Excellence Program* key objectives include making website and collection content open to access communication, and these same messages were used and recorded as *belief in contribution* messages aimed at digital volunteers. Within the *Digital Excellence Program's* landing page projects that involved digital volunteers contain no mention of them, nor are there any invitations back to the digital volunteer program.

SLV includes enhanced volunteer engagement as a key indicator within its 2016-2020 strategic plan however, as shown above, there is no discernible connection on any of the auxiliary pages between the onsite and digital volunteer programs.

SLSA's strategic plan specifically includes digital volunteering activities within it.

SLQ mentions 'online volunteers' within their strategic workforce planning, they also have a range of transparent communication mechanisms including a content strategy that details how

contributions to all website nodes are made and can be followed up on. The development of an online engagement strategy is mentioned as being underway within their 2015/16 annual report.

Discussion

Several observations and discussion points were noted from within the coded data. A rhetorical and ideological analysis has enabled a close reading of how the website content relates directly to the theoretical framework of participatory culture, and to the inductively formed themes of volunteering and strategic directives. Messages as well as the absence of them, as described in the results section above, were all considered to formulate the following discussion. It focuses on how the digital volunteer programmes could create opportunities for connections and informal learning. As well as the role that the further application of participatory culture principles could have in building the capacity of patrons and gaining their trust. Finally, it discusses the observations made regarding the lack of recognition of the work of the digital volunteers and what this could be caused by and how the state libraries have attained the genuine engagement required within a participatory culture.

Creating opportunities for connections and informal learning

There was a notable lack of instances of informal mentoring taking place within open forums or through social media channels. The only opportunities or mechanism for reaching out for support within the digital volunteering programs was to program coordinators or other library staff. While this serves the purpose of providing opportunity for digital volunteers to seek out help and support, the effects of a closed communication channel reduce the ability for participants to seek out information, find solutions for themselves and simultaneously assisting future digital volunteers.

In 2008, prominent library practitioner, Lorcan Dempsey advised that patrons are disinclined to make contact with anonymous information services (2008). Almost a decade later, at the Australian Library and Information Services 2016 National Conference, Rose Holley reported that Dempsey's keynote message to the Australian audience was on this same topic; that most libraries still do not display pictures of their staff on their websites (Holley, 2016). This is relevant in the digital volunteer programme context because while all of the external applications being used (DigiVol, Trove and Flickr) provide staff details and forums to connect with other participants or to seek support, the applications developed by the state libraries (SA Memory, Audible and Transcripts) do not. A further trend reveals this propensity for closed channel communications. Each state library provided 'hashtags' encouraging digital volunteers to 'share' completed projects with their wider networks. An emphasis here is placed on instructions for 'sharing' their completed projects with their own networks rather than on using this channel to reach out and connect with each other. Yet, as shown within the project data, all the participatory culture elements that would enable openly accessible communications are present. The project data revealed that SLNSW and SLQ have already navigated the use of staff social media usage by developing policies, and SLSA have library staff authoring blogs relating to the digital volunteering activities. As more volunteering projects move online, particularly without an equivalent increase in staffing resources, a known risk is that digital volunteers can feel forgotten (Stokes, 2013, p. 147). By using social media channels or message boards and encouraging digital volunteers to connect and support one another, the state libraries might realise one of the benefits of participatory culture. It is significant that the choices of communication methods are so similar across each of the state libraries. In their current iterations, digital volunteers cannot benefit from the informal mentorship of their digital volunteering colleagues. This is incongruent with the key

messages encouraging participation that invite digital volunteers to be part of a community or team.

The lack of visibility of communication between digital volunteers and programme staff is further affected by the adoption of third-party crowdsourcing platforms. Digital volunteers have likely begun their journey as a visitor to a state library website, they have been drawn in by the messages contained within the *belief in contribution* data. The invitation to participate proposes that they will be engaging with a State collection and with a specific community of interest. All of these key messages directed to digital volunteers makes them believe that their contributions matter by helping each State Library to make their collections visible, accessible, and more meaningful. There were very few messages from the state libraries within any of the third-party tools that they adopted, and within *Trove*, there is no opportunity at all for the state libraries to present any messages or branding that continue the sense of state-based community and contribution. When brought over to a new website without any continuance of a state library presence, this sense of contribution and duty is lost.

The complexities and issues of working across platforms and institutions was observed by the different ways the state libraries have integrated with *Trove*. SLNSW is transparent in their communication and advises that the 'Newspaper' portion of their digital volunteer program is run by the *National Library*, with updates being available only from them. SLQ links to prepopulated lists of their own creation within *Trove*. SLV has embedded *Trove* lists within their webpage, they evidently monitor for the 'vic-fix done' tag after asking digital volunteers to apply it. This was observed as holding true during the project data collection as they provide fresh content in a timely manner each month, removing the outdated or incomplete projects. SLSA's method of linking to a variety of search terms within *Trove* is the least

successful, when hyperlinks are clicked, *Trove* displays large blank spaces that requires scrolling down the page to find the website content.

Furthermore, each of the state libraries have provided a link to *Trove's* top contributor record board. This is a program feature noted by Holley as one of her 'Top tips for Crowdsourcing Projects' (Holley, 2010 para. 40). However, *Trove's* site-wide focus for top contributors shows the very high statistics of 'all time' participants. Once again, the sense of community that the state libraries have carefully crafted, based on contribution to a specific state collection back on their own websites, is diminished. The unobtainable statistics of all time contributors may serve as a deterrent to participation rather than the intended attraction.

If a framework for a national digital volunteering program were to be developed, *Trove* might be able to support this through the development of an assortment of state-based, as well as thematic leader-boards and discussion channels. This would provide opportunity for informal mentorship and social connection. As viewed within the museum designed *DigiVol*, this functionality already exists, SLQ is able to display statistics of the number of volunteers involved alongside the number of tasks already completed.

McShane identifies that arrangements to integrate systems and platforms contain "complex technical, administrative and commercial dynamics" (McShane, 2011, p. 391). The role of *Trove* in all of the state libraries digital volunteer programmes is significant. As a library-designed application and the only consistent third-party tool used within each of the state libraries' digital volunteer programmes, it forms the crux of a national digital volunteer programme. As Copeland (2015) learnt in building a community archive, within our networked, globalised society, considerations about the fluidity of communities and the mobility of citizens must be taken into account. A digital volunteer workforce is not restricted

to participating at just one location. However, the variety of different experiences of working across the different state libraries, is at best, confusing. But it has the potential to cause real frustration which may be resulting in a lack of ongoing interest.

Building the Capacity of Patrons and Gaining Their Trust

It was the original intention of this study to detect and analyse the presence of Jenkins' proposed new media literacies within each state library's digital volunteer programme. However, a very brief inspection concluded that the activities did not contain enough of the mechanisms aimed at developing new media literacies to enable a useful critical analysis. This knowledge informed the resulting research questions aiming to ascertain whether there are any differences between the crowdsourcing activities being offered and the broader elements of Jenkins' theory of participatory culture within them.

The potential of the digital volunteering activities to provide skill development is acknowledged by SLSA in their 2013-14 Annual Report, they describe their 'new digital volunteering program' as a way to 'support community learning and skill development'. Eligibility to be a digital volunteer, however, requires a base level of technical skill. Perhaps it is unsurprising that in a program that requires users to have their own Internet connection, a certain level of technical capability would be assumed. However, by incorporating the teachings of Jenkins' theory of participatory culture and aiming to address its key issues such as the 'participation gap', state libraries and their patrons stand to benefit from the understanding and knowledge that access is not the main issue.

Across all of the programmes, there is a repeated assurance of digital volunteering being 'easy' and an emphasis that involvement does not require the necessity of establishing an account to participate. It is suggested however, that it is 'better' if you do. There is a missed

opportunity here for the state libraries to address the issues that surround accessibility, privacy and information security that signing up to a website entails. By offering clear detailed instructions or explanation for why an account is needed and what is involved in creating one, the digital volunteer programmes would be contributing to their participants new media literacies.

As has been established through this research, the main elements of participatory culture are evident within each state libraries' digital volunteer programme. As Jenkins' white paper proposes, it is through the concerted development of opportunities to develop new media literacies that enable the active engagement within a participatory culture. The digital volunteer programmes are uniquely placed to provide learning spaces that inspire ongoing participation and development of skills. However, as McShane (2011) observes, oftentimes due to funding cuts in public libraries, participatory culture activities are relegated to a level of technology instruction and monitoring in lieu of 'Information Literacy' training. This is seen within the close examination of how each state library provides instructions to prospective digital volunteers using mostly text-based information. In some programmes, the information contained within the instructions of the set activities contains a lack of clear guidance and at times misleading information. For instance, SLSA provide hyperlinks to the front pages of several other websites. The 'activity' is a short statement to then upload images found within those external websites to another external website (Flickr), there is no discernible collaboration between the organisations. Similarly, SLQ's activity pages show completion rates of individual transcription projects that do not match up with the project statistics contained within the DigiVol and History Pin applications. Additionally, the duplication of opportunities to tag items both in Flickr and their own catalogue is nonsynchronous it creates confusion for digital volunteers over where time and effort should be

concentrated. Opportunities outside of text-based learning are very limited. SLSA embeds a *Flickr* tutorial video, SLV links to *Trove's* introductory videos. When initially setting up codes, a reference to SLNSW's 'Transcrib-athon' was recorded as a potential opportunity for engagement and skill development, this ended up being the only occurrence of an offline event.

Findlay (2017) proposes that most memory institutions still see themselves as 'trusted institutions', and are struggling with the concept of having to propose that they can be 'trustworthy' (p. 9). In new media environments, the skills required to successfully assess relevancy, to distinguish bias and commercial motives will not exempt memory institutions based on past measures of authority. If digital volunteers are going to spend their own personal time, or the time of their employer, contributing to digital volunteering projects, the credibility and integrity of the *belief in contribution* and *social connection* messages must be able to be promptly ascertained.

Recognizing the work of the digital volunteers

The state libraries have all chosen to position their crowdsourcing activities as opportunities for digital volunteers. The new chartered definition of what it means to be a volunteer in Australia now includes digital volunteering (Volunteering Australia, 2017). This suggests accountability to treat participants as peers rather than anonymous contributors. Yet, from the perspective of a digital volunteer, the lack of recognition of the programmes contained within the reports, policies, and in particular the annual reports, it could appear that the digital volunteer programmes are losing momentum and internal support.

From the researcher's perspective this could be seen as evidence of Holley's observation that libraries whilst well-versed in social engagement, lack the proficiency and guidance needed

to create "sustained input" required in crowdsourcing projects (Holley, 2010). Sustained input, is critical to the success of crowdsourcing projects. This is concerning for the integrity of the digital volunteer programmes as an underwhelming level of contribution can result in conflicting narratives remaining unresolved (Ajiferuke et al., 2015).

As seen above in the placement of digital volunteering programmes in relation to onsite volunteering programmes findings, SLNSW, SLSA and SLQ have gone so far as to integrate or position their programmes alongside their onsite volunteer programmes. In doing so they have further reinforced the impression that they are similar, if not equally important. Giving thanks and recognising the work of the digital volunteers is tied to the act of reciprocity in volunteering (Manatschal & Freitag, 2014, p. 209). From a resourcing and logistics perspective the differences may be vast, however, from the perspective of a digital volunteer, a lack of inclusion and recognition within annual reports, policies or strategy documents is unexplainable, and serves to suggest a lack of value of their contribution.

What the digital volunteers cannot see, is that behind the scenes the state libraries are likely wrestling with many issues caused by developing new engagement mechanisms. Attempts to navigate any terrain involving cultural heritage information brings with it numerous risks as memory institutions are directly responsible for protecting the copyright of their collection items (Wilson-Barnao, 2016). Such issues relating to liability, copyright, and a range of other 'ambiguous issues and unresolved concerns' are often the reason institutions decline to engage with community at all (Liew & Cheetham, 2016). The state libraries must also be considering the implications of work health & safety, as Australia's peak body for volunteering has now included digital volunteers within its remit (Volunteering Australia, 2017). Matters such as working with potentially upsetting material must also be taken into consideration (de Villiers et al., 2017). The above discussion about creating transparent

Genuine Engagement with the State Libraries' Collections

Apart from SLV (who have chosen to restrict their digital volunteer activity to Trove corrections), the digital volunteer perspectives and inputs are being integrated into each state libraries' core library processes through the inclusion of information created by the digital volunteers into the library catalogue. This is a reconceptualization of the traditional library model and a shift away from the one-way communication modes that libraries of the past have held onto (Deodato, 2014; Nguyen, 2015). The work of SLQ is the furthest along in this regard, with contributions by digital volunteers already in place within their library catalogue, demonstrating the enrichment of their collections through participation by digital volunteers. For the other state libraries, their intentions of working towards this level of involvement was detected, so they are at the very least aware of the need for such interaction. Further research would do well to monitor the governance of how the digital volunteers' inputs are being incorporated into collections. To realise the democratic benefits of participatory culture such processes must be responsive, transparent and accountable.

Limitations

Desk-based research on this topic provided ample opportunity for determining the presence of the elements of participatory culture. It did however, limit the deductions and conclusions that could be made.

Within this study invitations contained within social media messages produced by the state library were not included. Further research examining the success rate of the participatory culture elements to elicit participation through social media could be useful to determine the value of using external social media channels to attract potential digital volunteers. The results of such an investigation would provide insight into the success of specific initiatives and programmatic themes.

The context under which this research was performed, using publicly accessible information, was also affected by differences in the types of information made available by each state library. For example, SLSA provides access to their post-print newsletters that include a regular column written by the staff member involved with transcribing documents. The other state libraries may have similar regular communication channels, however as they do not provide access to past issues this remained unknown within the boundaries of this research.

The state libraries tendency to conflate the activities and statistics of the digital volunteers and the onsite volunteer programs contributed to some difficulty in determining which projects belonged to which program. However, as shown, this resulted in an interesting secondary discussion of their convergence and the leveraging of the value-proposition that using the notion of volunteering is creating. Further research would do well to monitor the governance of how the digital volunteers' inputs are now being incorporated into the collections as to realise the democratic benefits of participatory culture such processes must be responsive, transparent and accountable.

Conclusion

The evidence of participatory culture principles within the digital volunteer programmes is timely, as the potential of digital volunteering is being recognised by other memory institutions (de Villiers et al., 2017). State library digital volunteering programmes are well placed to provide flexible volunteering alternative opportunities.

Within our networked society, libraries providing opportunities for patrons to engage with their collections is fundamental to building ongoing relationships. The state libraries have adopted the language and rhetoric of participatory culture, suggesting their digital volunteer activities contain all the elements required to support and sustain participatory culture. These are offered through a range of crowdsourcing activities being extended to digital volunteers by each state library. They vary in their delivery methods with some building inhouse applications, and others adopting from third-party sources.

All elements of participatory culture were identified as being present within each of the state libraries' digital volunteer programmes, with 60.7% of the messages being recorded within the participatory culture elements of *Social Connection* and *Belief in Contribution*. Within these elements of participatory culture, the use of the concepts of 'community' and 'contribution to collections' was observed however, within the elements *Support for Creating and Sharing* and *Informal Mentorship* these messages, although present, were not as prevalent. This thesis suggests that by creating opportunities aimed at open and transparent communication between the digital volunteers and the programme staff, participants will be able to seek out information, find solutions for themselves and simultaneously assist future digital volunteers.

The use of third-party applications was another area in which it was observed that participants might feel the effect of the lower participatory culture elements. Switching platforms and a lack of messages from the state libraries within these new platforms lessens the sense of inclusion. Furthermore, the messages recorded relating to *Low Barriers* required suggest that very few skills, and available technology is all that is required to participate. Incorporating Jenkins' proposed new media literacies into the digital volunteer programmes

would enable the state libraries to recognise that access is not the issue preventing productive participation in a networked society.

There is cause for celebration within what has already been accomplished by the fledgling digital volunteering programmes. Public engagement in online environments carries many challenges and risks. Through this process, the state libraries have seemingly evolved away from the cultural heritage model of 'crowdsourcing' and towards a participatory culture. Opportunities to further embed participatory culture principles within their programmes are evident as this research has shown. New challenges and rewards await the future iterations of digital volunteer programmes that continue to include participatory culture practices.

References

About ATLAS.ti. (n.d.). Retrieved September 23, 2017, from http://atlasti.com/about-atlas-ti/ About us. (n.d.). Retrieved June 6, 2017, from https://australianmuseum.net.au/digitisationproject-volunteers

ACRL Board. (2015, February 5). Framework for Information Literacy for Higher Education.

Retrieved from

http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/infolit/Framework_ILHE
.pdf

Ajiferuke, I., Goodfellow, J., & Opesade, A. (2015). Characteristics and effectiveness of tags in public library online public access catalogues/Les caractéristiques et l'efficacité des balises dans les catalogues publics en ligne des bibliothèques publiques. *Canadian Journal of Information and Library Science*, 39(3), 258–278. Retrieved from https://muse.jhu.edu/article/598445

- Anderson, B. (2008). The Ideas of Henry Jenkins and Libraries. *Behavioral & Social Sciences Librarian*, 26(3), 81–84. https://doi.org/10.1080/01639260802164696
- Australian Bureau of Statistics. (2015, June 30). 4159.0 General social survey: Summary results, Australia, 2014. Retrieved October 14, 2017, from http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4159.0Main%20Features152
- Brabham, D. C. (2013). Crowdsourcing and online communities. In A. A. Delwiche & J. J. Henderson, *The participatory cultures handbook*. New York: Routledge.
- Brennen, B. (2012). *Qualitative research methods for media studies*. Retrieved from https://ebookcentral.proquest.com/lib/curtin/detail.action?docID=1075433
- Carletti, L. (2016). Participatory heritage: Scaffolding citizen scholarship. *International Information & Library Review*, 48(3), 196–203. https://doi.org/10.1080/10572317.2016.1205367
- Carliner, S., Castonguay, C., Sheepy, E., Ribeiro, O., Sabri, H., Saylor, C., & Valle, A. (2015). The job of a performance consultant: a qualitative content analysis of job descriptions. *European Journal of Training and Development*, *39*(6), 458–483.

 Retrieved from www.emeraldinsight.com/2046-9012.htm
- Cho, J. Y., & Lee, E.-H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report*, 19(32), 1–20. Retrieved from http://nsuworks.nova.edu/tgr/vol19/iss32/2
- Clolery, P. (2012, March 7). Red Cross opens social media center for disaster response.

 Retrieved October 16, 2017, from http://www.thenonprofittimes.com/news-articles/red-cross-opens-social-media-center-for-disaster-response/

- Coo-ee! South Australia: Become a digital volunteer. (n.d.). Retrieved August 16, 2017, from http://www.samemory.sa.gov.au/site/page.cfm?u=1528
- Copeland, A. (2015). Public library: A place for the digital community archive. *Preservation, Digital Technology & Culture*, 44(1). https://doi.org/10.1515/pdtc-2015-0004
- Couros, G. (2014, August 24). Digital parent volunteers [Blog post]. Retrieved from http://georgecouros.ca/blog/archives/4716
- de Villiers, A., Laurent, N., & Stueven, C. (2017). Volunteers in Australian archives.

 *Archives and Manuscripts, 45(2), 118–135.

 https://doi.org/10.1080/01576895.2017.1326828
- Delwiche, A. A., & Henderson, J. J. (2013). *The participatory cultures handbook*. New York: Routledge.
- Dempsey, L. (2008). Always on: Libraries in a world of permanent connectivity. *First Monday*, *14*(1). https://doi.org/10.5210/fm.v14i1.2291
- Deodato, J. (2014). The patron as producer: libraries, web 2.0, and participatory culture.

 **Journal of Documentation, 70(5), 734–758. https://doi.org/10.1108/JD-10-2012-0127
- EuropeanaEU. (2010). *Liam Wyatt, Wikipedia at Europeana Open Culture 2010 [Video file]*.

 Retrieved from https://www.youtube.com/watch?v=i6tAnFqYMvo
- Findlay, C. (2017). Participatory cultures, trust technologies and decentralisation: innovation opportunities for recordkeeping. *Archives and Manuscripts*, (0), 1–15. https://doi.org/10.1080/01576895.2017.1366864
- Flanagan, M., & Carini, P. (2012). How games can help us access and understand archival images. *The American Archivist*, 75(2), 514–537. Retrieved from http://www.jstor.org/stable/43489634

- Fuegi, D., & Segbert-Elbert, M. (2010). Europeana Open Culture 2010. *Ariadne*, (65). Retrieved from http://www.ariadne.ac.uk/issue65/open-culture-rpt
- Funnell, A. (2015, June 7). Future Tense at Remix 2015. *Future Tense*. Radio National.

 Retrieved from http://www.abc.net.au/radionational/programs/futuretense/futuretense-at-remix-2015/6497820
- Hicks, D. (2017). Person or Place: Rhetorical Construction of Librarian and Library by the Information Profession Community = La personne ou le lieu: la construction rhétorique du bibliothécaire et de la bibliothèque par la communauté des professionnels de l'information. *Canadian Journal of Information and Library Science*, 40(4), 318–331. Retrieved from https://muse.jhu.edu/article/649273
- Holley, R. (2010). Crowdsourcing: How and why should libraries do it? *D-Lib Magazine*, *16*(3/4). https://doi.org/10.1045/march2010-holley
- Holley, R. (2016, September 17). Digital library futures [Blog post]. Retrieved from http://rose-holley.blogspot.com.au/2016/09/digital-library-futures.html
- Honigman, B. (2013, May 29). 5 ways to become a digital volunteer [Blog Post]. Retrieved from https://www.huffingtonpost.com/brian-honigman/5-ways-to-become-a-digital-volunteer_b_3350093.html
- Hopkins, P., Hare, J., Donaghey, J., & Abbott, W. (2015). Geo, audio, video, photo: how digital convergence in mobile devices facilitates participatory culture in libraries. *The Australian Library Journal*, 64(1), 11–22.
 https://doi.org/10.1080/00049670.2014.984379
- Huvila, I. (2015). The unbearable lightness of participating? Revisiting the discourses of "participation" in archival literature. *Journal of Documentation*, 71(2), 358–386. https://doi.org/10.1108/JD-01-2014-0012

- Hvenegaard Rasmussen, C. (2016). The participatory public library: the Nordic experience.

 New Library World, 117(9/10), 546–556. https://doi.org/10.1108/NLW-04-2016-0031
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Jenkins, H. (2013, May 6). What do we now know about participatory cultures: An interview with Aaron Delwiche and Jennifer Jacobs Henderson (Part one) [Blog post].

 Retrieved from http://henryjenkins.org/blog/2013/05/what-do-we-now-know-about-participatory-cultures-an-interview-with-aaron-delwiche-and-jennifer-jacobs-henderson-part-one.html
- Jenkins, H. (2014). Rethinking "Rethinking Convergence/Culture." *Cultural Studies*, 28(2), 267–297. https://doi.org/10.1080/09502386.2013.801579
- Jenkins, H., Clinton, K., Purushotma, R., Robison, A. J., & Weigel, M. (2006). Confronting the challenges of participatory culture: Media education for the 21st century, *1*.

 Retrieved from http://wheatoncollege.edu/president/files/2012/03/Confronting-Challenges-of-Participatory-Culture.pdf
- Johnson, E. (2016). The Right Place at the Right Time: Creative Spaces in Libraries. In *The Future of Library Space* (Vol. 36, pp. 1–35). Emerald Group Publishing Limited. https://doi.org/10.1108/S0732-067120160000036001
- Johnson, M., Clapp, M., Ewing, S., & Buhler, A. (2011). Building a participatory culture:

 Collaborating with student organizations for twenty-first century library instruction.

 Collaborative Librarianship, 3(1). Retrieved from

 http://digitalcommons.du.edu/collaborativelibrarianship/vol3/iss1/2

- Kim, I., & Kuljis, J. (2010). Applying content analysis to web-based content. *Journal of Computing and Information Technology*, 18(4), 369.
 https://doi.org/10.2498/cit.1001924
- Koltay, T. (2010). Library 2.0, information and digital literacies in the light of the contradictory nature of Web 2.0. *Webology*, 7(2). Retrieved from http://www.webology.org/2010/v7n2/a78.html
- Kracht, T. (2014, September 5). Digital volunteers Setting up for success. Retrieved June 6, 2017, from https://traceykracht.wordpress.com/2014/09/05/digital-volunteers-setting-up-for-success/
- Larabie, C. (2011). Participatory culture and the hidden costs of sharing. *The McMaster Journal of Communication*, 7(1). Retrieved from https://journals.mcmaster.ca/mjc/article/download/255/222
- Levy, P. (1997). Collective intelligence: mankind's emerging world in cyberspace / Pierre

 Levy; translated from French by Robert Bononno. New York: Plenum Trade.
- Liew, C. L. (2013). Digital cultural heritage 2.0: A meta-design consideration. *Information Research*, 18(3). Retrieved from http://www.informationr.net/ir/18-3/colis/paperS03.html#.WfNZIWiCxPY
- Liew, C. L. (2014). Participatory cultural heritage: A tale of two institutions' use of social media. *D-Lib Magazine*, 20(3–4). https://doi.org/10.1045/march2014-liew
- Liew, C. L. (2016). Social metadata and public-contributed contents in memory institutions: "Crowd Voice" Versus "Authenticated Heritage"? *Preservation, Digital Technology* & *Culture*; *Berlin*, 45(3), 122–133. https://doi.org/10.1515/pdtc-2016-0017

- Liew, C. L., & Cheetham, F. (2016). Participatory culture in memory institutions: of diversity, ethics and trust? *D-Lib Magazine*, 22(7/8). https://doi.org/10.1045/july2016-liew
- Liew, C. L., Wellington, S., Oliver, G., & Perkins, R. (2015). Social Media in libraries and archives: Applied with caution/Les médias sociaux dans les bibliothèques et les archives: Appliqués avec prudence. *Canadian Journal of Information and Library Science*, 39(3), 377–396.
- Manatschal, A., & Freitag, M. (2014). Reciprocity and volunteering. *Rationality and Society Rationality and Society*, 26(2), 208–235. https://doi.org/10.1177/1043463114523715
- McShane, I. (2011). Public libraries, digital literacy and participatory culture. *Discourse:*Studies in the Cultural Politics of Education, 32(3), 383–397.

 https://doi.org/10.1080/01596306.2011.573254
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Sage Publications. Retrieved from http://academic.csuohio.edu/kneuendorf/SkalskiVitae/SkalskiNeuendorfCajigas17.pdf
- Norris, W. (2017). Digital humanitarians. *Journalism Practice*, *11*(2–3), 213–228. https://doi.org/10.1080/17512786.2016.1228471
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y
- Rambaree, K. (2014). Computer-aided deductive critical discourse analysis of a case study from Mauritius with ATLAS-ti 6.2. In H. L. Lim & F. Sudweeks (Eds.), *Innovative methods and technologies for electronic discourse analysis:* IGI Global. https://doi.org/10.4018/978-1-4666-4426-7

- Repplinger, J. (2016). Internet Reviews. 2016, 77(1). Retrieved from http://crln.acrl.org/index.php/crlnews/article/view/9592/10972
- Ridge, M. (2014). *Crowdsourcing our cultural heritage*. Farnham: Routledge. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=797021&site=eh ost-live
- Rogers, L., Noble, J., & Volunteering SA&NT. (2013). Positive ageing: think volunteering.
- Schreier, M. (2014). Qualitative content analysis. In U. Flick, *The SAGE handbook of qualitative data analysis* (pp. 170–183). 1 Oliver's Yard, 55 City

 Road, London EC1Y 1SP United Kingdom: SAGE Publications Ltd.

 https://doi.org/10.4135/9781446282243.n12
- Smithsonian Institution. (n.d.). Retrieved June 12, 2017, from https://www.si.edu/
- Starbird, K. (2012). Digital volunteerism: Examining connected crowd work during mass disruption events. In V. Pipek, J. Landgren, & L. Palen (Eds.) (Vol. 9, pp. 116–123).

 Presented at the Proceedings of the CSCW 2012 Workshop on Collaboration and Crisis Informatics.
- State Library of NSW. (2016, October 12). Digital volunteering [Text]. Retrieved August 16, 2017, from http://www.sl.nsw.gov.au/research-and-collections-research-and-engagement/digital-volunteering
- State Library of Queensland. (n.d.). Pitch In! Digital volunteers. Retrieved August 16, 2017, from http://www.slq.qld.gov.au/about-us/pitch-in
- State Library Victoria. (n.d.). Join our Vicfix campaign to improve newspapers online.

 Retrieved August 16, 2017, from https://www.slv.vic.gov.au/contribute-create/vicfix
- Stokes, B. (2013). Restructuring civic engagement. In A. A. Delwiche & J. J. Henderson (Eds.), *The participatory cultures handbook* (pp. 143–151). New York: Routledge.

- Swiss, T. (Ed.). (2000). *Unspun: key concepts for understanding the World Wide Web*. New York: New York University Press.
- The New York Public Library. (2016, April 20). Connect. Retrieved October 27, 2017, from https://www.nypl.org/connect
- van Dijk, J. (2012). *The Network Society, Third Edition*. Sage Publications Ltd. Retrieved from http://purl.utwente.nl/publications/83874
- Volunteering Australia. (2017, May). Volunteering Australia's definition of volunteering.

 Retrieved from https://www.volunteeringaustralia.org/wp-content/uploads/Definition-FAQs-Supplement-May-2017.pdf
- Volunteering Australia. (n.d.). Definition of volunteering. Retrieved October 3, 2017, from https://www.volunteeringaustralia.org/definition-of-volunteering/
- Weerakkody, N. (2015). *Research methods for media and communication*. Melbourne:

 OUPANZ. Retrieved from

 http://public.eblib.com/choice/PublicFullRecord.aspx?p=4882797
- White, M. D., & Marsh, E. E. (2006). Content analysis: A flexible methodology. *Library Trends*, 55(1), 22–45. https://doi.org/10.1353/lib.2006.0053
- Zacklad, M., & Chupin, L. (2015). Le crowdsourcing scientifique et patrimonial à la croisée de modèles de coordination et de coopération : Le cas des herbiers numérisés/Scientific and heritage crowdsourcing at the crossroads of models of coordination and cooperation: The case of digital herbaria. *Canadian Journal of Information and Library Science*, 39(3), 308–328. Retrieved from https://muse.jhu.edu/article/598448

Zhang, Y., & Wildemuth, B. M. (2009). Qualitative analysis of content. In *Applications of* social research methods to questions in information and library science (pp. 310–312). Westport, Conn: Libraries Unlimited.