

This is an Accepted Manuscript of an article published by Taylor & Francis in the Journal of the Australian Library and Information Association in Volume 70, no. 2 June 2021 and available online at: <https://www.tandfonline.com/doi/full/10.1080/24750158.2021.1907886>

Partnering in knowledge production: Roles for librarians in the digital humanities

Emilia C. Bell^{a*} and Mary Anne Kennan^b

^a*Charles Sturt University, Australia;* ^b*Charles Sturt University, Australia*

Emilia C. Bell (Corresponding author)

Email: emilia.bell@outlook.com

Emilia Bell is a graduate of the Master of Information Studies at Charles Sturt University. She also holds a BA in International Relations and Art History. Emilia is currently a school library assistant with research interests that include academic and critical librarianship, libraries and social inclusion, and research methodologies.

Mary Anne Kennan is an Adjunct Associate Professor, for the Information Studies, Charles Sturt University. Mary Anne's research interests focus broadly on scholarly communication including open access, libraries and social inclusion, and increasingly on education for the information professions. She is currently Editor of the *Journal of the Australian Library and Information Association*.

Partnering in knowledge production: Roles for librarians in the digital humanities

Abstract

This purpose of this paper is to review literature from the Digital Humanities (DH), academic librarianship, and critical librarianship, focusing on potential roles for Australian academic librarians in the DH. After defining DH and its relationship with academic librarianship, the difference between service and collaborative models are discussed. This includes how service models characterise current perceptions of DH librarians' roles. Findings of this review indicate that there are, indeed, roles for librarians in the DH that can contribute to scholarly partnerships. These roles build on the shared values of librarianship and the humanities and are related to the critical and theoretical foundations of the DH. Critical librarianship provides a framework for roles that can contribute to knowledge production, not just to service provision. This framework can also work towards increasing representation and accessibility in DH scholarship.

Key words: digital humanities; academic librarianship; critical librarianship

Word count: 7052

Introduction

The role of librarians in the Digital Humanities (DH) is challenging traditional academic library service models and discussion around what constitutes DH scholarship and roles. Literature examining the visibility of librarians who work with digital humanists or in the digital humanities¹ (DH librarians) through collaborative and scholarly roles contributes to these debates. Typically, this literature encourages visibility through technical ‘building’ of DH infrastructure and digital libraries, rather than research-based knowledge production. Librarians, however, can contribute to the DH beyond technical services and the fostering of collection accessibility and visibility, by promoting and engaging in community collaboration in the DH. Engaging with the literature from the emerging field of critical librarianship demonstrates how librarians’ contribution to the DH is work that also benefits from an interpretive and scholarly contribution. Critical librarianship literature also identifies how shared values between librarianship and the DH can promote collaborative and interpretive roles for librarians as partners in DH scholarship. This paper reviews the related literature from academic librarianship, critical librarianship, and the digital humanities, to examine how values and spaces shared by these three areas might encourage greater partnership between academics and professional librarians and increase the visibility of the DH and librarian’s contributions to it. The intended audience are library and information science (LIS) practitioners supporting, or planning to support, DH scholarship in academic institutions.

This literature review is positioned within the LIS literature and addresses the role of DH librarians from this perspective rather than that of the broader DH literature. Its focus is on the role of academic librarians working within DH scholarship. While DH projects and collaborations occur in other sectors, particularly the broader cultural heritage sector, this paper focuses on academic institutions and how what is framed as a ‘service versus scholarship divide’ informs the role of DH librarians (Shirazi, 2014). Some collaborative LIS and DH projects initiated outside of academic libraries are included in this review as their contributions and the values they highlight are nonetheless applicable to academic institutions.

¹ For brevity, librarians who work with digital humanists or in the digital humanities will be called digital humanities (DH) librarians throughout this paper. It is acknowledged that the time of writing, while there are librarians internationally with this, or a similar, titles or roles, there are no librarians currently known to have this title or explicit role in Australia.

Geographically, there is limited, though emerging, literature about Australian libraries' involvement in DH (Grant & Organ, 2020; Verhoeven & Burrows, 2016). Further, most literature on roles for academic librarians in the DH focuses on the United States (US) where many academic librarians have faculty (academic) status. This does not align with the current service models in Australian academic libraries where academic librarians are typically professional or 'non-academic' staff and where research is not an accepted part of their role. There has, however, been increased interest in fostering a research culture within Australian academic librarianship (McBain et al., 2013). For these reasons, the scope is narrowed to discuss the implications of the literature in the Australian academic library context. In order to focus on roles for academic librarians in the DH, this literature review draws on three fields, the DH, academic libraries, and critical librarianship. Each of these field are briefly introduced in the background section below.

Background

The digital humanities

The DH can be understood as the application of, or engagement with, digital technology in humanities scholarship, where digital technology works as both a tool and object of analysis. This description emphasises both elements of technology and traditional scholarship (Gibbs, 2013). The DH is also, however, a self-identified label for a specific kind of scholarship within the humanities. The term 'digital humanities' has been formative as a category of professional identity, as part of a heterogeneous community driven toward connection and participation (Kirschenbaum, 2012b, p. 13; Svensson, 2016).

Three definitional debates are evident in DH literature. The first debates *what* the DH are. The second asks *who* contributes to the DH. The third examines the *how* and *why* of DH scholarship. In participatory DH fashion, Heppler (2017) crowd-sourced definitions of the DH from multiple *Day of DH* sessions. Day of DH is an "open community project," examining how the DH are defined and *what* digital humanists do, collecting perspectives and data from within the DH community (Day of DH, 2013). The result is 817 different records, aggregated to create the website <http://whatisdigitalhumanities.com>, which generates a new definition with every refresh (2017). Often, questioning "what is DH?" becomes part of the very definition,

process, and perhaps, its purpose (Warwick et al., 2012, p. xii). After addressing academic libraries and critical librarianship, this literature review returns to a more detail discussion of the DH below in the section “Shared spaces and values”.

Academic libraries

The purpose of academic libraries has traditionally been seen to encompass a role which supports the teaching and research of their parent institution, and this role continues, in an evolving form, in the contemporary digital world (Corrall, Kennan, & Afzal, 2013). There has long been a link between humanities scholarship and libraries, as traditional models of humanities research, which did not require any specific equipment or devices, involves work in (or enabled by) libraries. This is to the extent that libraries have been metaphorically and colloquially referred to as the humanities researchers’ laboratory (Pawlicka-Deger, 2020). The DH maintain a connection with university libraries, initially developed and supported by library’s work to create digital libraries’ which gained momentum with technological developments in the 1990s (Xie & Matusiak, 2016). Building on traditional service and resourcing roles, libraries were early adopters of the digital, first in terms of providing finding tools followed by purchasing and then creating digital resources. This led to the development of digital libraries, defined as the “collections, tools, and services created and delivered in the digital format,” which are concerned with facilitating a digital collection’s selection, organisation, access, and long-term preservation (Rydberg-Cox, 2006, p. 15; Zhang et al., 2015, p. 364). Historically, the emphasis was on the term *digital*, focusing on providing access and enabling technology (Xie & Matusiak, 2016, p. 5). The LIS literature has seen the emphasis placed on the term *libraries*, with a focus on service roles and values. Most recently, research support offered by Australian academic libraries has grown to include providing services such as research impact measures, for example those using altimetric and bibliometric tools and research data management (Corrall et al., 2013; Haddow & Mamtora, 2017).

Critical librarianship

Critical Librarianship, as social justice orientated librarianship, is long embodied in the profession, founded on strong ethical values (Gregory & Higgins, 2013, p. 6). Advocating for information access, diversity, and literacy and learning are among these ethical traditions

(Australian Library and Information Association, n.d.; Australian Library and Information Association et al., 2018, p. 6; Besser, 2004). Conversation on critical librarianship, as positioned within a critical theorist framework, intensified from 2014, partially owing to Twitter #critlib and ‘unconference’ discourse (Garcia, 2015). Samek (2007, p. 67) describes critical librarianship as librarians engaging with the “human condition and human rights above other professional concerns”. In practice, critical librarianship intersects with the humanities as it requires librarians “consider the historical, cultural, social, economic, and political forces that affect information” so to critique and disrupt these systems (Gregory & Higgins, 2013, p. 3). This definition acknowledges the systemic inequalities that library work exists in and recognise a need for active intervention, engaging with issues surrounding access, neutrality, and representation.

Following the search method, from this point, this paper is organised in three main sections: ‘Shared spaces and values,’ ‘Service and collaboration,’ and ‘Critical knowledge production’. ‘Shared spaces and values’ establishes the relationship between libraries and the DH. It begins by defining the DH and considers *what* and *who* the DH involves, as well as *how* and *why* DH scholarship is carried out. It goes on to address the shared spaces which the humanities, the DH, and Australian academic libraries occupy and the conflicting views of role perception of academic librarians and academic faculty. The second section, ‘Service and collaboration,’ continues the discussion on role by analysing how a focus on service models in academic libraries may contribute to the devaluation of academic librarians’ roles in the DH. Using the concept of liminality, we explore how librarian’s own perception of “outsiderness” might position libraries to advocate for inclusivity, representation, and partnership of diverse and marginalised communities in research and scholarship. Finally, ‘Critical knowledge production’ draws on the values of critical librarianship that are also constructive and valuable to, and congruent with, the aims of the DH. It positions critical librarianship as an opportunity for partnership and contribution to knowledge production in the DH.

Search method

This review draws on literature from both the LIS and DH fields. Literature not published in scholarly journals is also included as much of the discussion on DH occurs outside of traditional scholarly publishing venues. Initially, peer-reviewed articles were identified with Charles Sturt University’s discovery tool (Primo Search) and Google Scholar. Following this, individual

databases searched were JSTOR and EBSCOhost. Initial searches built off the string “*digital humanities*” AND *librar**. Variations of this search added terms, including *roles*, “*service model*,” *values*, and “*critical librarianship*”. The articles included in this review are primarily from LIS journals, publishing on academic or critical librarianship. Following initial searches, a chaining technique was used to find further publications from reference lists or footnotes. A citation, or forward searching, approach, with Scopus and Google Scholar, was taken to find literature on service and research culture in Australian academic libraries and any collaborative DH projects. This reflects the geographic scope of the paper and recognises the limitations and relevance concerns for literature outside of Australia. This paper will now present the literature across three sections. It will first explore the shared spaces and values of the humanities and librarianship. Second, it will address service and collaborative models of librarianship and their impact on librarian’s roles and self-perception. Third, it establishes how critical librarianship can contribute to DH knowledge production and increase representation and accessibility.

Shared spaces and values

Defining the DH

While there are numerous understandings of *what* the DH are, two camps are evident. The first delimits technology as a tool and digital as material (Ide & Mylonas, 2004). It finds meaning in early conceptions of DH as ‘humanities computing,’ before that phrase was displaced by ‘digital media,’ with digital media finally replaced by ‘digital humanities’ (Bode & Arthur, 2014, p. 18; Kirschenbaum, 2012a, p. 75; Ramsay & Rockwell, 2012; Rockwell, 2013; Svensson, 2009). Computational definitions of DH are challenged by a ‘meaning problem,’ as such definitions lack self-reflexivity and struggle to contribute impactful scholarship or relevance to the broader humanities disciplines (Bode & Arthur, 2014, pp. 18-19).

The second perspective on *what* the DH are, perceives that technology and digital media can be objects of study themselves. Reflecting on technology’s significance to the DH is just as important as its application to the DH (Sula, 2013, p. 16). This means questioning how technology can contribute to humanities knowledge and research quality, rather than using it simply to garner academic standing or accolades (Australian Academy of the Humanities et al., 1998c; Burrows, 1999, p. 19). In this way the DH can engage in self-reflexive practice,

interrogating the very tools and techniques which define its practice. Although the DH are considered a methodological outlook, driven by a variety of tools and technologies, they are also about scholarship, driven by collaborations and networks, in which the librarian can be an interdisciplinary mediator (Kirschenbaum, 2012b; Zhang et al., 2015, p. 363). Simmons (2005, p. 304) describes how they can reveal underlying assumptions that subject specialists might otherwise make, such as showing how a disciplinary norm is *an* academic discourse rather than *the* academic discourse. Academic librarians as disciplinary mediators are already explored in information literacy and genre theory literature, but their discourse mediation skills and perspectives are valuable in DH projects and partnerships (Logsdon et al., 2017; Simmons, 2005).

As debate over *who* constitutes a digital humanist has grown, so too has a binary between those who ‘build’ and those who ‘theorise’ (Berry & Fagerjord, 2017; Ramsay, 2013b; Ramsay & Rockwell, 2012). This ‘building’ and ‘theorising’ divide influences perceptions of DH roles, including what work is considered to be scholarship and therefore counts as meaningful DH contribution (Ramsay & Rockwell, 2012). In a speech titled *Who’s in and who’s out* Ramsay (2013b) incited debate claiming that defining digital humanists by their participation in community and collaboration was “complete nonsense”. Ramsay (2013a, p. 243; 2013b) identifies digital humanists by whether they code or build, encouraging a shift from “reading and critiquing to building and making”. While Ramsay and Rockwell (2012) concede the significance of theorising in the DH, there can remain an aura of prestige and inaccessibility, a common criticism levelled against DH scholarship (Edwards, 2012; Pannapacker, 2012).

Responses to the *how* and *why* of DH scholarship are just as fraught and three perspectives on DH scholarship itself are described across the DH and LIS literature (Burrows, 1999, p. 249; Vandegrift & Varner, 2013, p. 68; Varner & Hswe, 2016, p. 37). The first states the importance and value of bringing emerging technologies and experimentation into the humanities sphere. The second condemns fixating on technology as the humanities’ saviour. Arguably, this takes a “business as usual” stance and an insular retreat “into the ivory tower... [prompting] further marginalisation” (Stuhr, 1995, as cited in Burrows, 1999, p. 249). The final is critical of ‘elitist’ discourse, observing bias, inaccessibility, and cliquish traits within the DH (Bode & Arthur, 2014, p. 17; Pannapacker, 2012, 2013; Vandegrift & Varner, 2013). This

perspective stands against building a digital ivory tower, lacking public relevance and engagement.

DH in academic libraries

In DH discourse, the library has often featured as a space for the digitisation and preservation work which accompanies DH projects (Sula, 2013, p. 11); a space that also supports text encoding to provide common software and hardware independent standards for describing digital texts and other humanities data (Cole 1997; Dalmau & Hawkins 2014-5); as well as providing access to electronic collections and services and physical facilities (Burrows, 1994). There are examples worldwide of this from the early adoption of the Internet to the present. Examples include the University of Virginia Electronic Text Centre established in 1992 and the Scholarly Electronic Text and Image Service (SETIS) established in 1996 at the University of Sydney (Cole, 1997). Librarians have largely been considered as the performers of such technical work and providers of information services rather than being considered as DH scholars or partners in DH scholarship. In some places, however, roles are evolving.

THATCamp, an ‘unconference,’ has provided a space to discuss roles. THATCamp is self-described as collaborative and informal, facilitating “non-hierarchical and non-disciplinary and inter-professional” participation (THATCamp, 2012). It is credited across both DH and LIS literature as having characterised participation in DH discourse (Baer, 2013; Spiro, 2012; Sula, 2013; Vandegrift & Varner, 2013). A dedicated 2012 *DH and Libraries THATCamp* captured partnerships being forged between DH and librarians, emphasising the contributions of the latter as “scholars in their own right” (THATCamp, 2012). Inclusive contribution and partnership are credited to DH spaces lacking hierarchical structures, particularly surrounding academic labour. Labour hierarchies and related power structures are addressed in critical librarianship literature as a contributor to structural inequalities (Logsdon et al., 2017). Despite lacking hierarchical structure, Svensson (2016, p. 25) suggests DH spaces can remain problematic. THATCamps and libraries are not neutral sites and digital humanists should apply critical perspectives to technologies used and roles performed in these spaces. Svensson (2016, p. 26) argues that tensions between theorising and building need to be reconciled, especially if theoretical and methodological foundations for DH tools are to be

developed through and with humanities knowledge production; that is, not strictly built upon models from science and engineering disciplines (Berry & Fagerjord, 2017, p. 158).

Some commentators outside of humanities scholarship have long regarded the humanities as disciplines in “continual crisis,” and their value and relevance to society occasions recurring debate (Australian Academy of the Humanities et al., 1998a, 1998b; Burrows, 1999, p. 248, p. 253). There are also internal disputes within DH communities on the value and reliability of DH computational methodology, which extends to questioning whether DH qualifies as scholarship and is worthy of academic prestige or advancement (Zhang et al., 2015, p. 369). This places funding, authorship, and institutional support in a tenuous position, as fast-paced and measurable research output is prized (Burrows, 1999, p. 249). To an extent, the DH, can be viewed as a technological turn for humanities research, driven by new methods, which can align with institutional favour for more positivist and practical research, as the dominant research paradigm (Hall, 2012; Scheinfeldt, 2012; Verhoeven & Burrows, 2016, p. 1). This, however, is set against an established interest in ideology, theory, and cultural critique on matters of gender, identity, race, sexuality, and class, within humanities scholarship. These issues are also concerns for critical librarianship. Ultimately, institutional support impacts library support and resources for the DH. A lack of support risks alienating librarians’ own scholarly contributions to DH, where like the humanities, the value of libraries, and librarian’s inputs into the academy, often require defending.

Defunding and ineffective public communication are considered concurrent and ongoing threats to the humanities (Liu, 2012, p. 496). Vandegrift and Varner (2013) describe the shared responsibility of libraries and the humanities toward collective memory, but also go on to describe an ongoing struggle of each to justify their value. In addition to having shared values, the humanities and libraries both struggle to demonstrate their relevance, as ‘the death of’ each is consistently proclaimed (Vandegrift, 2012; Vandegrift & Varner, 2013). Building on Fitzpatrick’s assertion that public apathy is “far more dangerous” than public criticism, Vandegrift and Varner (2013, p. 70) assert that the humanities should acknowledge issues of “access and engagement” and that libraries can help support DH visibility and accessibility. Indeed, Appleton (2019) describes practising critical [arts] librarianship that contributes to “equality, diversity and social justice” and Enoch and Gold (2013, pp. 108-109) describe including diverse voices and marginalised communities as DH stakeholders. Vandegrift (2012) explains that “DH shares the most basic goal with the library – accessibility of information” as

it aims to increase the digital accessibility and research potential of cultural materials. Such values concerning information and knowledge access and connection are stated in the Australian Library and Information Association's (2018) core values policy statement. The alignment of LIS values with those of the DH has the potential to promote the relevance of DH to wider communities outside of academia and forge academic and non-academic partnerships.

Role perception

As discussed in the previous section the role of libraries and librarians in the DH is often considered as a technical role, one of builders and collectors which THATCamp (2012) tried to characterise in a more collaborative and scholarly fashion. Despite this intervention, even in the United States, where many academic librarians have faculty status, with research as a part of their role, differences in role perception are still identified in a 2015 survey sponsored by Gale Cengage and *American Libraries*. A significant disconnect between library and faculty perceptions of the library's role in DH was identified (Gale Cengage & American Libraries, 2015a, 2015b; Varner & Hswe, 2016). While sixty-three percent of librarians felt DH librarians should be a "full-fledged project collaborator and participant," only twenty-seven percent of faculty felt this should be the library's role. Instead, eighty percent of faculty considered the library's role to be "providing general support," followed by "a liaison to existing library services" at sixty-six percent compared to fourteen percent of librarian's feeling this was their role. Only four percent of librarian's considered their primary role to be support staff. The resulting "ad hoc" and variable nature of library services suggest the role of DH librarians is evolving, but is improvised (Bryson et al., 2011; Vandegrift & Varner, 2013, p. 71; Varner & Hswe, 2016, p. 38). Inconsistency in role perception suggests a misalignment with how professional values and virtues are applied to service. Notably, conflicting variation in role perception is the case in North America where many academic librarians have faculty status (Gale Cengage & American Libraries, 2015a, 2015b). It is even more likely that in Australia, where librarians are viewed as 'professional' or 'support' staff, the library's involvement in the DH is going to be viewed strictly as service provision.

Service and collaboration models

Service models

Three organisational models, employed by university libraries involved in DH, have been addressed in LIS literature, initially identified in an *Ithaka S+R* report (Maron & Pickle, 2014; Verhoeven & Burrows, 2016, p. 3). They include a service, a lab, and a network model, with the first prompting contentious discussion in LIS DH literature. The service and lab model both involve individual units while network models are coordinated efforts with multiple units across a campus. Service models position the library as a service designed to meet faculty and individual researchers' needs, across multiple disciplines, setting it apart from other models which run and attract funding through their own research and development efforts (Verhoeven & Burrows, 2016, p. 3). Service remains the primary organisational model for Australian academic libraries, often de-emphasising a research culture and, instead, emphasising research support as a strategic priority (Atkinson, 2019; Jacobs & Murgu, 2017; Keller, 2015; McBain et al., 2013, pp. 449-450).

The library profession's cultural values and labour are shaped toward service models (Allison-Cassin, 2020). Recent LIS literature critiques the service model and suggests a shift to, and preference for, librarians as collaborative partners rather than strictly service and support staff. While this criticism has primarily emerged from US literature, it has gained momentum in Australian LIS literature (Verhoeven & Burrows, 2016). Varner and Hswe (2016), Vandegrift and Varner (2013), Logsdon et al. (2017), and Nowviskie (2011) all critically describe the negative impact of fixating on library service ethics. Driving this service ethic are virtues labelled as 'helpful,' 'enabling,' and 'supportive' (Appleton, 2019; Nowviskie, 2011). Nowviskie (2011) argues the result is self-effacing and *ad-hoc* service, lacking intellectual partnership. Shirazi (2014) also recognises this, but places unequal power dynamics in academic institutions at the fore of the service and scholarship divide. Academic hierarchies and power relations, including gender and race disparities and assumptions, impact the support for, and roles of, non-academic staff in collaborative partnerships.

The capacity for a DH research culture in Australian academic libraries is markedly different than what is presented in most international studies. Literature on library practitioners undertaking their own research is overwhelming focused on the United States (US), Canada, and the United Kingdom (UK) (Charing & Gardiner, 2017, p. 385; McBain et al., 2013, p.

448). For US and Canadian academic librarians, position descriptions and professional advancement often requires research and publication. Faculty status is a standard model for academic library staff in the US, but not so in Australia or the UK (Charing & Gardiner, 2017, p. 383; McBain et al., 2013, p. 448). Instead, Australian university libraries are viewed as allies to, and supporters of, research excellence and performance, not as ‘research partners’ or collaborators in research projects (Borrego et al., 2018; Keller, 2015). Instead, librarian and faculty collaboration typically see librarians in an educative role, supporting curriculum delivery and teaching information literacy instruction (ILI) and research skills to students that are scalable across multiple disciplines (Charing & Gardiner, 2017, p. 386; Manuell, 2019). This is owing to a service environment that is now primarily digital, leaving other areas of research support and information discovery and access services performed behind the scenes and largely invisible to faculty and researchers (Corrall et al., 2013, p. 637).

Librarianship’s service values can place it within the frame of feminised, affective, and reproductive work (Logsdon et al., 2017; Shirazi, 2014). Here, affective refers to the emotional labour associated with performing service work. Reproductive (or shadow) work is the labour that supports the academic profession or publication hierarchy, without necessarily being actively involved in it (Shirazi, 2014). For librarians, this is work such as teaching ILI and preserving and cataloguing resources for future use. The work itself lacks visibility in the academic hierarchy, all the while enabling and reproducing it. Both affective and reproductive work are commonly examined through a gendered lens whereby librarianship is viewed as a feminised profession and, as Shirazi (2014) argues, it “is vital and it is intellectual labour, but because it does not conform to the publish or perish model at the top of the academic hierarchy, it is reduced to (and devalued as) ‘service.’” Thus, Shirazi (2014) asks: “do librarians work *in service of scholarship* or are they *servile to scholars*?”. In the context of this paper, this leads us to ask, is the service work of librarian’s merely supporting DH scholarship or a co-producer of it?

Collaborative models

While co-authorship and scholarly partnership between library and academic staff remains infrequent, Australian literature shows there are emerging incentives and support within some universities (Charing & Gardiner, 2017; McBain et al., 2013). This includes a growing

emphasis on evidence-based practice (EBP) in librarianship, further encouraging a research culture and scholarly contribution. While EBP is significant to building a ‘community of practice’ and knowledge sharing, bridging practice and research in academic librarianship (Binder & Hall, 2014), it is beyond the scope of this paper as EBP is more focussed on producing or using already produced research to improve practice. Flinders University is one Australian institution that began initiatives to foster a research practice culture for their librarians (McBain et al., 2013). This continues to be sustained with organisational support to counter initial institutional barriers (Walkley Hall, 2018). Such initiatives face barriers such as a management driven by service delivery culture; limited available time outside of service imperatives; and no indication from management that research is valued alongside service (McBain et al., 2013, p. 452). Time and resourcing are consistently identified as the greatest barrier to librarian engagement in research activities, which is only likely to change with additional resources and organisational support (2013, p. 450).

Tensions between library service and research functions are already being navigated in Australian universities. Chitty and McRostie (2016) describe the eScholarship Research Centre (ESRC) at the University of Melbourne. Key to the role of the ESRC was evaluating its own service role and research purpose. Though as of June 2020, the ESRC was disestablished, its organisational structure had positioned it to be the “only non-faculty institutional research center” within the university (Chitty & McRostie, 2016, p. 162), which may have contributed to its demise. Holding a “core research agenda,” the ESRC was described as a “structural anomaly,” though one with precedents outside of Australia (Chitty & McRostie, 2016, p. 162; Mccarthy et al., 2016, p. 152). The ESRC’s services were also its research subject, with conflict between these functions consistently acknowledged in reviews of the center. Nevertheless, there is an increasing push for recognition of librarian’s intellectual contribution to research, recently seen in demands for recognition of contribution in the form co-authorship in systematic reviews (Desmeules et al., 2016; Luca & Ulyannikova, 2020, p. 45; Russell & Muir, 2020).

The LIS literature encourages LIS professionals to act and to recognise their own capacity for change in the DH, by acting intentionally to determine their own roles and change perceptions (Appleton, 2019, p. 94; Jacobs & Murgu, 2017, p. 18; Vandegrift & Varner, 2013). Vandegrift and Varner (2013, p. 76) argue that it is not lack of opportunity which inhibits librarians from identifying equally as digital humanists, but their own “timidity”. They suggest

librarianship has an ‘academic inferiority complex’ stemming from a “vocation of servitude” (2013, p. 76). Further, this service culture is hard to counter given that DH librarian’s affective labour is not only invisible to others but often also to themselves. To resolve this, Vandegrift and Varner (2013) argue that partnerships need to have tangible content outcomes. Librarian’s involved in DH need to be “making ‘stuff’,” that is, scholarly material, to uphold the library’s institutional value (2013, p. 69). This requires problematising current perceptions of librarian’s DH roles as “passive...technical partner[s]” (Jacobs & Murgu, 2017, p. 18). To gain equal recognition as digital humanists, librarians must step outside the library and embrace being digital humanists themselves.

Institutional barriers make stepping outside of existing roles and service cultures a challenge. Posner (2013), Shirazi (2014), and Muñoz (2016) examine such barriers and name them, rather than placing the responsibility on the individual, as Vandegrift and Varner (2013) do with arguments against ‘timidity’. An Australian perspective on DH and libraries requires recognising how ingrained library service culture is institutionally. It is reflected in librarian’s roles and self-perception as ‘support’ staff and can itself be a barrier to planning an entry into the DH. The SPEC Kit 236 survey reported that research libraries are waiting to determine DH demand before enabling library staff support (Bryson et al., 2011, p. 11). An implied consequence is *ad hoc* service, seen in nearly half the respondent libraries. Both Muñoz (2012) and Vandegrift and Varner (2013) take a “just get down to work” or get “making stuff” attitude. Assuming agreement and taking advantage of no direct opposition becomes a tactical and disruptive manoeuvre (Nowviskie, 2012). The maxim “more hack, less yack” divides DH literature and resonates in academic libraries, as librarians are encouraged to start ‘building’ as their entry to DH.

Liminal spaces

Academic librarians exist in ‘liminal’ spaces within academic institutions (Allison-Cassin, 2020; Logsdon et al., 2017). Liminality is “the in-between space in relationships, social roles, and contexts in times or at places of transition and change” (Davis, 2008). Those in liminal positions exist between social states, “othered” or marginalised by those occupying a more central space. While predominantly described in US academic libraries, where librarians are dually academic and professional staff yet not recognised as scholarly collaborators (Gale

Cengage & American Libraries, 2015a, 2015b), liminality can also be seen in Australian contexts.

The library itself can be imagined as a socially liminal space, one of both ordered ideas and questioning (Filster, 2015, p. 8). Academic libraries are considered an “institutional counterpoint...between faculty and student,” offering a shared transitional space, as an intermediate step toward knowledge acquisition (Plum, 1994, pp. 501-502). They are set apart from, but reproduce, the academic hierarchy, as knowledge and academic authority and legitimacy are strived for. Librarians are interdisciplinary mediators and negotiate providing services and resources to all university disciplines and also information instruction outside of the authority of the classroom or disciplinary knowledge (Almeida, 2015; Beilin, 2015). Typically, librarians do not have the ‘power’ or agency to define academic success or confer the grades or awards that measure it (Almeida, 2015; Eisenhower & Smith, 2010). Librarians sit outside of the power exchange of student receptivity for educational success. While librarians help reproduce this educational paradigm, their liminal position allows for critical ILI that should empower students and researchers to critically engage with the authority of resources. Liminality allows for critical reflection from librarians on their relationship with DH infrastructure and collections and encourages the same of students and researchers, beyond traditional institutional markers of success and legitimacy.

For academic librarians, liminality impacts role perception and scholarly processes. Liminality also, however, enables individuals to see and challenge power structures that set processes of inclusion and exclusion (Davis, 2008; Logsdon et al., 2017, p. 156). It provides an opportunity for DH librarians to recognise and respond to issues of access and representation in DH scholarship, providing space and representation for marginalised voices in collections and the wider community (Appleton, 2019, p. 94; Logsdon et al., 2017). Appleton (2019) suggests libraries and the arts are both marginalised in academia, to the extent they are less visible compared to other spaces and disciplines. Almeida (2015), however, argues this invisibility is really “outsiderness,” too often conflated with marginalisation. Nevertheless, liminality provides greater opportunity for mediation between academic faculty, students, and non-academic communities represented in DH collections and library spaces. The library’s own “outsiderness” might allow librarians to better recognise marginalised voices and increase diversity and representation.

DH also occupies a liminal space, sitting in-between the humanities and the digital or computational (Berry & Fagerjord, 2017; Svensson, 2016). Just as LIS literature advocates for librarians to be equal partners, DH literature encourages the digital humanist to “transcend their ‘servant’ role in the humanities” and hold equal space (Liu, 2012, p. 495). Liu (2012, p. 495) argues,

...the service function of the digital humanities...can convert into leadership if such service can be extended beyond facilitating research in the academy (the usual digital humanities remit) to assisting in advocacy *outside* the academy in the humanities’ present hour of social, economic, and political need.

The struggle to define DH may have complicated, rather than clarified, its status. Defining DH as ‘big,’ having a large and inclusive scope, opens new areas of exploration, accommodating diverging interests. Despite the inclusivity this offers, institutional and methodological challenges arise from this liminality (Svensson, 2016, p. 33). As the DH struggle to clarify their institutional position and place in humanities departments, methodological direction, multiple epistemic traditions, and modes of knowledge production, are not easily reconciled (2016).

Critical knowledge production

Critical librarianship has begun to feature in LIS literature on DH, highlighting expanded roles for DH librarians. LIS values driving critical librarianship are constructive and valuable to the aims of the DH. Current roles are easily reduced to service partnerships, where managing digital objects and infrastructure is seen as a neutral contribution to research projects. Recognising that “participation in digitisation projects is *never* neutral” challenges current accounts of library service work as static and requiring little interpretation (Jacobs & Murgu, 2017, p. 5). Jones (2017) examines why collections projects cannot be neutral and argues that not confronting the past is “denying our own ability to affect change”. Working with collections is not just a matter of curating new collection types and increasing representation but requires challenging past perspectives. In DH roles, a lack of neutrality is shown not only in selection processes, but as librarians consider what data forms a collection and what information its description might provide, so they affect its contribution to future analysis, thus shaping knowledge production (Jones, 2017). Researching cultural collections, Andrews (2019, pp.

219-220), a Ywaalaraay woman, explains how “the collected environment reflects the space where meaning is re-ordered, or translated...and exemplifies both historically and today, a space controlled by the collector, the institutions they represent and the disciplines they contribute to”. For librarians, recognising a position of power and access requires re-examining their roles in the process of knowledge production in the humanities.

The role of organising and representing source information is value-informed and contributes to disciplinary knowledge. DH librarians’ roles require understanding of how technologies serve and reframe new scholarship and methodologies and how existing values, power dynamics, and practices are reflected in knowledge production (Jacobs & Murgu, 2017, p. 10). Whereas Seefeldt and Thomas (2009, p. 5) argue librarians manage product, rather than process, Giannetti (2019) argues that participating in both contributes positively to DH and strengthens knowledge production. Giannetti (2019, p. 8) views librarians’ engagement in the process of producing and encoding digital texts as an inherently political act. Likewise, Jacobs and Murgu (2017, p. 10) propose that librarians should not simply produce a digital product but actively analyse the values produced with it. This is an interpretive process with “evaluation, selection, and integration of DH tools and resources” (Giannetti, 2019, p. 3). Librarians are not statically recovering or reproducing a digital source but constructing authority and representation (Enoch & Gold, 2013).

In the Australian context, a question posed by Sample (2013) becomes relevant: “When does service become scholarship?”. Verhoeven and Burrows (2016, p. 2) recognize the humanities’ and libraries’ shared agendas offers roles for librarians’ contributing to DH “knowledge analysis and formation”. They suggest exposing library data and metadata as linked open data and building research-orientated knowledge organization systems with this data (2016). This work relates to issues of representation and knowledge organization; areas Ramsay identifies as common ground for DH and LIS (Ramsay, 2010, as cited in Sula, 2013, p. 11).

The increased engagement of Australian libraries with the DH includes interpretive approaches that support knowledge production. The Humanities Networked Infrastructure (HuNI), a data aggregation service with input from Deakin University Library, among others, exemplifies this. HuNI supports the design of DH digital resources and fosters “serendipitous discoveries,” encouraging research that recognizes data commonalities (Verhoeven & Burrows, 2016, p. 9). The ESRC, described earlier, made efforts to make its datasets available

as linked data, with HuNI being one avenue (Lewis & Neish, 2016). Quoting Posner (2015), Verhoeven and Burrows (2016, p. 10) argue for

understanding markers like gender and race not as givens but as constructions that are actively created from time to time and place to place... stop acting as though the data models for identity are containers to be filled in order to produce meaning and recognize instead that these structures themselves constitute data.

The HuNI recognises interpretation as vital to the humanities and avoids compartmentalising disciplines within any existing “authoritative framework” (2015, p. 422). This enables researchers, to work with librarians, to create their own semantic frameworks, classifications, data, and links.

In the Australian Galleries, Libraries, Archives, and Museums (GLAM) sector, producing collection records and digitizing items often takes priority over relational and creative opportunities that would otherwise contribute to multi-contextual practice (Jones, 2019, 26 November). Jones argues for greater ‘relational infrastructure’ in the Australian GLAM sector. Building rich context and relationships “is not just a mechanical exercise in joining the dots” (2019). Rather than widening infrastructure to allow access, Jones draws on Christen’s and Anderson’s (2019) idea of ‘slow archives’ to argue that rather than simply widening current access paths, new ones should be forged. By slowing normative practices to examine “how knowledge is produced, circulated, contextualized, and exchanged through a series of relationships” it is possible to support, embrace, and learn from paths already in communities (2019). Slowing and returning to a collection’s creators, or its “source community,” is key to interpreting the context and representation of materials in DH collections (Andrews, 2019).

The practices and people responsible for describing and classifying collections are typically as invisible as the creators are, and their work is likewise interpretive (Jones, 2019). This is especially true for Aboriginal and Torres Strait Islander creators. Jones reflects on Mowgee Wiradjuri man Nathan Sentence’s (2017) observation that First Nations people go unacknowledged “as creators of culture and history or as knowledge holders,” and are instead assigned “roles of subject”. LIS professionals working with collections and DH infrastructure are faced with the responsibility of shaping and selecting whose perspectives are encoded, whose are excluded, and what relationships are represented (Jones, 2019). Australian

librarians' roles can and should go beyond technical 'building,' as DH gravitates to, and contribute new conceptual and theoretical models as foundations for DH practice alongside academics (Bode & Arthur, 2014; Svensson, 2009; 2016, p. 2; Thorpe, 2019).

Given that information is not neutral, working as an information professional requires forgoing any assertion of neutrality. It requires reflexivity on issues of access and representation (Garcia, 2015). With the "power and potential to change public memory," LIS professionals are positioned as decision-makers concerning whose "voices are heard and preserved" (Jacobs & Murgu, 2017, p. 18). Thorpe (2019) makes a case for 'transformative praxis' in librarianship and archives, to create space for indigenous self-determination and bring issues of access and representation to the fore of DH. Here, critical librarianship can share its "transformative, empowering, and a direct challenge to power and privilege" with the DH (Garcia, 2015). Critical theory via critical librarianship can challenge current DH practices and contribute to building new theoretical models from interdisciplinary and community perspectives.

Librarians have focused on the practicalities of formats for digital representation, rather than philosophical discussion of their meaning and significance as commonly seen in archive and museum sectors (Jones, 2017, 2019). An acceptance of "descriptive metadata schemas, vocabularies, [and] classification systems" sees underlying language of cultural and historical assumptions being left unchallenged (Verhoeven & Burrows, 2016, p. 6). There is, Verhoeven and Burrows (2016, p. 8) argue, an *obligation* for librarians to equally partner with humanities researchers to critically address these issues, including classification and categorization, vocabularies, and ontologies. This requires examining Australian academic libraries' current organisational cultures and librarians' own critical and interpretive contributions to DH knowledge structures.

The Western Australia New Music Archive (WANMA) is a DH project that has seen DH theory and digital library practices partner to "enable meaningful and relevant interpretation" (Trainer et al., 2017, p. 232). WANMA illustrates how DH collections create meaning and connections, as semantic frameworks (2017, p. 236). Two best practice guidelines helped connect collection items to their contextual information. First, the collection invited participation and was not isolated from the communities it represented. Secondly, connections to original cultural context were retained when translating creative works into a digital form. WANMA datasets provide additional context through "biographical, descriptive, and

bibliographical information and by linking to other web spaces that continue the stories” (2017, p. 238). DH librarians can continue a collection’s story through community engagement, building meaning by connecting context, using the suggestions and examples provided here as possible guides. Librarians must, then, examine how users will access, interface with, and make meaning from the data contained in the collection.

Conclusion

In Australian academic libraries, librarians’ roles in the DH typically conform to a traditional service model. Reviewing the literature from the DH, academic librarianship (and related information fields such as archives), and critical librarianship highlights the values and space shared by these areas and may encourage scholarly partnership between academics and professional librarians. While limited research exists about academic librarians and the DH from an Australian perspective, the LIS literature more widely, is shifting the emphasis away from service work, as neutral, static, and requiring little interpretation, toward more collaborative models which acknowledge librarians’ roles in knowledge production. Increasingly, critical librarianship recognises roles for librarians in the DH that contribute to new perspectives on, and recognition of library and librarian involvement in knowledge production. Australian librarians can approach their work in building DH infrastructure and collections critically, providing context that promotes increased representation and accessibility in DH scholarship.

References

- Allison-Cassin, S. (2020). Bodies, brains, and machines: An exploration of the relationship between the material and affective states of librarians and information systems. *Library Trends*, 68(3), 409-430. <https://doi.org/10.1353/lib.2020.0009>
- Almeida, N. (2015). *Librarian as outsider*. Hybrid Pedagogy. <https://hybridpedagogy.org/librarian-as-outsider/>
- Andrews, J. A. (2019). *Encountering cultural material in museum collections: An Indigenous perspective* [PhD thesis, The Australian National University]. ProQuest Dissertations & Theses Global. <https://dx.doi.org/10.25911/5cab2368ec66a>
- Appleton, L. (2019). Viewpoint: Is critical art librarianship actually a thing? *Art Libraries Journal*, 44(2), 92-95. <https://doi.org/10.1017/alj.2019.10>
- Atkinson, J. (2019). Collaboration by academic libraries: What are the benefits, what are the constraints, and what do you need to do to be successful? *New Review of Academic Librarianship*, 25(1), 1-7. <https://doi.org/https://doi.org/10.1080/13614533.2019.1575016>
- Australian Academy of the Humanities, Australian Research Council, & National Board of Employment, Education, and Training. (1998c). *Knowing ourselves and others: The humanities in Australia into the 21st century* (Vol. 1). Sydney University Press for the Australian Academy of the Humanities.
- Australian Library and Information Association. (2018). *ALIA core values policy statement*. <https://www.alia.org.au/about-alia/policies-standards-and-guidelines/alia-core-values-statement#:~:text=Excellence%2C%20accountability%2C%20integrity%20and%20responsibility,collaborations%20to%20advance%20these%20value>
- Australian Library and Information Association. (n.d.). *About ALIA*. <https://www.alia.org.au/about-alia>
- Australian Library and Information Association, Australian Public Library Alliance, & National and State Libraries Australasia. (2018). *Australian Libraries support the Sustainable Development Goals*. <https://www.nsla.org.au/sites/default/files/documents/aust-libraries-sustainable-development-goals-jan18.pdf>
- Baer, A. (2013). Critical information literacy in the college classroom: Exploring scholarly knowledge production through the digital humanities. In L. Gregory (Ed.), *Information literacy and social justice: Radical professional praxis* (pp. 99-120). Library Juice Press. <http://hdl.handle.net/2022/17236>

- Beilin, I. (2015). Beyond the threshold: Conformity, resistance, and the acrl information literacy framework for higher education. *In the Library with a Lead Pipe*. <http://www.inthelibrarywiththeleadpipe.org/2015/beyond-the-threshold-conformity-resistance-and-the-aclr-information-literacy-framework-for-higher-education/>
- Berry, D. M., & Fagerjord, A. (2017). *Digital humanities: Knowledge and critique in a digital age*. Polity Press.
- Besser, H. (2004). The past, present, and future of digital libraries. In S. Schreibman, R. G. Siemens, & J. Unsworth (Eds.), *A companion to digital humanities*. Blackwell Publishing.
- Binder, A., & Hall, L. (2014). *Creating communities of practice: A shared culture of professional development* [Paper]. Proceedings of the Conference for Entrepreneurial Librarians, North Carolina. <https://core.ac.uk/download/pdf/234820194.pdf>
- Bode, K., & Arthur, P. L. (2014). Collecting ourselves. In P. L. Arthur & K. Bode (Eds.), *Advancing digital humanities: Research, methods, theorie*. Palgrave Macmillan.
- Borrego, Á., Ardanuy, J., & Urbano, C. (2018). Librarians as research partners: Their contribution to the scholarly endeavour beyond library and information science. *The Journal of academic librarianship*, 44(5), 663-670. <https://doi.org/10.1016/j.acalib.2018.07.012>
- Bryson, T., Posner, M., St. Pierre, A., & Varner, S. (2011). *Digital humanities: SPEC kit 326*. Association of Research Libraries. <https://publications.arl.org/Digital-Humanities-SPEC-Kit-326/>
- Burrows, T. (1997) Integrating electronic services into the academic library: The Scholars' Centre at the University of Western Australia. *Australian Academic & Research Libraries* 25(4): 213-220.
- Burrows, T. (1999). Electronic texts, digital libraries, and the humanities in Australia. *Library Hi Tech*, 17(3), 248-256. <https://doi.org/10.1108/07378839910289330>
- Charing, S., & Gardiner, B. (2017). The push to publish: What is the impetus for Australian academic librarians? *Journal of the Australian Library and Information Association*, 66(4), 382-392. <https://doi.org/10.1080/24750158.2017.1395130>
- Chitty, T., & McRostie, D. (2016). Better together: The ESRC in the university research library of the twenty-first century. *The Australian Library Journal: The Library-Archive Confluence: The eScholarship Research Centre, University of Melbourne*, 65(3), 157-166. <https://doi.org/10.1080/00049670.2016.1208714>

- Christen, K., & Anderson, J. (2019). Toward slow archives. *Archival Science*, 19(2), 87-116. <https://doi.org/10.1007/s10502-019-09307-x>
- Cole, C. (1997) SETIS: Electronic Texts at the University of Sydney Library. *Ariadne*, 8, <http://www.ariadne.ac.uk/issue/8/scholarly-electronic/>
- Corrall, S., Kennan, M. A., & Afzal, W. (2013). Bibliometrics and research data management services: Emerging trends in library support for research. *Library Trends*, 61(3), 636-674. <https://doi.org/10.1353/lib.2013.0005>
- Critlib. (n.d.). *about / join the discussion*. critlib.org. <http://critlib.org/about/>
- Davis, C. S. (2008). Liminal Perspective. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 484-485). SAGE Publications. <https://doi.org/10.4135/9781412963909>
- Dalmau, M. & Hawkins, K. (2015) "Reports of My Death Are Greatly Exaggerated": Findings from the TEI in Libraries Survey, *Journal of the Text Encoding Initiative*. 8 December 2014 - December 2015, <http://journals.openedition.org/jtei/1322>
- Day of DH 2013. (2013). *About Day of DH*. <http://dayofdh2013.matrix.msu.edu/about-day-of-dh/>
- Desmeules, R., Campbell, S., & Dorgan, M. (2016). Acknowledging librarians' contributions to systematic review searching. *The Journal of the Canadian Health Libraries Association*, 37(2). <https://doi.org/10.5596/c16-014>
- Edwards, C. (2012). The digital humanities and its users. In M. K. Gold (Ed.), *Debates in the Digital Humanities* (pp. 213-246). University of Minnesota Press.
- Eisenhower, C., & Smith, D. (2010). The library as 'stuck place': Critical pedagogy in the corporate university. In M. Accardi, E. Drabinski, & A. Kumbier (Eds.), *Critical library instruction: Theories and methods* (pp. 305-317). Library Juice Press.
- Enoch, J., & Gold, D. (2013). Seizing the methodological moment: The digital humanities and historiography in rhetoric and composition. *College English*, 76(2), 105-114.

- Filster, B. (2015). *The liminal library: Making our libraries sites of transformative learning*. Librarians' Information Literacy Annual Conference, Newcastle University.
<https://barbarafilster.net/LiminalLibrary.pdf>
- Gale Cengage, & American Libraries. (2015a). *Digital humanities: Faculty survey results*. American Libraries. <https://americanlibrariesmagazine.org/wp-content/uploads/2016/01/digital-humanities-faculty.pdf>
- Gale Cengage, & American Libraries. (2015b). *Digital humanities: Librarian survey results*. American Libraries. <https://americanlibrariesmagazine.org/wp-content/uploads/2016/01/digital-humanities-librarian2.pdf>
- Garcia, K. (2015). *Keeping up with...critical librarianship*. Association of College & Research Libraries. http://www.ala.org/acrl/publications/keeping_up_with/critlib
- Giannetti, F. (2019). 'So near while apart': Correspondence editions as critical library pedagogy and digital humanities methodology. *Journal of Academic Librarianship*, 45(5).
- Gibbs, F. (2013). Digital humanities definitions by type. In M. Terras, J. Nyhan, & E. Vanhoutte (Eds.), *Defining Digital Humanities: A Reader* (pp. 289-297). Ashgate Publishing Limited.
- Grant, R. C., & Organ, M. (2020). Digital journeys @ UOW Australia: From digital dexterities to digital humanities and beyond. *The International information & library review, ahead-of-print*(Ahead of print), 1-6.
<https://doi.org/10.1080/10572317.2020.1785173>
- Gregory, L., & Higgins, S. (2013). Introduction. In L. Gregory & S. Higgins (Eds.), *Information literacy and social justice: Radical professional praxis* (pp. 1-10). Library Juice Press.
- Haddow, G., & Mamtora, J. (2017). Research support in Australian academic libraries: Services, resources, and relationships. *New Review of Academic Librarianship*, 23(2-3), 89-109. <https://doi.org/10.1080/13614533.2017.1318765>
- Hall, G. (2012). Has critical theory run out of time for data-driven scholarship? In M. K. Gold (Ed.), *Debates in the digital humanities*. University of Minnesota Press.
- Heppler, J. A. (2017). *What is digital humanities?* @jaheppler.
<http://whatisdigitalhumanities.com>

- Jacobs, H. L. M., & Murgu, C. (2017). Questioning the past and possible futures: Digital historiography and critical librarianship. *Journal of Critical Library and Information Studies*, 1(1), 1-22. <https://doi.org/https://doi.org/10.24242/jclis.v1i1.14>
- Jones, M. (2017). *Metadata and power: Toward relational agency in archival description* [Paper]. Australian Society of Archivists, The University of Melbourne, Australia. <https://www.mikejonesonline.com/contextjunky/2017/09/27/metadata-and-power-toward-relational-agency-in-archival-description/>
- Jones, M. (2019, November 26). Paths. *Mike Jones: Context Junky*. <https://www.mikejonesonline.com/contextjunky/2019/11/26/paths/>
- Keller, A. (2015). Research support in Australian university libraries: An outsider view. *Australian Academic & Research Libraries*, 46(2), 73-85. <https://doi.org/10.1080/00048623.2015.1009528>
- Kirschenbaum, M. (2012a). Digital humanities as/is a tactical term. In M. K. Gold (Ed.), *Debates in the digital Humanities* (pp. 415-428). University of Minnesota Press.
- Kirschenbaum, M. (2012b). What is digital humanities and what's it doing in English departments? In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 3-11). University of Minnesota Press.
- Lewis, A., & Neish, P. (2016). Pathways, parallels and pitfalls: the scholarly web, the ESRC and linked open data. *The Australian Library Journal: The Library-Archive Confluence: The eScholarship Research Centre, University of Melbourne*, 65(3), 224-231. <https://doi.org/10.1080/00049670.2016.1209075>
- Liu, A. (2012). Where is cultural criticism in the digital humanities? In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 490-510). University of Minnesota Press.
- Logsdon, A., Mars, A., & Tompkins, H. (2017). Claiming expertise from betwixt and between: Digital humanities librarians, emotional labor, and genre theory. *College & Undergraduate Libraries*, 24(2-4), 155-170. <https://doi.org/10.1080/10691316.2017.1326862>
- Luca, E. J., & Ulyannikova, Y. (2020). Towards a user-centred systematic review service: The transformative power of service design thinking. *Journal of the Australian Library and Information Association*, 69(3), 357-374. <https://doi.org/10.1080/24750158.2020.1760506>

- Manuell, R. (2019). The education and training role of Australian academic librarians. *Journal of the Australian Library and Information Association*, 68(1), 86-87. <https://doi.org/10.1080/24750158.2018.1552389>
- Maron, N. L., & Pickle, S. (2014, June 18). *Sustaining the digital humanities: Host institution support beyond the start-up phase*. Ithaca S+R. https://digital.library.unt.edu/ark:/67531/metadc463533/m2/1/high_res_d/SR_Supporting_Digital_Humanities_20140618f.pdf
- McBain, I., Culshaw, H., & Walkley Hall, L. (2013). Establishing a culture of research practice in an academic library: An Australian case study. *Library Management*, 34(6/7), 448-461. <https://doi.org/10.1108/LM-08-2012-0053>
- Mccarthy, G., Morgan, H., & Daniels, E. (2016). The eScholarship Research Centre: Working with knowledge in the twenty-first century. *The Australian Library Journal*, 65(3), 147-156. <https://doi.org/10.1080/00049670.2016.1208073>
- Muñoz, T. (2012). *Digital humanities in the library isn't a service*. <http://trevormunoz.com/notebook/2012/08/19/doing-dh-in-the-library.html>
- Muñoz, T. (2016). Recovering a Humanist Librarianship through Digital Humanities. In J. W. White & H. Gilbert (Eds.), *Laying the Foundation* (pp. 3-14). Purdue University Press. <https://doi.org/10.2307/j.ctt163t7kq.4>
- Nowviskie, B. (2011). A skunk in the library. *Nowviskie*. <http://nowviskie.org/2011/a-skunk-in-the-library/>
- Nowviskie, B. (2012). lazy consensus. *Nowviskie*. <http://nowviskie.org/2012/lazy-consensus/>
- Pannacker, W. (2012). Digital humanities triumphant? In M. K. Gold (Ed.), *Debates in the digital humanities*. University of Minnesota Press.
- Pannacker, W. (2013). Stop calling it 'digital humanities'. *The Chronicle of higher education*, 59(24).
- Plum, T. (1994). Academic libraries and the rituals of knowledge. *Reference Quarterly*, 33(4), 496-508.
- Posner, M. (2013). No half measures: Overcoming common challenges to doing digital humanities in the library. *Journal of Library Administration: Digital Humanities in Libraries: New Models for Scholarly Engagement*, 53(1), 43-52. <https://doi.org/10.1080/01930826.2013.756694>

- Posner, M. (2015). *What's next: The radical, unrealized potential of digital humanities*.
<http://miriamposner.com/blog/whats-next-the-radical-unrealized-potential-of-digital-humanities/>
- Ramsay, S. (2013a). On building. In M. Terras, J. Nyhan, & E. Vanhoutte (Eds.), *Defining Digital Humanities: A Reader* (pp. 243-245). Ashgate Publishing Limited.
- Ramsay, S. (2013b). Who's in and who's out. In M. Terras, J. Nyhan, & E. Vanhoutte (Eds.), *Defining Digital Humanities: A Reader* (pp. 239-241). Ashgate Publishing Limited.
- Ramsay, S., & Rockwell, G. (2012). Developing things: Notes toward an epistemology of building in the digital humanities. In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 75-84). University of Minnesota Press.
- Rockwell, G. (2013). Is humanities computing an academic discipline? In M. Terras, J. Nyhan, & E. Vanhoutte (Eds.), *Defining Digital Humanities: A Reader* (pp. 13-32). Ashgate Publishing Limited.
- Russell, F., & Muir, R. (2020). A return to librarian mediated searching in a pilot systematic search service. *Journal of the Australian Library and Information Association*, 69(2), 262-273. <https://doi.org/10.1080/24750158.2020.1749333>
- Rydberg-Cox, J., A. (2006). Introduction. In *Digital libraries and the challenges of digital humanities* (pp. 1-25). Chandos Publishing.
- Sample, M. (2013, February 8). *When does service become scholarship?* Sample Reality.
<https://www.samplereality.com/2013/02/08/when-does-service-become-scholarship/>
- Scheinfeldt, T. (2012). Sunset for ideology, sunrise for methodology. In M. K. Gold (Ed.), *Debates in the digital humanities*. University of Minnesota Press.
- Seefeldt, D., & Thomas, W. (2009). What is digital history? A look at some exemplar projects. *Perspectives on History*, 47(5), 1-8.
- Sentence, N. (2017, July 21). Maker unknown and the decentring First Nations People. *Archival decolonist* [-o-]. <https://archivaldecolonist.com/2017/07/21/maker-unknown-and-the-decentring-first-nations-people/>
- Shirazi, R. (2014). *Reproducing the academy: Librarians and the question of service in the digital humanities*. <https://roxanneshirazi.com/2014/07/15/reproducing-the-academy-librarians-and-the-question-of-service-in-the-digital-humanities/>

- Simmons, M. H. (2005). Librarians as disciplinary discourse mediators: Using genre theory to move toward critical information literacy. *Portal*, 5(3), 297-311.
<https://doi.org/10.1353/pla.2005.0041>
- Spiro, L. (2012). "This is why we fight": Defining the values of the digital humanities. In M. K. Gold (Ed.), *Debates in the digital humanities* (pp. 16-34). University of Minnesota Press.
- Stuhr, J. (1995). The humanities Inc.: Taking care of business. In D. Myers (Ed.), *Re-inventing the humanities: International perspectives* (pp. 3-10). Australian Scholarly Publishing.
- Sula, C. A. (2013). Digital humanities and libraries: A conceptual model. *Journal of Library Administration*, 53(1), 10-26.
<https://doi.org/http://dx.doi.org/10.1080/01930826.2013.756680>
- Svensson, P. (2009). Humanities computing as digital humanities. *Digital Humanities Quarterly*, 3(3).
- Svensson, P. (2016). Introducing the digital humanities: Imagining a meeting place for the humanities and the digital. In P. Svensson, J. T. Klein, T. McPherson, & P. Conway (Eds.), *Big Digital Humanities* (pp. 1-35). University of Michigan Press.
<https://doi.org/10.2307/j.ctv65sx0t.5>
- THATCamp. (2012). *About*. DH and Libraries THATCamp.
<http://dhlib2012.thatcamp.org/about/index.html>
- Thorpe, K. (2019). Transformative praxis – building spaces for indigenous self-determination in libraries and archives. *In the Library with a Lead Pipe*.
<http://www.inthelibrarywiththeleadpipe.org/2019/transformative-praxis/>
- Pawlicka-Deger, U. (2020). The Laboratory Turn: Exploring Discourses, Landscapes, and Models of Humanities Labs. *DHQ: Digital Humanities Quarterly*, 14(3).
- Vandegrift, M. (2012). What is digital humanities and what's it doing in the library? *In the Library with the Lead Pipe*.
<http://www.inthelibrarywiththeleadpipe.org/2012/dhandthelib/>
- Vandegrift, M., & Varner, S. (2013). Evolving in common: Creating mutually supportive relationships between libraries and the digital humanities. *Journal of Library Administration*, 53(1), 67-78. <https://doi.org/10.1080/01930826.2013.756699>
- Varner, S., & Hswe, P. (2016). Special report: Digital humanities in libraries. *American Libraries*, 47(1/2), 36-41.

- Verhoeven, D., & Burrows, T. (2015). *Aggregating cultural heritage data for research use: The Humanities Networked Infrastructure (HuNI)* [Paper]. Research Conference on Metadata and Semantics Research, Manchester, England.
https://dx.doi.org/10.1007/978-3-319-24129-6_36
- Verhoeven, D., & Burrows, T. (2016). *Libraries and the digital humanities: Partnership, collaboration and shared agendas* [Paper]. Proceedings of the Victorian Association for Library Automation 18th Biennial Conference and Exhibition, Melbourne, Victoria. <http://dro.deakin.edu.au/view/DU:30082201>
- Walkley Hall, L. (2018). From practice to research at Flinders University Library: Sustaining a research culture. *Library Management*, 39(8/9), 615-624.
<https://doi.org/10.1108/lm-10-2017-0110>
- Warwick, C., Terras, M. M., & Nyhan, J. (2012). Introduction. In C. Warwick, M. M. Terras, & J. Nyhan (Eds.), *Digital humanities in practice* (pp. xiii-xix). Facet Pub.
- Xie, I., & Matusiak, K. K. (2016). Introduction to digital libraries. In I. Xie & K. K. Matusiak (Eds.), *Discover digital libraries: Theory and practice* (pp. 1-35). Elsevier.
<https://doi.org/https://doi.org/10.1016/B978-0-12-417112-1.00001-6>
- Zhang, Y., Liu, S., & Mathews, E. (2015). Convergence of digital humanities and digital libraries. *Library Management*, 36(4/5), 362-377. <https://doi.org/10.1108/LM-09-2014-0116>