Gray literature

Resources for locating unpublished research

by Brian S. Mathews

Gray or grey literature has long been considered the proverbial needle in the haystack. It is commonly defined as any documentary material that is not commercially published and is typically composed of technical reports, working papers, business documents, and conference proceedings. The greatest challenges involved with these items are the process of identification, since there is limited indexing, and acquisition, since availability is usually marred with uncertainty. Added to this is the absence of editorial control, raising questions about authenticity and reliability. Yet despite these considerations, gray literature is continually referenced in scholarly articles and dissertations and therefore remains an issue that academic librarians must contend with.

While the search for these eclectic materials is not new, the development of the Web has increased opportunities. Gray literature is now freely available on many Web sites and is selectively indexed by numerous commercial database vendors. Many organizations and individuals are also providing access to their works online. While all these factors present a new optimism, they also raise expectations that everything is available quickly, if not instantly, creating unrealistic perceptions.

Included in this section are Web sites that aid in understanding the nature of gray literature as well as various search tools. The focus is upon freely available resources that offer some full-text coverage. While the majority of these selections

concentrate upon scientific and technical literature, other resources have been included to illustrate the wide range and variation of gray literature.

About gray literature

- II. Toolkit–Finding Information: Gray Literature. This site provides detailed definitions of gray literature and links to many technical report Web sites. *Access*: http://www.bcinow.com/ demo/iltoolkit2/Types_Gray_Lit.htm.
- The Role of Grey Literature in the Sciences. This site provides a concise overview of gray literature and offers insight regarding its impact on the sciences. *Access*: http://library.brooklyn.cuny.edu/access/greyliter.htm.
- TextRelease: Grey Literature Program and Conference Bureau. This site provides information about the International Conference on Grey Literature and includes purchasing information for past proceedings as well as updates on future sessions. *Access*: http://www.textrelease.com.

Directories

• NY Academy of Medicine: Grey Literature Page. This site focuses on gray literature resources from the medical field and includes an extensive listing of agencies and organizations that produce health-related materials. The site also features a quarterly "Grey Literature Report," listing

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many items that are available freely online. *Access:* http://www.nyam.org/library/grey.shtml.

- Virtual Technical Reports Central. This site is hosted by the University of Maryland Libraries and offers a large listing of gray literature-producing institutions. While technical and research reports are prominent, it also features preprints, reprints, and e-prints. *Access*: http://www.lib.umd.edu/ENGIN/TechReports/Virtual-TechReports.html.
- U.S. Government Information: Technical Reports. This site is hosted by the University of Colorado Libraries and provides an annotated listing of government agencies and resources related to technical reports. *Access*: http://www-libraries.colorado.edu/ps/gov/us/techrep.htm.

Scientific and technical reports: Government resources

• Agricultural Online Access (Agricola). This database is administrated by the National Agricultural Library and provides access to records of articles, chapters, reports, and reprints, encompassing all aspects of agriculture and allied disciplines. *Access*: http://agricola.nal.usda.gov/.

• Energy Citations Database (ECD). This resource was designed by the Department of En-



ergy and covers the areas of physics, mathematics, engineering, and computer science. The

database provides limited full-text availability and indexes books, articles, reports, and conference papers back to 1948. *Access*: http://www.osti.gov/energycitations/.

• **GrayLIT Network.** This site provides information on technical reports generated through federally funded research and development projects. This meta-search portal includes archives from the Defense Department reports collection, the DOE Information Bridge, EPA Reports, and a selection of NASA reports. *Access*: http://graylit.osti.gov/.



 NASA Technical Reports Server. This search tool provides comprehensive access to the numerous NASA report archives, including documents from its predecessor NACA. The site provides some full-text coverage and indexes back to 1917. The advanced search includes additional physics-related resources. *Access*: http://ntrs.nasa.gov/.



- National Technical Information Service (NTIS). The NTIS site is a comprehensive resource for federally funded scientific, engineering, and business-related information. The database provides some full-text access and indexes over two million publications back to 1990. Access: http://www.ntis.gov/search/.
- Scientific Network and Information Network (STINET). The STINET site provides access to citations of unclassified defense research documents. Many of the records are available in full-text, and indexing coverage extends back to 1974. *Access*: http://stinet.dtic.mil/.
- Transportation Research Information Services (TRIS Online). This database provides access to nearly 500,000 records in transportation-related fields. Sources include books and articles as well as some full-text research studies, technical reports, and conference papers. *Access*: http://trisonline.bts.gov/sundev/search.cfm.
- U.S. Patent Database. This site provides full image access to all U.S.-granted patents back to 1790, with full-text searching back to 1976 and the full-text of published applications. The database also enables searching for references, which can include articles, reports, and proceedings. *Access*: http://www.uspto.gov/patft/index.html.

Other scientific and technical report resources

• CiteSeer: Scientific Literature Digital Library. This site aims toward improving the distribution and response of scientific literature. It indexes over 600,000 full-text documents and



includes features allowing for citation analysis,

reference linking, awareness tracking, and more. Additionally, the site provides algorithms, techniques, and software that can be used by other digital libraries. *Access*: http://citeseer.ni.nec.com/cs.

• **MAGIC Project.** The site aims toward establishing a collaborative system for the collection, storage, and use of engineering gray litera-



ture. Adminis-Cranfield Uni-

versity Library in the United Kingdom, MAGiC Project includes a citation database of over 120,000 international technical reports. Access: http://www.magic.ac.uk/.

- MathSearch. This site searches a collection of more than 200,000 documents on academic mathematics and statistics servers and includes the full text of some technical reports, working papers, and other eclectic materials. Access: http://www.maths.usyd.edu.au:8000/ MathSearch.html.
- Spires High-Energy Physics (HEP) Database. This database comprehensively indexes



over 500,000 articles, papers, preprints, and technical reports. Most

of the materials are available in full text, with coverage extending back to 1974. Access: http:// www.slac.stanford.edu/spires/hep/.

Information technology reports and resources

- HP Labs Technical Reports. This site provides access to technical reports authored by HP researchers. Indexing goes back to 1990, and the site includes mostly full-text materials. Access: http://www.hpl.hp.com/techreports/.
- IBM Research: Technical Paper Search. This database provides access to article citations and technical reports authored by the IBM Research community. Indexing goes back to 1987 and includes some full-text materials. Access: http://domino.watson.ibm.com/library/ cyberdig.nsf/home.
- Microsoft Research: Technical Reports. This mostly full-text database provides access to computer science publications, technical reports, and projects authored by Microsoft researchers. Access: http://research.microsoft.com/ pubs/.
- Networked Computer Science Technical Library (NCSTRL). This resource provides access to an international collection of computer science research reports and papers. The database is designed for educational use and is a collaborative effort between academic, industrial, and government research laboratories. Access: http:// www.ncstrl.org.
- ZDNET IT Directory. This site provides a full-text digital library of technical

white papers, Webcasts, and case studies on various IT-related topics. The site requires a free registration to view materials. Access: http:// itpapers.zdnet.com/.

Miscellaneous resources

- National Standards Systems Network (NSSN). Although standards are available commercially, they are typically grouped into the gray literature category. This site provides a federated search tool of more than 250,000 records from more than 600 developers and links to purchasing information. Access: http:// www.nssn.org/.
- · Political Science Sites of Working Papers. This site provides links to scholarly working papers on political science and related fields. Access: http://www.workingpapers.org/.
- Research Papers in Economics (RePEc). This site is an international collaborative effort to



enhance the dissemination of research in economics and related fields.

The project includes a mostly full-text database of working papers, journal articles, chapter listings, and downloadable software components. Access: http://www.repec.org/.

- Search Adobe PDF Online. This Adobe search tool scans millions of PDF documents online. It indexes many files undetected by major search engines, and, although results can be varied, it does include a wealth of gray literature. Access: http://searchpdf.adobe.com/.
- World Bank Research Resources. This site provides access to working papers, current studies, and datasets from the World Bank Group. Access: http://econ.worldbank.org/ resource.php.

E-print archives and resources

- Clinical Medicine and Health Research **NetPrints.** This site provides a full-text archive for medical researchers to post their completed clinical studies. Access: http://clinmed.netprints. org/.
 - · Cogprints. This self-archive provides material relevant to the study of cognition in the areas of psychology, biology, linguistics, and philosophy, as well as in the computer, physical,

social, and mathematical sci-

ences. The site includes full-text access to articles, chapters, technical reports, and conference papers. *Access*: http://cogprints.ecs.soton.ac.uk/.

- Education-line. Administered by the Brotherton Library in the United Kingdom, this site provides full-text access to reports, working papers, and conference documents that support educational research, policy, and practice. Access: http://www.leeds.ac.uk/educol/.
- **E-print Network.** This site is a metasearch for scientific e-print resources and enables federated searching of more than 30 major databases and servers. *Access*: http://www.osti.gov/eprints/.
- **GNU E-Prints Archives.** This site provides a listing of more than 100 online archives using e-print software, and includes many academic institutions. *Access*: http://software.eprints.org/archives.php.

Discussion lists

- Engineering Librarians Division (ELDNET-L). This moderated list addresses "issues of interest to engineering and related subject area libraries and librarians." ELDNET-L is sponsored by the American Society for Engineering Education, Engineering Libraries Division, but is open to all interested subscribers. Access: http://www.englib.cornell.edu/eld/listserv/eldnetfile.html.
- GreyNet Listserv. This international moderated list seeks "to facilitate dialog and commu-

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nication between persons and organisations in the field of grey literature." In addition to the electronic lists, the

site includes information about the International Conference Series on Grey Literature and provides an extensive categorical listing of resources. *Access*: http://www.greynet.org.

• Science and Technology Librarians Section Listserv (STS-L). This moderated list "provides a forum through which librarians in scientific and technical subject fields can achieve and maintain awareness of the impact and range of information with which they work." STS-L is designed for communication of ACRL's Science and Technology Section, but is open to all interested subscribers. Access: http://listserv.utk.edu/archives/sts-l. html.



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"...an exciting product.... Highly recommended."

Booklist/Reference Books Bulletin, Nov. 1, 2003

"...invaluable as a way to promote holdings information easily to patrons as well as an in-house collection

Net Connect/ Library Journal, Winter 2004

'A' Rating."

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"A godsend for reference librarians."

Thomas Mann, The Oxford Guide to Library Research

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