Information literacy and regimes of truth: continuity and disruption

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Abstract

Introduction. This study sought to understand how academic librarians perceived the information literacy programmes that they provided, what this might mean for democratic practices in a society and how this work was linked to a regime of truth.

Method. Eighteen librarians who provide information literacy programmes and services in university libraries in Sydney, Australia, participated in semi-structured interviews. Analysis. Through a thematic analysis using a priori and open coding, the factors the librarians consider important in their work were identified, including changes to the ways they implement information literacy programmes and services, and how these linked to regimes of truth.

Results. There was a strong emphasis on the authority of information and the development of critical thinking, although in some universities, the responsibility for information literacy programmes is devolving to study skills support staff. Some librarians stressed the importance of ensuring that academics understood the government policy changes in the valuing of scholarly output.

Conclusions. Although all librarians noted changes in the university and in their work, their focus on the authority of information and the ways it is established suggest that, while changes to the regime of truth may be apparent, a regime of post-truth is not yet emerging.

Introduction

The idea that we live within regimes of truth, a reality long taken for granted in democratic societies, has become a talking point in recent times as the media, social media and everyday conversations have been filled with discussions of fake news and alternative facts, challenging the notion of a regime of truth and leading to the emergence of the concept of post-truth. Foucault (1980) introduced the concept of a regime of truth, describing it as the ways a society identifies what is true and what is false, including the establishment of sources of authority and the acknowledgement of institutions responsible for asserting what is to be taken as true. He noted that this regime was not static but was being constantly re-negotiated and re-interpreted. Harsin (2015) argues that a cultural shift is leading away from a time of mass communication, when people were onlookers, witnesses to the knowledge of relatively few others presented through channels that were perceived to be reliable. This era is giving way to a view of the media as a 'many-headed hydra' (2015, p. 329), where media channels proliferate through social media, audiences fragment and content competes for attention. Technologies, including the World Wide Web and social media, can isolate their users from alternative points of view (Lor, 2018) and create what Pariser (2011) refers to as a filter bubble, where algorithms provide content which, among other factors, is in line with the search history of the user. The technologies facilitate the efforts of the produser (Bruns, 2007), who is at the same time a contributor of online content and a consumer of it. Although Bruns originally considered the content created by *produsers* only temporary, always available for review and revision in a collaborative and continuous process, the reality has been that people in a common filter bubble are more likely to share content rather than revise it, facilitating a replication of content across multiple sources.

Lewandowsky, Cook and Ecker (2017) identified seven trends that they considered may have contributed to the emergence of a regime of post-truth (p. 420). These go beyond technology and beyond the information itself. They encompass the decline of social capital and isolation; growing inequality in society; increasing political polarisation; declining trust in science and scientific knowledge; a difference in the levels of belief in misinformation according to

political persuasion; the fragmentation of the media landscape and the emergence of filter bubbles; and the rise of individualism. This broader approach demonstrates that regimes of truth are concerned with more than information messages or products and their quality or veracity.

Libraries have long been considered an integral part of the regime of truth in western societies and important institutions in support of democracy. They have engendered trust in their ability to provide authoritative resources that support debate in the community and to act as a safe space for civil society (Rettig 2010). The criteria for ascertaining the quality of information and authoritative sources have been fundamental to professional practice and understood as an essential aspect of the contributions librarians have made to a regime of truth, although Lor (2018, p. 314-5) has suggested that the guidelines librarians often develop for users to gauge the quality of information are at best superficial. As part of this role in supporting a regime of truth, librarians have more recently championed information literacy. Bundy (2002, p. 131) noted the significance of taking a 'whole-of-society' approach to information literacy, but information literacy has often been taken as merely a way to ensure that students could find reliable information for their school and university assignment tasks. This approach has evolved over time. Mackey and Jacobson (2011) demonstrate how notions of information literacy for practitioners have evolved from a series of tasks, culminating in information use mostly for personal purposes, to a recognition of the importance of online sources and social media and the impact of both on the ability of all information users to become authors or creators. They indicate that in contemporary times, a re-thinking of information literacy is required, shifting the focus towards a meta-literacy, a framework that 'informs other literacy types' (2011, p. 70). An essential aspect of this meta-literacy, drawn from information literacy, is its relationship to lifelong learning and active citizenship. At the heart of this approach is the notion that people should be able to critically evaluate information from a range of sources and use it to present rational arguments, based on sound data.

Policy statements of the profession of librarianship claim that information provision, through libraries, supports the democratic processes in a community. Rivano Eckerdal (2017, p. 1012) notes that in considering the part libraries play in supporting democracy, there is little concern for what might be meant by democracy; however, two traditions exist, frequently referred to as the liberal tradition and the deliberative tradition. The liberal tradition is concerned with rights and the respect for individual freedoms, valuing the individual's ability to make well-founded decisions that contribute to society. The deliberative tradition is concerned with equality and active citizenship (Touraine 2000) and values open discussion in which the conflicting points of view can be aired, even if they cannot be resolved. These two traditions are not mutually exclusive. Budd (2015) attests that fundamental to the democratic tradition are deliberation and reflection among people in a community and that for these to be possible, 'informing sources' are a fundamental requirement to both types of democratic traditions, a point commonly made in the literature of librarianship.

Methodology

With an interest in the perceptions of participants and their explanations of relationships between their work and the abstract concept of democratic processes, an interpretive approach was appropriate. The focus was on the ways that university librarians provided information literacy programmes and services, and acknowledging that this can happen in many ways and at different levels, each library decided on how librarians would be recruited to the study. Thus, in some libraries, subject specialists or faculty liaison librarians were invited to take part whereas in others, it was librarians managing the provision of information literacy programmes who took part. The libraries contacted were all linked to universities in Sydney, New South Wales. Sydney has five universities that have their main campus in the city and two universities with a national remit and significant presence in the city. It also has a number

of universities, often located in an office block, whose main campus is in other cities in New South Wales or other states in Australia. In all, eighteen librarians employed by the five libraries traditionally associated with Sydney and the two libraries with a national remit took part. Participants are numbered L9-L26 because this study is part of a larger study into the ways that librarians perceive that their work in developing information literacy may support democratic processes (Yerbury and Henninger, 2018; Yerbury and Henninger, in press). Data were collected through semi-structured interviews, lasting between 30 and 45 minutes. The questions sought to understand the services and programmes the individual was involved in, firstly for students, then for teachers and researchers, administrative staff and the executive, and finally for alumni. To focus on the relationship between information literacy and democratic processes, participants were asked how they might explain to another librarian how the services and programmes they provide support the development of democratic processes. This led to the introduction of post-truth, fake news and alternative facts and questions about where the responsibilities lie for ensuring a well-informed community and which organisations librarians might partner with if they believe they have such a responsibility but cannot take the whole responsibility. The interviews were recorded and transcribed verbatim. The transcripts were analysed using a priori coding and emergent coding (Krippendorff, 2018). The a priori coding frame was drawn from discussions of regimes of truth (Foucault, 1980; Harsin, 2015; Lewandowsky et al., 2017) and democratic processes (Budd, 2015; Rivano Eckerdal, 2017).

Findings

The librarians in this study expressed views that both supported the view that there was continuity in the existing regime of truth and suggested that a regime of post-truth might be emerging, or at least that there was a disruption to the existing regime of truth.

There is strong support for the notion of continuity in the existing regime of truth. There was a significant emphasis on 'credibility' (L16) and the importance of identifying and using 'authoritative sources' and understanding how to determine authority (L9, L11, L14, L15, L16, L23, L24, L25, L26) at a basic level through the use of a mnemonic (for example C.R.A.P.: currency, reliability, authority, purpose), and at a more sophisticated level through understanding the processes of peer review, as well as through the idea of evidence-based practice. L11 gave the specific example of 'wanting students [in health sciences] from the beginning to recognise the authoritative sources', such as the World Health Organisation and its use of social media, especially Twitter. The tendency of academic staff to specify readings means that 'you're not going to get incredibly dodgy stuff to look at', and the responsibility of the librarian then is 'to be around evidence and unpacking the question' (L25). The assumption, made explicit by only L10, is that the library is a source of good information.

It was clear that the role of the academic librarian involved in information literacy programmes is to provide training in finding and evaluating resources both through the library collection and using other sources. There was some difference in emphasis here. Some explained this as developing skills of critical thinking, placing the emphasis on the use of information (L9, L10, L12, L14, L16, L17, L19, L26). Others focussed on helping students to be successful in their assessment tasks (L11, L12, L14, L15, L16, L18, L23); yet others saw themselves encouraging the understanding of evidence-based practice (L18; L20, L21, L22, L24, L25, L26). A final, and smaller, group (explicitly linked information literacy to the education programme of the university (L12, L13, L14, L19).

In the context of credibility, people were also mentioned as having authority. Here, though, librarians were making a point about distinguishing between expertise and reputation as a basis for authority. L10, for example, commented:

if it's Stephen Hawking [the renowned theoretical physicist] saying it and it's about social policy, well, I'm not just gonna give him the benefit of the doubt, because I mean, he's brilliant and all of that when it comes to stuff like black holes, but he's not necessarily that brilliant when it comes to budget holes or something like that.

Similarly, L20 said 'The Comm[onwealth] Bank Manager, the head of the Reserve Bank, they are the people they are listening to, [rather than people who know how to evaluate information]'¹.

Some librarians in this study were very aware of a shift in the regime of truth, related to changes in the recognition of scholarly output, brought about through the authority of the government. They acknowledged their role in contributing to the conversations about government research policy and saw themselves as the gatekeepers to the resources through which academics could understand their own scholarly production in the light of policy changes. These policy changes signal a shift in the regime of truth. Put very simply, previously in the triennial Excellence in Research for Australia evaluation of research, the quality of a research output was demonstrated if a publication appeared in a peer reviewed journal or conference proceedings or in a book published by a recognised publisher. However, in the 2018 round, citations calculated from data supplied by Clarivate were used as an additional measure of quality in some fields. Librarians in some universities, aware of the relationship between publication, citation count, altmetrics and use of social media, have facilitated access to the tools allowing academics to understand the data available about them and their publications and provided training in their use. L10, L13 and L19 specifically emphasised the importance of ensuring that academic staff understood the significance of the contemporary emphasis on research management, including the policy and online tools used in the management of research data. L24 placed emphasis on the importance of understanding the publishing process and its relationship to citation and other bibliometric measures. L12 was concerned with the same issue of research management but spoke in terms of scholars enhancing their reputation through 'their management of their profile online', ensuring that they have one profile of their research projects and research outputs that is complete and accurate. This issue was of concern also to L23 who linked authority as expressed through profile, altmetrics and reputation to the importance of working within the recently established government policy on scholarly output. The use of altmetrics to measure scholarly impact, and thus to validate research output, was also discussed by this small group of librarians. With scholarly impact being another aspect of the way in which the government indicates the validation of truth claims, this raised questions for academics in the minds of some librarians. L15 noted that

[Academics] need to understand that even though those sources [Clarivate and Scopus] look correct and authoritative, you have to evaluate them as well. So for example, what actually does an altmetric tool evaluate? and if the Australian government is calling for engagement and impact and not just metrics, then how do you use these sources and take that information from these sources and use it to actually fulfil that? and that means understanding government policy and reading the policies and being clear of them rather than just coming and say, 'You're going to need to know how many times this has been cited'.

L25 indicated that the library was actively involved in working with academics in the process of creating and validating new knowledge: 'We get academics to do talks [in the library], we promote their materials, we do a lot of work with them about alternative metrics and engaging with communities and things like that'.

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¹ Interviews were conducted before the 2018 Australian Royal Commission into Banking, whose findings may have caused a different choice of authority figures in society.

Most participants in the study, however, spoke from the perspective of professional practice, rather than considering broader societal concerns, and in doing so, they looked to the past. They seemed to consider themselves as in some way anomalous in contemporary times, thus hinting that they were uncertain about how they and their role might be considered in the future. L9 described the rubric for evaluating information as 'old-fashioned', a phrase used by L11 to describe herself and her approach to professional practice. This idea was taken up also by L14, who described 'traditional form things still going on' and L18, who referred to traditional 'wording still being used'. L16 'went back to when I was growing up' to explore how shared understandings of information structures were apparent in everyday life and L10 considered the idea of the educated and informed citizen 'a very ... classic idea'. This sense of being vesterday's people was not entirely without foundation, it seemed, in some universities. There was a small number of librarians (L14, L22, L25) who specifically drew attention to instances where their skills in information literacy are now deemed complementary to or even subordinate to those of educational technologists or of those engaged in learning support. L25 stressed the collaborative effort involved in working with the study skills support team for first year students. L14 explained how 'the [learning support centre] ... employ their own tutors ... [and teach] what we used to teach, ... the information literacy research skills units'.

It seemed that relationships with academic staff had been stronger and more stable in the past. There were two factors here: the effect of staff turnover and the pressure of content-heavy subjects. L25 noted, with some resignation, the difficulties involved in maintaining contact with academic staff, because 'every time a subject coordinator leaves, we risk losing [contact with the students taking that subject]'. She went on to suggest that in the pressured timetables for subjects, 'Academics don't even want us really ... they [just] want us to go "don't even look there, only look here for information".

The way in which the licensing arrangements governing access to database content affected longer term access to evidence-based content was raised by several participants (L10, L12, L21 L22, L26) as one of the key aspects disrupting the established regime of truth. Because of the terms of these licensing agreements, graduates were no longer able to use the sources they had learned about during their programmes of professional education, as they no longer had an affiliation with the university that was covered by the access license for the database. In health sciences and medicine, licensing was seen to be a particular issue. One librarian explained how when students went into the health system for their practical experiences, the version of the database software they had access to was different from the version they could access through the university library, something which the students found very confusing. Another librarian questioned whether 'it makes sense to show them how to use Medline [a commercial database] if they are going to be using PubMed [an open source database]' when they graduate. The concern that key content might be constrained because of the commercial relationship imposed by the database publisher, usually now a multi-national conglomerate, encouraged many of the participants to become champions of open access (L12, L13, L14, L15, L16, L18, L21, L25, L26).

The relationship between digital technologies and access to content is another focus of change, giving rise to impacts in several contexts (L10, L12, L13, L15, L17, L20, L21, L25). The lack of cues available in on-screen reading was considered an as-yet unexplored issue in the development of skills in information literacy. This flat, seemingly undifferentiated, text was seen to have removed the contextual structuring of information involved in the use of some traditional print-based reference materials. '[When] you used a phonebook ... you had to think about what type of information that was in it, so I'd go to the [front of the] white pages for government information ... but there aren't any categories anymore' (L16). L12 discussed how text online, even in e-books, had multiple access points and natural language searching, a situation quite different from the relationship between the linear pathway of a traditional book and the function of an index (L12).

Librarians placed emphasis on the digital tools available to them, as well as those now available to scholars and to the general public (L14, L15, L16, L20, L21, L24), although in most instances they did not specify what these tools were. In part, this seemed to be because they recognised that it was not so much the specific tool that was important, but the function it performed, such as 'reference management' (L10, L12, L22), 'discovery tools' (L14), 'analytic tools' (L10) or, very frequently, the learning management system of the university. L15, however, stated the importance of using resources that were up-to-date and ensuring that students were shown how to use these resources. In this context, she emphasised the advantages of using tutorials developed by the database providers, especially Clarivate and Scopus.

In another shift related to technologies, students were acknowledged as having relationships to published content in ways that was unimaginable even fifteen years ago, given their capacity to contribute to online sources, act as citizen journalists, or even create their own websites or blogs, thus becoming *produsers* (L11, L14, L23). This meant that in some faculties (in more than one university), skills in information literacy, including digital literacy, were considered a *hurdle task* (L13, L16, L19), that is compulsory, online activities in which students were required to demonstrate competence before being allowed to proceed with their studies, which would require them to act as *produsers*, at least at some level.

The notion of continuity and change in the regime of truth was also apparent in the ways these librarians talked about change over time in the position of the profession. The view that the work they did in developing skills in information literacy did not have a direct impact on the democratic processes in society was common, as was the view that 'We don't think about how what we do fits into society' (L12). It was clear that the discussions about engagement in democratic processes were very personal ones, often introduced with the phrase 'Well, for me' or something similar. L13 was concerned that librarians should shoulder their responsibilities now and acknowledge 'our role to contribute to the conversation' about government research policy and the associated reporting requirements, including the collection and management of research data. L9, on the other hand, said: 'I don't think we should be [involved in the discussion] ... I do inherently see my work as apolitical'. For L15, it was the role of public librarians to raise issues in the community, not academic librarians. L13 was one of two respondents drawn to the broader matter of engagement with questions of public interest and the development of new knowledge in the community. She noted: 'I quite like the idea of public intellectuals' and she wondered whether Waleed Aly, a commentator on radio and television and an academic at Monash University in Melbourne known for his ability to generate discussion in the community, was considered a serious scholar and therefore could be seen as a public intellectual. L25 also picked up on the notion of the conversation, reminding librarians that 'scholarship has a conversation behind it', and that the importance of the university in everyday life 'really comes from that deep scientific or cultural knowledge that they have based on evidence', which importantly gets 'communicated [to] the general public'.

Discussion

On the surface, there is clear evidence that the existing regime of truth is continuing; at the same time as there is evidence that changes are occurring. This does not necessarily mean that a regime of post-truth is emerging. Foucault noted that a society's regime of truth is constantly shifting and being negotiated, so it is important to consider those aspects where changes are occurring in the light of his views on the workings of a regime of truth (Foucault, 1980). The findings from this study touch on three of these aspects: the mechanisms through which one can identify information of high quality, the methods through which *true* information can be acquired, and the position in society of those acknowledged as arbiters of truth.

The strong emphasis on the importance of understanding the sources of authority by which information can be evaluated is evidence of a continuing regime of truth. Foucault argues that each society has means by which true and false statements are acknowledged. In this research, librarians champion evidence-based practice, emphasise the importance of peer review as a way of validating information, and are disdainful of sources such as Wikipedia, preferring instead to recommend commercial databases where authority is vested in the multinational publisher. The quality of scholarly information can be ascertained by applying a mnemonic but is perhaps more reliably identified through its process of validation: being peer reviewed. Lewandowsky *et al.* (2017) identify a declining trust in science as one of the features of a regime of post-truth. However, that does not seem to be occurring here, with the emphasis on evidence-based practice and the importance of peer-reviewed literature, and with the focus from at least one health sciences librarian on the authority of organisations such as the World Health Organisation in the Twittersphere.

The engagement of some librarians with the shifts in the ways in which sources of authority are established and the acknowledgement of institutions responsible for asserting what is to be taken as true demonstrated an engagement with both government policy and academics. Some participants in this study acknowledged the role of academics as arbiters of truth, because, in their role as scholars and researchers, academics contribute to the scholarly record, to that peer reviewed store of knowledge. Thus, they emphasised the importance of trying to ensure that academics in their university understand that there has been a shift in the regime of truth. The valuing of scholarly outputs through publication in a peer reviewed source is no longer the end point, the marker of authority, but only the pre-requisite to citations in other scholarly work and mentions in social media, potentially demonstrating a readership in a broader public.

A detrimental aspect of the continued existence of the regime of truth is the emphasis librarians place on the past, referring to themselves as *old-fashioned*, a phrase which might suggest an awareness of not keeping up with shifts and changes. However, to some extent, the phrase was used to lament changes over which individuals have no control. An example of a past which is preferable to the present arises in the context of the licensing of full text databases. This means that libraries no longer own the containers of information (the journals) so that they can no longer make policy decisions on access to the containers in their collection because of the terms and conditions in legal contract governing access to content.

Pariser's (2011) notion of the filter bubble has been considered a key factor limiting access to a wide range of content on a topic, and essentially providing individuals with information that matches their preconceptions. Although Tran and Yerbury (2015) in a study carried out in 2014 found that graduates were likely to use the techniques they had learned in information literacy programmes to work around the limitations of the filter bubble created by Google, it appears that this practice may be changing and students are more accepting of the search results from their Google search. However, the filter bubble of greatest concern to these librarians is not the one created through the use of Google or social media. Rather, it is the one that academics create when they specify the readings for a subject and provide soft copies of these readings through the university's learning management software. This means that students have no opportunity to challenge themselves and to apply the principles of identifying relevant information of high quality because they are not required to go beyond a given set of resources, within a closed universe of knowledge, created by the academic. This is potentially significant because if university students, who are the future leaders in industry, the professions and society more broadly, are denied the opportunity to explore the stores of recorded knowledge as students, they are unlikely to build the skills they will require in their profession and in their lives to ensure a broad, open and reliable base of content for decisionmaking.

There is relatively little evidence from the participants that academic staff and students are seen as produsers by the librarians, another feature potentially concerned with a change in the regime of truth. However, this does not mean students are not produsers, since there is evidence that some students are encouraged in their programmes of study to create blogs, podcasts or vodcasts, and websites as assessment tasks or to create data visualisations, and they are avid contributors to social media. Bruns (2007) might have seen the creations of produsers as temporary, and to a large extent the content produced by students is temporary, like any assessed task. However, technology has changed since Bruns first introduced the concept of the produser, and ready access to digital storage in the cloud exists on a scale that seemed impossible to contemplate a decade ago. The references by a number of librarians to altmetrics show that academic staff are acknowledged as working in a context where they are not only producers of scholarly knowledge in a traditional sense through publication in peerreviewed sources, but they are also in a context where they are aware of the expectation that produsage, through blogs and podcasts, for example, can affect their scholarly reputation. In this way, it is clear that although some examples of produsage may be temporary, others leave more permanent traces.

Another feature of a regime of post truth identified by Lewandowsky *et al.* (2017) and many others is the fragmentation of the media landscape. Librarians in this study acknowledge this, in part through the emphasis they place on authoritative sources of information, and their critical approaches to sources such as Wikipedia and other online sources that may not be validated by an aggregating service such as Informit or Factiva. However, although some acknowledge the reality that undergraduate students will inevitably use this fragmented media landscape to find content that they deem relevant to their assessment tasks, with one exception these librarians do not appear to acknowledge that there may be some benefit in exploring how to identify relevant authoritative content in this landscape which may be saturated with social media.

The emphasis on critical thinking is presented by participants as providing a method for identifying high quality information found through other sources and therefore as a continuation of a regime of truth. However, emphasis on critical thinking may also be evidence of the rise of individualism, with the focus on the responsibility of the individual. To some extent, this focus on the individual could be seen to exist in the instrumental relationship between information literacy programmes, critical thinking, assessment tasks and grades. Yet it may also be, as Rivano Eckerdal (2017) indicates, that this is not evidence of a shift towards the individualism of a regime of post truth, but evidence of a view of democracy generally referred to as liberal democracy, where the emphasis is on the responsibility of the individual to make sound decisions. As Budd (2015) has asserted, the role of the active citizen in the view traditionally assumed by libraries is one of engagement in a community through deliberation and reflection.

This shift in the understanding of the skills essential to a democratic society may be mirrored in another shift, and that is in the understanding of information literacy. As Mackey and Jacobson (2011) demonstrated, the understanding of what information literacy is, how it can best be taught and how the outcomes can be expressed has evolved significantly over the past thirty years. Some of the librarians in this study noted that information literacy was included in some form in the list of graduate attributes or capabilities, signalling that information literacy was no longer solely the responsibility of subject librarians, an add-on to a particular subject or a useful extra-curricular activity. However, the recognition by one of the participants in the study that information literacy needs to be considered a meta-cognitive skill marks another shift in the evolution of information literacy. This shift, potentially, takes it out of the purview of librarians and makes it a fundamental aspect of education: a way of thinking about learning, not a separate, identifiable set of skills concerned with the use of information contained in resources. To some extent, this is already occurring in those universities where academic librarians provide resources to staff in central units with title

such as Learning Skills Centre or Academic Support Centre, who are then responsible for providing support in the development of learning strategies for undergraduates.

This leads to the final point for discussion and what could be seen as a significant shift in the workings of a regime of truth. While librarians placed an emphasis on the development of skills in critical thinking and being able to articulate an argument, or engage with government policy, this emphasis involved other people: students, academic staff and researchers. There was little evidence that they saw themselves as active participants in shaping shifts in the regime of truth, using their knowledge and skills to contribute to discussions in society. To the extent that they did contribute to discussions, they seemed to do this as private individuals, rather than in a professional context. The findings in this study cannot lead to a conclusion on why librarians are not seen to engage with the discussions in the wider society related to the ways a society identifies what is true and what is false, how sources of authority are established and how institutions responsible for asserting what is to be taken as true are acknowledged.

The shift to information literacy as a meta-cognitive skill, related to learning, removes the librarian from that engagement with a skill essential to the practices of democracy. Even though information literacy programmes might only have existed formally for thirty years in university libraries, they have nonetheless been seen as important in supporting the ideological position of the library as an important institution in a democratic country. The massification of tertiary education has changed the relationships among librarians, academic staff and students; the mechanisms for providing information literacy programmes also tend to remove the librarian from direct involvement in developing an understanding in students on how sources of authority are established. The pressure of meeting the learning needs of students and the expectations of the university may mean librarians have little time to engage in those discussions that might highlight the role of the library as one of the institutions responsible for shaping a society's view of a regime of truth.

Limitations

There are limitations to this study. It does not claim to reflect the policies of the universities in which the librarians were involved. Although the context in which librarians work clearly influences the way they carry out their responsibilities, this study was concerned with the way librarians expressed their personal perspectives on a topic of considerable significance to professional practice. A relatively small number of librarians, living and working in the same city, was interviewed. The findings of this study cannot be generalised to encompass all librarians, nor even all academic librarians. Nonetheless, it has identified trends and shifts which will have implications for approaches to information literacy.

Conclusion

There is evidence that there are certainly significant shifts in the regime of truth as seen through the practices of librarians with responsibility for programmes related to information literacy. These are mostly seen to relate to coursework students. Information literacy conceptualised as a meta-cognitive skill may lead to a lesser engagement of librarians with students in universities as learning support staff take on more of the responsibilities for the development of these skills, unless strong collaborations can be developed. It is clear, too, that some librarians do not see themselves and their professional practice as keeping pace with the shifts in the regime of truth, as they refer to their approach as 'old-fashioned'. On the other hand, there are some librarians who have actively embraced the shifts in the establishment of sources of authority prompted by changes in government policy, and who are working with the academic staff of the university to support them in their continuing contribution to the authorised knowledge base on which society can draw.

The librarians in this study, regardless of the way that they might conceive of their practices, do contribute to the democratic processes of the society. They might be working alongside academic staff to develop skills in critical thinking in students; they might be emphasising the importance of evidence-based practice in justifying professional decisions; and they might be working with academic staff to ensure that the scholarly output of these academics is recognised as authoritative according to the new policies of the government. There is, however, evidence that they could become invisible as the regime of truth shifts and is renegotiated.

While this study cannot claim to focus on all aspects of society that Lewandowsky *et al.* (2017) identified as demonstrating a potential shift to a regime of post-truth, it demonstrates how librarians in university libraries in Sydney, Australia are not only working against any decline in trust in scientific knowledge but are actively supporting the development of this knowledge.

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Contributors

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References

- Bruns, A. (2007, December 21). Produsage: a working definition. In *Produsage.org: from production to produsage: research into user-led content creation*. Retrieved April 25, 2019 from http://produsage.org/node/9. (Archived by WebCite® at http://www.webcitation.org/77uYFhRdR)
- Budd, J. (2015). Democracy, economics, and the public good: informational failures and potential. New York: Palgrave Macmillan.Bundy, A. (2002). Growing the community of the informed: information literacy: a global issue. Australian Academic and Research Libraries, 33(3), 125-134
- Foucault, M. (1980). *Power/knowledge: selected interviews and other writings, 1972-1977* (C. Gordon, trans.). New York: Pantheon Books.
- Harsin, J. (2015). Regimes of posttruth, postpolitics, and attention economies. *Communication, Culture & Critique*, 8(2), 327-33.
- Krippendorff, K. (2018). Content analysis: an introduction to its methodology (4th ed.). Beverly Hills, CA: Sage.
- Lewandowsky, S., Cook, J., & Ecker, U.K. (2017). Letting the gorilla emerge from the mist: getting past post-truth. *Journal of Applied Research in Memory and Cognition*, 6(4), 418–24.
- Lor, P.J. (2018). Democracy, information, and libraries in a time of post-truth discourse. *Library Management*, 39(5), 307-21.
- Mackey, T.P. & Jacobson, T.E. (2011). Reframing information literacy as a metaliteracy. *College & Research Libraries*, 72(1), 62-78.
- Pariser, E. (2011). The filter bubble: what the Internet is hiding from you. New York: Penguin Press.

- Rettig, J.(2010). New technologies, citizen empowerment, and civic life. In A. Katsirikou and C.H. Skiadas (Eds.), *Qualitative and Quantitative Methods in Libraries: Theory and Applications:*Proceedings of the International Conference on QQML2009, Chania, Crete, Greece, 26-29

 May 2009 (pp. 191-7). Singapore: World Scientific Publishing.
- Rivano Eckerdal, J. (2017). Libraries, democracy, information literacy, and citizenship: an agonistic reading of central library and information studies' concepts. *Journal of Documentation*, 73(5), 1010-33.
- Touraine, A. (2000). Can we live together?: equality and difference (D. Macey, trans.). Stanford, CA: Stanford University Press.
- Tran, T. and Yerbury, H. (2015). New perspectives on personalised search results: Expertise and institutionalisation. *Australian Academic and Research Libraries*, 46(4), 277-290.
- Yerbury, H & Henninger, M (2018). Civil commitment and the role of public librarian. In S. Kurbanoğlu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi and L. Roy, (Eds.) *Information Literacy in the Workplace*, 5th European Conference on Information Literacy, St Malo, France 18-21 September 2017 (pp. 376-385). Cham: Springer.
- Yerbury, H. & Henninger, M. (in press). Libraries and democracy: complementarity in a regime of truth. In S. Goldstein, (ed.), *Informed Societies: Why information literacy matters for citizenship, participation and democracy*. London: Facet Publishing.