Assessing the Treatment of Patron Privacy in Library 2.0 Literature

Michael Zimmer

ABSTRACT

As libraries begin to embrace Web 2.0 technologies to serve patrons, ushering in the era of Library 2.0, unique dilemmas arise regarding protection of patron privacy. The norms of Web 2.0 promote the open sharing of information—often personal information—and the design of many Library 2.0 services capitalize on access to patron information and might require additional tracking, collection, and aggregation of patron activities. Thus embracing Library 2.0 potentially threatens the traditional ethics of librarianship, where protecting patron privacy and intellectual freedom has been held paramount. As a step towards informing the decisions to implement Library 2.0 to adequately protect patron privacy, we must first understand how such concerns are being articulated within the professional discourse surrounding these next generation library tools and services. The study presented in this paper aims to determine whether and how issues of patron privacy are introduced, discussed, and settled, if at all, within trade publications utilized by librarians and related information professionals

INTRODUCTION

In today's information ecosystem, libraries are at a crossroads: several of the services traditionally provided within their walls are increasingly made available online, often by non-traditional sources, both commercial and amateur, thereby threatening the historical role of the library in collecting, filtering, and delivering information.

For example, web search engines provide easy access to millions of pages of information, online databases provide convenient gateways to news, images, videos, as well as scholarship, and large-scale book digitization projects appear poised to make roaming the stacks seem an antiquated notion. Further, the traditional authority and expertise enjoyed by librarians has been challenged by the emergence of automated information filtering and ranking systems, such as Google's algorithms or Amazon's recommendation system, as well as amateur, collaborative, and peer-produced knowledge projects, such as Wikipedia, Yahoo! Answers, and Delicious. Meanwhile, the professional, educational, and social spheres of our lives are increasingly intermingled through online social networking spaces such as Facebook, LinkedIn, and Twitter, providing new interfaces for interacting with friends, collaborating with colleagues, and sharing information.

Michael Zimmer, PhD, (zimmerm@uwm.edu), a LITA member, is Assistant Professor, School of Information Studies, and Director, Center for Information Policy Research, University of Wisconsin-Milwaukee.

Libraries face a key question in this new information environment: what is the role of the library in providing access to knowledge in today's digitally networked world? One answer has been to actively incorporate features of the online world into library services, thereby creating "Library 2.0."

Conceptually, Library 2.0 is rooted in the global Web 2.0 discussion, and the professional literature often links the two concepts. According to O'Reilly, Web 2.0 marks the World Wide Web's shift from a collection of individual websites to a computing platform that provides applications for end users and can be viewed as a tool for harnessing the collective intelligence of all web users.[1] Web 2.0 represents a blurring of the boundaries between web users and producers, consumption and participation, authority and amateurism, play and work, data and the network, reality and virtuality.[2] Its rhetoric suggests that everyone can and should use new Internet technologies to organize and share information, to interact within communities, and to express oneself. In short, Web 2.0 promises to empower creativity, to democratize media production, and to celebrate the individual while also relishing the power of collaboration and social networks.

Library 2.0 attempts to bring the ideology of Web 2.0 into the sphere of the library. The term is generally attributed to Casey,[3] and while over sixty-two distinct viewpoints and seven different definitions of Library 2.0 have been advanced,[4] there is general agreement that implementing Library 2.0 technologies and services means bringing interactive, collaborative, and user-centered web-based technologies to library services and collections.[5] Examples include

- providing synchronous messaging (through instant message platforms, Skype, etc.) to allow patrons to chat with library staff for real-time assistance;
- using blogs, wikis, and related user-centered platforms to encourage communication and interaction between library staff and patrons;
- allowing users to create personalized subject headings for library materials through social tagging platforms like Delicious or Goodreads;
- providing patrons the ability to evaluate and comment on particular items in a library's collection through rating systems, discussion forums, or comment threads;
- using social networking platforms like Facebook or LinkedIn to create online connections to patrons, enabling communication and service delivery online; and
- creating dynamic and personalized recommendation systems ("other patrons who checked out this book also borrowed these items"), similar to Amazon and related online services.

Launching such Library 2.0 features, however, poses a unique dilemma in the realm of information ethics, especially patron privacy. Traditionally, the context of the library brings with it specific norms of information flow regarding patron activity, including a professional commitment to patron privacy (see, for example, American Library Association's Privacy Policy,[6] Foerstel,[7] Gorman,[8] and Morgan[9]). In the library, users' intellectual activities are protected by decades of established norms and practices intended to preserve patron privacy and confidentiality, most

stemming from the ALA's Library Bill of Rights and related interpretations.[10] As a matter of professional ethics, most libraries protect patron privacy by engaging in limited tracking of user activities, having short-term data retention policies (many libraries actually delete the record that a patron ever borrowed a book once it is returned), and generally enable the anonymous browsing of materials (you can walk into a public library, read all day, and walk out, and there is no systematic method of tracking who you are or what you've read). These are the existing privacy norms within the library context.

Library 2.0 threatens to disrupt these norms. In order to take full advantage of Web 2.0 platforms and technologies to deliver Library 2.0 services, libraries will need to capture and retain personal information from their patrons. Revisiting the examples provided above, each relies on some combination of robust user accounts, personal profiles, and access to flows of patrons' personal information:

- Providing synchronous messaging might necessitate the logging of a patron's name (or chat username), date and time of the request, e-mail or other contact information, and the content of the exchange with the librarian staff member.
- Library-hosted blogs or wikis will require patrons to create user accounts, potentially tying posts and comments to patron IP addresses, library accounts, or identities.
- Implementing social tagging platforms would similarly require unique user accounts, possibly revealing the tags particular patrons use to label items in the collection and who tagged them.
- Comment and rating systems potentially link patrons' particular interests, likes, and dislikes to a username and account.
- Using social networking platforms to communicate and provide services to patrons might result in the library gaining unwanted access to personal information of patrons, including political ideology, sexual orientation, or related sensitive information.
- Creating dynamic and personalized recommendation systems requires the wholesale tracking, collecting, aggregating, and processing of patron borrowing histories and related activities.

Across these examples, to participate and benefit from Library 2.0 services, library patrons could potentially be required to create user accounts, engage in activities that divulge personal interests and intellectual activities, be subject to tracking and logging of library activities, and risk having various activities and personal details linked to their library patron account. While such Library 2.0 tools and services can greatly improve the delivery of library services and enhance patron activities, the increased need for the tracking, collecting, and retaining of data about patron activities presents a challenge to the traditional librarian ethic regarding patron privacy.[11]

Despite these concerns, many librarians recognize the need to pursue Library 2.0 initiatives as the best way to serve the changing needs of their patrons and to ensure the library's continued role in

providing professionally guided access to knowledge. Longitudinal studies of library adoption of Web 2.0 technologies reveal a marked increase in the use of blogs, sharing plugins, and social media between 2008 and 2010.[12] In this short amount of time, Library 2.0 has taken hold in hundreds of libraries, and the question before us is not *whether* libraries will move towards Library 2.0 services, but *how* they will do it, and, from an ethical perspective, whether the successful implementation of Library 2.0 can take place without threatening the longstanding professional concerns for, and protections of, patron privacy.

RESEARCH QUESTIONS

Recognizing that Library 2.0 has been implemented, in varying degrees, in hundreds of libraries,[13] and is almost certainly being considered at countless more, it is vital to ensure that potential impacts on patron privacy are properly understood and considered. As a step towards informing the decisions to implement Library 2.0 to adequately protect patron privacy, we must first understand how such concerns are being articulated within the professional discourse surrounding these next generation library tools and services. The study presented in this paper aims to determine whether and how issues of patron privacy are introduced, discussed, and settled—if at all—within trade publications utilized by librarians and related information professionals.

Specifically, this study asks the following primary research questions:

RQ1. Are issues of patron privacy recognized and addressed in literature discussing the implementation of Library 2.0 services?

RQ2. When patron privacy is recognized and addressed, how is it articulated? For example, is privacy viewed as a critical concern, as something that we will need to simply "get over," or as a non-issue?

RQ3. What kind of mitigation strategies, if any, are presented to address the privacy issues related to Library 2.0?

DATA ANALYSIS

The study combines content and textual analyses of articles published in professional publications (not peer-reviewed academic journals) between 2005 and 2011 discussing Library 2.0 or related web-based services, retrieved through the Library, Information Science, and Technology Abstracts (LISTA) and Library Literature & Information Science Full Text Databases. The discovered texts were collected in winter 2011 and coded to reflect the source, author, publication metadata, audience, and other general descriptive data.

In total, there were 677 articles identified discussing Library 2.0 and related web-based library services, appearing in over 150 different publications. Of the articles identified, 50 percent of appeared in 18 different publications, which are listed in table 1.

Table 1. Top Publications with Library 2.0 Articles
(2005–2011)

Publication	Count
Computers in Libraries	51
Library Journal	51
Information Today	21
Library and Information Update	21
incite	20
Scandinavian Public Library Quarterly	18
American Libraries	16
Electronic Library	15
ONLINE	14
School Library Journal	14
Information Outlook	13
Mississippi Libraries	13
College & Research Library News	12
Library Hi Tech News	12
Library Media Connection	12
CSLA Journal (California School Library Association)	10
Knowledge Quest	10
Multimedia Information and Technology	8

Each of the 677 source texts was then analyzed to determine if a discussion of privacy was present. Full-text searches were performed on word fragments to ensure the identification of variations in terminology. For example, each text was searched for the fragment "priv" to include hits on both the terms "privacy" and "private." Additional searchers were performed for word fragments related to "intellectual freedom" and "confidentiality" in order to capture more general considerations related to patron privacy. Of the 677 articles discussing Library 2.0 and related web-based services, there were a total of 203 mentions of privacy or related concepts in 71 articles.

These 71 articles were further refined to ensure the appearance of the word "privacy" and related terms were indeed relevant to the ethical issues at hand (eliminating false positives for mentions of "private university," for example, or mention of a publication's "privacy policy" that happened to be provided in the PDF searched). The final analysis yielded a total of 39 articles with relevant mention of patron privacy as it relates to Library 2.0, amounting to only 5.8 percent of all articles discussing Library 2.0 (see table 2). A full listing of the articles is in appendix A.

Table 2. Article Summary		
	Count	%
Total articles discussing Library 2.0	677	
Articles with hit in "priv" and related text searches	71	10.5
Articles with relevant discussion of privacy	39	5.8

The majority of these articles were authored by practicing librarians in both public and academic settings and present arguments for the increased use of Web 2.0 by libraries or highlight successful deployment of Library 2.0 services. Of the 39 articles, only 4 focus primarily on challenges faced by libraries hoping to implement Library 2.0 solutions.[14]

A textual analysis of the 39 relevant articles was performed to assess how privacy was discussed in each. Two primary variables were evaluated: the length of discussion, and the level of concern. Length of discussion was measured qualitatively as high (concern over privacy is explicit or implicit in over 50 percent of the article's text), moderate (privacy is discussed in a substantive section of the article), and minimal (privacy is mentioned, but not given significant attention). The level of concern was measured qualitatively as high (indicated privacy as a critical variable for implementing Library 2.0), moderate (recognized privacy as one of a set of important concerns), and minimal (mentioned privacy largely in passing, giving it no particular importance). Results of these analyses are reported in table 3.

Table 3. Length of Discussion and Level of Concern		
	Length of Discussion	Level of Concern
High	3	9
Moderate	8	13
Minimal	28	16

Of the 39 relevant articles, only three had lengthy discussions of privacy-related issues. As early as 2007, Coombs recognized that the potential for personalization of library services would force libraries to confront existing policies regarding patron privacy.[15] Anderson and Rethlefsen similarly engage in lengthy discussions of the challenges faced by libraries wishing to balance patron privacy with new Web 2.0 tools and services.[16] These three articles represent less than 1 percent of the 677 total articles identified that discussed Library 2.0

While only three articles dedicate lengthy discussions to issues of privacy, over half the articles that mention privacy (21 of 39) indicate a high or moderate level of concern. For example, Cvetkovic warns that while "privacy is a central, core value of libraries…the features of Web 2.0 applications that make them so useful and fun all depend on users sharing private information with the site owners."[17] And Casey and Savastinuk's early discussion of Library 2.0 puts these concerns in context for librarians, warning that "libraries should remain as vigilant with

protecting customer privacy with technology-based services as they are with traditional, physical library services." [18]

While 21 articles indicated a high or moderate level of concern over patron privacy, less than half of these provided any kind of solution or strategy for mitigating the privacy concerns related to implementing Library 2.0 technologies. Overall, 14 of the 39 relevant articles provided privacy solutions of one kind or another. Breeding, for example, argues that librarians must "absolutely respect patron privacy,"[19] and suggests any Library 2.0 tools that rely on user data should only be implemented if users must explicitly "opt-in" to having their information collected, a solution also offered by Wisniewski in relation to protecting patron privacy with location-based tools.[20] Rethlefsen goes a step further, proposing libraries take steps to increase the literacy of patrons regarding their privacy and the use of Library 2.0 tools, including the use of classes and tutorials to help educate patrons and staff alike.[21]

Conversely, Cvetkovic argues that "the place of privacy in our culture is changing," and that while "in many ways our privacy is diminishing, but many people…seem not too concerned about it." [22] As a result, while she argues for only voluntary participation in Library 2.0 services, Cvetkovic takes a position that information sharing is becoming the new norm, weakening any absolute position regarding protecting patron privacy above all.

DISCUSSION

RQ1 asks if issues of patron privacy are recognized and addressed within literature discussing Library 2.0 and related web-based library services. Of the 677 articles published for professional audiences that discuss Library 2.0, only 39 contained a relevant discussion of the privacy issues that stem from this new family of data-intensive technologies, and only 11 of these discussed the issue beyond a passing mention.

RQ2 asks how the privacy concerns, when present, are articulated. Of the 39 articles with relevant discussions of privacy, only 11 make more than a minimal mention of privacy concerns. However, the discussion in 22 of the articles reveals a high or moderate level of concern. This suggests that while privacy might not be a primary focus of discussion, when it is mentioned, even minimally, its importance is recognized.

Finally, RQ3 seeks to understand if any solutions or mitigation strategies related to the privacy concerns are articulated. With only 14 of the 39 articles providing a means for practitioners to address privacy issues, readers of Library 2.0 publications are more often than not left with no real solutions or roadmaps for dealing with these vital ethical issues.

Taken together, the results of this study reveal minimal mention of privacy alongside discussions of Library 2.0. Less than 6 percent of all 677 articles on Library 2.0 include mention of privacy; of these, only 11 make more than a passing mention of privacy, representing less than 2 percent of

all articles. Of the 39 relevant articles, 22 express more than a minimal concern, but of these, only 9 provide any mitigation strategy.

These results suggest that while popular publications targeted at information professionals are giving significant attention to potential for Library 2.0 to be a powerful new option for delivering library content and services, there is minimal discussion of how the widespread adoption and implementation of these new tools might impact patron privacy and even less discussion of how to address these concerns. Consequently, as the interest in, and adoption of, Library 2.0 services increase, librarians and related information practitioners seeking information regarding these new technologies in professional publications will not likely be confronted with the possible privacy concerns, nor learn of any strategies to deal with them.

This absence of clear guidance for addressing patron privacy in the Library 2.0 era resembles what computer ethicist Jim Moor would describe as a "policy vacuum":

A typical problem in Computer Ethics arises because there is a policy vacuum about how computer technology should be used. Computers provide us with new capabilities and these in turn give us new choices for action. Often, either no policies for conduct in these situations exist or existing policies seem inadequate. A central task of Computer Ethics is to determine what we should do in such cases, that is, formulate policies to guide our actions.[23]

Given the potential for the data-intensive nature of Library 2.0 technologies to threaten the longstanding commitment to patron privacy, these results show that work must be done to help fill this vacuum. Education and outreach must be increased to ensure librarians and information professionals are aware of the privacy issues that typically accompany attempts to implement Library 2.0, and additional scholarship must take place to help understand the true nature of any privacy threats and to come up with real and useful solutions to help find the proper balance between enhanced delivery of library services through Web 2.0-based tools and the traditional protection of patron privacy.

ACKNOWLEDGEMENTS

REFERENCES

1. Tim O'Reilly, "What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software," 2005, www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html.

2. Michael Zimmer, "Preface: Critical Perspectives on Web 2.0," *First Monday* 13, no. 3 (March 2008), http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2137/1943.

3. Michael Casey, "Working Towards a Definition of Library 2.0," *LibraryCrunch* (October 21, 2005), www.librarycrunch.com/2005/10/working_towards_a_definition_o.html.

4. Walt Crawford, "Library 2.0 and 'Library 2.0,'" *Cites & Insights* 6, no 2 (Midwinter 2006): 1–32, http://citesandinsights.info/l2a.htm.

5. Michael Casey and Laura Savastinuk, "Library 2.0: Service for the Next-Generation Library," *Library Journal* 131, no. 14 (September 1, 2006): 40–42; Michael Casey and Laura Savastinuk, *Library 2.0: A Guide to Participatory Library Service* (Medford, NJ: Information Today, 2007).; Nancy Courtney, *Library 2.0 and Beyond: Innovative Technologies and Tomorrow's User* (Westport, CT: Libraries Unlimited, 2007).

6. American Library Association, "Policy on Confidentiality of Library Records," www.ala.org/offices/oif/statementspols/otherpolicies/policyconfidentiality.

7. Herbert N. Foerstel, *Surveillance in the Stacks: The FBI's Library Awareness Program* (New York: Greenwood, 1991).

8. Michael Gorman, *Our Enduring Values: Librarianship in the 21st Century* (Chicago: American Library Association, 2000).

9. Candace D. Morgan, "Intellectual Freedom: An Enduring and All-Embracing Concept," in *Intellectual Freedom Manual*. (Chicago: American Library Association, 2006).

10. *Library Bill of Rights*, American Library Association, www.ala.org/advocacy/intfreedom/librarybill; American Library Association, "Privacy: An Interpretation of the Library Bill of Rights," www.ala.org/Template.cfm?Section=interpretations&Template=/ContentManagement/ContentDisplay.cfm&ContentID=132904

11. Rory Litwin, "The Central Problem of Library 2.0: Privacy," *Library Juice* (May 22, 2006), http://libraryjuicepress.com/blog/?p=68.

12. Zeth Lietzau and Jamie Helgren, *U.S. Public Libraries and the Use of Web Technologies, 2010* (Denver: Library Research Service, 2011), www.lrs.org/documents/web20/WebTech2010_CloserLookReport_Final.pdf.

13. Ibid.

14. Sue Anderson, "Libraries Struggle to Balance Privacy and Patron Access," *Alki* 24, no. 2 (July 2008): 18–28; Karen Coombs, "Privacy Vs. Personalization," *netConnect* (April 15, 2007): 28; Milica Cvetkovic, "Making Web 2.0 Work–From 'Librarian Habilis' to 'Librarian Sapiens,'" *Computers in Libraries* 29, no. 9 (October 2009): 14–17, www.infotoday.com/cilmag/oct09/Cvetkovic.shtml;, Melissa L. Rethlefsen, "Tools at Work: Facebook's March on Privacy," *Library Journal* 135, no. 12 (June 2010): 34–35.

15. Coombs, "Privacy Vs. Personalization."

16. Anderson, "Libraries Struggle to Balance Privacy and Patron Access."; Melissa L Rethlefsen, "Facebook's March on Privacy," *Library Journal* 135, no. 12 (2010): 34–35.

17. Cvetkovic, "Making Web 2.0 Work."

18. Casey and Savastinuk, "Library 2.0: Service for the Next-Generation Library."

19. Marshall Breeding, "Taking the Social Web to the Next Level," *Computers in Libraries* 30, no. 7 (September 2010): 34–37, www.librarytechnology.org/ltg-displaytext.pl?RC=15053.

20. Jeff Wisniewski, "Location, Location, Location," *Online* 33, no. 6 (2009): 54–57.

21. Rethlefsen, "Tools at Work: Facebook's March on Privacy."

22. Cvetkovic, "Making Web 2.0 Work," 17.

23. James Moor, "What Is Computer Ethics?" *Metaphilosophy* 16, no. 4 (October 1985): 266–75.

Appendix A: Articles with relevant mention of patron privacy as it relates to Library 2.0

Anderson, Sue. "Libraries Struggle to Balance Privacy and Patron Access." *Alki* 24, no. 2 (July 2008): 18–28.

Balnaves, Edmund. "The Emerging World of Open Source, Library 2.0, and Digital Libraries." *Incite* 30, no. 8 (August 2009): 13.

Baumbach, Donna J. "Web 2.0 and You." *Knowledge Quest* 37, no. 4 (2009): 12–19.

Breeding, Marshall. "Taking the Social Web to the Next Level." *Computers in Libraries* 30, no. 7 (September 2010): 34–37.

Casey, Michael E. and Laura Savastinuk. "Library 2.0: Service for the Next-Generation Library." *Library Journal* 131, no. 14 (September 1, 2006): 40–42.

Cohen, Sarah F. "Taking 2.0 to the Faculty Why, Who, and How." *College & Research Libraries News* 69, no. 8 (September 2008): 472–75.

Coombs, Karen. "Privacy Vs. Personalization." *netConnect* (April 15, 2007): 28.

Coyne, Paul. "Library Services for the Mobile and Social World." *Managing Information* 18, no. 1 (2011): 56–58.

Cromity, Jamal. "Web 2.0 Tools for Social and Professional Use." *Online* 32, no. 5 (October 2008): 30–33.

Cvetkovic, Milica. "Making Web 2.0 Work—From 'Librarian Habilis' to 'Librarian Sapiens.'" *Computers in Libraries* 29, no. 9 (October 2009): 14–17.

Eisenberg, Mike. "The Parallel Information Universe." *Library Journal* 133, no. 8 (May 1, 2008): 22–25.

Gosling, Maryanne, Glenn Harper, and Michelle McLean. "Public Library 2.0: Some Australian Experiences." *Electronic Library* 27, no. 5 (2009): 846–55.

Han, Zhiping, and Yan Quan Liu. "Web 2.0 Applications in Top Chinese University Libraries." *Library Hi Tech* 28, no. 1 (2010): 41–62.

Harlan, Mary Ann. "Poetry Slams Go Digital." *CSLA Journal* 31, no. 2 (Spring 2008): 20–21.

Hedreen, Rebecca C., Jennifer L. Johnson, Mack A. Lundy, Peg Burnette, Carol Perryman, Guus Van Den Brekel, J. J. Jacobson, Matt Gullett, and Kelly Czarnecki. "Exploring Virtual Librarianship: Second Life Library 2.0." *Internet Reference Services Quarterly* 13, no. 2–3 (2008): 167–95.

Horn, Anne, and Sue Owen. "Leveraging Leverage: How Strategies Can Really Work for You." In *Proceedings of the 29th Annual International Association of Technological University Libraries (IATUL) Conference,* Auckland, NZ (2008): 1–10, http://dro.deakin.edu.au/eserv/DU:30016672/horn-leveragingleveragepaper-2008.pdf.

Huwe, Terence. "Library 2.0, Meet the 'Web Squared' World." *Computers in Libraries* 31, no. 3 (April 2011): 24–26.

"Idea Generator." *Library Journal* 134, no. 5 (1976): 44.

Jayasuriya, H. Kumar Percy, and Frances M. Brillantine. "Student Services in the 21st Century: Evolution and Innovation in Discovering Student Needs, Teaching Information Literacy, and Designing Library, 2.0-Based Student Services." *Legal Reference Services Quarterly* 26, no. 1–2 (2007): 135–70.

Jenda, Claudine A., and Martin Kesselman. "Innovative Library 2.0 Information Technology Applications in Agriculture Libraries." *Agricultural Information Worldwide* 1, no. 2 (2008): 52–60.

Johnson, Doug. "Library Media Specialists 2.0." *Library Media Connection* 24, no.7 (2006): 98.

Kent, Philip G. "Enticing the Google Generation: Web 2.0, Social Networking and University Students." In *Proceedings of the 29th Annual International Association of Technological University Libraries (IATUL) Conference,* Auckland, NZ (2008), http://eprints.vu.edu.au/800/1/Kent_P_080201_FINAL.pdf.

Krishnan, Yvvonne. "Libraries and the Mobile Revolution." *Computers in Libraries* 31, no. 3 (April 2011): 5–9.

Li, Yiu-On, Irene S. M. Wong, and Loletta P. Y. Chan. "MyLibrary Calendar: A Web 2.0 Communication Platform." *Electronic Library* 28, no. 3 (2010): 374–85.

Liu, Shu. "Engaging Users: The Future of Academic Library Web Sites." *College & Research Libraries* 69, no. 1 (January 2008): 6–27.

McLean, Michelle. "Virtual Services on the Edge: Innovative Use of Web Tools in Public Libraries." *Australian Library Journal* 57, no. 4 (November 2008): 431–51.

Oxford, Sarah. "Being Creative with Web 2.0 in Academic Liaison." *Library & Information Update* 5 (May 2009): 40–41.

Rethlefsen, Melissa. "Facebook's March on Privacy." *Library Journal* 135, no. 12 (2010): 34–35.

Schachter, Debbie. "Adjusting to Changes in User and Client Expectations." *Information Outlook* 13, no. 4 (2009): 55.

Shippert, Linda Crook. "Thinking About Technology and Change, or, 'What Do You Mean It's Already Over?'" *PNLA Quarterly* 73, no. 2 (2008): 4, 26.

Stephens, Michael. "The Ongoing Web Revolution." *Library Technology Reports* 43, no. 5 (2007): 10–14.

Thornton, Lori. "Facebook for Libraries." *Christian Librarian* 52, no. 3 (2009): 112.

Trott, Barry and Kate Mediatore. "Stalking the Wild Appeal Factor." *Reference & User Services Quarterly* 48, no. 3 (2009): 243–46.

Valenza, Joyce Kasman. "A Few New Things." *LMC: Library Media Connection* 26, no. 7 (2008): 10–13.

Widdows, Katharine. "Web 2.0 Moves 2.0 Quickly 2.0 Wait: Setting up a Library Facebook Presence at the University of Warwick." *SCONUL Focus* 46 (2009): 54–59.

Wisniewski, Jeff. "Location, Location, Location." *Online* 33, no. 6 (2009): 54–57.

Woolley, Rebecca. "Book Review: Information Literacy Meets Library 2.0: Peter Godwin and Jo Parker (eds.)." *SCONUL Focus* 47, (2009): 55–56.

Wyatt, Neal. "2.0 for Readers." *Library Journal* 132, no. 18 (2007): 30–33.