

# Emerging Anxieties

## Librarianship and Material Transformations in the Age of New Technology

by Carolin Huang

Following the Enlightenment period, librarianship has long been defined by the physical space, collections, and architecture of the library and the knowledge base, stewardship, and organizational prowess of the librarian (Lerner 125). However, the traditional roles of libraries and librarians are being challenged today with the shift from industrial to information capitalism in the West (Lankes 7; Buschman, *Dismantling the Public Sphere* 65; Lerner 200). The current direction of libraries is unknown, as the conventions for seeking, organizing, and producing information are affected by new technological mediations. Libraries are developing intelligent agents for reference services, automating circulation and lending, building electronic resources through commercial vendors, creating information commons and makerspaces, developing digital libraries, and buying more computerized technologies. It should be no surprise then that issues of technology-induced anxiety, stress, and fear dominate LIS literature. Yet, much of this literature centres the experience of the library user or worker, negating analysis of how anxiety pervades the entirety of the library institution and the relations within them. Solutions to technology-induced anxiety in the library setting are reduced to changes in professional responsibilities, such as conducting better training on technology use or developing better adaptive skills. Such a narrow analysis of the major economic transformations affecting librarianship demonstrates the urgent need to employ a political economy approach to LIS literature. Mosco defines a political economy approach as “the study of the social relations, particularly the power relations, that mutually constitute the

---

**Carolin Huang** is an independent scholar with a BA from McGill University and a MLIS from University of Alberta.

Keywords: political economy; anxiety; labor crisis; information technology; capitalism; innovation discourse; prosumer

production, distribution, and consumption of resources” (*The Political Economy of Communication* 2) and “the study of control and survival in social life” (3) more generally. This approach demonstrates more clearly the restructuring of information flow and the reconstruction of labour relations, enabled by our innovation economy, that threaten the institution of librarianship. Affective reactions to these threats cannot be isolated to the experience of the user/worker and their lack of knowledge on how to use new technologies, but must be related to larger structures of power that affect relationships of work, production and consumption. Thus, addressing such anxiety embodied by the library institution cannot consist of mere education on and practice with these technologies. Following an political economy approach, we need to get at the root of what is really an overarching economic anxiety relating to the survival of the institution. Is librarianship merely an appendage to the information economy? Are librarians becoming what Marx calls the “conscious linkages” between the “numerous mechanical and intellectual organs” of automation (692)? These questions, perhaps, better get at the core of the anxieties we experience, and the incredible stakes we face in librarianship.

### **Anxiety, Technology, & Libraries**

LIS literature employs many terms to describe the uncertainty that users and workers face in the increasingly technological library setting: “technological anxiety” (Novek), “information anxiety” (Eklof; Katopol), “information overload” (Blummer and Kenton; Gorman; Hopkins), “technostress” (Bichteler; Kupersmith; Melchionda; Sami and Pangannaiah), “computer anxiety” (Sievert et al.), and “library anxiety” (Jiao et al.; Mellon; Onwuegbuzie). The prominence of these terms in LIS discourse draw attention to the general condition of anxiety librarianship. I do not plan to do an extensive literature review on these topics as this has already been done elsewhere (see Bawden and Robinson; Blumer and Kenton; Melchionda; Sami and Pangannaiah); instead, I want to emphasize the dominant epistemological approach to analyzing anxiety that pervades LIS literature. Many of these scholars set out to identify the source and effects of anxiety, and possible solutions to addressing anxiety faced by librarians and users. The major narratives that come up in this literature are how increased access and availability of information due to new technologies have cultivated feelings of anxiety, how the continuous invention of new softwares and technologies have fostered an urgency to keep up, and how increased instruction on information literacy and technology use can help quell these fears. For instance, Melchionda argues that librarians must adopt a proactive, open and flexible attitude to embracing new technologies to address their fear towards the Internet takeover (132-133). This

approach neglects to consider how the formation of affect is ascribed to sociopolitical structures of power (Ahmed 9). Through a political economy lens, anxiety is not simply a feeling that can be located within individuals that can be rid of through rational human behaviour, but must be regarded as a social condition that is currently embodied by librarianship. Williams's theorization on *structures of feeling* is useful here to understand how anxiety exceeds the individual to become apart of something much larger - as "forming and formative processes" (128). It represents a "social experience which is still *in process*, often indeed not yet recognized as social but taken to be private, idiosyncratic, and even isolating, but which in analysis (though rarely otherwise) has its emergent, connecting, and dominant characteristics, indeed its specific hierarchies" (Williams 132). Thus, my analysis attempts to articulate some of the emerging formations of affect, entwined with the information economy.

Literature on the possible loss of the library profession, perhaps, comes closer to issues relating to labour and market transformations. Novek, Tracy and Hayashi relate the fear that librarians have towards technology to the deskilling of library labour and the replacement of jobs by automation. The purpose of their analysis on the deep uncertainty faced by librarians is not to eliminate such fears but build a stronger critique of the growth of information technologies as it relates to our current economy. Novek, in discussing the anxieties faced by academic librarians towards computer technologies, states that such feeling "makes the economic and social effects of information technology more personal to [them]" (20) and thus, can incite a more critical outlook of technology. Along similar expressions, Tracy and Hayashi demonstrate how some librarians recognize the detrimental consequences of information technologies on the library profession and "public service mission of the library" (66).

### **Crisis of Librarianship**

The loss of librarianship's commitment to the public to the desire to innovate and embrace new technologies under information capitalism is central to the work of Buschman. His work introduces a stronger political economy framework for looking at the intensification of feeling in the library setting. He argues that the crisis of librarianship is defined by its lack of recognition of the philosophical shifts happening in the field. He asserts that the uncritical adoption of new technologies furthers the dominance of information capitalism and the privatization of public libraries. As a result, market-oriented discourse now governs libraries and their work, while the public sphere, defined by Habermas as a place that encourages democratic participation and social dialogue outside corporate or state control, shrinks. In this

crisis, libraries struggle for survival, quantifying their worth in order to justify their existence. To subvert this crisis, Buschman claims that librarians must be willing to develop a solid, substantial foundation for the defense of librarianship, as libraries foster the discussion, communication, and investigation of contemporary issues, all practices that are key to democratic life (“Libraries and the Decline” 9-10). But can the technological anxieties faced by librarianship be absolved simply through the commitment to the public sphere?

A simple consideration of Nye’s *technological sublime*, tied to the formation of American exceptionalism (16), confirms the difficulty of separating technology from the intensification of feeling. The social construction of technology is dependent on the very sense of distance and awe experienced by the user/consumer. Mosco argues that cyberspace comes to exemplify the technological sublime today, as it is “praised for its epochal and transcendent characteristics and demonized for the depth of evil it can conjure” (*The Digital Sublime* 24). Given the impact of technology on affective formations, the task of subduing the condition of anxiety that preoccupies librarianship is thus much grander of a feat.

Both Frohmann and Popowich, in their readings of Buschman, are not convinced by Buschman’s succumbing to principles of democracy in maintaining the future public librarianship. Frohmann, on the one hand, wonders if the concept of democracy has been “sufficiently debased in our time” (80) so that it should be rejected as the beacon of hope defending libraries from our increasingly neoliberal economy. He notes that because the rhetoric of democracy is also central to capitalist market participation, Buschman’s argument to hold faith for democracy in maintaining the public in public librarianship is not sound. Democracy then becomes “a concept that refuses to stop skidding drunkenly across the discursive terrain” (Frohmann 82) and perhaps cannot serve as a solid foundation for future librarianship. Frohmann’s ultimate concern is with how Buschman ascribes so much conviction in democracy and the public sphere in their purest form, concepts that Frohmann believes are already corrupted by private interests; he notes, “to be intermeshed with commerce seems to amount in [Buschman’s] view to a thorough elimination of the possibility of progressive politics other than one based on appeals to universal — yet thoroughly American — “truths” about the essence of democracy, justice, and equality” (Frohmann 83). Ford and Mosco have already demonstrated that the divide between public and private is becoming less clear cut with the development of information and communication technologies. Mosco goes as far to assert that because processes of commodification penetrate the public sphere, there is no such thing as free space immune from state and private interests in our

contemporary society (*The Political Economy of Communication* 153).

From an explicitly political economy perspective, Popowich challenges Buschman's defense of librarianship and extends Frohmann's critique of professional values. Popowich argues that the crisis of librarianship goes beyond professional concerns and is deeply material, "expanded upwards into the subjective experiences of library workers, and downwards to the organization and discipline of library labour itself" (7). His concern with the material conditions of librarianship is exemplified in his question: "How does a crisis of librarianship intersect with wider crises in capitalism itself?" (Popowich 6). He looks how living labour, the manual work of librarians, has been going through real subsumption, the restructuring of labour by technology, to comply with the capitalist market. Through his analysis of restructuring processes that have affected labour relations, including shared cataloguing, resources via OCLC, library automation, data initiatives, and electronic resource vendors, he argues that librarianship is now structured to be complicit with market interests:

The double bind consists in this: that whether we try to resist or embrace technical innovation, we make ourselves more attractive to private capital. If we are slow to change, there is more profit to be reaped by our modernization; if we are at the cutting edge, then the profitability of our commodities is higher. Whether we try to dismantle professional power imbalances or we try to protect them, we end up further enmeshed in the logic of labour and competition. (Popowich 17)

He gets to the heart of the imprisonment of capitalism, and why the mere rejection of technology by librarians and reorientation of the professional duties of librarians cannot suffice. So unlike Buschman, who believes that the crisis of librarianship can be explained by a lack of praxis of foundational values, Popowich contends that the crisis stems from the material disruption in the relations and conditions of library work (Popowich 14).

Hence, the desperation librarians have to keep up with technological trends is intimately connected to the logic of our current economy. As an example, the February/March 2018 issue of *Library Technology Report*, an ALA publication that evaluates new technology products for libraries, focuses on "How to Stay on Top of Emerging Technology Trends for Libraries". In the issue, King uses market-oriented language, such as "innovation cycles," "consumer behaviour," "job opportunities," "trendsetters and trend watchers," "tipping points," and "upgrade," to describe ways to keep up with new technologies (5). The enmeshment of librarianship into our innovation-centred economy is extremely clear in the language used. Such discourse affirms that librarianship is uncritically making its move from its traditional

claims of democracy to an orientation towards a corporate framework (Buschman, *Dismantling the Public Sphere* 16; Elmborg 341; Lofgren 29). The major guiding library organizations, ALA and IFLA, have demonstrated their dependency on technological innovation for some time with their long-established bodies devoted to the research, education, advancement of information technology: the Library and Information Technology Association of ALA and the Information Technology Section of IFLA. These bodies have come to represent the obligation of the library, under an endless state of technological development, to practices of capitalist consumption and production. Therefore, only by understanding the confluence of public institutions with the private market in the library's restructuring for capital accumulation can we best fathom the shaky grounds and anxious feelings that have come to characterize librarianship (Popowich 17).

### **Material Transformations**

If we read anxiety as an affective response to the an economic crisis that affects in librarianship, what are the material transformations to be fearful of in the library setting? As attention and resources are directed towards new technologies, library work, librarianship, information, and library users take on new meanings and relationships. Morris-Suzuki describes how the capitalist economy has shifted towards the making of new technologies, or more specifically softwares, that mechanize the process of work itself to increase the accumulation of capital (114). As a result, the body of the worker is separated from their knowledge, and such knowledge is turned into a commodity (Morris-Suzuki 113). This process explains the direction of librarianship towards innovation and new technologies, and the supplanting of living labour by dead labor in library work. Tracy and Hayashi discuss the impact of deskilling on library work with the introduction of ICT infrastructures. They argue that the professional status of librarians, and the value of library work are being threatened by new technologies (Tracy and Hayashi 66). The entirely different role that the labour of librarians assumes can be best described by Marx:

Labour appears, rather, merely as a conscious organ, scattered among the individual living workers at numerous points of the mechanical system; subsumed under the total process of the machinery itself, as itself only a link in the system, whose unity exists not in the living workers, but rather in the living (active) machinery, which confronts his individual, insignificant doings as a mighty organism. (693)

Dyer-Witheyford analyzes how this loss of worker control is worsened by the “futuristic accumulation” of contemporary information economy, where “capital . . . learn[s] to function, not while drawing

populations into production, as in primitive accumulation, but while ejecting them from it” (186). In this way, the library worker struggles for control, worth, and being more than a linkage between machines and flows of capitalist accumulation.

And as the very notion of library work, and librarians’ relationship to work are transforming, the relationships between production and consumption, and library worker and user, are also transforming. Stevenson, in her reading of *Third Generation Public Libraries: Visionary Thinking and Service Development in Public Libraries (to 2020) and Potential Application in Ontario*, concludes that the planning document centres on the role of the library user as producer and consumer and completely neglects the role of the librarian in future libraries (193). She notes that one part of the report that does make mention of the librarian is a statistic about the decline of library workers by 200 percent since the early 1990s (Stevenson 195). Critically analyzing the shifting role of the library user, she identifies the relationship between the expenditure of free labour by library users, in contributing to the design of library services and the physical space, and the making of library users into prosumer commodities. These economic shifts take a much grander scale when Stevenson notes how libraries in Canada have become market-oriented showcases for new technology (194). The institution of the library itself, in this case, takes on a new form and purpose. Affected by the economies of information, knowledge, technology and cyberspace beyond the library setting, the material transformations happening to librarianship, as an institution, space, and practice, are incredibly drastic, multifaceted and disorienting.

## Conclusion

The intensification of feeling in librarianship, thus, is rooted in socio-political transformations that extend beyond the profession and yet dramatically affect traditional library relations and roles. Deskilling and the decline of living labour threatens the more radical potential of librarianship, as librarians become merely the connection between the exploitative, capitalist exchanges in the information economy, “dividing the planet into high- and low-wage zones” (Dyer-Witthoford 186). If the condition of anxiety in librarianship is rooted in our economic system, any solution that remains within the confines of the profession will be fruitless. As Popowich asserts, the crisis of librarianship can only be resolved when we “fundamentally change the way labour, production, and social life are organized” (17) and “deal with the commodity question” (18). The deeply personal anxiety felt around technology, persistent throughout LIS literature, must be regarded as a social phenomenon that speaks volumes about the effects of our technology-driven economy. Perhaps then, the answer

is not to absolve librarianship from the affective force of anxiety but let such force guide us in navigating and dismantling the technology-driven economy itself. As many have argued, we are at a critical point in shaping the future of libraries.

## Works Cited

- Ahmed, Sara. *The Cultural Politics of Emotion*. Edinburgh University Press, 2004.
- Bawden, David, and Lyn Robinson. "The Dark Side of Information: Overload, Anxiety and Other Paradoxes and Pathologies." *Journal of Information Science*, vol. 35, no. 2, 2008, pp. 180-191. *SAGE Journals*, doi:10.1177/0165551508095781. Accessed 10 April 2018.
- Bichteler, Julie. "Technostress in Libraries: Causes, Effects and Solutions." *The Electronic Library*, vol. 5, no. 5, 1987, pp. 282-287. *Emerald Insight*, doi:10.1108/eb044766. Accessed 10 April 2018.
- Blummer, Barbara, and Jeffrey M. Kenton. "Reducing Patron Information Overload in Academic Libraries." *College & Undergraduate Libraries*, vol. 21, no. 2, 2014, pp. 115-135. *Taylor & Francis Online*, doi:10.1080/10691316.2014.906786. Accessed 10 April 2018.
- Buschman, John E. *Dismantling the Public Sphere: Situating and Sustaining Librarianship in the Age of the New Public Philosophy*. Libraries Unlimited, 2003.
- Buschman, John E. "Libraries and the Decline of Public Purposes." *Public Library Quarterly*, vol. 24, no. 1, 2005, pp. 1-12. *Taylor & Francis Online*, doi:10.1300/J118v24n01\_01. Accessed 10 April 2018.
- Dyer-Witheford, Nick. *Cyber-Proletariat: Global Labour in the Digital Vortex. Between the Lines*, 2015.
- Eklof, Ashley. "Understanding Information Anxiety and How Academic Librarians Can Minimize Its Effects." *Public Services Quarterly*, vol. 9, no. 3, 2013, pp. 246-258. *Taylor & Francis Online*, doi:10.1080/15228959.2013.815529. Accessed 10 April 2018.
- Elmborg, James K. "Libraries as the Spaces Between Us: Recognizing and Valuing Third Space." *Reference & User Services Quarterly*, vol. 50, no. 4, 2011, pp. 338-350, [journals.ala.org/index.php/rusq/article/viewFile/3297/3497](http://journals.ala.org/index.php/rusq/article/viewFile/3297/3497). Accessed 10 April 2018.
- Ford, Sarah Michele. "Reconceptualizing the Public/Private Distinction in the Age of Information Technology." *Information, Communication & Society*, vol. 14, no. 4, 2011, pp. 550-567. *Taylor & Francis Online*, doi:10.1080/1369118X.2011.562220. Accessed 10 April 2018.
- Frohmann, Bernd. Review of *Dismantling the Public Sphere: Situating and Sustaining Librarianship in the Age of the New Public Philosophy*, by John E. Buschman. *Progressive Librarian*, vol. 23, 2004, pp. 75-86, [www.progressivelibrariansguild.org/PL/PL23/075.pdf](http://www.progressivelibrariansguild.org/PL/PL23/075.pdf). Accessed 10 April 2018.
- Gorman, Michael. *The Enduring Library: Technology, Tradition, and the Quest for Balance*. American Library Association, 2003.
- Habermas, Jurgen. *The Structural Transformation of the Public Sphere*, 1962. Translated by Thomas Burger, MIT Press, 1989.
- Hopkins, Richard L. "Countering Information Overload: The Role of the Librarian." *The Reference Librarian*, vol. 23, no. 49-50, 1995, pp. 305-333. *Taylor & Francis Online*, doi:10.1300/J120v23n49\_21. Accessed 10 April 2018.

- Jiao, Qun G., et al. "Library Anxiety: Characteristics of 'At-Risk' College Students." *Library and Information Science Research*, vol. 18, no. 2, 1996, pp. 151-163. *ScienceDirect*, doi:10.1016/S0740-8188(96)90017-1. Accessed 10 April 2018.
- Katopol, Patricia F. "Information Anxiety and African-American Students in a Graduate Education Program." *Education Libraries*, vol. 35, no. 1-2, 2012, pp. 5-14, files.eric.ed.gov/fulltext/EJ989510.pdf. Accessed 10 April 2018.
- King, David Lee. "How to Stay on Top of Emerging Technology Trends for Libraries." *Library Technology Reports*, vol. 53, no. 2, 2018, pp. 5-35, dx.doi.org/10.5860/ltr.54n2. Accessed 10 April 2018.
- Kupersmith, John. "Technostress and the Reference Librarian." *Reference Services Review*, vol. 20, no. 2, 1992, pp. 7-50. *Emerald Insight*, doi:10.1108/eb049150. Accessed 10 April 2018.
- Lankes, R. David. *The New Librarianship Field Guide*. The MIT Press, 2016.
- Lerner, Fred. *The Story of Libraries: From the Invention of Writing to the Computer Age*. 2nd ed., Bloomsbury Publishing, 2009.
- Lofgren, Hans. "Post-Industrialism and Librarianship: A Critique." *The Australian Library Journal*, vol. 34, no. 4, 1985, pp. 25-30. *Taylor & Francis Online*, doi:10.1080/00049670.1985.10755530. Accessed 10 April 2018.
- Melchionda, Maria Grazia. "Librarians in the Age of the Internet: Their Attitudes and Roles: A Literature Review." *New Library World*, vol. 108, no. 3-4, 2007, pp. 123-140. *Emerald Insight*, doi:10.1108/03074800710735339. Accessed 10 April 2018.
- Mellon, Constance A. "Library Anxiety: A Grounded Theory and Its Development." *College & Research Libraries*, vol. 47, no. 2, 1986, pp. 160-165, crl.acrl.org/index.php/crl/article/view/14195/15641. Accessed 10 April 2018.
- Morris-Suzuki, Tessa. "Robots and Capitalism." *New Left Review*, vol. 147, 1984, pp. 109-121, newleftreview.org/article/download\_pdf?id=1023. Accessed 10 April 2018.
- Mosco, Vincent. *The Digital Sublime: Myth, Power, and Cyberspace*. MIT Press, 2004.
- Mosco, Vincent. *The Political Economy of Communication*. 2nd ed., SAGE Publications Ltd, 2009.
- Novek, Eleanor M. "Do Professors Dream of Electric Sheep? Academic Anxiety about the Information Age." *The Annual Meeting of the Association for Education in Journalism and Mass Communication, Anaheim, CA, August 10-13, 1996*, pp. 1-25, files.eric.ed.gov/fulltext/ED399594.pdf. Accessed 10 April 2018.
- Nye, David E. *American Technological Sublime*. MIT Press, 1994.
- Onwuegbuzie, Anthony J. "Writing a Research Proposal: The Role of Library Anxiety, Statistics Anxiety, and Composition Anxiety." *Library and Information Science Research*, vol. 19, no. 1, 1997, pp. 5-33. *ScienceDirect*, doi:10.1016/S0740-8188(97)90003-7. Accessed 10 April 2018.
- Popowich, Sam. "Libraries, Labour, Capital: On Formal and Real Subsumption." *Journal of Radical Librarianship*, vol. 4, 2018, pp. 6-19, journal.radicalibrarianship.org/index.php/journal/article/view/25/37. Accessed 10 April 2018.
- Sievert, MaryEllen, et al. "Investigating Computer Anxiety in an Academic Library." *Information Technology and Libraries*, vol. 7, no. 3, 1988, pp. 243-252. *ProQuest*, login.ezproxy.library.ualberta.ca/login?url=https://search-proquest-com.

- login.ezproxy.library.ualberta.ca/docview/215839109?accountid=14474. Accessed 10 April 2018.
- Sami, Lalitha K., and N. B. Pangannaiah. ““Technostress” A Literature Survey on the Effect of Information Technology on Library Users.” *Library Review*, vol. 55, no. 7, 2006, pp. 429-439. *Emerald Insight*, doi:10.1108/00242530610682146. Accessed 10 April 2018.
- Stevenson, Siobhan A. “Immaterial Labour, Public Librarians, and Third-Generation Public Libraries.” *New Library World*, vol. 117, no. 3/4, 2016, pp. 186-200. *Emerald Insight*, doi:10.1108/NLW-11-2015-0083. Accessed 10 April 2018.
- Tracy, James F., and Maris L. Hayashi. “A Librataria? Labor, Technology, and Librarianship in the Information Age.” *Knowledge Workers in the Information Society*, edited by Catherine Mckercher and Vincent Mosco, Lexington Books, 2007, pp. 53-67.
- William, Raymond. *Marxism and Literature*. Oxford University Press, 1977.