

Accessibility of E-resources from Theological Library Websites

by Kate L. Ganski

ABSTRACT: This study examines the accessibility of e-resources from the websites of theological libraries to discover if theological libraries are providing digital access to e-journals, recommended religious internet resources, and digital libraries. Qualitative content analysis was used to evaluate the placement and terminology of e-resources on twenty-five theological library websites of faith-based institutions with primarily graduate/professional students. Findings revealed slightly more than half of these websites make e-resources available and are easily accessible through a quick navigational pathway. Terminology used was found to be diverse and varied. These findings suggest that theological library websites are attempting to meet the digital needs of their students. Further study is recommended to understand the impact, if any, these findings may have on the digital needs of theological students.

INTRODUCTION

Theological library websites serve as the virtual front door to the ever-increasing amount of electronic information for students, researchers, and faculty. This raises a number of issues for theological librarians, including website design and usability testing and availability of e-resources. Not the least of these issues is the fact that many theological libraries lack adequate funding for the technical support and infrastructure necessary to handle this increase in e-resources.¹ This study seeks to fill a gap in the literature of theological librarianship by providing a qualitative analysis of theological library websites.

As more and more library users seek information online it has become increasingly important for libraries not to simply establish a web presence but to use their websites to extend their mission and services beyond the physical library. In a collection of essays addressing theological librarianship and the internet, Stover directly addressed the need for theological libraries to design websites that reflect their mission, purpose, and role within religious, academic communities.² Keck, in the same volume, expressed the importance of “opening the front door” by providing a website that is easy to navigate and rich with information.³ These articles are rich in theory and provide philosophical and conceptual guidance to theological librarians for designing websites.

LITERATURE SURVEY

Several studies have investigated the impact of design on website usability at academic libraries. Still studied the content of library websites in English-speaking countries in hopes of devising a template for libraries designing websites. Her study found that the most common elements across all sites were links to the local OPAC and at least one database.⁴ Similarly, Bower examined the websites of forty-one health sciences libraries, but with an

¹ Marshall Eidson, “Electronic Journals in Religious Studies: Theological Libraries Prepare for the Digital Future.” In *Theological Librarians and the Internet: Implications for Practice*, ed. Mark Stover (New York: Haworth Press, 2001), 53.

² Mark Stover, “Theoretical and Conceptual Foundations for Web Site Design in Religious and Theological Academic Libraries.” In *Theological Librarians and the Internet: Implications for Practice*, ed. Mark Stover (New York: Haworth Press, 2001), 169-171.

³ Andrew J. Keck, “Opening the Front Door: Designing a Usable Library Web Site.” In *Theological Librarians and the Internet: Implications for Practice*, ed. Mark Stover (New York: Haworth Press, 2001), 129-132.

⁴ Julie M. Still, “A Content Analysis of University Library Websites in English Speaking Countries.” *Online Information Review* 25, no. 3 (2001): 162.

Kate L. Ganski is Technical Services Librarian, Salzmann Library, St. Francis Seminary, St. Francis, Wisconsin.

emphasis on best practice for navigational design.⁵ Bower's sense that patrons of health science libraries share an information-seeking behavior defined by their common traits, backgrounds, and interests motivated his study. Bower's research recommended the following navigational elements for all health science libraries' home pages: bibliographic databases listed by title, e-books, e-journals, hours of operation, instruction or tutorials, news, and services.⁶

Eliassen, et al. conducted an experiment at the University of Washington library in order to better design the navigational menu of their networked system. Librarians had frequently reported that students had difficulty determining where to search for books and articles. Results showed that using text that is more descriptive is necessary for undergraduates to navigate effectively and grouping resources by content therein positively affects navigation.⁷

Bevilacqua's 2005 case study examined the impact of e-journal organization on the discovery and use of e-journals by users in the humanities. The study concluded that providing multiple access strategies such as direct access via OPAC, and subject and A-Z listings from websites maximizes the navigational promotion of e-journals. Despite the library staff's preference for the OPAC as the point of access for e-journals, no interview respondent mentioned finding links to e-journals in the OPAC.⁸

Dewey's analysis of the "findability" of links on the websites of university consortium member libraries is also helpful in this regard. Dewey found that most library services were hard to find because the links were embedded in their sites and descriptive terminology was confusing.⁹ To help deal with the problem of confusing terminology, John Kupersmith maintains a clearinghouse site for library website usability testing, *Library Terms that Users Understand*. Narrative descriptions of these studies suggest that terminology is a major factor in users' ability to access resources reliably. Findings show that natural language phrases, such as "Find articles," effectively lead users to the correct resources.¹⁰

While many people have broadly noted an increase in the number of new e-resources mounted on the web,¹¹ there has been little attention given to the rise in religious and theological studies e-resources. In 1997, Gorton investigated the availability of theological information on the internet. After conducting literature searches, internet searches, and collecting data from questionnaires distributed to theological libraries in the United Kingdom, Gorton found that a large number of OPACs were available, special collections were inaccessible, and the amount of theological

⁵ Stewart M. Bower, "Academic Health Sciences Library Website Navigation: An Analysis of Forty-One Websites and Their Navigation Tools." *Journal of the Medical Library Association* 92, no. 4 (2004): 418-19. Bower combines Steve Krug's criteria for persistent navigation on websites with his own link calculator to establish a list of best links to be included on health science libraries' navigational menus.

⁶ Ibid.

⁷ Karen Eliassen, Jill McKinstry, Beth Mabel Fraser, and Elizabeth P. Babbitt. "Navigating Online Menus: A Quantitative Experiment." *College & Research Libraries* 58, no. 5 (1997): 514-515.

⁸ Fabrizia Bevilacqua, "Organising E-journals from the Point of View of Humanities: A Case Study at the University of Parma." *New Library World* 106, no. 9 (2005): 422-426.

⁹ Barbara I. Dewey, "In Search of Services: Analysing the Findability of Links on CIC University Libraries' Web Pages." *Information Technology and Libraries* 18, no.4 (1999): 211-212.

¹⁰ John Kupersmith, *Library Terms That Users Understand*. <http://www.jkup.net/terms.html> (accessed July 15, 2006).

¹¹ Bonita Wilson, "The Growth of Digital Content." *D-Lib Magazine* 10, no. 12 (2004), <http://www.dlib.org/dlib/december04/12editorial.html> (accessed July 15, 2006); Jose-Marie Griffiths, "Scholarly Information Seeking on the Web." *NEAIS Newsletter* 42, no. 10 (2000): 150-152.

information available via the World Wide Web was impressive. Gorton found that the greatest barrier to libraries in providing electronic access to information was funding.¹²

Eidson also noted in 2001, after surveying the state of electronic journals in religious studies, that the cost to purchase, mount, maintain, or create e-resources has been a barrier to theological libraries. Even though there is a recent boom if not full acceptance of e-journals and digital libraries, many scholars in theological fields have been slow to embrace these new formats.¹³

At this point, a definition of the term “e-resource” may be helpful. The Online Dictionary of Library and Information Science defines e-resource as

material consisting of data and/or computer program(s) encoded for reading and manipulation by a computer by the use of a peripheral device directly connected to the computer, such as a CD-ROM drive, or remotely via a network, such as the Internet (AACR2). The category includes software applications, electronic texts, bibliographic databases, etc.¹⁴

For the purposes of this paper, “e-resources” refers to Open Access Journals, electronic journals, external websites, and digital libraries. Three research questions guided this study of the accessibility of e-resources from theological library websites:

- What is the navigational pathway to the e-resources?
- What is the terminology used to describe the e-resources?
- How much “library added value” is provided, if any?

In order to answer these questions, I evaluated individual websites using a uniquely designed research instrument. This paper discusses the findings of the investigation and the possible implications it has for practice.

METHOD

To determine the accessibility of e-resources from individual theological library websites I employed qualitative content analysis. A research instrument developed to record the navigational pathway to the e-resources, the terminology used, and descriptive information about the resources served as the recording device. I initially created a representative sample by selecting institutions with the Carnegie Basic class: Specialized/Faith: Special Focus Institutions—Theological seminaries, Bible colleges, and other faith-related institutions, focusing on institutions with an Enrollment Profile of exclusively graduate/professional. I further divided this representative sample of 120 institutions into American Theological Library Association (ATLA) member and non-member libraries. Random sampling produced the sample group of 25 faith-based institutions with primarily graduate/professional students.

Half of the sample libraries were ATLA members. The majority (40 percent) of the libraries were from the Midwest region as defined by the U. S. Census Bureau.¹⁵ There was equal representation for libraries from the Northeast and

¹² Catherine Gorton, “Accessibility of Theological Information via Electronic Means.” *Bulletin of the Association of British Theological and Philosophical Libraries* 4, no. 1 (1997): 5, 6-7.

¹³ Eidson, 53-55.

¹⁴ Joan M. Reitz, *ODLIS- Online Dictionary for Library and Information Science*. Libraries Unlimited, http://lu.com/odlis/odlis_e.cfm#eresource (accessed July 14, 2006).

¹⁵ U. S. Census Bureau. Census Regions and Division of the United States. http://www.census.gov/geo/www/us_regdiv.pdf (accessed October 19, 2006).

South regions, while the West was the least represented (16 percent). The full-time equivalent enrollment ranged from 29 FTE to 1314 FTE. The average enrollment size was 264 FTE. The median was 158 FTE. Sixteen (64 percent) of the theological library websites are members in a local, denominational, or school consortium.

The evaluation of each library website took place during the course of one week in the month of July 2006. The research instrument consisted of five sections: demographics, navigation, terminology, “library added value,”¹⁶ and researcher’s notes or observations. I culled demographic information from the Carnegie classification website, the Association of Theological Schools database, and the websites of individual theological libraries. These data described the study sample mentioned earlier.

Section two addressed the accessibility of e-resources. A modified breadcrumb trail adopted from Dunsmore’s 2002 study charted the pathway to e-resources.¹⁷ Beyond simply recording the path to the resources, the breadcrumb trail tallied the “distance” from the library homepage to the e-resource, thus providing a metric measurement of accessibility.

Section three allowed for the study of the terminology employed. I recorded all terms used to describe the e-resources. The data collected in this section provided further information helpful in determining the accessibility of these resources.

Section four analyzed the amount of additional information provided by the theological library websites to describe the resource. This additional information described as “library added value” increases the implied content value of the resource. Any additional information about a resource may prove useful to the user where terminology is confusing or unclear. Four descriptive categories, developed by the researcher, facilitated analysis of the amount of information provided: no added information, short annotations such as dates and coverage, content review, and search help.

The final section provided the researcher the opportunity to record any data that did not completely fit within the other sections of the research instrument. This section was frequently used to record the name of a consortium, an obvious omission of material (such as a link to the OPAC), or a unique resource not otherwise accounted for in this study.

RESULTS

Evaluation of twenty-five theological library websites found that more than half (56 percent) of them provided access to e-journals. Ease of navigation, defined as the average number of links, to any electronically accessible journal was 2.77. Internet sites and digital libraries were as accessible as journals, never requiring more than three links (averaging only 2.5 links).

Over a third (36 percent) of the evaluated libraries provided unique access to freely available open access journals from their websites. Navigation to these journals averaged 2.7 links, often only requiring two. Interestingly, just

¹⁶ For the purposes of this study, “library added value” refers to additional information provided by librarians to describe the e-resource. I defined four categories: no added information; short annotations, e.g., dates covered; review of the content found in the e-resource; and search tips, e.g., how-to guides.

¹⁷ Carla Dunsmore, “A Qualitative Study of Web-Mounted Pathfinders Created by Academic Business Libraries.” *Libri* 52 (2002): 142-143. The term breadcrumb trail developed from the familiar tale of Hansel and Gretel who left a trail of bread so that they could remember where they had been. On the internet, a breadcrumb trail appears on a webpage to users as they navigate through a website.

under half of the websites with access to e-journals provided this access only through their OPAC. Most (72 percent) of the library websites provided access to electronic journals through a subscription service.

A greater number of theological library websites (60 percent) provided access to library-recommended internet sites than to open access journals. The average number of links to these sites was 2.6. Navigation to these recommended sites most often required three links. Only one of the websites provided access to an internally developed digital library.

The second focus of the study was on the terminology used to describe the e-resources. Of the various words, terms, and phrases used to describe electronically available journals, “full text,” “online,” and variations of “e-journal” were the most common. The term most often used to describe links to internet sites was “internet resources,” while there was no consistency in the naming of digital libraries.

The majority of theological library websites (83 percent) provided some amount of additional information regarding e-journals, primarily short descriptions of the content provided, e.g., dates covered. A slightly larger proportion (88 percent) of library websites provided additional information about internet sites and digital libraries. Although the majority of these were short descriptions, internet sites and digital libraries were three times more likely to have extensive reviews of their content than were e-journals.

DISCUSSION

Slightly over half of the theological library websites provide access to e-journals. In light of the increasing student demand for e-journals and the amount of energy and funding devoted to the digitization of print journals, this figure is surprisingly low.

On the other hand, where e-journals *are* available, the navigational pathway is short, thereby increasing ease of access. The same is true for access to recommended internet sites and digital libraries. Yet here again, only a small majority of the websites provide access to these resources.

In his study of e-journal organization, Bevilacqua found that multiple access strategies encouraged access to e-journals.¹⁸ This suggests that if theological library websites only provide access to e-journals through the OPAC, they are not maximizing the navigational promotion of these resources. It is highly recommended that theological library websites provide more than one access point to e-resources to increase the likelihood of their discovery and use.

The data suggest that theological library websites continue to emphasize print materials over electronically accessible materials. Great efforts are underway to increase the availability of e-resources for theological and religious studies (e.g., ATLAS Serials database, ATLA CDRI database of images), but they remain underrepresented on library websites. Perhaps greater outreach from ATLA to non-member libraries is necessary, or perhaps libraries simply lack the funding or technological expertise to promote these materials. One could argue, however, that theological libraries are responding to scholars’ preference for print materials.¹⁹ Further research would be necessary to answer these questions fully.

The diversity of terminology used to describe the e-resources on the websites suggests a further hindrance to accessing these materials. Research has shown that consistency in naming decreases user confusion.²⁰ Many

¹⁸ Bevilacqua, 426.

¹⁹ Eidson, 54-55.

²⁰ Kupersmith.

theological library websites provided additional information about the e-resources. Adding additional information increases the likelihood that users will find the information that they seek, thus increasing accessibility. Furthermore, Kupersmith recommends the use of natural language terms instead of library terminology to increase accessibility, e.g., “Find Articles” instead of “Databases.”²¹ Of the websites surveyed, not one included such natural language terminology. The data suggest that libraries could improve access to e-resources by improving the terminology used on their websites.

Eidson, in his article “Electronic Journals in Religious Studies,” noted that the economic means of institutions would determine e-journal accessibility.²² This study determined economic means by an institution’s membership in ATLA.²³ Only one member library provided no access to e-journals, whereas four non-member libraries did not. This small variance is not significant enough to substantiate or disprove Eidson’s claim. Further data on ATLA membership costs and consortia membership costs could help further explore this hypothesis.

SUMMARY

As the availability of electronic resources continues to grow, library websites need to play a greater role in promoting and providing access to them. Theological library websites are encouraged to expand their promotion of e-resources, both on their websites and in their libraries. Theological libraries should also provide more than one access point for e-resources and apply natural language terms to describe these resources to aid their users in finding them. It is hoped that this study will draw attention to both the key issues of e-resource accessibility and the potential that well-planned theological library websites have for extending access to electronic resources.

BIBLIOGRAPHY

- Association of Theological Schools. “The Commission on Accrediting.” *Alphabetical Index of Member Schools*, http://www.ats.edu/member_schools/alpha.asp (accessed June 23, 2006).
- Bevilacqua, Fabrizia. “Organising E-journals from the Point of View of Humanities: A Case Study at the University of Parma.” *New Library World* 106, no. 9 (2005): 416-29.
- Bower, Stewart M. “Academic Health Sciences Library Website Navigation: An Analysis of Forty-One Websites and Their Navigation Tools.” *Journal of the Medical Library Association* 92, no. 4 (2004): 412-420.
- Carnegie Foundation for the Advancement of Teaching. 2006. *The Carnegie Classification of Institutions of Higher Education*, <http://www.carnegiefoundation.org/classifications/> (accessed June 23, 2006).
- Chen, Li-Peng. “A Study of the Accessibility of Digital Collections in Academic Libraries.” *Bulletin of the Library Association of China* 74 (2005): 77-88.
- Dewey, Barbara I. “In Search of Services: Analysing the Findability of Links on CIC University Libraries’ Web Pages.” *Information Technology and Libraries* 18, no.4 (1999): 210-13.
- Dusmore, Carla. “A Qualitative Study of Web-Mounted Pathfinders Created by Academic Business Libraries.” *Libri* 52 (2002): 137-156.
- Eidson, Marshall. “Electronic Journals in Religious Studies: Theological Libraries Prepare for the Digital Future.” In *Theological Librarians and the Internet: Implications for Practice*, edited by Mark Stover, 45-67. New York: Haworth Press, 2001.

²¹ Ibid.

²² Eidson, 53, 59.

²³ A better measurement of economic means is library budgets or funding. Lacking access to this data, ATLA membership, being an additional library expense that was available to track, served as an indicator of library funding.

- Eliassen, Karen, Jill McKinstry, Beth Mabel Fraser, and Elizabeth P. Babbitt. "Navigating Online Menus: A Quantitative Experiment." *College & Research Libraries* 58, no. 5 (1997): 509-516.
- Gorman, G. E. "Patterns of Information Seeking and Library Use by Theologians in Seven Adelaide Theological Colleges." *Australian Academic and Research Libraries* 21, no. 3 (1990): 137-156.
- Gorton, Catherine. "Accessibility of Theological Information via Electronic Means." *Bulletin of the Association of British Theological and Philosophical Libraries* 4, no. 1 (1997): 4-12.
- Griffiths, Jose-Marie. "Scholarly Information Seeking on the Web." *NFAIS Newsletter* 42, no. 10 (2000): 150-152.
- Keck, Andrew J. "Opening the Front Door: Designing a Usable Library Web Site." In *Theological Librarians and the Internet: Implications for Practice*, edited by Mark Stover, 127-137. New York: Haworth Press, 2001.
- Kupersmith, John. *Library Terms That Users Understand*. <http://www.jkup.net/terms.html> (accessed July 15, 2006).
- Prabhu, Margaret, Stephen Crothers, and Shirley Sullivan. "Electronic Journal Access in an Academic Library Revisited." *Australian Library Journal* 51, no. 3 (2002): 219-232.
- Reitz, Joan M. *ODLIS- Online Dictionary for Library and Information Science*. Libraries Unlimited, http://lu.com/odlis/odlis_e.cfm#eresource (accessed July 14, 2006).
- Still, Julie M. "A Content Analysis of University Library Websites in English Speaking Countries." *Online Information Review* 25, no. 3 (2001): 160-164.
- Stover, Mark. "Theoretical and Conceptual Foundations for Web Site Design in Religious and Theological Academic Libraries." In *Theological Librarians and the Internet: Implications for Practice*, edited by Mark Stover, 161-201. New York: Haworth Press, 2001.
- U. S. Census Bureau. Census Regions and Division of the United States. http://www.census.gov/geo/www/us_regdiv.pdf (accessed October 19, 2006).
- Wilson, Bonita. "The Growth of Digital Content." *D-Lib Magazine* 10, no. 12 (2004), <http://www.dlib.org/dlib/december04/12editorial.html> (accessed July 15, 2006).



APPENDIX

RESEARCH INSTRUMENT FOR EVALUATING THE ACCESSIBILITY OF E-RESOURCES FROM THEOLOGICAL LIBRARY WEBSITES

<p>1. Demographics:</p> <p>Name of Institution: _____</p> <p>URL: _____</p> <p>Enrollment Size: _____ Location: _____</p> <p>ATLA Member: _____ Consortium Member: _____</p>
<p>2. Navigation:</p> <p>2a. E-journals: _____</p> <p> OA journals: _____</p> <p> Subscription journals: _____</p> <p>2b. External Religious Internet Sites: _____</p> <p>2c. Internal digital libraries: _____</p> <p>2d. External digital libraries: _____</p>
<p>3. Terminology:</p> <p>3a. E-journals: _____</p> <p>3b. Open Access Journals: _____</p> <p>3c. Subscription Journals: _____</p> <p>3d. External Religious Internet Sites: _____</p> <p>3e. Internal digital libraries: _____</p> <p>3f. External digital libraries: _____</p>
<p>4. Library Added Value:</p> <p>4a. E-journals</p> <p> No added information</p> <p> Short annotations describing the content provided</p> <p> Review of content found in the resource</p> <p> How-to-use or search tips</p> <p>4b. Other e-resources</p> <p> No added information</p> <p> Short annotations describing the content provided</p> <p> Review of content found in the resource</p> <p> How-to-use or search tips</p>
<p>5. Researcher's Notes or Observation:</p> <p>_____</p>