



JOURNAL

Official Journal of the International Federation of Library Associations and Institutions
Volume 35 (2009) No. 1, pp. 1–88. ISSN 0340–0352 SAGE Publications

CONTENTS

Editorial: A Selection from Québec	
Stephen Parker	3
Letters to the Editor: Human Rights and Social Responsibility	
Christine Deschamps, Derek Law and Al Kagan	5
The President's Page	
Claudia Lux	7
The Sidewalk Is Our Reference Desk: when librarians take to the streets	
Lia G. Friedman and Melissa Morrone	8
Mass Digitization for Research and Study: the digitization strategy of the Bavarian State Library	
Klaus Ceynowa	17
The Biodiversity Heritage Library: sharing biodiversity literature with the world	
Nancy E. Gwinn and Constance Rinaldo	25
eBooks on Demand (EOD): a European digitization service	
Günter Mühlberger and Silvia Gstrein	35
Ikjarutit: delivering legislative library services in an Inuktitut language environment	
Yvonne Earle	44
Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand	
John H. Mohi and Winston D. Roberts	48
REPORT	
Third Meeting of the Internet Governance Forum (IGF), Hyderabad, India	
Sanjay K. Bihani and Stuart Hamilton	59
NEWS (with separate Table of Contents)	63
INTERNATIONAL CALENDAR	75
SOMMAIRES 78 — ZUSAMMENFASSUNGEN 79 — RESÚMENES 81 — Рефераты статей 82.	78
Notes for Contributors	85

IFLA Journal

Official Journal of the International Federation of Library Associations and Institutions
ISSN 0340-0352 [print] 1745-2651 [online]

Published 4 times a year in March, June, October and December

Editor: Stephen Parker, Apt. 1C, Edifício Rosa dos Ventos, Rua Rosa Parracho 27,
Cascais 2750-778, Portugal. E-mail: zest@sapo.pt

Editorial Committee

David Miller (*Chair*),

Levin Library, Curry College, Milton, MA, USA. E-mail: dmiller@post03.curry.edu

Michèle Battisti,

Association des professionnels de l'information et de documentation (ADBS), Paris, France. E-mail: michele.battisti@adbs.fr

Sanjay Kumar Bihani,

Ministry of External Affairs, New Delhi, India. E-mail: alio@mea.gov.in

Galina Kislovskaya,

Russian State Library, Moscow, Russian Federation. E-mail: gkisl@rsl.ru

Filiberto Felipe Martinez-Arellano,

University Center for Library Science Research, National Autonomous University of Mexico. E-mail: felipe@cuib.unam.mx

Omnia M. Sadek,

Library & Information Science Dept, College of Arts & Social Science, Sultan Quaboos University, Muscat - Oman.
E-mail: Omnia@squ.edu.om

Christobal Pasadas Ureña,

Universidad de Granada Biblioteca, Facultad de Psicología, Granada, Spain. E-mail: cpasadas@ugr.es

Christine Wellems,

Buergerschaftskanzlei, Parlamentarische Informationsdienste, Hamburg, Germany. E-mail: christine.wellems@bk.hamburg.de

Wu Jianzhong,

Shanghai Library, Shanghai, China. E-mail: jzwu@libnet.sh.cn

Stephen Parker (United Kingdom) (*Editor, ex officio*)

Publisher

SAGE, Los Angeles, London, New Delhi, Singapore and Washington DC.

Copyright © 2009 International Federation of Library Associations and Institutions. UK: Apart from fair dealing for the purposes of research or private study, or criticism or review, and only as permitted under the Copyright, Designs and Patents Acts 1988, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the Publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency (www.cla.co.uk/). US: Authorization to photocopy journal material may be obtained directly from SAGE Publications or through a licence from the Copyright Clearance Center, Inc. (www.copyright.com/). Inquiries concerning reproduction outside those terms should be sent to the Publishers at the address below.

Annual subscription (4 issues, 2009) Free to IFLA members. Non-members: full rate (includes electronic version) £202/\$374. Prices include postage. Full rate subscriptions include the right for members of the subscribing institution to access the electronic content of the journal at no extra charge from SAGE. The content can be accessed online through a number of electronic journal intermediaries, who may charge for access. Free e-mail alerts of contents listings are also available. For full details visit the SAGE website: www.sagepublications.com

Student discounts, single issue rates and advertising details are available from SAGE, 1 Oliver's Yard, 55 City Road, London EC1Y 1SP, UK. Tel: +44 (0) 20 7324 8500; fax +44 (0) 20 7324 8600; e-mail: subscriptions@sagepub.co.uk; website: www.sagepublications.com. In North America from SAGE Publications, 2455 Teller Road, Thousand Oaks, CA 91359, USA. Periodicals postage paid at Rahway, NJ. Postmaster: Send address corrections to IFLA Journal, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001, USA.

The *IFLA Journal* is abstracted/indexed in Library and Information Science Abstracts, Multicultural Education Abstracts, PAIS International and Sociological Abstracts.

Typeset by Star Compugraphics Private Limited, Delhi, India

Printed in Great Britain on acid-free paper by CPI Antony Rowe, Chippenham, UK

EDITORIAL

A Selection from Québec

Stephen Parker

As is customary in the first issue of each year, this issue focuses on the presentation of a selection of papers presented at last year's IFLA World Library and Information Conference, held in Québec City, Canada, from 10–14 August 2008. The selection is based on the results of a two-stage review process carried out by members of the Editorial Committee.

The first paper in this issue describes an innovative kind of reference service being provided in the United States. 'The Sidewalk Is Our Reference Desk: when librarians take to the streets', by Lia G. Friedman, Head of Public Services and Instruction and Outreach Librarian at the University of California San Diego Arts Library, and Melissa Morrone, a Library Information Supervisor at a branch of Brooklyn (NY) Public Library, describes the activities of 'Radical Reference', a volunteer-run collective that provides free reference and instruction services to independent journalists, political activists and the public, both online and in person at protests and political events. The online services use open source tools to answer questions, while at protests and actions 'Street librarians' armed with tailor-made 'Ready Reference Kits' receive backup support from home-based librarians. The aim of both approaches is to reach underserved populations who may have limited access to trusted information.

The next three papers all focus on one of librarianship's current 'hot topics' – that of digitization. In 'Mass Digitization for Research and Study: The digitization strategy of the Bavarian State Library', Klaus Ceynowa, the Library's Deputy Director General, describes how the Library is working to achieve its primary strategic objective of digitizing its unique holdings of precious manuscripts, rare printed books and comprehensive special collections, to make them accessible to the world. The library is involved in several large-scale digitization projects, and the paper describes in detail the use of state-of-the-art robotic scanners as well as a public-private partnership with Google, which are key parts of its digitization strategy.

An international digitization project focusing on a specific area of scientific enquiry is described in the next paper, 'The Biodiversity Heritage Library: Sharing biodiversity literature with the world', by Nancy E. Gwinn, Director of the Smithsonian Institution Libraries, and Constance Rinaldo, Librarian of the Ernst Mayr Library and Archives in the Museum of Comparative Zoology at Harvard University. The paper describes how several major natural history museum libraries, botanical libraries, and research institutions in the United Kingdom and the United States have joined forces to develop a strategy and operational plan to digitize the published literature of biodiversity and make it available internationally as the Biodiversity Heritage Library. The authors describe the BHL portal and its innovative search services, and offer a case study of the process from one of its members, the Museum of Comparative Zoology at Harvard University.

Another international digitization project, this time with a European focus, is described in the next paper, 'eBooks on Demand (EOD). A European digitization service', by Günter Mühlberger and Silvia Gstrein of the Department for Digitization and Digital Preservation of the University- and Regional Library Tyrol in Austria. The eBooks on Demand service (EOD) was established within the framework of the European Union funded project Digitization on Demand (2006–2008), and is currently available in more than eighteen libraries in ten countries. The service enables users to order public domain books as PDF eBooks, which are digitized and saved long-term in a digital library. The EOD service is implemented within the framework of a network, which has the advantages of reducing the workload of individual libraries and enhancing the recognition of the service for the user and the public.

Like the three papers on digitization, the two final papers in this issue share a common theme – that of library service to speakers of indigenous languages.

The first of these papers, 'Ikjarutit: Delivering legislative library services in an Inuktitut language environment', is by Yvonne Earle, Legislative

Librarian of the Nunavut Legislative Library, in northern Canada. Nunavut is the homeland of the Inuit peoples, and a goal of its government is to ensure that Inuktitut will be the working language of government by 2020. It is in this environment that the Legislative Library works to build collections, deliver services and develop staff competencies in Inuktitut language and library skills.

The final paper in this issue, 'Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand', also deals with the provision of library services to an indigenous population. The authors, John H. Mohi and Winston D. Roberts of the National Library of New Zealand, outline the National Library's plan for responsiveness to Māori, 'Te Kaupapa Mahi Tahī: a Plan for Partnership', which builds on traditional library services and products by developing new electronic services including digitization for access and preservation, through a power-sharing

relationship with Māori. The paper also outlines the Library's collaboration with Pasifika, Asian, refugee and migrant communities in New Zealand, which are linked to the 'New Generation National Library' strategy, designed to provide all New Zealanders with information important to all aspects of their lives.

This issue also includes a report by Sanjay K. Bihani and Stuart Hamilton on the Third Meeting of the Internet Governance Forum (IGF), held in Hyderabad, India, a contribution from IFLA Corporate Partner Emerald Group Publishing, 'Publishing Development: editorial innovation at the service of global knowledge', the regular President's Page by IFLA President Claudia Lux, and, unusually, letters to the Editor.

The next issue will include more Québec conference papers and a major paper on libraries and information in Italy, to be published before the 2009 IFLA World Library and Information Congress in Milan.

LETTERS TO THE EDITOR

IFLA, Human Rights, and Social Responsibility

From Christine Deschamps
(President of IFLA, 1998–2003)

I would like to bring a few points to the attention of readers of *IFLA Journal*, concerning Mr Al Kagan's article in the last issue (Vol. 34 No. 3 (October 2008), about 'IFLA, Human Rights, and Social Responsibility'.

About the Jerusalem Conference, Mr Kagan says that: "it is good to finally read something about what happened behind the scenes". But where does he get his information? From Alex Byrne, the then Chair of FAIFE. But Mr Byrne did not know everything. Why did not Mr Kagan go to the Secretary General (Mr Ross Shimmon) or myself? He would have got a few answers to his questions. For instance:

The decision to go to Jerusalem was taken by my predecessor Mr Wedgeworth, at the time of the Camp David agreements, when it did not seem unrealistic to believe that the peace process was well on its way... That being done, there was no reason why IFLA should yield to external political pressure, aiming at the exclusion of a country for political reasons only. After all, IFLA went to Moscow in 1991, and to Beijing in 1996 (and in this article Mr Kagan does not even mention China and the problems of human rights over there...), went to Cuba, went to other countries and is proud to have done so. If IFLA is going to have its Conference only in democratic, peaceful, human rights respectful countries, there will be very few places in the world where it will meet. It has always been said that IFLA wanted to bring democratic practices and freedom of speech in its Conference, but also to places where they were not in practice.

As to the Jerusalem Conference, a few rectifications are needed:

- There was an Arab librarian in the Organizing Committee, and I met him and visited his library.
- IFLA was aware of the Arabic Conference in Cairo, and suggested to send someone from the IFLA Headquarters; this was refused.

- There were also some funded West African librarians who were denied visas for other Conferences, including South Africa, and no derogatory conclusions were drawn. Why should it be different for Israel?
- In many Conferences, politicians or keynote speakers have been speaking in their own language (in Chinese for instance, when Chinese was not yet an official IFLA language). Provided there is simultaneous interpretation, it never was a problem. Why should it be with Hebrew?

Now it is true that speaking of Jerusalem as the "eternal capital of the State of Israel" was dramatically wrong, but no one knew that Mr. Avineri would say so, and that is why I reacted officially about IFLA's dissociation with the political incidents. But IFLA's Executive Board had taken great pains in asserting that:

1. We would go only to Jerusalem West (officially under the authority of Israel) and we even excluded from the official list a hotel which was borderline... .
2. We took great care of saying that having the IFLA Conference in a city did not mean that it was the country's capital city (like Brighton, Boston, Glasgow, etc.)
3. We wanted to see our Conference as a purely professional meeting, since it is not to my knowledge within IFLA's missions to address the political situation of the countries where the Conference stands. Again, why should there have been a difference between other countries and Israel?

In conclusion, I want the *IFLA Journal's* readers to know that going to Jerusalem did put us in a very difficult situation, that we tried every possible contact with the Palestinians to associate them, or have counterpart happenings in the other parts of Jerusalem at the same time, and they systematically refused. It certainly was a "nightmare Conference" for the Executive Board.

But I still maintain that it would not have been right to exclude a country solely for political reasons, and to behave towards Israel differently from

the way we had and have been behaving towards other countries.

28 October 2008 (by e-mail)

**From Derek Law
(Treasurer of IFLA, 1997–2003)**

Perhaps the only other point one might make was that, at that time invitations came from Library Associations which were IFLA members. The invitation was not from the State of Israel or the City of Jerusalem but from the local Library Association. You rightly mention Camp David. We also wanted librarians from all over the world to have the chance to visit Palestinian areas (many did) and to draw their own conclusions. The fact that there were nightmares, some of them public, was the best evidence that there were problems. I think IFLA did a service there (as in Cuba and China) in letting our members see for themselves at first hand the issues that colleagues face(d).

29 October 2008 (by e-mail)

Al Kagan comments:

I am pleased to continue the discussion regarding IFLA and human rights by responding to Christine Deschamps and Derek Law, IFLA President and Treasurer at the time of the Jerusalem conference. In general, I agree with them that IFLA must be able to meet all over the world and without excluding countries for political reasons. However, we must evaluate each context and be ready to make exceptions for the sake of the legitimacy of the organization. My own preference is to go to problematical places and raise the issues. I think that is clear from my actions, some of which were described in my article. Regarding China, I chaired a meeting in Beijing titled 'Access to Human Rights Documentation,' and I had an interesting experience with the Chinese censors, which I will not detail here.

Although the IFLA leaders may say that they want to exclude politics, it is impossible to hold a "purely professional meeting" because every venue has its own political context. Recall that when we met in Paris, Madame Deschamps asked us to act against the removal of books from several public libraries in Southern France that recently installed mayors from the Front National, a far right-wing political party. I do not remember any dissenting voices. In the case of Jerusalem the city itself is contested, one of the most volatile venues in the world. It is not enough to say that IFLA only scheduled its functions in the western part of the city, and made statements concerning its position. The act of meeting in Jerusalem is itself a political statement or signal. The local organizers obviously used this opening to invite a former government official to publicly counteract such IFLA statements at the Opening General Session. The Arab boycott of the meeting only goes to show that this was an impossible venue.

Concerning the denial of visas to West African conference speakers and other delegates, it seems likely that the scale of such exclusions was larger than in the past. This was the first time that I remember the question being raised at the Regional Section on Africa meeting. Furthermore, I myself saw harassment of darker skinned travelers when I arrived at passport control at the airport. Of course, every local organizing committee is expected to negotiate such practices with their governments to insure entry without exclusion based on nationality or appearance, but considering the political situation in the Middle East, I do not think we could have expected the Government of Israel to comply with IFLA guidelines, with or without the efforts of the local organizing committee. Let's do better in the future.

5 December 2008 (by e-mail)

The President's Page

Claudia Lux, IFLA President, 2007–2009

The financial crisis – now each day it is in the news. Will it affect libraries? Yes it will. Prices for imported equipment and books may rise. Communities will not have enough income to fund libraries any more. Is this what will come upon us during the next months or years? Are there countries where it will be different? Are there countries where the economy will stay stable and libraries will develop? Or is it a global financial and economical crisis? I do not know what the impact will be in your country, in your city, in your university or community. But what I know is that we have to prepare the arguments for libraries, as in times of crisis libraries must be on the agenda.

Some years ago somebody told me the story of an industrial town in Southern Germany in the 1980s. More than a thousand men and women lost their jobs, when industrial change led to the closing down of a big company. With an extra program, the Bavarian State supported the public library of the city and helped to increase the library budget. The reason is clear: those who lose their jobs have many problems to solve and the public library is the right institution to provide help through knowledge and keep people informed, so that they can play a role as an integral part of society. As a next step, the library can be used as a place for lifelong learning, for a new professional orientation and the development of skills through different media. This may be a decision to search for work in a foreign country, to change profession, to keep up with computer knowledge and usage, to learn a new language, to have an idea and invent a new product – everything is possible in a public library! And the same is true of university libraries and special libraries. During a crisis it is even more important to make use of the knowledge presented in a library and to understand what went wrong. This means to learn from history, too, and to detect when solutions lie in the future.

What else does this financial crisis teach us? A free system with nearly no regulation suddenly collapsed after many people had made a lot of profit. This happened on the basis of a free trade



Claudia Lux, IFLA President 2007–2009

policy without any regulations. And now there are losses and these are paid by the public sector, by the state, by everybody through their taxes. Now the state comes back to regulate and in the German television a panel tonight even questioned the future of capitalism. For libraries this crisis does not show the end of the market economy but it shows that it is right to be critical of the policy of the World Trade Organisation (WTO) to open up and make a free market out of everything and to push back state support.

In the GATS (General Agreement on Tariffs and Trade) Agreement IFLA sees a danger for libraries when everything, including library services, should be open to free competition in the market. In our IFLA Position on WTO Treaty negotiations from 2001 IFLA asked “to strengthen opposition to those WTO policies which will adversely affect the public sector internationally including, but not limited to, libraries, archives, museums and education.” (<http://www.ifla.org/III/clm/p1/pos-wto.htm>). From my point of view the public sector should be strengthened. And not only to pay back losses of banks but to invest in the future of education and free access to information. It is time to ask for more support for libraries by our communities, institutions and the state!

The Sidewalk Is Our Reference Desk: when librarians take to the streets

Lia G. Friedman



Melissa Morrone



Abstract

Radical Reference is a volunteer-run collective that provides free reference and instruction services to independent journalists, political activists and the public online (<http://radicalreference.info>) and in person at protests and political events. In our online setting a highly collaborative, multilingual, volunteer community uses open source tools to answer questions in a constantly evolving conversation, while at protests and actions 'Street librarians' armed with tailor-made 'Ready Reference Kits' are connected via cell phone to home support librarians who provide synchronous help. In both contexts we strive to reach an underserved population who may have limited access to trusted information.

Keywords: Radical Reference; street reference; activism; FLOSS; social responsibilities; information collectives; volunteers; open source

Introduction and Background

Information-seeking processes in the 21st century are rapidly changing. Both the public and library workers are in a state of constant adjustment to new technologies and techniques for finding answers to questions. In this environment, librarians must make contact with their target base and work to best serve their needs. It is equally important to be cognizant of those who have easy access to information, computers and online resources and have been taught to use them, as well as those who have not.

Radical Reference (RR) is a specialized collective of library workers and library school students who use virtual and other reference services to reach out to members of its community. At the inception of RR, founders defined its patron base as political activists and independent journalists. RR was launched in July of 2004 to support the thousands of activists that converged to protest at the 2004 Republican National Convention (RNC) in New York City.¹ Librarians recognized a need for information services that would be available to all and accessible not just at a reference desk, but in the streets, cafes and parks where activists gathered. Street reference volunteers connected with a community typically under-served by traditional libraries. These 'street librarians' were armed with 'ready reference kits' specific to the RNC and were connected via cell phone to home support librarians who extended available information resources and provided synchronous communication.

RR was created to support activism, break down barriers to information and connect users with quality information regardless of their ability to locate trusted data on their own or access a physical library space. The project was well received at the RNC by activist communities, and RR volunteers have continued and expanded its services to include resources such as Web research guides and instruction sessions taught throughout the United States.

About the Authors: page 16

RR's most prominent service is online reference. As of April 2008, RR's collective had over 300 volunteers – library workers with a variety of professional backgrounds and the ability to answer queries in nine languages. RR supports activist communities, progressive organizations, and independent journalists by providing professional research support and education on access to and critical evaluation of information. The group works in a collaborative virtual setting, has no designated hierarchy, and uses open source tools in order to live its egalitarian mission, as opposed to simply espousing it.

RR positions itself as the information source for independent journalists working with limited resources who want the best possible information with a quick turnaround time. RR provides not only reference service to these journalists but also fact-checking workshops that empower users to find and recognize trustworthy information available free via public libraries and the open Web.

RR subscribes to no one political philosophy, and the allegiances of individual members likely range from liberal Democrat to anarchist. Those active in RR believe that the struggle for social justice is relevant to librarianship and that librarians and library school students have the expertise to contribute to those working to foster a more equal society. RR does not subscribe to the notion that a master's degree in library science is a line in the sand demarcating who has authority to disseminate and procure information and who does not. Many members of RR are degreed librarians, but active members include students, library support staff, and librarians of life as well. For the purpose of this paper, the term 'librarian' will apply to library staff and students as well as degreed librarians.

Despite the fact that RR is primarily a virtual community, local collectives have formed around the United States where members meet face to face and organize events and actions that connect them to one another and to their users. The most vibrant group is in New York City. Its members have presented workshops and skillshares up and down the East Coast of North America and beyond. Local collectives become more active when there is an event to drive them, as the protests of 2004 led to a committed New York-based group of volunteers.

Although RR rejects a traditional hierarchical business model, there is a small core group of administrators who monitor the site, provide help to new members and coordinate ongoing projects such as website upgrades, fundraising and meetings at conferences. These moderators are geographically distant from one another but connect online and via telephone to collaborate on projects.

Radical Reference in Context

Socially Responsible Projects within Librarianship

There are multiple outlets for progressive librarianship in anglophone North America. The Social Responsibilities Round Table (SRRT) of the American Library Association (ALA) was founded in 1969 and "has provided a home within ALA for progressive librarians, library workers, and supporters who agree to promote social responsibility as a core value of librarianship."² Among SRRT's activities is bringing resolutions to the ALA Council and the membership. Past resolutions have covered a range of issues including apartheid in South Africa and the war on Iraq. There are six project-specific task forces operating under SRRT, and they put out a newsletter twice a year. SRRT offers a way to work towards an awareness of the importance of social responsibilities in librarianship from within the preeminent professional library association in the US.

The Progressive Librarians Guild (PLG) was created in 1990 and exists to "provid[e] a forum for the open exchange of radical views on library issues."³ A major PLG activity is publishing the peer-reviewed journal, *Progressive Librarian*. PLG is a dues-based membership organization governed by its Coordinating Committee. Both PLG and SRRT have active electronic discussion lists that provide online forums for their members to talk, argue and share information.

There are also many examples of socially responsible librarians and library advocates in the blogosphere. Jessamyn West's Librarian.net⁴ is one of the forerunners of activist library blogs and covers issues of relevance to socially responsible librarianship such as technology and its impact on rural and other libraries. Among other projects, West co-edited the *Revolt of Librarians Redux*

collection in 2003. Librarian Activist⁵ is a blog written by a small collective of Canadian library workers, covering political aspects of technology and information-seeking in Canada and the US. Rory Litwin, a member of SRRT and PLG, publishes the Library Juice blog⁶ (originally an online newsletter), where he discusses topics ranging from information as a public good to deprofessionalization in librarianship. Some RR members blog independently as well; a full list is available at <http://radicalreference.info/aggregator/sources>.

RR is younger than SRRT and PLG. The project is free to join and takes very little effort to 'join.' In this decentralized group of somewhat like-minded individuals – more a community of practice than an organization – saying one is a 'member' of RR doesn't involve much more than creating a username on the site, subscribing to the discussion list, and jumping in to answer a question or start up a local project. In addition to archived questions and answers, presentation materials, and pathfinders, the RR website contains short blog entries and report-backs from events.

Virtual Question-Answering Services

RR is one of many Web-based question-answering services. Many public and academic library systems now offer electronic 'Ask A Librarian' services to their cardholders or the public. In the realm of unaffiliated services, multiple efforts have come forward with motives from profit-making to community-building.

Google developed Google Answers in 2002. In this example, money changed hands for successfully answered questions. Prices of questions were determined by the askers, and the Google Answers Researchers (GAR) could net anywhere from a few dollars to close to USD 200 per question. Not surprisingly for a well-known name in Web products, Google's service was much-used and respected, attracting people – including librarians – who wanted to use their expertise and experience to assist others (and earn a little money). Answers were rated and tended to be fully articulated pieces with cited sources. Google Answers was closed in 2006, with former GARs launching Uclue⁷ soon after, using a similar payment model.

Yahoo! Answers⁸ is a popular and supported Web-based reference service with versions in almost 25 countries. This is the go-to place for a quick, free

answer to simple questions. Answers tend to be short, and few include citations and are voted on, resulting in a 'best' one for each resolved question. People can post questions that could charitably be described as unanswerable – “Where were you my whole life???”

There are other ways entrepreneurs are developing products to satisfy Web users' desire for fast human help with information-seeking. An attempt to meld search engine and reference librarian is a business called ChaCha.⁹ 'Guides' who are students, stay-at-home parents, and retirees¹⁰ text back answers to questions submitted by cell phone.

Librarians are also building online reference services. The Internet Public Library (IPL)¹¹ is an early example. IPL was founded in 1995 and is now managed by a consortium of universities with library and information studies programs. Submitted questions are not compiled on the site, apart from a selection in a 'Frequently Asked Reference Questions' section,¹² and the focus of IPL is creating pathfinders and link lists.

Jessamyn West, who was a Google Answers Researcher and wrote about her experience for Searcher,¹³ is one of three moderators for Ask Metafilter, or AskMeFi.¹⁴ Formed in 2003, Ask MetaFilter was the logical outcropping of the MetaFilter community Web log. It quickly generated an active community that today numbers in the tens of thousands. An example of a highly functioning and exciting online community, Ask MetaFilter sees as many as 5000 'mefites' active on the site answering questions and querying the 'hive mind' on a single day. Many answers are brief, but because Ask MetaFilter is a community where people feel more of a responsibility to one another than on other questions sites, answers are often given in seriousness and their very quantity insures a quality answer. Each user must pay a one-time fee of USD 5.00 to register with the site.

With RR's virtual reference service, a community of library workers and students has come together to volunteer their time, expertise and resources. Questions submitted to the site are answered by one or more volunteers using an open source content management system that allows for an ongoing, evolving conversation between members of RR and the patron. Members strive to reach those who may have limited access to trusted information and to convey the information in a

way that makes technology a means to an end, rather than a barrier.

RR has a commitment to providing complete, trustworthy answers with cited sources. Answers are often conversational in tone while at the same time emphasizing the research strategies undertaken to find the information. This balance between formal and informal is intended to demystify today's complicated information environment and empower the questioner to reproduce the search and interpret the results as best fits his or her need. Generally, the answerer avoids injecting personal analysis (except as suits the question itself) but always maps the methodology undertaken to arrive at the answer. RR members encourage askers to seek out additional sources, including those located in public libraries in the patron's own area if that is known, along with intelligent use of the open Web. While some RR patrons may prefer a simpler answer without the search strategy or list of sources articulated, the librarians believe the process of finding and interpreting information is as important as the answer to the question itself. By providing the tools to locate and interpret information, RR shares the tools of information and media literacy.

Challenges facing RR are that members come and go; there are issues with providing answers in a timely manner; and administrators may pull back from daily duties given the constraints of work, school or family. That said, the community is strong and evolving, with members ready to step up when others step back. The fluidity that comes into play when users are allowed to do the work that they can, when they can, allows for a freedom and strength that makes this community vital. Key to retention and a robust organization is the need to stay enthusiastic and invested, and to encourage other members to feel the same. RR has successfully provided independent journalists with research assistance and resources and the ability to find information on their own. Like all volunteer-based projects, RR experiences both the good and the bad of being composed of people volunteering their spare time. Luckily, people bring energy and ideas because they want to, not because they are being paid to. Some librarians who cannot fully incorporate their values into their paid work come to volunteer for RR for that fulfillment, as RR is a space where questions are asked by people who share a commitment to social justice.

In the Streets and on the Web

In the Streets ...

Activist events like protests are fluid and shifting. The range of information needed is broad and changing as well – ranging from the specific “if I am riding my bike and am arrested, what law am I breaking?” to broad, “Why are these people protesting?” to mundane, “Where is the closest public restroom?” The means of providing information to answer these queries are varied as well. During the 2004 RNC, members of RR came prepared with ready reference kits of anticipated information while others set up home support for the street librarians. Home support members were at their computers, near or far from the protests, ready to provide information that could not be answered using the sheaf of prepared materials or from the street librarian's own knowledge. These volunteers signed up for short shifts, together covering the entire time the street librarians were out.

The alternate method used for gathering and disseminating information during the protest was through a synchronous Web-based messaging service, TXTmob, which “lets you quickly... share txt messages with friends, comrades, and total strangers [with a] format... similar to an email b[ulletin]-board system.”¹⁵ Messages are sent simultaneously to multiple groups that need access to the same information at the same time. TXTmob was developed by the Institute for Applied Autonomy to support activists at the Democratic and Republican National Conventions in 2004.¹⁶ The service allowed real-time reference help as well as information on peripheral yet equally important updates, such as: “the police have cordoned off 7th street and are arresting everyone they encounter.” With the advent of new technologies come new possibilities in street reference. The presence of services that provide synchronous connectivity like Skype, a Web-based phone, text and video service, means that new methods of connecting are always on the horizon.

... and on the Web

The centerpiece of RR is its website. Every question submitted to RR is archived here, creating a knowledge base accessible to site visitors and

online searchers. The website also contains a 'reference shelf' of subject guides that cover topics from alternative bookstores and infoshops (community hubs of activist fliers, pamphlets and books), to history and resistance, to a comprehensive pathfinder for 'green scare' resources. It is the questions and answers, however, that provide the most dynamic resource and that make up the bulk of the content on the site.

The process for answering questions has evolved over the years. At the outset, everything was done by email. A submitted question would trigger an email message to an alias @radicalreference.info address. Subsequently one of the core administrators receiving the query would forward the message to the electronic list. From there, an RR member interested in claiming the question would reply-all with 'GOT IT' in the subject line. In this manner, everyone on the list would receive each question and determine if their skill set or resources matched the question. Generally each question found a single answerer, however, on some occasions a question would sit in members' inboxes with no action, forcing a site administrator to re-send the question.

At that time the main benefit of forwarding all questions to the RR list was that members were prompted to come out of the virtual woodwork and claim questions that jibed with their personal interests and/or expertise. Nevertheless, the process eventually was determined to be inefficient and causing of both inertia and dropped questions. The next method was a software solution that used the open source tool Lightning Bug (LB).¹⁷ The developers of LB created it to manage part of the Counter Convention website during the RNC. These activists live in New York City and are a subset of the InterActivist Network,¹⁸ the technology collective that supports RR. With LB, RR librarians operated using a rotating list in order to answer assigned questions. Members would receive an email alerting them to the presence of a new question in their LB account, and would have 48 hours to change its answer. If there was no action during that time period the question would 'escalate' and be visible to all members with LB log-ins.

With this system, RR members could no longer lurk without participating (though they did have the choice to register with LB or not), and questions could be distributed in a more equitable manner. However, the software did not entirely

meet the needs of a virtual collaborative reference service. One concern was that since LB assigned the next question to the user who had last answered one, new RR members invariably had to be responsible for handling a question immediately upon signing up to the site. Furthermore, LB was not as conducive to collaboration on answers, and the quantity of escalated questions indicated that the pressure of having a question all to oneself was not improving the quality and timeliness of answers after all. All of these issues contributed to RR members' decision to move to an entirely online question-answering process; Ask MetaFilter was in fact an inspiration for the change.

Currently, questions are submitted through a webform and have four required fields, in addition to optional fields (e.g. "how did you hear about us?"). People must give a title for their question, a time frame for when they need an answer, email address, and, of course, the question itself. No username is required to submit a question, the field names are in English and Spanish and the only technical requirements are Internet access and an email address. Access to computers and the Internet is not a universal privilege; however, as RR is a geographically disparate group, email is the most practical channel of communication at this time.

Throughout the process RR members may seek clarification on a question, just as librarians conduct reference interviews with patrons in any setting. After posting an answer to the site, an RR member will decide whether his or her answer is complete enough to warrant changing the question status to 'answered.' If it is not, the answer appears online but the question remains in the 'unanswered' list. Since the answers are online, the questioner (and anyone else) can view the progress of the question. The questioner receives an email from the RR member who completes the question and marks it 'answered.'

The spirit of collaboration that RR saw with street reference is also present on its website. Many questions are answered with the aid of internal notes (viewable only by authenticated members) allowing a virtual conversation among librarians to take place. RR members have different areas of expertise and interest, and there is an attempt to use many minds to put together a quality answer. The RR email list is also a necessary tool for communication, used to remind fellow members of pending questions on the site and to ask for help,

for example, in accessing a particular document held in an unavailable database.

While RR operates from a Left perspective, the librarians' goal is to answer questions to the best of their professional ability and supply the public with search strategies and skills for finding valuable information on their own. As activists with social justice values, RR members understand that there is a pantheon of underrated alternative resources – books, websites, databases, and more – that are ignored in mainstream culture. However, it is not necessarily RR's intent to promote 'left-wing' sources over 'regular' resources. The best tools and strategies available are used to answer a question as thoroughly as possible. The question of who is reporting on a topic, or where information is being published, or how data is gathered and distributed cannot always be divided into sources that are socially responsible and those that are not.

RR members promote the service via email lists as well as by distributing fliers at events and in activist spaces. RR has also been the subject of articles in the alternative press, such as the magazines *Clamor* and *Bitch*. Often people do not give clues in their questions to determine how they heard about the group, who they are and how they plan to use the information they will get, but excerpts are available that show RR is reaching its target patron base:

"I do research for Mumia Abu-Jamal's books and radio commentaries..."¹⁹

"I'm working with a writer on an article about the reforms to the Rockefeller Drug Laws that were recently signed into law."²⁰

"I'm working on an article on the radical right on college campuses for an upcoming indy article."²¹

"I'm writing on propaganda preparation of the Iraq war by the INC/NeoCon complex."²²

"I am working on a zine and I need a little direction."²³

"I'm looking for historic images of NYC for a documentary that I'm working on for my group, Heads On Fire."²⁴

"[M]y video collective is making a documentary on military recruitment and possibly on the draft..."²⁵

"Hi, yep I'm a student – library and info studies no less – but am stumped on this one and figure you can help."²⁶

The question from a library school student also indicates that RR is seen as a venue where colleagues collaborate and help one another. In a few cases, members actually know questioners, strengthening the real-life bonds between library workers and activists. A writer in New York City, for example, has submitted several questions to RR over the years, asking about media coverage of prisoners' hunger strikes, statistics on battered women, and legal cases on prisoner abuse. Thanks in part to RR's research assistance, her book about resistance among women in prison will be published later this year.

Frequently, questions are asked in a manner that implicitly or overtly assumes political affinity between the questioner and RR librarians, as in one that states, "I need some information on the Military Commissions Act of 2006 so I can defend my abhorrence of it in a knowledgeable fashion."²⁷ Another says, "The liberals are making noises about blaming anarchists and radicals for any rowdiness that may happen at the RNC protests";²⁸ expressing a point familiar to activists but not necessarily to the mainstream that there is a wide gap of mistrust between 'liberals' and those who are decidedly on the extreme political left.

Questions are international in scope and cover many topics, from the Iraq war to cocaine to Czech anarchists. Many involve subjects that are current issues in North American activism, such as the criminal justice system (including library services to prisoners), immigration and the environment. RR has provided resources for alternative charitable giving in the areas of Hurricane Katrina relief (2005) and aid to post-election chaos in Kenya (2008).

Given RR's roots in the actions around the 2004 RNC, many questions have been submitted by activists preparing for demonstrations. Among other things, these have covered the history of silent actions as a form of protest,²⁹ whether NYC Police Commissioner Ray Kelly had a son who was himself planning to protest³⁰ and age-related legal issues for a 16-year-old protestor.³¹

In keeping with RR's identification as a collective of library workers, many questions have been about books and reading materials. Several people have asked about reading lists, particularly for young people: progressive or radical books for a 6-year-old,³² alternative perspectives

on relationships and sex for a 15-year-old,³³ a good primer on imperialism³⁴, books explaining progressive issues to teenagers,³⁵ and more.

Non-librarians as well as librarians have approached RR with questions about library issues. The question of balance in library collections has been covered in a discussion about getting alternative materials into libraries³⁶ and about adding a map called The People's Guide to the RNC to library collections.³⁷ People have asked about creating a radical lending library in New York City,³⁸ and whether anyone has studied the information-seeking behavior of activists.³⁹ Some questions reference recent and historical political influences on librarianship, such as the PATRIOT Act and library patron data⁴⁰ and FBI visits to libraries.⁴¹ RR also turned (with permission) a discussion from the Library Underground email list into a document on the site: "Why do we need librarians and libraries anymore now that we have the Internet?"⁴²

Technology and Open Source

Similar to the concept of social responsibilities in a theoretically neutral field like librarianship is the idea of technology as an ideological tool. While staff at the libraries that use the proprietary Microsoft Windows software – by far the most common operating system – may believe that they're making unbiased technology decisions, library workers and others who use free software are aware of political implications of these decisions. Free/libre open source software (FLOSS) is best thought of as being free as in speech, not as in lunch. In other words, lack of cost alone does not make something 'free'; rather, it is the philosophy of openness and liberty behind the software that counts. The generally agreed-upon criteria of FLOSS are the following,⁴³ that one is free to:

- Read source code and evaluate it for security and other reasons.
- Modify source code for your own use.
- Distribute your modifications.
- Anyone for any use.

RR uses open source and/or non-commercial software and Web hosting as much as possible. The technology collective InterActivist Network hosts the RR website at no charge, and the only consistent cost incurred is domain registration, at less than USD 20.00 per year.

The site is written in PHP with a MySQL database backend, and it uses Drupal,⁴⁴ an open source content management system. Drupal provides tools for blogging, content creation, site design and organization and user management. Every member of RR can create content – answers to questions, subject guides for the 'reference shelf', blog posts, and other pages. The decentralized set-up allows people to immediately implement ideas, such as a guide to alternative video archives and blog posts about a Library of Congress subject heading action.

An option for contacting RR besides email and webforms, as well as for communication among RR volunteers, is instant messaging (IM), using Gaim⁴⁵ and other open source IM clients.

Moving Even Farther from the Desk: If Reference, then why not Instruction?

An exciting outcome of RR's service is the opportunity to share skills with the broader activist and information professional communities. Almost all of these appearances represent contact with non-traditional and underserved populations – most adults do not have the affiliations with colleges and universities that allow them access to the rich print and electronic collections of academic libraries, and many community activists do not look to public libraries to assist with the research that will shape their campaigns. RR functions as a way to promote these services.

Recent RR presentations and skillshares include the following:

- RR was a coalition partner for the 2008 NYC Grassroots Media Conference, helping plan and execute this annual event, and conducted two workshops, 'Radical Reference Presents: The 2008 Grassroots Media Election Guide' and 'Alternative Voices on the Internet: Managing the News Online'.
- The Women and Media Conference in 2008 provided an opportunity to teach 'FACT-UP: Fact Check, Research and Thinking Critically like a Radical Librarian,' which introduced fact-checking skills and research strategies to both storied reporters and novices.
- RR members helped plan the first and second (2007 and 2008) NYC Anarchist Bookfairs, presenting a workshop called 'The Importance of Community Needs Assessment in Activist Work' in 2008.

- At the Mid Atlantic Radical Bookfair in 2007, RR members, along with other information and library advocates, conducted a panel discussion on social equality and radical services as a form of activism.
- The US Social Forum of 2007 saw an ambitious librarian effort led by members of RR and PLG. One goal was to collect materials from the forum itself to preserve and archive this social movement history. Another was to survey forum attendees on attitudes towards activism, libraries, and information-seeking.⁴⁶ A third was to provide reference services in the forum's Media Justice Center; including conducting the workshop 'Media Essentials: Research and Fact-Checking.'

A full list of RR appearances is available at <http://radicalreference.info/rrpresentations>.

While public libraries may offer free instruction on computers and navigating the Internet, these classes are not available to those who work or go to school during library hours, and they are not appealing to those whose skills are more advanced or whose interests are more focused than typical public library classes can satisfy. The workshops and skillshares that RR members conduct are a way for library workers to assist some of the many non-traditional patrons who either don't use libraries or don't get everything they need out of them. At the same time, the aim is to illustrate the importance of librarian expertise and library services, such as free access to subscription databases. All handouts and slides are available on the website, making RR's virtual presence a repository of its face-to-face instruction that then becomes available to anyone with an Internet connection.

In addition to conferences and bookfairs, RR members participate in activist campaigns as RR librarians. These activities are important to RR members, who are often part of the activist communities they serve. For example, the New York collective is periodically approached by the NYC Independent Media Center⁴⁷ to provide research support for their newspaper, and it was called upon to catalog the collection of documents, videos, and periodicals archived by a local environmental group. An RR member in Boston helped coordinate the Iraq Veterans Against the War (IVAW) Winter Soldier campaign⁴⁸ earlier this year.

Conclusion

Librarians are educators, stewards of literacy and protectors of freedom of information and as such hold the key to a continuing dialog with the public concerning the right to access information regardless of privilege or location. Technology may be the issue that both drives this right and divides us. In the US the number of households that have a computer in the home continues to rise,⁴⁹ and yet in other parts of the world these numbers are drastically lower. One cannot deny that the ability to penetrate the barriers to relevant and trusted information may lie in the ability to access and use a computer. RR works to extend information literacy with the understanding that information has an inherent bias. With a dearth of guidance in the face of an expanding river of information, and with more and more organizations geared towards answering questions posed by the general population, RR has become an invaluable tool to a targeted base. By collaborating with journalists and activists, RR volunteers serve a population advocating for social justice both within and outside of the mainstream system of information-gathering and reporting. A cyclical building of knowledge perpetuating change is the cornerstone to worldwide information literacy, and RR continues to work towards this goal.

Notes

Unless otherwise noted, all links were last accessed December 10, 2008.

1. http://en.wikipedia.org/wiki/2004_Republican_National_Convention_protest_activity
2. <http://www.libr.org/srrt/about.html>
3. <http://libr.org/plg/index.php>
4. <http://librarian.net>
5. <http://www.librarianactivist.org/>
6. <http://libraryjuicepress.com/blog/>
7. <http://uclue.com/>
8. <http://answers.yahoo.com/>
9. <https://www.chacha.com/>
10. <http://ptech.allthingsd.com/20080424/if-you-have-chacha-and-a-cellphone-you-have-answers/>
11. <http://ipl.org/>
12. <http://ipl.org/div/farq/>
13. <http://www.infotoday.com/searcher/oct02/west.htm>
14. <http://ask.metafilter.com>
15. <http://www.txtmob.com/>
16. <http://www.appliedautonomy.com/>
17. <http://lightningbug.sourceforge.net>
18. <http://www.interactivist.net>
19. <http://radicalreference.info/node/1203>
20. <http://radicalreference.info/node/559>

21. <http://radicalreference.info/node/508>
22. <http://radicalreference.info/node/91>
23. <http://radicalreference.info/node/241>
24. <http://radicalreference.info/node/562>
25. <http://radicalreference.info/node/30>
26. <http://radicalreference.info/node/329>
27. <http://radicalreference.info/node/1301>
28. <http://radicalreference.info/node/74>
29. <http://radicalreference.info/node/417>
30. <http://radicalreference.info/node/31>
31. <http://radicalreference.info/node/29>
32. <http://radicalreference.info/node/1999>
33. <http://radicalreference.info/node/15>
34. <http://radicalreference.info/node/899>
35. <http://radicalreference.info/node/162>
36. <http://radicalreference.info/node/2135>
37. <http://radicalreference.info/node/149>
38. <http://radicalreference.info/node/703>
39. <http://radicalreference.info/node/514>
40. <http://radicalreference.info/node/469>
41. <http://radicalreference.info/node/166>
42. <http://radicalreference.info/internetvslibrary>
43. <http://www.fsf.org/licensing/essays/free-sw.html>
44. <http://www.drupal.org>
45. <http://gaim.sourceforge.net/about.php>
46. http://radicalreference.info/information_needs_survey
47. <http://nyc.indymedia.org/en/index.html>
48. <http://ivaw.org/wintersoldier>
49. <http://www.census.gov/prod/2005pubs/p23-208.pdf>

Paper presented at the World Library and Information Congress: 74th IFLA General Conference And Council, 10–14 August 2008, Québec City, Canada, in session 158.

Reference and Information Services. Version française: http://www.ifla.org/IV/ifla74/papers/158-Friedman_Morrone-trans-fr.pdf; Espanol: http://www.ifla.org/IV/ifla74/papers/158-Friedman_Morrone-trans-es.pdf

About the Authors

Lia G. Friedman is Head of Public Services and Instruction and Outreach Librarian at the University of California San Diego Arts Library. A member of Radical Reference from the beginning, Lia is also the Staff Librarian for Make/Shift magazine and blogs at theexperiment.org. Lia can be reached at Arts Library, Geisel Library Building, University of California, San Diego, 9500 Gilman Drive, #0175Q, La Jolla, CA 92093-0175, USA. Tel. +1 858-822-2784. E-mail: lgfriedman@ucsd.edu

Melissa Morrone is a graduate of McGill University's Graduate School of Library and Information Studies and currently works as a Library Information Supervisor at a branch of Brooklyn (NY) Public Library. A member of Radical Reference since its inception, she is also active with Books Through Bars in New York City. Melissa can be reached at 39-Flatlands, Brooklyn Public Library, Flatlands Branch, 2065 Flatbush Ave., Brooklyn, NY 11234, USA. Tel. +1 (718) 253-4409. E-mail: m.morrone@brooklynpubliclibrary.org

Mass Digitization for Research and Study: the digitization strategy of the Bavarian State Library

Klaus Ceynowa



Dr. Klaus Ceynowa is the Deputy Director General of the Bavarian State Library in Munich, Germany. From 2002 to 2005, he worked as Deputy Director at the Göttingen State and University Library, and from 1997 to 2001 as assistant to the director and head of the acquisitions department at the Regional and University Library at Munster. There, Dr Ceynowa was responsible for two projects funded by the German Research Foundation which dealt with the development and implementation of Activity Based Costing and a Balanced Scorecard for academic libraries. His main research interests are strategic and financial planning, human resources management and development, controlling and marketing for libraries in the digital age. He is a member of the Standing Committee of the IFLA Academic and Research Libraries Section. From 2005–2007 he also served as convenor of the IFLA Quality Issues in Libraries Discussion Group. Since 2007 he has been a delegate to the OCLC Members Council. Dr. Ceynowa may be contacted at: Bavarian State Library, 80328 Munich, Germany. Tel. + Phone: +49 (0)89 28638 2201. E-mail: ceynowa@bsb-muenchen.de Website: www.bsb-muenchen.de

Abstract

The Bavarian State Library is one of the largest European research libraries. The Library's unique collection profile is characterized by extremely precious manuscripts, rare printed books and comprehensive special collections from thousands of years of cultural heritage. Responding to the challenges of the digital age, it is a primary strategic objective of the Bavarian State Library to digitize as soon as possible its unique collections, which are a good part of written cultural heritage, and to make them usable for the world. Aiming for this strategic objective, the library undertakes several large-scale digitization projects, which will bring more than 1.2 million books online during the next few years. The deployment of state-of-the-art robotic scanners as well as a public-private partnership with Google which are part of this digitization strategy are described in detail. The implications for the future role of libraries – especially as 'bricks and books' institutions – in the rapidly changing information landscape is also briefly discussed.

Keywords: digital libraries; mass digitization; digitization strategy; public-private partnerships; Bavarian State Library; Google Book-Search Project

From the 'Hybrid' to the 'Digital' Library

The relevant infrastructure for the research, distribution and use of information today is the Internet. Researchers and students expect to satisfy their need for information promptly and comprehensively via the Internet. Since the variety of web-based offers meets this demand increasingly frequently and comfortably, users have less and less need to use conventional information sources and resources. At least for the generation born after 1981, the so-called 'millennials', who grew up with user-friendly web technology and for whom – primarily due to the ubiquitous availability of high-speed broadband networks – immediate access to digital offers and services, independent of time and place, has become a matter of course, the following is true today: Information has to be accessible easily, at a mouse click, on the Internet, otherwise it is no longer even taken notice of. This generation is currently studying at university or college and will shortly be playing a decisive role in shaping the forms of generating, communicating and acquiring information in research, teaching, business and career.

Current surveys and opinion polls clearly point out the resulting challenges for libraries. In the 2006 OCLC report, 'College Students' Perceptions of Libraries and Information Resources', 39 percent of the responding college students said that, preferring the use of the Internet, they avail themselves of the services of their university library considerably less frequently.¹ In reply to the question which type of research suited their habits best ("fits perfectly with your lifestyle"), 64 percent of respondents mentioned using search engines; however, only 30 percent mentioned the

‘online library’ and only 24 percent the ‘physical’ library.² In line with this, 72 percent of the college students prefer search engines when searching information, but only 14 percent prefer the “real” library, and 10 percent prefer the electronic library.³ As is shown by the survey compiled in 2006 by PEW Internet & American Life Project titled ‘The Internet as a Resource for News and Information about Science’, this information-using behaviour is by no means applicable only in the fields of structured factual questions or pragmatically motivated information access (such as, for example, preparing for an exam), but likewise in the field of more sophisticated and specialized information demand. Three scientific disciplines were picked out – stem cell research, climate change and the origin of life. A representative number of Americans were asked where they would go first in order to learn more (!) about these specific scientific topics. Also with the aim of acquiring more in-depth knowledge, 67 percent (stem-cell research), 59 percent (climate change) and 42 percent (origin of life) of the respondents would resort to the Internet, whereas only 11 percent (stem-cell research), 12 percent (climate change) and 19 percent (origin of life) mention the library as their preferred information source.⁴ The study ‘Researchers’ Use of Academic Libraries and their Services’, published in 2007 by RIN (Research Information Network) and CURL (Consortium of Research Libraries) among other things analyses the importance of the ‘real’, physical library for scientific and scholarly users. Scientists and scholars of different disciplines were asked to compare the intensity of their library visits in the year 2006 to that of the year 2001, and to make a prognosis for 2011.⁵ Regardless of the field of study the result is very unambiguous: whereas in the year 2001, 40 percent of the responding scientists and scholars still used to visit the library at least once per week, in 2006 this proportion had diminished to 22.5 percent, and according to the respondents’ own prognosis, in the year 2011 it will have shrunk to 18.5 percent. A particularly significant drop is expected in the fields of life sciences, with merely 9.5 percent, and physical sciences, with only 10 percent, predicted as regular on-the-spot users in the year 2011. In the social sciences also, only a very limited demand for local library services (19 percent) is expected in 2011. Only in the field of arts and humanities did 40 percent of the respondents plan to keep visiting the library at least once per week in 2011.

If the libraries wish to maintain their position as the hubs of the academic and general public information infrastructure also in the future, they have to act on their conclusions drawn from the foreseeable changes in the patterns of use. In the long term, this means that the trend is leading away from the well-known model of the ‘hybrid library’ with peacefully coexisting printed and electronic media, and towards the model of a genuinely ‘digital library’ with a predominantly net-based offer of contents and associated services. It is not a contradiction that, parallel to this development, ‘real’ libraries (if not all libraries) will also continue to exist as centres of communication and cultural exchange and as guardians of heritage.

International Research Library on the Internet

The challenges posed by the model of a primarily – or even exclusively – web-based information infrastructure differ depending on the type of library and the users to be serviced. For the Bavarian State Library, as a great European universal library and one of the world’s leading international research libraries, its collections acquired systematically in the course of 450 years represent the decisive ‘distinguishing feature’ at the centre of its ‘business model’ for the digital age. These collections, which encompass a large part of the written cultural heritage of the Occident, and which are continuously further extended, are a unique resource for academic research and study. With 91,000 manuscripts, the Bavarian State Library holds one of the five largest collections worldwide, and with its collection of 20,000 incunabula it even holds the world’s largest collection of incunabula. With 130,000 prints of the 16th century, it owns Germany’s largest collection of works from this period. As for its holdings of periodicals – about 49,000



Figure 1. Exterior of the Bavarian State Library.

titles, a growing part of which is also available in electronic form – it is outranked in Europe only by the British Library.

Due to its international orientation, the Bavarian State Library – in contrast, for example, to a university library – does not have a locally defined ‘primary user group’. Rather, its services address researchers, students and information seekers on an international level. The demand is of a correspondingly international nature, as is shown by the intensive use by foreign academics and the great demand by document delivery services (about 500,000 orders processed in 2007).

The Internet represents the natural medium for the Bavarian State Library, for it allows everybody to access information, no matter when or where. Consequently, one important strategic goal of the Bavarian State Library is to digitize its unique holdings as fast as possible and – very pragmatically – to make them accessible to the world as far as possible under the given legal and technological conditions.

The Bavarian State Library has been pursuing the goal of a comprehensive digitization of its holdings since 1997, the year of foundation of the Munich Digitization Centre (MDZ – Münchener Digitalisierungszentrum), which was established with the financial support of the German Research Foundation (Deutsche Forschungsgemeinschaft – DFG). This centre is seamlessly integrated in the work processes of the library in the form of the ‘Digital Library Division’ (Referat Digitale Bibliothek) today. Since its foundation it has carried out more than 80 projects, mostly funded by third parties, the majority of them representing cooperative projects with university and non-university research. In addition to developing innovative technologies and workflows, the Bavarian State Library focuses on digitizing its manuscripts and Bavarica, as well as the collections of the DFG-supported areas of collection emphasis, in particular history and Eastern Europe. By the end of 2007 over 24,000 titles with a total data volume of 50 terabytes had been scanned and processed for posting on the Internet. The ‘digitization line’ of the Bavarian State Library is currently equipped with two high-resolution book scanners, two so-called ‘Graz camera tables’ for the gentle digitization of the most valuable manuscripts and prints, and three fully automatic scanning robots with a maximum throughput of 1,800 pages per hour.

The know-how aggregated at the MDZ now puts the Bavarian State Library in a position to realize its comprehensive digitization strategy in a variety of suitable ways, given the diachronic structure of its collections and the different types of materials used. With continued financial support by the German Research Foundation, the manuscripts, incunabula and historical prints of the 16th century and the music materials and maps will be digitized ‘in house’ using the digitization line of the MDZ. In a current DFG-financed project for the digitization of the 38,000 German language prints of the 16th century held by the Bavarian State Library, 7.5 million pages are scanned by means of scanning robots within a period of only two years.

The current support guidelines of the DFG, in particular concerning national licenses for current periodicals and the digitization of materials belonging to areas of collection emphasis⁶, furthermore allow the increasingly comprehensive provision also of works that are subject to copyright protection. Already in 2008, again supported by the DFG, the Bavarian State Library is going to conclude contracts with renowned publishing houses in the fields of humanities and social studies, allowing the digitization and open-access provision of the publishing programmes frequently up to the year of publication 2004. The compensation payments will be manageable, and a comfortable moving-wall solution will provide for the continuation of these digitization programmes.

‘Boutique Digitization’ versus Mass Digitization

Regarding the collection segment from the 17th to the 19th century, flanked by the historical collections of the manuscripts, incunabula and early prints on the one hand, and the copyright-protected collections of the 20th century and new publications – in printed or electronic form – on the other hand, the Bavarian State Library has taken the path of a public-private partnership. In the spring of 2007 the Bavarian State Library and the world’s leading Internet search-engine provider Google signed a widely noticed cooperation contract of several years’ duration. Within the framework of this agreement Google will scan the copyright-free collections of the library from the 17th to the 19th century – encompassing far more than one million books and bound volumes

of periodicals. The digital copies will be made available on the Internet for worldwide use, both via the website of the Bavarian State Library (<http://www.bsb-muenchen.de>) and via Google Book Search (<http://books.google.com>) and the general Google web search. The cooperation with Google will make a substantial part of the European written cultural heritage – hundreds of thousands of literary and scholarly source works in many languages, as well as a comprehensive, systematically built corpus of historical research literature – available at a mouse click for every user with an Internet access. In addition to the Bavarian State Library, a whole group of renowned libraries, among others the university libraries of Stanford, Michigan, Harvard and Princeton, the New York Public Library and the Bodleian Library of Oxford University, currently take part in the Google library project.

What were the reasons that convinced the Bavarian State Library to commit itself to this partnership, which is unique in scope in Europe, with Google? The projects of the Munich Digitization Centre, similar to the activities of other large German libraries, usually follow a subject-related or material-specific approach directed

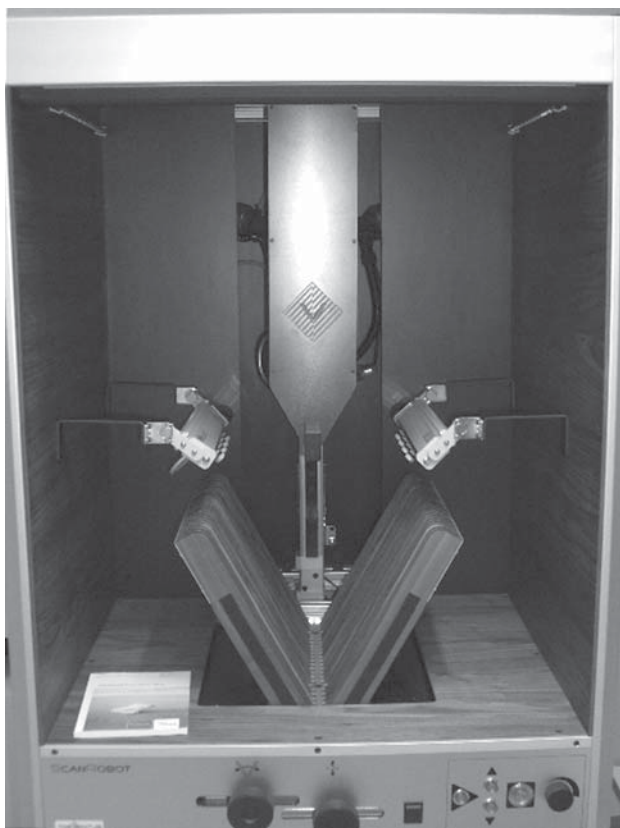


Figure 2. One of the automatic scanning robots at the Bavarian State Library.

at relatively small text collections which are of special research interest or which are unique as regards their collection profile. Ronald Milne of the British Library has called these projects ‘boutique digitization projects’. In contrast, the cooperation between the Bavarian State Library and Google means that for the first time in the history of German libraries a digitization project of an industrial scale, a true mass digitization project, is tackled technically and logistically. A ‘selection’ of books takes place only according to their fitness for scanning from a conservation perspective, and according to certain requirements of size and volume posed by Google’s proprietary scanning technology.

The funds necessary for a mass digitization project designed to encompass more than a million books, especially if this project is to be carried through within a period of little more than five years, can only be provided within the framework of a public-private partnership. The current publications and recommendations by the European Commission and the European Council for the ‘Digitization and Online Accessibility of Cultural Material and Digital Preservation’, for example, express rather clearly that the European Union will not contribute to funding the operating expenses of the mass digitization of cultural material, but considers this a task of the member states. Also the current initiatives on a German federal and state level for developing a ‘German Digital Library’ by way of contribution to a ‘European Digital Library (Europeana)’ are still largely undetermined as to who is going to shoulder the financial burden of a comprehensive digitization of the German cultural heritage in libraries, archives and museums. In view of the immense funding requirements, the European Commission explicitly points out the necessity of public-private partnerships, in order to cope with the task of digitizing the respective national cultural heritage.⁷

‘Google Digital Copy’ and ‘Library Digital Copy’

The decisive advantage for the Bavarian State Library in cooperating with Google lies in the fact that Google absorbs the complete digitization cost. By way of compensation, Google keeps a ‘Google digital copy’ for integration in Google Book Search and the general Google web search. The Bavarian State Library, for its part, obtains a ‘library digital copy’ for integration in its various

Internet offers. As regulated by corporate law, and as is customary in public-private partnerships, the details of the contract are confidential. The central point of the contract concluded with Google is: through obtaining a digital copy of the data generated by Google, the Bavarian State Library acquires these data 'physically' and thereby permanently. The 'library digital copy' may be made available within the framework of the online catalogue (OPAC) and the web offers, for example in the form of research collections selected according to subject areas and processed especially for scholarly research.

The digitized books can be browsed or leafed through virtually by means of comfortable navigation instruments. What is more, due to progressive optical character recognition, the majority of the digitized works will be searchable in full-text mode. Since the digitization project encompasses exclusively copyright-free holdings of the Bavarian State Library, the user also has the option to

download or copy the complete work for scholarly purposes. The provision of the digital copies in the form of full-text indexed research collections, catalogued with differentiated structural data and Web 2.0 functions, will create entirely new possibilities of working, in particular for the areas of humanities, cultural studies and social studies. This means that the Bavarian State Library does not only set great value by content, but also by context.

The metadata of the digitized collections furthermore allow the Bavarian State Library to integrate the 'library digital copy' in regional, national and international portals and services without any restrictions. The holdings digitized by Google can thus, for example, be integrated in services such as the 'Bayerische Landesbibliothek Online', Bavaria's arts and humanities portal, or the planned 'European Digital Library', if necessary upon prior selection according to subject or material. In this context it should be stressed that the contract



Figure 3. One the Graz camera tables in use at the Bavarian State Library.

with Google is nonexclusive. In the light of new technologies developed in the future, special requirements of use or a change in the strategic framework conditions it is thus left up to the Bavarian State Library to produce new digital copies also of such titles already scanned by Google.

It goes without saying that Google, as a stock exchange listed corporation, does not digitize the complete copyright-free holdings of the Bavarian State Library for altruistic reasons. Given the ranking of Google Book Search in the complete Google portfolio, it is obviously not intended to directly market the 'Google digital copy'. This does not make much sense in view of the fact that the library may offer the identical 'library digital copy' free of charge via its web offers. The 'Google digital copy' can be accessed via the general Google web search or via the special web service of Google Book Search. At least for the latter, no online advertising is planned so far to accompany the search results.

Nonetheless, the library project provides Google with an indirect, yet significant competitive advantage. The full-text digital copies add an enormous amount of content to the Google search index, which in the end results in an optimized search, more users, more clicks on the advertisements and thereby an increase in profit. Generally, the variety of services – Google Earth, Google Scholar, Google Mail and also Google Book Search – surrounding the web search engine representing the Google core product seem to primarily fulfil the function of making Google appear the more attractive service in comparison to competing search engines, which are always 'just a mouse click away'. "Users like Google better" – according to this principle Google Book Search also makes a contribution to making the search engine more attractive for online advertisers.

Conservation of Collections and Long-Term Archiving

As the central state and repository library of the Free State of Bavaria, the Bavarian State Library has to guarantee the long-term usability of its holdings. The collections of the Bavarian State Library of the 19th century are seriously threatened by paper disintegration. The digitization by Google thus serves also the purpose of collection conservation, since by preparing digital copies at

least the information contained in the threatened books can be saved. Since the extent of the damage is increasing rapidly, time is of the essence. The digitization represents a special conservational protection also for those parts of the collections that are not threatened by disintegration, since in the future readers will normally use the digital copy, whereas the original will only have to be consulted for special research purposes. In line with its digitization strategy, the Bavarian State Library will in future generally halt the production of microfilms of threatened library holdings. Digital copies will be produced instead, which, owing to their conditions of use, have already developed into the far more attractive secondary form. The Bavarian State Library sets about the challenging task of safeguarding the digitized holdings in the long run together with the technically superbly equipped Leibniz Supercomputing Centre of the Bavarian Academy of Sciences and Humanities.⁸ Several large-scale projects supported by third-party funds are currently pursued in this field. In support of all the process steps of its digitization projects the Bavarian State Library has developed an electronic publishing system with elaborate functions of a logistics server, which is designed particularly for 'industrial mass digitization' with several thousand volumes to be 'moved' per week, and which supports all processing steps from retrieving the volumes to their web presentation, on to their long-term archiving.

Conservational Fitness and Quality Standards

The Bavarian State Library issued an invitation to tender for the planned mass digitization of its copyright-free holdings in the Supplement to the Official Journal of the European Union (Tenders Electronic Daily), advertising the project as a service concession in a transparent and non-discriminatory procedure in the form of an 'invitation to participate in the negotiation procedure'. The thus concluded cooperation agreement with Google is subject to the obligation of secrecy that is customary for contracts between public institutions and commercial enterprises, meaning that no information must be given to third parties regarding the technical and organizational details of the contract, the exact scope of the holdings intended for digitization and the exact duration of the project. This circumstance has led to critical enquiries, primarily regarding the problem of fulfilling the conservational and

qualitative requirements that library digitization projects are usually subject to.

It has to be stressed in this context that the conservational criteria underlying the decision as to which books are in a sufficiently fit state for digitization and which are not, are as a rule established by the Bavarian State Library and Google together. In cases of doubt the final decision is always taken by the library. The consistent involvement of the internationally renowned 'Institute for the Restoration of Books and Manuscripts' of the Bavarian State Library, ensures that no book is handed over to Google which could be damaged during scanning using Google's technology. Also the quality standards agreed with Google are within the tolerance range that is customary for third-party funded digitization projects. It is advantageous in this context that the Bavarian State Library does not belong to the first group of participants in the library project initiated by Google in 2004, but as a 'late entrant' can profit from the quality checks continuously optimized by Google.

Libraries and the Internet Economy

In the light of the Google library project, in which 26 large libraries are currently already participating, with a total of approximately 30 million books to be scanned, the fundamental question arises as to whether this enormous project does not sound the death knell for libraries in the long run, in particular since a growing part of new literature is also offered in digital form by the publishing houses, as e-journals and e-books. Will the readers still use the reading rooms, the lending desks and the special collections of the libraries, if great parts of their holdings can easily be retrieved online at every Internet workstation? Given that the reading rooms of the Bavarian State Library are frequently extremely crowded – in 2007 more than one million visitors were counted – and that the new opening hours until midnight were embraced enthusiastically, there is obviously no need to worry about this, not even in the long run. Rather, the current development can be characterized as a renaissance of libraries, which are enjoying a continuous increase in use as places of cultural and scholarly exchange and concentrated learning, even though increasingly comprehensive parts of their information resources are made available online.

Sometimes it is also doubted whether the 'library digital copy' left at the free disposal of the Bavarian State Library will still be in demand after all, given that the identical 'Google digital copy' can be retrieved using the most popular search engine of the world. From the perspective of the Bavarian State Library, this doubt is also unfounded. The library is in fact not at all unhappy that its copyright-free collections will in the future be retrievable also via Google, the world's most frequently used web search engine. After all, this corresponds to the basic mission of every library: to join people and knowledge. The offers of Google Book Search and the Bavarian State Library therefore have to be understood as complementary. Ultimately, Google is striving to add additional content to its search index that is not at the disposal of its competitors, in an attempt to consolidate its market leadership in the online advertising business. The processing of extensive digital text collections for specific scholarly interests of use, and their embedding in web-based research and learning environments, which will be characteristic for the future offering of the 'library digital copy' by the Bavarian State Library, does at least not represent the core business of Google. It can therefore be assumed that, instead of competing with each other, rather two services and interests of use with a different focus will coexist.

A prognosis of the potential demand of the future mass offering of digitized research literature by the library can be made with the aid of the so-called 'long tail' phenomenon of the Internet economy. The term 'long tail' designates a curve for the sale of goods, which drops steeply at the start, and then slowly progresses toward zero. At the top of the curve are the products that are in strong demand (in the case of DVDs for example, these are the latest blockbusters), at the end of the curve are the only marginally sought after niche products (for example a subgenre of Japanese anime films). In his much-noticed book, *The Long Tail. Why the future of business is selling less of more*, Chris Anderson, head editor of the US periodical *Wired*, has shown by means of a multitude of examples that this curve is no longer universally applicable to Internet trading.⁹ Online traders such as Amazon, iTunes or Netflix owe up to one half of their turnover, not to 'hits' or 'bestsellers', but to perceived niche products from the continuously flattening long tail. This circumstance is owed to the fact that on the Internet the geographic

boundaries of conventional, local and regional retail trading do not exist. On the web, goods can be offered globally and for 24 hours per day, so that products which are intended for a special group of customers and not for the mass market still meet with sufficient demand. Products that are regarded as 'shelf warmers' in a conventional retail outlet, or that are not even included in the line of goods, can be sought after by thousands of customers in online trading.

Large universal libraries have conducted a long tail business already under the conditions of the analogue age – consciously disregarding the dictate of economic usability – by providing 'product storage' for a demand that is usually rather special and unforeseeable regarding time and scope. In the digital age this offer now meets with exactly the right distribution channel to reach a demand potential that is spread throughout the world, but which is nonetheless of a significant total volume. This becomes obvious already when comprehensive retro-conversion projects render the metadata of specific collection segments globally accessible via online catalogues. After the conversion of the so-called 'Quarto Catalogue' of the Bavarian State Library, containing the collections from 1841 to 1952, was concluded at the end of 2005, the demand for these titles within the framework of local lending and document delivery increased by more than 20 percent. If in the future the digital full-text copies of increasingly comprehensive collection segments can be accessed directly via the catalogue entries, a significant increase in use stands to be expected in comparison to the conditions of analogous information provision. In this case the demand follows the offer. The unique holdings of the library, which had always been intended for use on an international scale, can now finally reach their clients, who had existed all along, but being spread all over the world could not be addressed efficiently so far. On the whole, the basic idea of the digitization strategy of the Bavarian State Library is to contribute to the core mission of the library: to preserve the complete unique holdings for future generations and to simultaneously optimize access for the present generation. The 'market place' in which libraries of future viability have to fulfill this mission is the web, which decisively shapes the work processes in science and research. Today, libraries can no

longer be confident that the users will adapt their workflows to the library's structures, but rather have to integrate their services and offers into the network-based work processes of the users. The strategy of the comprehensive digitization of its holdings enables the Bavarian State Library to bring its self-conception as an international research library to bear in the Internet world in an appropriate manner.

References

1. Cf. 'College students' perceptions of libraries and information resources', 2007, p. 61 (3–19) under <http://www.oclc.org/reports/perceptionscollege.htm> and 'Perceptions of libraries and information resources' (2005) under <http://www.oclc.org/reports/perceptionscollege.htm>.
2. Cf. 'College students' perceptions of libraries and information resources', 2007, p. 62 et seq. (3–20 et seq.) under <http://www.oclc.org/reports/perceptionscollege.htm>.
3. Cf. 'College students' perceptions of libraries and information resources', 2007, p. 23 (1–11) under <http://www.oclc.org/reports/perceptionscollege.htm>.
4. Cf. http://www.pewInternet.org/pdfs/PIP_Exploratorium_Science.pdf, p. 21.
5. Cf. <http://www.rin.ac.uk/files/libraries-report-2007.pdf>, p. 19 et seq.
6. Concerning the DFG support programme 'Nationallizenzen' (national licenses) see http://www.dfg.de/forschungsfoerderung/wissenschaftliche_infrastruktur/lis/projektfoerderung/foerderziele/nationallizenzen.html and <http://www.nationallizenzen.de>. Concerning the programme 'Digitalisierung der DFG-Sondersammelgebiete' (digitization of the DFG areas of collection emphasis) see http://www.dfg.de/forschungsfoerderung/formulare/download/12_154.pdf.
7. Cf. *Official Journal of the European Union*, 2006/C 297/01, 'Council Conclusions on the Digitisation and Online Accessibility of Cultural Material and Digital Preservation' http://ec.europa.eu/information_society/activities/digital_libraries/doc/culture_council_council_conclusions_nov_2006/en.pdf.
8. Bernd Reiner. 'Sicherung des Weltkulturerbes am Leibniz-Rechenzentrum' in: *Akademie Aktuell. Zeitschrift der Bayerischen Akademie der Wissenschaften*, 2007, no. 22, p. 18–22.
9. Chris Anderson. *The Long Tail. Why the future of business is selling less of more*. New York, 2006.

Paper presented at the World Library and Information Congress: 74th IFLA General Conference And Council, 10–14 August 2008, Québec City, Canada, in session 139 Acquisition and Collection Development. Version française: <http://www.ifla.org/IV/ifla74/papers/139-Ceynowa-trans-fr.pdf>. Russian version: <http://www.ifla.org/IV/ifla74/papers/139-Ceynowa-trans-ru.pdf>

The Biodiversity Heritage Library: sharing biodiversity literature with the world

Nancy E. Gwinn



Constance Rinaldo



Abstract

Ten major natural history museum libraries, botanical libraries, and research institutions in the United Kingdom and the United States joined in 2005 to develop a strategy and operational plan to digitize the published literature of biodiversity held in their respective collections and to make that literature available for open access and responsible use as a part of a global 'biodiversity commons.' Headquartered at the Smithsonian Institution Libraries, the Biodiversity Heritage Library (BHL) is one of the cornerstones of the Encyclopedia of Life, a global effort to document all 1.8 million named species of animals, plants, and other forms of life on earth. This paper provides an overview of the BHL and its potential impact on biodiversity research, describes the BHL portal and its innovative search services, and provides a case study of the process from one of the members: the Museum of Comparative Zoology at Harvard University.

Keywords: Biodiversity Heritage Library; Smithsonian Institution Libraries; Museum of Comparative Zoology; Harvard University; taxonomy; systematics

Introduction

According to a US government report, biodiversity, a term coined by internationally renowned scientist E.O. Wilson as a shortened form of 'biological diversity,' refers to the variety and variability among living organisms and the ecological complexes in which they occur.¹ The basic sciences to identify biological diversity are known as taxonomy, the theory and practice of describing, naming, and classifying all plants, animals, and microorganisms of the world, and systematics, the classification of living things into groups based on their evolutionary origins. Research in these disciplines is most often conducted in natural history museums and botanical gardens in the developed world, which contain rich and extensive collections of flora and fauna, as well as large libraries of the literature that document them. Taxonomists have barely scratched the surface of known species (Godfray 2007; Wheeler 2008). It is estimated that there are between 5 and 30 million species on the planet, yet only 1.8 million have been identified and described.

In 1992, 150 government leaders signed the Convention on Biological Diversity, which recognized the crucial role of taxonomy in promoting sustainable development. For several years, taxonomists have recognized the need to speed up their work, before expanding populations, environmental calamities, and economic development reduce the wealth of existing species. Their work has value well beyond the act of identification; it has wide use and economic impact for a broad range of applications in agriculture, biodiversity conservation, protected area management, control of invasive species, forestry, plant breeding, disease control, and trade in natural products, including pharmaceuticals (Wheeler 2008). Yet there are severe obstacles to progress, what the field has termed the 'taxonomic impediment.' Taxonomists largely carry out their

work among the specimen and literature collections in the industrialized nations. There are few taxonomists to collect and work on the millions of undescribed species in biodiversity-rich but economically poorer countries.² And for all taxonomists, access to the relevant literature can be a costly, time-consuming process (Godfray 2007; Minelli 2003).

More than any other science, the domain of systematic biology is utterly dependent on the historical literature of published descriptions of species; publication in print still determines the legitimacy of naming and credit for new discoveries. Alessandro Minelli writes:

According to current practice, any serious monographic work about a given taxon should include a careful consideration of all previous literature dealing with at least one species belonging to that taxon, regardless of whether it was published last year or in the late 18th century, whether it is written in English or in Spanish, in Russian, or in Latin. If these works include the description of (the then) new taxa, or have an impact on its nomenclature, they cannot be ignored.³

Minelli describes taxonomic papers as ‘legal’ documents as well as scientific ones, because they describe new species according to rules of distinct international codes.⁴ The codes exist to ensure that all taxonomists adhere to principles of priority, which resolves problems caused by the use of homonyms or synonyms in naming. Consequently, taxonomists must consult all relevant literature from Linnaeus⁵ onwards to ensure a sound basis for their work.

Technology and the Internet finally provided a way to dissolve the taxonomic impediment, at least in part, through scanning of both the literature and specimen collections so they can be shared with the global scientific community (Godfray 2007). There are over 5.4 million volumes on biodiversity dating back to 1469: 800,000 monographs and 40,000 journal titles. Fifty percent were published before 1923 and are in the public domain in the United States. It is a big job.

Planning Begins

In 2003, the Smithsonian Institution hosted a conference of biologists to discuss what was needed

to improve the efficiency of biological research. The greatest obstacle, experts determined, was access to the historical literature (see Figure 1 for an example). Those of us in natural history museum and botanical garden libraries know that for years, researchers have traveled to use our collections, often spending most of their time standing in front of photocopy machines to collect as much literature as possible before they returned home. Digital technology and the Internet offered a solution; if the literature was scanned and made searchable on the web, researchers could gain access from wherever they were in the world. As a result of the conference, the Smithsonian provided funding for the Smithsonian Libraries to digitize the *Biologia Centrali-Americana*, a 63-volume work published from 1879–1915, which remains the seminal work on the flora and fauna of Central America.⁶ The funding also supported initial work toward developing a system of automatic coding of the scientific names of species found in the work to improve accessibility for taxonomists.

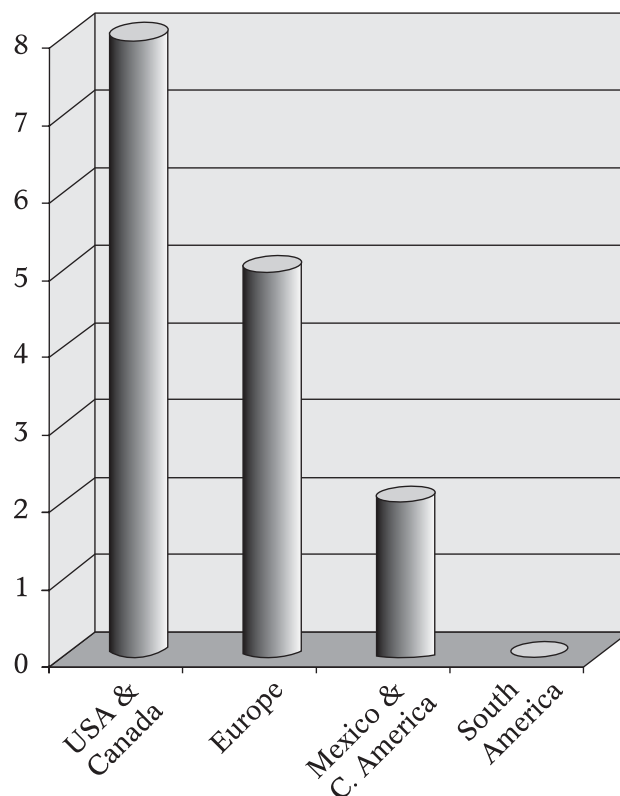


Figure 1. Distribution of copies of the *Biologia Centrali-Americana*; the copies in Central America are located in the Earl Tupper Library, Smithsonian Tropical Research Institute, Republic of Panama, one of the Smithsonian Libraries' twenty branch libraries. Courtesy, Martin Kalfatovic.

In 2005 at the Natural History Museum in London, the Alfred P. Sloan Foundation funded an international symposium called *Library and Laboratory: the Marriage of Research, Data, and Taxonomic Literature*. The 80 biologists, librarians, and computer scientists who attended again identified the lack of access to the published literature of biodiversity as one of the principal obstacles to efficient and productive research (Moritz 2005).

In May 2005, representatives of several major natural history and botanical libraries met at the Smithsonian's National Museum of Natural History in Washington, DC. With funding provided by the Smithsonian Institution, the goal of the meeting was to develop a strategy and operational plan to digitize the published literature of biodiversity held in their respective collections and to make that literature available for open access and responsible use as a part of a global 'biodiversity commons' (Moritz 2002). Two years later, the directors of the libraries of the American Museum of Natural History, Harvard University Botany Libraries, Harvard University Ernst Mayr Library of the Museum of Comparative Zoology, Missouri Botanical Garden, Natural History Museum in London, New York Botanical Garden, the Royal Botanic Gardens, Kew, Field Museum of Natural History in Chicago, Marine Biological Laboratory/Woods Hole Oceanographic Institution Library and the Smithsonian Institution Libraries agreed to a Memorandum of Agreement that established the Biodiversity Heritage Library (BHL).⁷ The Smithsonian Libraries agreed to host the BHL Secretariat and provided from its senior management staff the first Program Director, Thomas Garnett.

Another development was brewing at the same time, the Encyclopedia of Life.⁸ This is an ambitious, even audacious, collaborative global project to document authoritatively the 1.8 million known species of animals, plants, and other forms of life and to create web pages on the Internet for each one. Each page is just an entry point, suitable for the general public but with linked pages pointing to more specialized data for researchers. The Encyclopedia embraced the Biodiversity Heritage Library as one of its four cornerstones, to bring much of the historical literature about a species to the relevant web page. This was critical for the project, because through the Encyclopedia of Life, the BHL received a first increment of USD 3 million from the John D. and Catherine T.

MacArthur Foundation. Additional funds have come from the Alfred P. Sloan Foundation, the Gordon and Betty Moore Foundation, the Richard Lounsbury Foundation and individual BHL member institutions.

Why Do This Now?

The ten BHL member libraries have over 2 million volumes of biodiversity literature collected for over 200 years to support scientists and students throughout the world. Clearly these libraries together hold a substantial part of the world's published knowledge on biological diversity. While there are several mass digitization projects at major research libraries here and abroad, none have the discipline-specific focus of the BHL partner institutions and may fail to capture significant elements of this biodiversity legacy. Much of the biodiversity literature is highly specialized and often not duplicated even in broad university research collections. Nor are all of them allowing open access to the digitized publications. With its innovative search strategies, the BHL is intended to be 'one-stop shopping' for those needing to consult biodiversity literature.

Costs of scanning have fallen considerably and in a high-production mode, the Internet Archive projects a low basic cost of 10 cents a page. The biodiversity literature is a tractable, well-defined scientific domain and has extreme longevity – current taxonomic literature often relies on texts and specimens that are more than 100 years old. (Godfray 2007; Minelli 2003) In addition, the BHL supports the Global Biodiversity Information Facility (GBIF) and other international biodiversity initiatives⁹ (Speers and Edwards 2008). The benefits are clear: taxonomists and other scientists will have access to the biodiversity literature – globally, scientists and citizens in the developing world will finally have easy access to the historical literature. This clearly advances the objectives of the international Convention on Biological Diversity.¹⁰

Getting Started

The BHL members selected the Internet Archive to provide the scanning services and also to store the resulting digital files. The Internet Archive shares the BHL mission to provide open access

to the literature and has the capacity to do mass scanning in a high production mode at reasonable cost. The Internet Archive began digitizing for BHL partners in early 2007. BHL members are working with three (Boston, Washington, DC, and New York) of the six ten-station Internet Archive digitization centers, as well as with smaller centers in the Smithsonian Institution, the University of Illinois, Urbana-Champaign, and the Natural History Museum, London. However, the partners are doing much more than simply scanning volumes.

Missouri Botanical Garden staff established the Biodiversity Heritage Library portal as an innovative research environment with the ambitious goal of transforming the nature of scientific inquiry, as well as vastly accelerating research in life sciences and conservation.¹¹ Via the portal, users have access to both digitized images (JPEG 2000, PDF, and JPEG) and Optical Character Recognition (OCR) text of the literature, but that is only the start. It also employs an array of taxonomically intelligent services designed to overcome the problem of common name versus scientific name and changes of names over time. This scientific reference system for investigating scientific literature offers a model that reflects, and also serves to amplify, scientists' approaches to, and use of, the body of natural history literature.

What Is Taxonomic Intelligence?

Scientists use scientific names to find information about organisms. One organism can have many scientific names over time or multiple common names depending on language or region. Additionally, one name might refer to multiple organisms. Thus it can be difficult to retrieve information about an organism even if the current scientific name is known. This problem was addressed by an international project called uBio for Universal Biological Indexer and Organizer. uBio is composed of the Taxonomic Name Server (TNS), which acts as a name thesaurus; NameBank, a repository of over 10.7 million recorded biological names and identifiers that link those names together; and ClassificationBank, which stores multiple classifications and taxonomic concepts.¹² BHL uses TaxonFinder, a taxonomic intelligence algorithm developed by the collaborators at uBio, to compare the OCR texts with NameBank and identify likely scientific names (Figure 2). Once fully integrated, a researcher will then be able to search the BHL collection using any form of an organism's name (Leary et al. 2008). This will also allow users searching the Encyclopedia of Life web pages to draw in the literature related to the species.

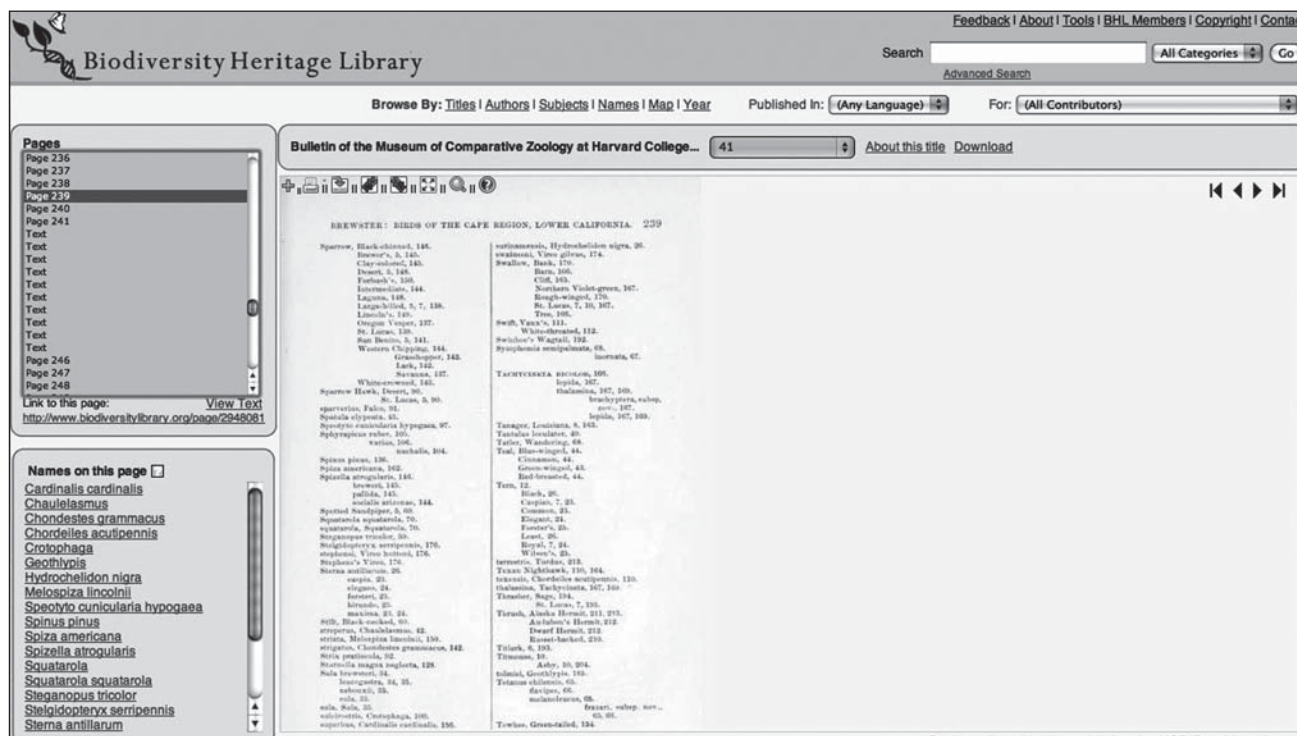


Figure 2. A page in the Biodiversity Heritage Library showing the list of scientific names (bottom left lower corner) extracted from the OCR text.

After the Internet Archive scans the volumes, the BHL portal ingests MARCXML and other associated XML files. JPEG files are retrieved on calling up a volume and high resolution JPEG 2000 files are retrieved on the fly from the Internet Archive when requested by a user and decoded at the portal for viewing via a web browser. OCR text is also sent on the fly to uBio for name extraction via taxonomic intelligence and displayed in real time with the page image. The BHL portal serves the image and text files; displays volume, part and piece metadata; and applies Globally Unique Identifiers (GUIDs) for linking to other taxonomic services. Persistent URLs allow linking at bibliographic record, volume, and page levels in BHL. The BHL technical staff at the Missouri Botanical Garden are constantly improving the portal's presentation of results and adding features such as geocoding the Library of Congress Subject Headings using the Google Maps Application Programming Interface. (Figure 3; Freeland et al. 2008).

The use of taxonomic intelligence to locate binomial name strings within BHL texts enables the creation of 'discovered bibliographies' related to desired taxa. Unlike traditional bibliographies or

indices (e.g. *Zoological Record*), full-text searching of BHL content with taxonomic name recognition allows a user to find names in articles or books that traditional bibliographies did not include. BHL technical staff implemented the 'discovered bibliography' functionality that creates citation lists at the page level for taxa using the 'name find' feature.

But What About Copyright?

In general, the BHL project attempts to keep copyright infringement risk low by tackling the public domain literature first, seeking permissions for digitization, negotiating alternative agreements and moving on when none of these tactics applies. BHL has an opt-in copyright model. The BHL Program Director has opened negotiations with a variety of publishers from small, learned societies to large commercial organizations. As of December 2008, the BHL has obtained permissions to digitize 47 titles from museum and small society publishers. The BHL will digitize the entire run of the publications to the most recent issues, as per the negotiated permissions, and mount them on the BHL portal at no cost to the societies.



Figure 3. The Library of Congress Subject Headings of the volumes in the BHL are geocoded and then mapped using the Google Maps API.

The files can be reused by the society for its own purposes.¹³ The BHL will take responsibility for long-term sustainability of the scanned material. Some aggregators and commercial publishers have expressed interest in alternative agreements, such as providing metadata and OCR files for indexing using taxonomic intelligence tools.¹⁴ Discussions are underway with the *Zoological Record*, BioOne, JStor and others.

BHL Governance

The Biodiversity Heritage Library is not incorporated and thus is not a legal entity. Through the Memoranda of Agreements, each member institution has committed to the collaborative effort to build the Biodiversity Heritage Library and to search for additional funding to support it. The directors of the member libraries form the Institutional Council, which provides strategic direction, reviews progress, discusses current issues, and monitors the budget. An Executive Committee meets weekly by conference call. As members have implemented the scanning process, practical issues and obstacles have appeared. The case study of the Ernst Mayr Library at Harvard's Museum of Comparative Zoology illustrates some of these.

Ernst Mayr Library Case Study

The costs of scanning, while low on a per-page basis, are high over the course of the entire project. Thus it was essential to identify ways to minimize duplication of scanning. The first step was to purchase the OCLC Collection Analysis tool and add all member library records.¹⁵ The Smithsonian Institution paid for the first year's subscription. It took more than a year to get this tool up and running, partly because not all libraries initially were members of OCLC, and, in the case of Harvard University, the records of the botany and zoology libraries could not be separated from those of the other Harvard libraries. The OCLC Collection Analysis tool enabled a broad look at institutional collection strengths and allowed the group to estimate the numbers of public domain pages that could be scanned more or less immediately and to identify subjects with unique titles in the member libraries. Non-BHL mass scanning projects have some overlap with the BHL. To minimize duplication, library staff review other projects; if the material is open access and easily ingested, in some cases, BHL members may alter scanning plans.

With input from the EOL Steering Committee, BHL members chose serial publications as the first priority, because the serial literature is critical to the scientists who make up the primary audience for the first release of the BHL. The library systems office of the Natural History Museum of London developed a tool to avoid scanning duplication among the member institutions. A mashup database was generated that included online catalog records of all the serials in all the member institutions with a checkbox for selection; thus a serials bid list was born. As titles are identified for scanning, an institution will access this database to make sure no one else has bid on the item. If there are no bids, or bids cover only part of a serials run, the institution is free to claim the title, or at least the parts of the title that have not been bid, for scanning. The MBL/WHOI Library has built a monograph de-duping tool that shows what monographs have been scanned; there is no bidding process for monographs as yet.

BHL members established a wiki early in the project to facilitate communication among the widely dispersed libraries. The wiki is used to maintain minutes of conference calls and meetings, post presentations and procedures, and coordinate technical questions, quality discussions and collections work. It became clear in March 2008 that member staff managing the day-to-day planning and processing workflows required better communication. Staff needed to compare their experiences more directly to ensure efficient workflows and to avoid 'reinventing the wheel.' Staff now participate in two or more monthly conference calls. These calls have become critical to developing and managing efficient and coordinated workflows for the BHL project. Staff in the member libraries discovered that everyone was experiencing frustration with various workflow problems and were surprised at the overwhelming amount of work to be done.

The Director of the Museum of Comparative Zoology set aside substantial funding for five years, so that the Ernst Mayr Library collections could be scanned for the Biodiversity Heritage Library. Digitization, processing and moving such a large collection is expensive in dollars and labor, so the library hired student interns to assist. Reports generated from the Mayr Library's integrated library system are used to create 'picklists' of items to pull for scanning. Picklists are lists of items available to scan, based on date criteria, in shelf-list order and simplify the process of pulling

exactly the right items from the shelves. All items are barcoded and cross-checked for suitability for scanning; fold-outs are identified, measured and flagged. Picklists are edited upon checking the holdings of BHL partner institutions using tools described above to minimize duplication of scanning effort. Staff generate a final packing list for each shipment to the scanning center once individual items have been checked for scanning suitability based on size, fragility and size of fold-outs. A database contains an inventory of all items scanned for the Ernst Mayr Library. Items rejected, either by the Library or the scanning center, are tracked via the integrated library system.

It takes a minimum of 2.5 staff to keep the project moving at a pace of about 200 books every other week.. Harvard's systems staff work with the Internet Archive to ensure smooth Z39.50 connections and help with project planning and problems.. The Z39.50 connection enables the Internet Archive to pull metadata from the Harvard University catalog to populate the Internet Archive and BHL portal records. Ultimately, it is important that Harvard users have immediate access to the digital collections and thus the final step is to provide access to digitized material through Harvard's portal.

Many of the early publications have fold-outs or are larger than average size. Initially, the Internet Archive had strict limits on size and did not scan books with fold-outs. Other issues that cause



Figure 4. One of the Internet Archive scanning stations at the Boston Public Library.

rejection or questioning of items for scanning include tight margins, size, brittleness and poor binding. Internet Archive personnel in the Boston scanning center (Figure 4) have been flexible and are willing to scan unusual items and provide test scan samples so that the best decision for the library's materials can be made. A solution to the fold-out problem is being tested in Boston and although there is still a size limit (18 by 24 inches), it is an exciting improvement (Fig 5). The quality of the scanned foldouts varies; some are superior to the original, some as good as the original, and some are inferior to the original but adequate for display. To see the best quality foldouts, the JPEG 2000 image must be viewed. The pdf and other views of the foldouts are not adequate in most cases. Fewer books are rejected now because of fold-outs, but digitizing them increases scanning time and thus the cost.

Results to Date

As of December 2008, there were more than 10.3 million pages, contained in nearly 8,760 titles (more than 25,000 volumes) accessible through the BHL portal. The project has demonstrated that: the concept of mass scanning of general collections is possible; there are high levels of OCR accuracy in late 19th and 20th century printing. The taxonomic intelligence (species name finding) across millions of pages against nearly 11 million names in Name Bank is highly effective. Administratively separate and geographically disparate institutions can collaborate on a complex, multi-level project and achieve concrete results in a specific knowledge domain.



Figure 5. A sample fold-out from Klein, Jacob Theodor. 1755. *Tentamen herpetologiae*. Leidae & Gottingae : Apud Eliam Luzac, Jun. The original foldout was 10" by 15".

Most of the literature is in the developed world, in the Northern Hemisphere, but as mentioned earlier, most of the biodiversity is in the developing world and the Southern Hemisphere. One of the most desirable outcomes of the project is to repatriate literature to the originating countries of publication by making it accessible to anyone with an Internet connection. That this is already working is evident from the following message that the Smithsonian Libraries received from a researcher in a natural history museum in Peru:

My deepest gratitude for allowing me access to the digital version of the very rare "Bulletin des Séances de la Société Entomologique de France". It has been very important for my work on the database of the names of the butterflies of the world to be able to consult at leisure this series, which is held by extremely few libraries in the world. I cannot stress enough the importance of having access to electronic versions of the literature, especially to us researchers who cannot benefit from well-endowed institutional libraries.... I only wish that there were many more such electronic resources. Please keep up the excellent work!

and another from Hawai'i:

Aloha. I live on The Big Island of Hawai'i, a \$300.00 plane ride away from Honolulu and the Bishop Museum. Even when I can make it to the Museum (where I study the Hawaiian Bird Skins), they do not have every single bird (moho apicalis, the Oahu moho is missing).... I have been looking for this text for over TWENTY YEARS. Mahalo nui loa for all your hard work. Reading these pages mean so much to me and many others.... I cannot thank you enough, nor stress the importance of your website enough. Thank you for putting these items on the web, and in such a findable manner.

The Encyclopedia of Life and other informatics projects are data mining the BHL for information located in the legacy taxonomic literature. The opt-in copyright model has attracted a number of learned societies, who have given permissions for digitization of current materials. Additionally the project has generated excitement in the international community and many opportunities to develop new partnerships. There has also been support from traditional bibliophile and scientific audiences.

Where Do We Go from Here?

As the case study has shown, there are problems to be solved related to scanning and the types of volumes that form the heritage literature of biodiversity. Ultimately, the project must provide 'article-level' analysis of serials, which may require some adaptation of existing bibliographic indices of biodiversity literature, as well as the development of automated tools for structural analysis. This development may be combined with the creation of the 'union catalog' to provide 'one-stop' access to the literature.

The Biodiversity Heritage Library partners are currently Anglo-American centered, though many of the collections contain extensive non-English language material. A key goal is to develop global partnerships and include a global community. The best way to incorporate more languages is to partner with other countries and have the BHL served from multiple nodes in multiple languages. The BHL is working to engage European partners through projects such as the European Distributed Institute of Technology (EDIT)¹⁶ and Synthesis of Systematic Resources (SYNTHEsys).¹⁷ EDIT consists of 27 European, North American and Russian institutions whose goal is to overcome the taxonomic impediment by building taxonomic expertise through training and information provision. The goal of the SYNTHEsys project is to develop a coordinated European infrastructure for researchers in the natural sciences. The BHL hopes to leverage these projects into partnerships with other countries and thus develop an infrastructure that has a non-English component. The European Union, through eContentplus,¹⁸ its program for digital libraries, has offered a large grant to a European consortium to create a BHL Europe, which will involve seventeen countries. The goal is to link this site with the existing BHL Portal. Informative discussions have also taken place already with the Chinese Academy of Sciences and in Brazil. The Australian Government is likely to fund scanning as part of the Atlas of Australian Life. The BHL will also continue to work with commercial publishers for fair and equitable use of their publications.

Linkages to other data types (e.g. molecular, morphological, phenotype) are key to the overall plan. It will also be necessary to get equal cost efficiencies and speed for special collections and items with fold-outs or that are oversized. OCR

must improve for older publications and those in non-Roman scripts. It is likely that audiences will be expanded through social networking tools and repurposing content for new audiences. The BHL was developed primarily for scientists in partnership with the Encyclopedia of Life, but the audience will broaden as more tools become available.

The underlying architecture of BHL needs strengthening. The BHL is moving from the .Net application environment to the Fedora Commons architecture.¹⁹ Fedora Commons provides an open source architecture that can manage many forms of digital content. It will allow for an open framework for the description, storage, and retrieval of digitized materials in the different ways needed by scientists and librarians. For instance, *Biologia Centralia-Americana* has been described as a single title with 63 volumes or as 21 titles, each with multiple volumes. Fedora Commons can accommodate such variations and it has the potential to be a persistent, sustainable architecture for the Biodiversity Heritage Library.

The BHL partnership is working with the global taxonomic community, publishers, the Internet Archive and other organizations, to ensure that the biodiversity heritage literature is available to all, from the student seeking information on insects in the garden to scientists investigating endangered species in Brazil. It is a grand vision. But if the BHL is able to support biodiversity research by helping to eliminate one of the largest impediments to the identification of the world's living organisms, it will be counted a great success.

Notes

1. U.S. Congress. Office of Technology Assessment. 1987. Technologies To Maintain Biological Diversity, OTA-F-330 (Washington, DC: U.S. Government Printing Office): 313.
2. Global Taxonomy Initiative, Convention on Biological Diversity, <http://www.cbd.int/gti/problem.shtml>
3. Minelli, A. 2003. The status of taxonomic literature, *Trends in Ecology and Evolution*, 18(2): 75.
4. These are the International Code of Zoological Nomenclature, the International Code of Botanical Nomenclature and the International Code of Nomenclature of Bacteria.
5. Carl Linnaeus (1707–1778), a Swedish botanist, physician, and zoologist, is known as the father of modern taxonomy because he developed a scheme of binomial nomenclature that is still in use today.
6. The *Biologia Centrali-Americana* (BCA) is a fundamental work for the study of neotropical flora and fauna. It includes nearly everything known about the

biological diversity of Mexico and Central America at the time of publication (1879–1915). The original work consists of 58 biological volumes containing 1284 plates illustrating 18,587 subjects. A total of 49,392 species are described, 19,263 for the first time. Many of the illustrations and descriptions are the only ones that exist of the biota of the region.

7. About the Biodiversity Heritage Library, <http://www.biodiversitylibrary.org/About.aspx>
8. Encyclopedia of Life <http://www.eol.org>
9. Global Biodiversity Information Facility, <http://www.gbif.org>.
10. Convention on Biological Diversity, <http://www.cbd.int/>
11. Biodiversity Heritage Library, <http://www.biodiversitylibrary.org>
12. About the project, <http://www.ubio.org>
13. Can I Use Your Images, <http://www.biodiversitylibrary.org/Copyright.aspx>.
14. Tools, <http://biodiversitylibrary.org/Tools.aspx>
15. WorldCat Collection Analysis, www.oclc.org/collectionanalysis/default.htm
16. The European Distributed Institute of Taxonomy, EDIT, is the collective answer of 27 leading European, North American and Russian institutions to a call of the European Commission, issued in 2004, for a network in 'Taxonomy for biodiversity and Ecosystem Research'. This project started on 1 March 2006 and will last 5 years. <http://www.e-taxonomy.eu>
17. SYNTHESYS is the European Union-funded Integrated Infrastructure Initiative grant. This 5-year project, which began in February 2004, comprises 20 European natural history museums and botanic gardens [and] aims to create an integrated European infrastructure for researchers in the natural sciences. <http://www.synthesys.info/index.htm>
18. The eContentplus program expired on December 31, 2008, but will be continued after that date under the Information and Communications Technologies Policy Support Programme, one of the three initiatives that reside under the European Commission's Competitiveness and Innovation Framework Program (2007–2013). See http://ec.europa.eu/information_society/activities/econtentplus/index_en.htm and http://ec.europa.eu/cip/index_en.htm.
19. About Fedora Commons, <http://www.fedora-commons.org/about>

References and Links

- Biodiversity Heritage Library. <http://www.biodiversitylibrary.org> (accessed April 23, 2008)
- Biodiversity Heritage Library Prospectus. <http://www.sil.si.edu/bhl/supportdocuments/BHLP-prospectus10-05.pdf> (accessed April 23, 2008)
- Convention on Biological Diversity. <http://www.cbd.int/>
- Encyclopedia of Life. <http://www.eol.org> (accessed April 23, 2008)
- European Distributed Institute of Technology (EDIT). <http://www.e-taxonomy.eu/>
- Freeland, C., M. Kalfatovic, J. Paige, and M. Crozier. (2008) Geocoding LCSH in the Biodiversity Heritage Library. *The Code4Lib Journal*, Issue 2. 11 pp.
- Global Biodiversity Information Facility (GBIF). <http://www.gbif.org/>.

- Godfray, H.C.J., B.R. Clark, I.J. Kitching, S.J. Mayo, M.J. Scoble. (2007) The Web and the structure of taxonomy. *Systematic Biology*, 56 (6): 943–955.
- Leary, P.R., D.P. Remsen, C.N. Norton, D.J. Patterson and I.N. Sarkar. (2008) uBioRSS: tracking taxonomic literature using RSS, *Bioinformatics*, 23(11): 1434–1436.
- Minelli, A. (2003) The status of taxonomic literature. *Trends in Ecology and Evolution* 18(2): 75–78.
- Moritz, Thomas. (2002) Building the Biodiversity Commons. *D-Lib Magazine* 8 (6):
- Moritz, T. (2005) Macro-economic case for open access. In: Proceedings of a Conference in Association with an International Conference on the Barcode of Life, organised by Graham Higley and Chris Lyal (Natural History Museum, London), Anna Weitzman and Tom Garnett (Smithsonian Institution, Washington), and Tom Moritz (American Museum of Natural History, New York).
- OCLC Collection Analysis Tool. <http://www.oclc.org/collectionanalysis/default.htm>
- Speers, L, and J. Edwards. (2008) International infrastructure of enabling the new taxonomy: the role of the Global Biodiversity Information Facility (GBIF). In *The New Taxonomy*, The Systematics Association Special Volume Series 76, edited by Quentin D. Wheeler, Boca Raton, FL.: CRC Press, Taylor & Francis Group, pp 87–94.
- Synthesis of Systematic Resources (SYNTHESYS). <http://www.synthesys.info/index.htm>
- UBio. <http://www.ubio.org/>
- United States Congress. Office of Technology Assessment. (1987) *Technologies to maintain biological diversity*, OTA-F-330 (Washington, DC: US Government Printing Office)
- Wheeler, Q. (2008) Toward a new taxonomy. In *The New Taxonomy*, The Systematics Association Special Volume Series 76, edited by Quentin D. Wheeler, Boca Raton, FL.: CRC Press, Taylor & Francis Group, pp. 1–18
- Wheeler, Q. Taxonomic shock and awe. In *The New Taxonomy*, The Systematics Association Special Volume Series 76, edited by Quentin D. Wheeler, Boca Raton, FL.: CRC Press, Taylor & Francis Group.

Paper presented at the World Library and Information Congress: 74th IFLA General Conference And Council, 10–14 August 2008, Québec City, Canada, in session 109. Science and Technology Libraries. Version française: <http://www.ifla.org/IV/ifla74/papers/109-Gwinn-trans-fr.pdf>

About the Authors

Nancy E. Gwinn is Director of the Smithsonian Institution Libraries. She joined the Smithsonian in 1984 as Assistant Director for Collections Management and was appointed director in 1997. A former Fulbright scholar at the University of Oxford (Linacre College) in England, Gwinn holds a BA from the University of Wyoming, an AMLS in Library Science from the University of Michigan, and a PhD in American Civilization from George Washington University. Prior to the Smithsonian, she held positions at the Research Libraries Group, the Council on Library Resources, and the Library of Congress. Formerly Chair of IFLA's Preservation and Conservation Section and of Division VI, she currently serves on the IFLA Governing Board and is Chair of IFLA's Professional Committee. At the Smithsonian, she has fostered collaborative projects with museums and archives and is a member of the Biodiversity Heritage Library Institutional Council. Nancy may be contacted at: Smithsonian Institution Libraries, PO Box 37012 MRC 154, Washington, DC 20013-7012, USA. Tel. +1 202-633-2240. Fax: +1 202-786-2866. E-mail: gwinnn@si.edu

Constance Rinaldo has been the Librarian of the Ernst Mayr Library of the Museum of Comparative Zoology at Harvard University since 1999. She received a BA in Biology and Anthropology from the University of Massachusetts at Boston, an MSc in Zoology from the University of Connecticut and an MLS from the University of Maryland. Prior to coming to Harvard, she was the Head of Collections for the Biomedical Libraries at Dartmouth College. Connie currently is a member of the Institutional Council of the Biodiversity Heritage Library and serves as the Secretary for the Executive Committee. She may be contacted at: Museum of Comparative Zoology, Harvard University, 26 Oxford St., Cambridge, MA 02138, USA. Tel.: +1 617-495-4576. Fax: +1 617-496-6838. E-mail: crinaldo@fas.harvard.edu. Website: <http://library.mcz.harvard.edu>

eBooks on Demand (EOD): a European digitization service

Günter Mühlberger



Silvia Gstrein



Abstract

Within the framework of the European Union funded project Digitization on Demand (2006–2008), the eBooks on Demand service (EOD) is currently available in more than eighteen libraries in ten countries. EOD enables users to order public domain books as PDF eBooks. The requested books are digitized, delivered as an eBook and saved long-term in a digital library. The EOD service is implemented within the framework of a network. The individual library is responsible for the processing of the order and the digitization. The ordering of eBooks, delivery to the customer, electronic payment and automatic text recognition even for old and gothic font texts are supported through a central database with web access. The basic advantages of the network lie on the one hand in the reduced workload of individual libraries and on the other hand in the recognition value of the EOD service for the user and the public.

Keywords: eBooks; eBooks on Demand; document delivery service; digital library service; on demand publishing

Background

According to experts' estimates, around 1 million book titles were produced in Europe between 1500 and 1800, 5 million titles between 1800 and 1900 and in the 20th century the number multiplied with around 20 million titles being published.¹ It does not require clairvoyant ability to reach the conclusion that one day all of these approximately 25 million books will be digitized and available online. However, the factor of time cannot be underestimated, because even if several thousand books are digitized every day, it will take some decades until the target is reached.

As pleasing as these developments are in the view of individual researchers, the question in everyday library practice is raised: how does a researcher or historian locate a specific book that has not yet been recorded by one of the countless mass digitization programs? The situation seems completely disillusioning: far from the brave new world of global digitization projects, often the individual researcher has only traditional options at his disposal, and often cannot avoid a trip to the library in the case of older books from before 1800.

General Description of the EOD Service

In view of the difficulties experienced by a researcher when searching for a very specific work published between 1500 and 1900, the idea came up to develop a Digitization on Demand service. Some libraries already offer similar services within the context of their reprography departments and digitize individual book pages on request.²

The EOD service, however, wanted to go one step further. The target was to develop a comprehensive standardized procedure for ordering books and for delivering digitized books. Furthermore, the target solution was to be implemented within the framework of a network of libraries, reducing the workload of individual libraries and guaranteeing the user a dependable ordering system as well as consistent delivery quality. Also, the service was not only to be generally offered on the library's website, but to be equally integrated next to inter-lending and other services directly in the libraries' respective catalogues.³

For this reason, thirteen libraries under the leadership of the University and State Library of Tyrol presented and approved a project entitled 'Digitization on Demand' in the eTEN programme of the European Commission.⁴ The consortium included the following libraries: Bavarian State Library, National Library of Estonia, Royal Library of Denmark, National Library of Portugal, University and National Library of Slovenia, University Library in Bratislava, University Library of Graz, University Library of Greifswald, Humboldt University Library of Berlin, University and Regional Library of Tyrol, University Library of Regensburg, Vienna University Library and the National Széchényi Library in Hungary. The project lasted from October 2006 to June 2008. The service has been continued by the partners since 1 July 2008 in the form of the EOD Network. Over the coming years, the network will continue to be expanded with new partners and new on demand services being added.

From a technical standpoint, the goal of creating a network through the development of a central web-based database, the Order Data Manager (ODM), has been achieved. Every order in the EOD library network is collected there and processed. The staff of the individual libraries are notified of orders received by e-mail and receive online access to their respective orders. In this way, direct orders as well as price enquiries can be handled. As soon as an order is made, the book is pulled from the respective library and digitized following internal procedures. The respective image files are placed on the central EOD server via FTP and processed there by means of a further central service. Then it is a matter of the Digital Object Generator (DOG), a web service which, in addition to the image files, automatically generates full text by means of OCR (Optical Character Recognition). Finally, a single PDF file, the eBook,

is created, which also includes a cover and explanatory text on the EOD service. As soon as this process is completed, and the library has arranged the final release, the customer receives an automated e-mail with the link to his customer page. From there the customer can make the payment, for example, by credit card or other payment services, and then directly access the eBook and load it on his computer.

Books are ordered directly from the online catalogue of the respective library. The intention, therefore, was to draw the user's attention to the service where he can also find the metadata on the desired book.

The eBook PDF contains the page image (the electronic facsimile) as well as automatically recognized text even of gothic font text – which in very old books, however, has shown a substantial error rate. The user is able therefore to browse the entire book, magnify or insert notes as well as print original pages or search the full text of the book. The results are then highlighted directly on the original image of the page. One special advantage of eBooks also lies in the fact that colour pictures, like for example those included in older hand-coloured works, are reproduced again in colour; therefore, the user receives an absolutely authentic impression of the original.

The price of an eBook is set by the respective library and is mostly based on the number of the pages and a base price. The following consideration is the basis of the calculation: the user should not pay the actual total cost of the digitization; after all, the master files remain with the library and the public also later receives free access to the digitized works. What should be calculated is the additional cost occurring through the on-demand service. The underlying consideration is that a customer-oriented service leads to a considerably higher cost than mass digitization, which can be completed more rationally and cost-effectively.⁵ The specific price that a user now pays for an EOD eBook with 250 pages ranges between EUR 30.00 and EUR 130.00, depending on the library. In view of this price range, a certain degree of harmonization is certainly required here.

First Experiences in 2008

It can be said that expectations have been reached and in many cases even exceeded. Thirteen libraries

initially took part in the EOD service and the aim was to offer every book published between 1500 and 1900 as an eBook through the EOD service. However, this depends on the internal structures of each library. Thus, for example, not every sub library could be included.

If we look at the number of orders placed, it can now be said that larger libraries, which can index all their historical books in the online catalogue, process one order per workday. It was projected for the whole year 2008 that possibly nearly 1,500 orders could be processed and a comparable number of eBooks delivered. The average price per order is a little more than EUR 50.00, allowing a turnover of approximately EUR 75,000 to be calculated for the first year.

There are considerable differences among the libraries in the number of orders fulfilled. Which individual factors play a role needs to be studied in detail. What is key is how fully the historical inventory of a library is listed in the catalogue and how much the items in the catalogue are used by users outside of this library. A third factor must be added, which is completely surprising, that is whether the catalogue files are indexed by search engines such as Google. If an enquiry on a book title leads the user directly to the catalogue and the user sees the possibility of ordering the book in digital form, then it is especially interesting to those people who are not part of the library's core customers. Of course, the cost factor also plays an important, though evidently not a decisive role.

Finally, it can be summarized, that with its user-driven approach EOD can make a significant and long-term contribution to the development of a European digital library that is focused on the needs of the user.

EOD Customers

Every library that has implemented the EOD service has reported a very positive customer reaction. Representative of many others is this e-mail from an EOD user. It is from an Austrian researcher who works in London and ordered a book through EOD:

I just wanted to tell you that I am very pleased with the [...] EOD service and that I will certainly use this service again as well

as recommend it. "EOD" in my view is the right step into the future that will bring new life to old and valuable library holdings. [...] Books no longer have to be sent and the user no longer has to go to the library. And the "cherry on top" is the electronic text recognition!

In order to receive objective data, a systematic survey on customer satisfaction was carried out within the framework of the project, with 188 customers being surveyed by telephone following the completion of their order, using a standardized questionnaire. The data collected confirm initial impressions: just under 90 percent of customers stated that they were "very satisfied" with the service. They were especially satisfied with the fact that the service was offered at all. However, since not all delivered eBooks included full text, the question on the degree of satisfaction with the functionality was misleading and the result cannot be considered reliable.

When asked why they selected the EOD service, almost half of those surveyed answered that the book would otherwise have been "impossible or difficult to access". This proves that EOD has in fact achieved its goal of creating an additional alternative in accessing books.

Statements regarding the cost were also illuminating. The majority of customers paid between EUR 20.00 and EUR 49.00 per book. However, about 20 percent paid more than EUR 50.00, and a few, more than EUR 100.00 per eBook. The average price for all books was EUR 53.00. Thirty percent of customers rated the price of the EOD service as "very high" or "high". When asked how they rated the price-performance ratio, however, more than 95 percent of customers answered that it was "very good" or "good". Quite obviously, the cost arising from the digitization of the book is realistically estimated by customers; however, they would still desire lower prices. Nevertheless, 75 percent of customers stated that they paid for the eBook themselves, while a quarter accessed other budgets (institutes, faculties, companies).

It is not very surprising that the overwhelming majority of customers are either researchers or require eBooks for "professional or scientific use" (over 60 percent). In second place (at 16 percent) are book collectors and people who could be said to count among special interest groups such as amateur historians, for example.

A completely unexpected picture is given by the age range of the customers interviewed: there are no trends here; the customers are evenly spread over all age groups. The division according to sex, however, shows that fewer women order eBooks than men. The vast majority of customers are from the same country as the library they are ordering from. A further share is divided among the countries of Europe and a small proportion is from overseas.

Of especial interest to us is the survey carried out within the participating EOD libraries and the goal they set themselves of assessing the costs of digitization. It appears that only half the work time is used for scanning and post-processing the images, while related administrative tasks such as pulling the books, checking the archives, administering the orders and returning the books, make up the other half. Naturally, there are also significant differences from library to library and a lot depends on how effectively the respective processes within the library are organized. Within the area of digitization itself, it can be expected that in the next few years a better economy of scale can be achieved through the use of book robots.

Market Research

A special focus of the project was dedicated to market research and surveys of library users. The goal was to survey the general need for the EOD

service. The study was run parallel to a German representative sample of over 1,000 subjects as well as a sample of 2,200 users of the respective EOD libraries.

The expectations of library users in relation to product quality, the price of eBooks and the delivery time were surveyed together with the Institut für Marketing – Strategieberatung GmbH (Innsbruck, Austria).⁷ Moreover, the conjoint analysis⁸ process was partly used where the various attributes of a product or service, such as quality, cost, delivery time, etc., are combined and the subjects are given the choice of these packages. Based on a mathematical method, it can be calculated, with distinctly higher probability compared to traditional methods, which product features have especially lasting influence on the purchasing decision.

Figure 1 contrasts price and delivery time in the fictitious case of a 250-page book that has been requested for digitization.⁹

Figure 1 shows that, naturally, freely accessible eBooks have the highest benefit for the user. However, a price of EUR 20.00, around the same price as for a book, is still associated with a positive effect for the user. At EUR 50.00 per eBook, the situation clearly changes. Very similar is the user attitude regarding delivery time. A delivery time of three days is still seen as positive, while a delivery time of three weeks receives an overwhelmingly negative evaluation.

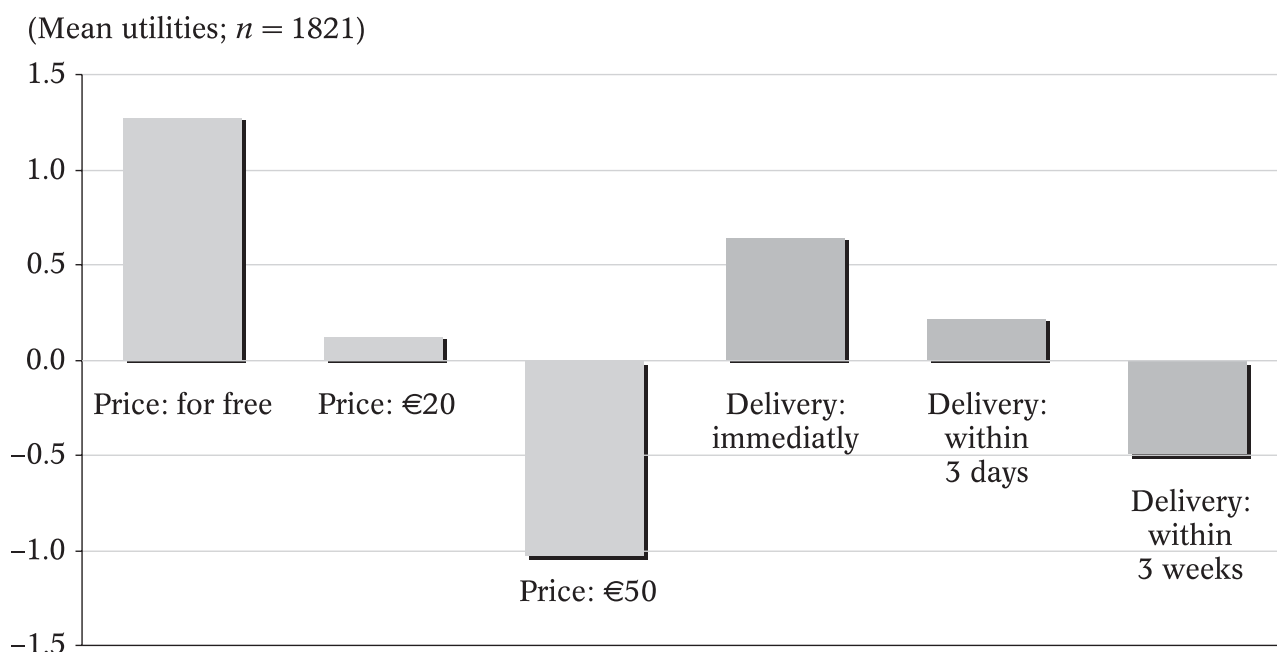


Figure 1. Benefits of different attribute levels of price and delivery time.

This survey opens up, from our point of view, another interesting perspective for public customers of digitization projects. If you want to make the EOD service more attractive to users, then you can consider assuming a percentage of the costs for each project. In this way, it is guaranteed the service will continue to be directed at individual customers and that the interests of the customer are also covered, in that a reduction in prices could be granted only to a specific region ('Austriaca'), a specific topic ('travel literature') or a specific group ('people affiliated with a university').

A further question was regarding the type of book those in the survey preferred. The alternatives offered were (1) a PDF file with full text search, (2) a PDF with only scanned images, (3) a database with online access and no PDF download possibility, (4) possession of original book, (5) borrowing the original book from a library or (6) reading the original in a library. The results showed that the PDF with full text search, together with possession of the original book, are the most attractive formats for use of historical books. This result is also reflected in most of the country summaries.

What is especially illuminating from the viewpoint of the libraries is that the option of reading the book in a reading room loses out compared to the other forms of use. However, just as interesting is that the pure electronic images without text recognition, and possible online databases without PDF download, also count among the least interesting alternatives. The top ranking given to a book that you own yourself shows that the second-hand bookshop becomes increasingly attractive as an alternative to the library. Finally,

second-hand bookshops have also been networked together internationally for a few years and can deliver older books at a limited cost and often at a relatively low price.

Very similar results are shown in Figure 3, in which the positive or negative characteristics of the product are listed as an outcome of the conjoint part. The PDF with full text and the ownership of the book are by far the highest-ranking options among all the other alternatives. It must be stressed that these alternative offers were not simply listed, but always surveyed in the context of 'packages' so that their quality rating in relation to each other could be determined exactly.

All of these numbers are unusually well secured and, surprisingly, the results of the survey of the general public give a similar picture. Here too, the PDF with full text and possessing the original book are at the top of the list, above all the other alternatives.

This impression is strengthened through an analysis of the alternatives to the EOD service itself. Searching the Internet for digitized versions of books was rated as the most important alternative by 40 percent of the people questioned, followed by a distinct margin at 25 percent for reading in the library. Interlending and buying the book in a second-hand bookshop possess the same desirability for the user in this survey.

In summary, it could be said that libraries that continue to offer their users only the traditional alternatives – lending, reading on site and interlending – actually no longer offer their users really attractive options. In fact, users expect to

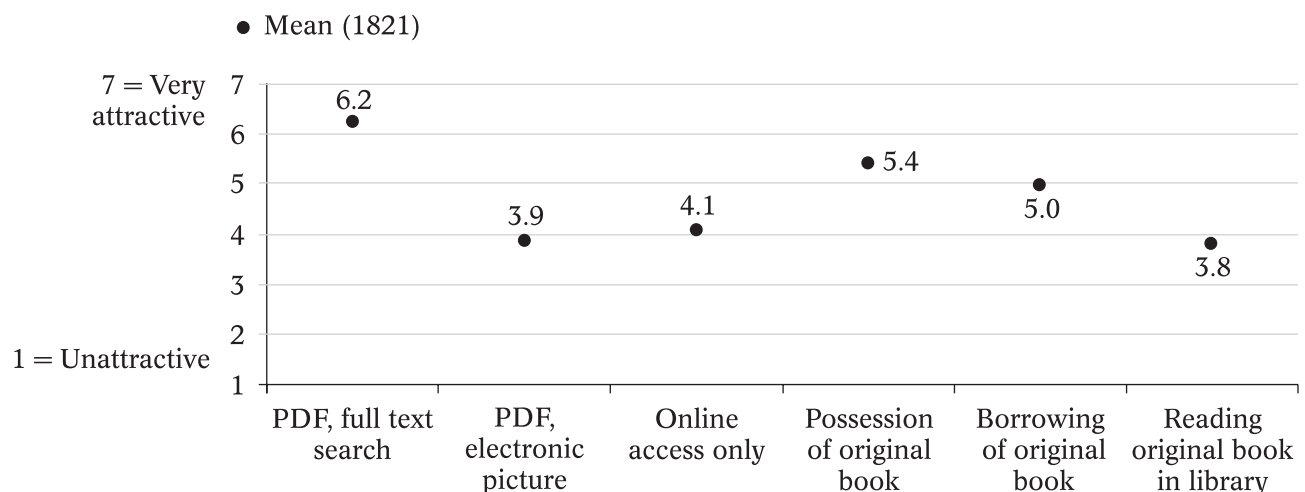


Figure 2. Attractiveness of different product types.

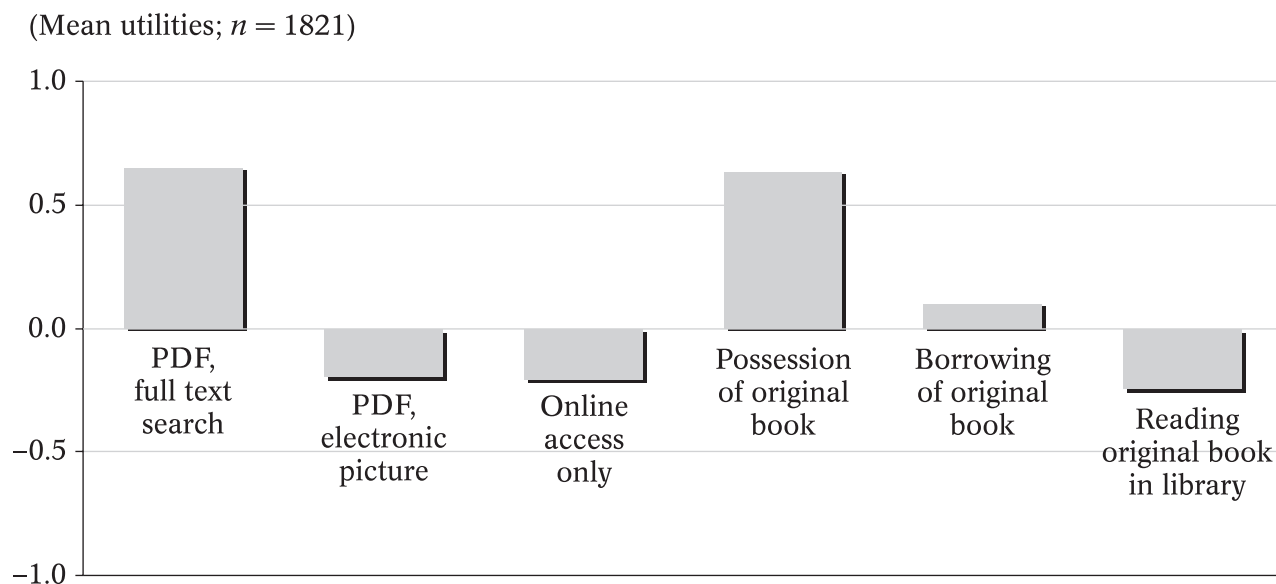


Figure 3. Benefits of different attribute-levels of product type.

find older books either digitally or they turn to a second-hand bookshop to find a copy themselves.

Basic Principles of the EOD Network

From 1 July 2008, the EOD network will stand on its own feet and be carried on by the participating libraries. The network's goal is to attract as many libraries in Europe as possible as members in the next years. In a few years, the original vision of the EOD network could become reality in that every single work published in Europe between 1500 and 1900 could be delivered worldwide within a few days as an eBook.

For organizational and legal purposes, the following structure has been selected for the EOD network: the hitherto coordinator of the project, the University and Regional Library of Tyrol, assumes responsibility for the operation, maintenance and further expansion of the central database with the services connected to that following the phase-out of EU support. Every prior project partner is connected in the network to each other through a cooperative agreement. The members of the networks are entitled to vote; the coordinator must therefore bring about a majority vote in the case of important decisions. In addition to the founding members, new libraries are brought into the network as 'associated members'.

The participating libraries pay the coordinator an annual fee and the actual costs incurred (OCR fees, online payment provider fees, etc.) for each eBook delivered. These fees are low, but should

ensure continuous operation in the medium term. According to internal calculations, it is assumed that the network can support itself with a minimum of around 50–60 libraries.

Further EOD Libraries

The future of the EOD network will depend in no small part on the willingness of European libraries to connect themselves to the network and provide the service. What reasons should a library have for joining the EOD network? The following considerations seem to us to be important here:

Expansion of the Service Portfolio

As seen in the customer survey and market research, users have reacted very positively to the service. A library that belongs to the EOD library shows that it reacts to the expectations of users and is anxious to meet the requirements of modern, Internet-based services. The EOD service should therefore be seen as an extension of a library's traditional service offering, ranking with traditional services such as building a collection, lending, interlending or reproduction services.

Support from a Central Infrastructure

The implementation of the EOD service is associated with low costs. The individual libraries neither have to buy any software nor develop a working routine for the processing of orders. They can instead access the central infrastructure. The websites and customer texts required for the

service just have to be adapted. Also all further central services, such as the creation of eBooks and online payment require no additional organizational involvement whatsoever.

Contribution to the Development of a Digital Library

Due to the fact that the EOD service only provides books which are without copyright restrictions on use, they can also be integrated into the respective digital library after the completion of the order. In this way, the digital library grows in line with the specific interests of users. Most EOD libraries place the works in their digital library within a period of some months and in this way the general public also gains free access to the digitized works.¹⁰

Internationalization

In the end, the EOD network is one of the few examples of an integration of libraries crossing national borders. The fact that the service is offered from Estonia to Portugal and from Slovenia to the Czech Republic is by no means self-evident and can also serve as an example of how this type of Europe-wide service could look in the future. For individual libraries there is the chance to gain experience and enter into international partnerships, and for the EOD network the wide proliferation in the countries of the European Union offers the possibility of being successful in further EU calls to tender and therefore of receiving 'fresh money' for improvements and expansions.

Five libraries not taking part in the EU project have already implemented the EOD service as well and are offering their books for digitization: the Moravian Library in Brno and the Research Library in Olomouc (both Czech Republic), the Saxon Regional Library – State and University Library of Dresden (Germany), the University Library of Tartu (Estonia) as well as the Bibliothèque Inter-universitaire de Médecine et d'Ontologie in Paris (France). The EOD coordinator is currently in talks with other well-known libraries in countries such as Austria, the Czech Republic, Germany, Poland and Hungary.

Expansion and Outlook

The first experience shows that the EOD network is fundamentally on the right path. The idea of concentrating on on-demand services and

implementing them by means of modern web technology can be seen as trendsetting. An infrastructure has also been created within the international network that will enable EOD to be equipped with new services and products.

From market surveys, it can be proven that in the relevant target group, i.e. scientists and researchers, there exists a high readiness to use the service. However, far too few of these potential customers are aware that they can access the EOD service in their search for a specific book. The awareness level must therefore be increased and, alongside general marketing measures, this should be achieved above all through an increased EOD presence in international catalogues and indexes as well as through a central enquiry database. The OCLC-run WorldCat or the TEL portal, which is a central search site for Europe's national libraries and is supported by the EU Commission, are of great interest in this connection. In the medium term, the EOD service is also to be directly integrated into these catalogues so that all users receive immediate notification in the case of books published before 1900, that digital ordering as an eBook is also possible.

The idea of a central EOD search engine goes a vital step further. This is to be 'fed' by EOD members' catalogue data and save the user from searching in individual local or national catalogues. An initial prototype of such a search engine is currently being developed in cooperation with the Institute of Technology at the University of Innsbruck. Moreover, the index of this search engine should also allow indexing by further search engines such as Google. In this way especially those users who find themselves searching for rare books are led to the EOD search results directly.

EOD's current standard product is delivered in a PDF eBook format, which contains an electronic copy ('page image') of the pages of the book as well as the automatic creation of full text. This, though, is just the beginning as digitization allows new products to be created, e.g. higher-quality full text and print-on-demand editions. All of these products build on the original library files and are to be centrally organized. In other words, no further procedures are required for the individual EOD library; instead, the new products will be centrally processed.

Especially interesting in this connection is the introduction of a print-on-demand service. Over 30 percent of customers surveyed stated they

would print the complete PDF eBook. It is therefore suggested to give these customers the option of directly ordering a reprint of the book along with the eBook from the outset. The actual challenge of this service has less to do with the printing of the PDF file, which many local suppliers can also do relatively cheaply, but instead in the development of a robust business procedure as well as worldwide delivery and online payment. A prototype is currently being tested that has been implemented in cooperation with the American company Booksurge,¹¹ a subsidiary of Amazon. As soon as a user wants a reprint in addition to the PDF eBook, the images are centrally prepared and transmitted to Booksurge with the metadata and an ISBN number, the book is printed there and sent directly to the respective customer. The customer pays for the production and shipping costs of the reprint on top of the price of the eBook. The chief advantage to the customer is that he only has to place a single order and the book can actually be delivered to him anywhere in the world. Following this first order, the book is also stored at Amazon.com and can continue to be ordered there as a reprint.

A further product is in the form of high-quality full text. This is especially necessary for those scientists who want to work very intensively and long-term with an historical work and therefore rely on a correct full text as well as the structuring of the text. However, the growing group of technologically interested readers who want to read their books 'on the go' and therefore use eBook readers could also be addressed with this. Conversion invites cooperation with a whole series of service providers who have specialized in the processing and creation of full text. The difficulty here, though, is in the diverse requirements and the lack of common standards. Furthermore it is very difficult from the start to estimate and above all generalize the costs of processing the books into TEL, docBook or MobiPocket and other eBook reader formats. We are, however, optimistic that in the course of 2008 a basic solution can be found and this product can be offered in 2009.

Eventually the EOD network would also like to develop a special service for the blind and visually impaired. On the basis of copyright agreements,¹² it should be possible in many countries in the European Union to allow the blind and visually impaired access to all books in a library. EOD, in cooperation with organizations and libraries for the blind, could expand the EOD service portfolio with an Access on Demand service. The DAISY

format would also provide an internationally accepted document format for the blind and visually impaired. However, here too there are several problems that need to be solved. Among these are the detailed review of copyrights and the authentication of a blind or visually impaired person and the allocation of costs, which should be charged either not at all or only minimally to the disabled person.

Notes and References

1. These figures are the result of a study within the framework of a contracted research project in 2007 by the ULB (University and Regional Library of) Tyrol, which has not yet been released.
2. E.g. Document Delivery Service at the British Library: <http://www.bl.uk/services/bsds/dsc/delivery.html#>
3. A first attempt was already made with the EU funded project books2u!. Cf. Günter Mühlberger: 'Digitising instead of mailing or shipping: a new approach to interlibrary loan through customer-related digitization of monographs.' In: *Interlending & Document Supply* (ISSN: 0264-1615), 2002, Vol. 30, Issue 2, p. 66 - 72, DOI: 10.1108/02641610210430523
4. http://ec.europa.eu/information_society/activities/eten/
5. Experience in the Department for Digitization and Electronic Archiving at the University and Regional Library of Tyrol shows that a factor of 2-3, and in some cases even 10-15, is to be added when one compares the cost of the digitization of an individual book compared to the cost with mass digitization.
6. There are currently four companies on the market that offer book robots: i2s (France), Kirtas Technology (USA), Qidenus (Austria) and Treventus (Austria). Cf. Ball, Julian: 'Public Exhibition of Automated Book Scanners Hosted at the Bayerische Staatsbibliothek Munich 18th- 20th June.' JISC Commissioned Report. September 2008. Available online: <http://digitisation.jiscinvolve.org/files/2008/10/automated-book-scanners-munich-2008-final.pdf> [14/12/2008]
7. <http://www.institut fuer marketing.com>
8. Green, Paul E.; Rao, Vithala R.: 'Conjoint measurement for quantifying. Judgmental data.' In: *Journal of Marketing Research*, 8 (1971).
9. Approx. 1,800 people from the pool of 2,200 survey participants also participated in the conjoint survey.
10. A list of the digital libraries can be found in the submenu 'Repositories' at <http://books2ebooks.eu/>
11. <http://www.booksurge.com>
12. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0029:EN:HTML>

Paper presented at the World Library and Information Congress: 74th IFLA General Conference And Council, 10-14 August 2008, Québec City, Canada, in session 74, Document Delivery and Interlending. Version française: http://www.ifla.org/IV/ifla74/papers/074-Gstrein_Muhlberger-trans-fr.pdf. German version: http://www.ifla.org/IV/ifla74/papers/074-Gstrein_Muhlberger-de.pdf

About the Authors

Günter Mühlberger, PhD studied German Language and Literature at the University of Innsbruck. Since 1998 he has been coordinator and project manager of several national and international R&D projects in the field of digital libraries. He is currently involved in IMPACT, a European Union funded R&D project to improve text recognition for historical documents. Since 2002 he has been head of the Department for Digitization and Digital Preservation of the University- and Regional Library Tyrol. He may be contacted at University and Regional Library of the Tyrol, Department for Digitization and Digital Preservation, 6020 Innsbruck – Innrain 52 – Austria. Tel. ++43-(0)512-507-8454. Fax: ++43-(0)512-507-9842.

E-mail: guenter.muehlberger@uibk.ac.at
URL: <http://www.uibk.ac.at/ulb/dea/>

Silvia Gstrein holds degrees in Hispanicistics as well as in Business Administration. Currently, she works as Project Manager at the University and Regional Library of Tyrol Department for Digitization and Digital Preservation and is responsible for the EOD network. She may be contacted at University and Regional Library of the Tyrol, Department for Digitization and Digital Preservation, 6020 Innsbruck – Innrain 52 – Austria. Tel. ++43-(0)512-507-8451. Fax: ++43-(0)512-507-949 08451.

E-mail: silvia.gstrein@uibk.ac.at
URL: <http://www.uibk.ac.at/ulb/dea/>;
www.books2ebooks.eu

Ikajarutit: delivering legislative library services in an Inuktitut language environment

Yvonne Earle



Yvonne Earle, BA, MLS, became Legislative Librarian at the Legislative Assembly of Nunavut in 2003. She has lived and worked as a librarian in Canada's eastern Arctic since 1987. Prior to going north Yvonne had practised her profession in other areas of Canada: Nova Scotia, Newfoundland and Toronto, Ontario. Her career has included public, school, university and special libraries and she has worked in public services, cataloguing and administrative positions. Yvonne has been active in library associations throughout her career. Most recently (2000–2006), she was the representative for the Nunavut Library Association in several national library fora. She served on the Canadian Library Association Council 2002–2005 and chaired the Foreign Library Credentials working group of the CLA President's Council on the 8Rs (Human Resources) 2005–2006. Yvonne may be contacted at Nunavut Legislative Library, PO Box 1200, Iqaluit NU Canada X0A 0H0. Tel. +1-867-975-5134. E-mail: yearle@assembly.nu.ca

Abstract

Nunavut Territory came into existence April 1, 1999. From the outset it was seen as a chance to shape institutions to preserve Inuit language, culture and tradition. No other Canadian province or territory has a majority of people speaking a single aboriginal language and it is a goal of the Government of Nunavut that by 2020 Inuktitut will be the working language of government. In this environment, the Legislative Library works to build collections, deliver services and develop staff competencies in Inuktitut language and library skills.

Keywords: legislative libraries; aboriginal languages; Inuktitut; Inuit language; Nunavut; Canada

Nunavut – Our Land

The territory of Nunavut is Canada's eastern and central Arctic region. It has a population of approximately 29,000, 84 percent of whom are Inuit¹, one of Canada's first peoples. The 2006 Canadian census statistics on aboriginal languages show that 91 percent of Inuit in Nunavut can converse in Inuktitut and for 83 percent of Inuit it is their mother tongue. Fully 15 percent are unilingual Inuktitut speaking but younger generations use English as their first or second language.

Nunavut, which means "Our Land", existed as the hope and dream of many Inuit who negotiated through the 1970s and 1980s with the Canadian government for the Nunavut Land Claims Agreement (NLCA). When the Final Agreement was signed, the NLCA covered one-fifth of the Canadian land mass and was the largest land claim negotiated with the Inuit. In 1993 the Canadian Parliament passed the Nunavut Land Claims Agreement Act and the Nunavut Act which created the territory of Nunavut and provided for its government's powers and responsibilities.

Inuktitut – the Language of the Inuit

From the outset, the implementation of Nunavut was seen as a chance to shape institutions that preserved Inuit language, culture and tradition. In 1999, the new Government of Nunavut (GN) established its guiding principles which reflect Inuit societal values. It has promoted the use and strengthening of Inuktitut as a core element to maximize citizen participation, provide access to programs and enfranchise the Inuit population. One of the GN's goals for 2020 as set out in the policy document *Pinasuaqtavut*, states "Inuktitut, in all its forms, will be the working language of the Government of Nunavut."

The phrase "Inuktitut in all its forms" recognizes two key factors. First, there are 7 regional dialects and 17 sub-dialects in the Inuktitut

language exclusive to Nunavut² but no dialect has been accepted and established as the standard for formal oral and written communication as has been done in Greenland. The western dialect is called Inuinnaqtun and there is a debate among linguists as to whether it is a dialect of Inuktitut or a separate language. Secondly, there are two writing systems. In the eastern regions of the territory Inuktitut is written in syllabics which have a resemblance to Pitman short hand, while in the western part of the territory Roman orthography is used. For purposes of this paper the term Inuktitut includes all dialects and orthographies.

The goal of making Inuktitut the working language of the Government of Nunavut is a significant shift from the current reality where English is the lingua franca and the majority of government workers do not have a proficiency in spoken and written Inuktitut. The affirmative action hiring policy, which is governed by Article 23 of the NLCA, aims to increase the number of Inuit working in the GN to 84 percent of the workforce and an emphasis on providing training opportunities will ensure they are full participants through all levels of the bureaucracy from senior management to clerical staff. Inuktitut classes are offered both to employees whose first language is Inuktitut to enhance their proficiency in governance and job related terminology, and as a second language for employees to develop basic Inuktitut skills. The Premier has now made it a requirement that all Deputy Ministers have a working knowledge of Inuktitut.

The Office of the Legislative Assembly

The Office of the Legislative Assembly of Nunavut (OLA) reflects the linguistic diversity of Nunavut in its staff. Our office provides a range of services to Members and the public in Nunavut's four official languages. Advertisements, notices and press releases are published in Inuktitut, English, Inuinnaqtun and French. Official Legislative Assembly documents are available in up to four languages as appropriate and the Hansard is bilingual Inuktitut/English. Members of the Legislative Assembly (MLAs) have the right to use any official language in the proceedings of the Assembly. Interpretation services are provided for all sittings of the House, caucus and standing committee meetings. The provision of interpretation services is critical to the full participation of all MLAs in performing their duties; in the first Assembly

a number of MLAs were unilingual Inuktitut speakers and in both the first and second Assemblies there have been several unilingual English-speaking Members. In addition OLA staff members with bilingual capabilities are available to assist MLAs.

Research and library services in the OLA are delivered to slightly different communities. Our Assembly operates in a consensus government so we do not have political parties and party caucus researchers as in many Westminster-style governments; hence staff in both services are "front line" in information delivery. The Research Division serves the Regular MLAs directly while the Legislative Library serves all MLAs, their staff, GN employees and the public.

Legislative Library Services

We face challenges in providing our Legislative Library services but it is important to frame the challenges we have in the broader context of Nunavut. Put very briefly, our infrastructure costs are high and what we have is often stretched to full capacity. Our literacy rates in English are the lowest in Canada, our school drop-out rate is 75 percent and "the supply of qualified Inuit is exhausted".³ There are few Inuit with professional credentials for the positions that require them (doctors, engineers, accountants, librarians) and many struggle with personal situations and issues that make study and training for specialized jobs a challenge.

The Legislative Library needs to have staff with good written and oral Inuktitut and English language capability to provide service. In our two-person library, the Legislative Librarian position has been filled by a credentialed librarian since it was created in 1998 and none of the incumbents has had a facility in Inuktitut. By default, the library technician position has therefore been staffed looking more for Inuktitut language capability and general experience than for the ability to meet the library technician skills listed in the job description. Considerable on-the-job training is required to familiarize the incumbents with basic library procedures, terminology and concepts.

Providing library technician training would seem the logical next step but programs available in southern Canada usually require a high school certificate. High school education was not available

to many Inuit employees and also grade achievement is not an indicator of the level of English literacy required for the course material. So we look for ways to build skills and confidence in-house and supplement this with courses offered locally which pertain to the job. However, the library has often been left with operational gaps, particularly in cataloguing and our capacity for new projects is limited.

For many new libraries it is a difficult decision to select an integrated library system (ILS), but in 1999, when the Legislative Librarian began to explore options for an ILS that could accommodate Inuktitut syllabics, such a thing did not exist. Many of the available systems at that time did not support Unicode at all and it was not until Unicode 3.0 was published in 2000 that Canadian aboriginal syllabics became part of the international standards. As far as we are aware, we were the first organization to implement a real Inuktitut-capable system in Unicode.⁴ The Library's requirements pushed the foundation development of Inuktitut technology for the government. GN Informatics and Multilingual E-Data Solutions developed the conversion utility and after the VTLS information system was selected in 2001 the Unicode based fonts Pigiarniq (GN standard) and Uqammaq were created and Unicode multilingual websites which supported syllabics followed.

The Legislative Librarian's leadership paved the way for Nunavut Arctic College, GN Department of Justice and Nunavut Public Library Services to become partners after the VTLS system was selected. We continue to share expertise and solve problems together.

As of late 2001 we had the technical capacity to create MARC Inuktitut catalogue records in our Virtua database but not the combination of language facility and cataloguing expertise. This changed in 2004 when library technician Carol Rigby was contracted.⁵ She is a northern resident with a facility in Inuktitut and many years of cataloguing experience. In subsequent years, the Legislative library has adopted multilingual cataloguing standards and has led the way for Inuktitut cataloguing. The four VTLS partners worked with the Department of Culture, Language, Elders and Youth to create a territorial standard wordlist of cataloguing terminology in Inuktitut; this allows for easy copy cataloguing. Our policy is to create Inuktitut records only for documents printed

in Inuktitut. For GN departments and agencies we use the Inuktitut form they have established as our authority but the Inuktitut name authority files and alternate title tracings reflect the vagaries of not having a standard written language. We have to be inclusive to provide the best search access.

That said, there are two significant gaps in our Inuktitut access. First, we do not have Inuktitut subject headings. There has been discussion in the past by language experts about developing an Inuktitut thesaurus but what we have at present is Asuilaak Living Dictionary (<http://www.livingdictionary.com/>) and a very politically sensitive environ around language issues. Second, our catalogue web pages are only in English; we have been waiting on translation to Inuktitut, Inuinnaqtun and French for some time.

It will likely be evident that we have all library signage in our four official languages with the Inuktitut majority language taking precedence. Approximately 8 percent of our collection is in Inuktitut based on analysis of cataloguing records to date. The majority of the Inuktitut materials will be GN and Legislative Assembly documents; very few federal documents are printed in Inuktitut. We display our materials in all languages and have a single integrated print collection. When items are produced in a flip format Inuktitut/English we have two copies processed so that each language has a prominent cover. We keep electronic documents and audiovisual materials in as many official languages as available.

The majority of our information requests at the Legislative Library are made in English and usually for information that is not available in Inuktitut. However, a service to an MLA such as finding an out-of-print book with a personal connection or purchasing a topographical map for express delivery to their constituency office very quickly filters through the ranks and we are happy to oblige. There are also occasional three-way conversations when an Inuktitut speaking client is relaying their request to the library technician who requires reference help from the librarian – an imperfect process not without its misses and humour but often successful.

Conclusion

We look forward and are working to the day when the library technician and the librarian will both

converse with the client in Inuktitut and have all the skills required for the functions of their positions. It will be critical also that information retrieval from historical and current Inuktitut resources is easy and well developed; there are superb Inuit history and culture resources such as Inuktitut magazine and the Igloodik Oral History project out there, just awaiting the magic of digitization and an Inuktitut Google search engine. There is also a catalogue awaiting Inuktitut subject headings!

Notes

1. Inuit are known as Eskimos in some Arctic regions.
2. Nunavut Implementation Commission. Nunavut Language Policy Conference: report and recommendations (Iqaluit, 1998).
3. Berger, Thomas R. Nunavut Land Claims Agreement Implementation Contract Negotiations for the Second Planning Period 2003–2013: Conciliator's Final Report (2006) p. iii.
4. Personal communication Gavin Nesbitt, former Management Systems Coordinator, Legislative Assembly of Nunavut, April 2008.
5. For more details see Rigby, C. and R. Patterson. Providing catalogue services in a multilingual, multi-script environment: the experience of Nunavut's library partnership in *Libraries without borders: Navigating towards global understanding* (IFLA Quebec City National Committee, 2008).

Paper presented at the World Library and Information Congress: 74th IFLA General Conference And Council, 10–14 August 2008, Québec City, Canada, in session 103 Library and Research Services to Parliaments. Version française: <http://www.ifla.org/IV/ifla74/papers/103-Earle-trans-fr.pdf>

Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand

John H. Mohi



Winston D. Roberts



Abstract

Outlines the role and responsibilities of the National Library of New Zealand Te Puna Mātauranga o Aotearoa in a country with a bi-cultural foundation and a multicultural national community. The Library's plan for responsiveness to Māori – 'Te Kaupapa Mahi Tahī: a Plan for Partnership' builds on traditional library services and products by developing new electronic services including digitization for access and preservation, through a power-sharing relationship with Māori. A Māori perspective is maintained through a national consultative and facilitative process. New avenues for collaboration between the National Library and other national and local government policy developers are indicated and examples of the Library's working relationships with *iwi* (tribes) are provided. The Library's collaboration with Pasifika, Asian, refugee and migrant communities in New Zealand is outlined. These activities are linked to the 'New Generation National Library' strategy, which is designed to provide all New Zealanders with information important to all aspects of their lives. Issues and challenges for the future are also noted..

Keywords: Māori; indigenous peoples; multicultural populations; Treaty of Waitangi; National Library of New Zealand; strategy; collaboration; refugees; migrant communities

Greetings – Mihi

<i>Kōkiri, kōkiri, kōkiri!</i>	– The message from the people
<i>Whakarongo ake au ki ngā reo o te motu</i>	– Clearly asks us
<i>E karanga mai ana</i>	– To open our doors
<i>Huakina mai ngā tatau o tō whare</i>	– So that we may work together
<i>Kia Mahi Tahī tatou, kia inu ai mātou</i>	– And share the information
<i>I Te Puna Mātauranga o Aotearoa</i>	– Held in Te Puna Mātauranga o Aotearoa

(From *Te Kaupapa Mahi Tahī – A Plan for Partnership 2005–2010* of the National Library of New Zealand)

A Māori–English Glossary:

<i>iwi</i>	tribe(s)
<i>kaitiaki</i>	guardian(s)
<i>kanohi ki te kanohi</i>	face to face
<i>marae</i>	enclosed space in front of a (meeting) house; by extension, a community
<i>Māori</i>	literally 'person' or 'people'

About the Authors: page 58

<i>mātauranga</i>	knowledge
<i>mauri</i>	spiritual power
<i>pakeha</i>	white person(s) or non-Māori
<i>tangata whenua</i>	the people of the land (the indigenous people of New Zealand)
<i>tangata tiriti</i>	the people of the Treaty [of Waitangi] (the non-Māori population)
<i>taonga</i>	treasure(s)
<i>te reo</i>	language (the Māori language)
<i>tototoko</i>	a carved staff used for ceremonial purposes

URLs for the websites referred to in the text are given in the Summary of Sources at the end of the article.

The Story

This is a story that starts in 1840. In that year the British Crown and the Māori people of New Zealand signed a treaty: the Treaty of Waitangi, which laid the foundation for our country, and for our political and cultural institutions, including – much later – the National Library of New Zealand Te Puna Mātauranga o Aotearoa.

Our story is about keeping faith with those who framed and signed the Treaty of Waitangi, recognizing two partners who each acknowledge their mutual interests, their unique and distinct identities. To be sure, the story is not all roses: in the period from 1840 to the 1970s our partnership included periods of warfare, periods of what



Figure 1. King, Marcus, 1891–1983: [The signing of the Treaty of Waitangi, February 6th, 1840].1938. (Alexander Turnbull Library Reference number: G-821-2)].

almost amounted to civil war between *iwi* (tribes), a massive land grab followed by new waves of immigrants, and a period in which it was genuinely believed that the Māori partner was but a dying race. From 1900 onwards, Māori sought to engage with the legislative processes of the new Dominion, following the Westminster model: they were championed by the Young Māori Party led by Sir Āpirana Ngata (he who once urged a young child: “Turn your hand to the tools of the Pākehā for the wellbeing of your body. Turn your heart to the treasures of your ancestors as a crown for your head.”¹).

This powerful movement spearheaded Māori involvement in the New Zealand military effort in World Wars I and II and was amplified by the Māori renaissance which began after World War II and which addressed the relationship between Māori and the Crown and issues of land, language and livelihood.

The story continues through the mid-1990s with emerging Māori writers, artists and activists, and a new and growing cohort of civil servants all of whom embraced the new New Zealand and saw it as having a unique place in the world. (As successive governments since the 1980s have recognized, that reconciliation also required acknowledgment and righting of past wrongs: settlements with *iwi* have been negotiated; the major settlements began with Ngāi Tahu in the South Island, then Tainui and others in the North Island, and most recently a significant settlement with Te Arawa.)

Over recent decades, New Zealand has seen the proportion of newer immigrant communities rise significantly. Following World War II, the country received many European immigrants; these were followed in the 1960s and 1970s by increasing numbers of Polynesian immigrants from the island states of the South Pacific, and since the 1990s by significant numbers of Asian immigrants, particularly from China and Korea. In addition, in recent years New Zealand has again accepted its share of refugees from oppression, famine and war. The New Zealand government’s policy is one of integration, not assimilation.

The National Library of New Zealand

So where does the National Library fit in to this picture? The main ‘building blocks’ of the Library in its present form are: the Alexander Turnbull

Library, our national bibliographic services, our outreach services to schools.

Alexander H. Turnbull was a New Zealand businessman and passionate book-collector in the late 19th and early 20th centuries – he amassed 55,000 books on all aspects of New Zealand and the South Pacific, and on his death in 1918 he bequeathed his collection to the Crown. That collection became the core of the Alexander Turnbull Library, later part of the National Library, and has been added to by purchase, donation and legal deposit ever since.

National bibliographic services were developed based on the national collection of all the books ever published by or about New Zealand in general and Māori in particular: the most comprehensive collection of books by or about Māori in the world.

The Country Library Service was brought into the National Library, whose services were developed to cater for the educational needs of a young vibrant population, some urban and many rural and isolated, using both English and Māori languages.

The Parliamentary Library briefly merged with the National Library from 1965 to 1985, when it reverted to Parliament.

There was a convergence of the people's needs, technical possibilities and professional practices from the 1960s onward, impelling the development of integrated national library services. The various 'building blocks' were brought together by the National Library Act of 1965, then revised by the Amendment Act of 1985 which saw the National Library in its present form installed in the building where it still is today.

Those changes reflected changes in society, the growth of the modern public service, and the gradual process of constitutional change that led to official (if belated) recognition of the status of the Treaty of Waitangi as a founding document of the modern state of New Zealand, and formal support and funding for movements to revive and strengthen the language and culture and teach it to the young. The Māori language was declared an official language of New Zealand in 1987.

These convergences, and the demands of Māori, empowered by new legislation and passionate to

grasp opportunities, led to the creation of new information services. The development of the National Library integrated Māori perspectives. Initially this was seen in the addition of the name Te Puna Mātauranga o Aotearoa ("the wellspring of knowledge of New Zealand"). More Māori came to feel more valued and at home in the National Library building. By the new millennium, the scene was set for a further revision of the National Library Act. Converging forces created a new and powerful piece of enabling legislation, the National Library of New Zealand Te Puna Mātauranga o Aotearoa Act 2003.

The Act specifies that the purpose of the National Library is to "enrich the cultural and economic life of New Zealand and its interchanges with other nations by, as appropriate:

- collecting, preserving and protecting documents, particularly those relating to New Zealand, and making them accessible for all the people of New Zealand, in a manner consistent with their status as documentary heritage and *taonga* ['treasure(s)']; and
- supplementing and furthering the work of other libraries in New Zealand; and
- working collaboratively with other institutions having similar purposes, including those forming part of the international library community."

The drafting of this Act of Parliament, driven by the National Library (as a central government department), was the subject of wide-ranging consultations across the library profession, the public service, the education and culture sectors, and with Māori. The Act redefined the relationship between the Alexander Turnbull Library and the National Library (of which the ATL is a part), it instituted legal deposit of electronic publications, it created a new statutory Library and Information Advisory Commission (LIAC) to advise the Minister Responsible for the National Library on all matters relating to library and information services in New Zealand. It also created a new advisory body, the Guardians/Kaitiaki of the Alexander Turnbull Library.

The Act recognizes mātauranga Māori as a knowledge system. It is notable that the terminology of the Act includes some key terms in Māori (particularly 'taonga' – 'treasure(s)') without English translations, reflecting the way in which key Māori concepts and words have become part of the everyday language of New Zealanders.



Figure 2. *Cooking in the pools, Whakarewarewa Rotorua [1960s]. (Gladys M Goodall Collection, Alexander Turnbull Library Reference number: PAColl-7756-1-02-0549-1)]*

The National Library therefore has clear responsibilities and a clear mandate to act. It is accountable to its Minister and to Parliament where, like all government departments, it tables its Statement of Intent at the beginning of every year and its Annual Report at the end of the year.

Te Kaupapa Mahi Tahī a Plan for Partnership

The National Library's services to Māori were put in place after careful consideration. The Library's plan for responsiveness to Māori – *Te Kaupapa Mahi Tahī: a Plan for Partnership*² is the fruit of careful and respectful consultation with *iwi* (tribes) and of state and community organizations mandated to speak for Māori. *Te Kaupapa Mahi Tahī* was agreed as policy in 2001, and informed the drafting of the National Library Act 2003. The current version was developed for the period 2005–2010, and is now being implemented across the Library. The Library's New Generation National Library strategy to 2017 in turn draws on *Te Kaupapa Mahi Tahī* among other sources.

Te Kaupapa Mahi Tahī builds on traditional library services and products by developing new electronic services including digitization for access and for preservation, through a power-sharing relationship with Māori.

For Māori, the details of this relationship are less important than the fact that the National Library is listening to them, in good faith. The National Library ensures that a Māori perspective is maintained through a national consultative and facilitative process. There is no substitute for face-to-face dialogue – *kanohi ki te kanohi*.

But a plan is not the same as doing something: the next step after planning is *Ngā Mahi Tahī*, the actual work/steps, Māori working as one. The Library is aware that it must be proactive and strategic. Staff from Services to Māori (STM) went out to Māori across the country and asked what they wanted. The answer was that they wanted full access to all information, they wanted government institutions to work with them as partners, they wanted respect for their culture. That was of course not just in relation to the National Library, it was general: Māori expectations of working in partnership with the Crown applied to all government departments and agencies.

Let there be no doubt about it: there have been big challenges; and one of the biggest has been dealing with the Treaty of Waitangi claims (or restitution) process. The most important claim with regard to the collections of the National Library – the claim known as WAI 262 – is still awaiting the Claims Tribunal's ruling. It has huge implications. For the National Library, the question is that, under WAI 262, Māori materials could go back to *iwi*: the materials are owned by the Crown, not by the National Library. The WAI 262 claim relates to cultural and intellectual property (including traditional knowledge), and includes the claim that documents about Māori should be 'repatriated' to *iwi* Māori. Since the claim was lodged, however, the Library has developed its *Kaupapa Mahi Tahī* and at a formal hearing last year, it was acknowledged by the Library that work done on Māori materials can only be done with Māori, and acknowledged by Māori that the National Library had done an extraordinarily good job in preserving, protecting and providing appropriate access to these materials.

Leadership and Partnership

The National Library undertakes staff development initiatives to support its work. For example, it encourages staff to participate in national professional associations, including *Te Roopu Whakahau* (the national association of Māori library and information workers), and it supports Māori language classes for all staff, from introductory to expert level. The word 'encourages' here is not used lightly: there is no question of requiring people to do such courses – we cannot legislate for bi-cultural awareness, we can only encourage it to develop. The Library also supports and encourages the organizers of the International Indigenous Librarians Forum (the first IILF was

held in New Zealand in 1999 and the 6th IILF will be held in New Zealand in 2009).

The National Library has shown leadership to its particular professional community and to its communities of users, and has made a measurable difference – and in so doing it has kept faith with both Tangata Whenua (the people of the land – Māori) and Tangata Tiriti (the people of the Treaty – non-Māori).

The Library has in effect developed an integrated suite of activities across the key areas of collections, staffing to maintain and care for them, and external relationships. Two examples of initiatives in the collections field, to improve bibliographic and subject access to Māori materials, are worthy of comment:

*The Māori Subject Headings Project
(c.1998–2006)*

LC subject headings had never worked for Māori so in the end the National Library, the two New Zealand professional associations, LIANZA (the national library association) and Te Roopu Whakahau (the national association of Māori library and information workers) worked together to produce Māori Subject Headings so that people could search in Māori for things important to them. The National Library provided the bibliographic expertise, LIANZA provided the professional connections, and Te Roopu Whakahau provided the bridge between the Māori communities, the National Library and the profession. The subject headings are now added to publications about Māori as these materials are catalogued and are progressively being applied to relevant material published in earlier times. These headings have not yet been applied systematically to unpublished material. The National Library still has a deferential attitude toward the expertise of curators and still needs to ‘open up’ more to working with Māori on the arrangement and description of unpublished materials.

*The Ngati Toa Project (2000) for iwi record
enhancement of the Tapuhi database of
unpublished Māori materials*

This resulted in an increase of 30 in the number of name fields, so allowing a qualitative increase in access points about this *iwi* and thereby increasing visibility of the materials in the Library and access to them.

These examples also illustrate both the possibilities and the challenges of the Library’s approach to relationships with Māori. The Library is equally concerned to develop effective relationships with other stakeholders – the professional organizations, the local government sector and central government.

**Relationships with Central Government:
Whole-of-Government Objectives**

The National Library, as a central government agency, operates within the context of whole-of-government planning and decision-making. Like the rest of the public service, the Library is oriented toward the present Labour-Coalition government’s four overriding objectives of: economic transformation, families, cultural identity, sustainability.

The National Library incorporates a policy department which is not only responsible for responding to its Minister and thus aiding the Library to meet accountability requirements, but also works closely with other departments and ministries on the development of strategies and policies which they are leading.

Some recent examples include:

- working with Te Puni Kōkiri (the Ministry for Māori Development) on the 25-year Māori Language Strategy (supported by the Māori Language Commission) to ensure that the Māori language remains a living contemporary language;
- working with the Office of Treaty Settlements when required to provide information to both the Crown and claimants on material in the National Library – (if redress involves documentary *taonga* in the National Library then the Library is fully consulted³);
- working with the Ministry for Culture and Heritage (MCH) on the identification of cultural property of the highest importance, to support work toward ratification of the 1954 Hague Convention;
- providing advice to MCH on its proposals to Cabinet for action on various UNESCO Conventions (Cultural Diversity, Intangible Cultural Heritage, UNIDROIT);
- working with the Ministry of Economic Development on some aspects of the revision of New Zealand’s copyright legislation – now passed

into law as the Copyright (New Technologies) Amendment Act 2008 – affecting libraries and particularly the National Library in terms of its mandate under its own Act.

Digital Strategy

The National Library has shown leadership in the national arena by contributing strongly to the creation of a national ‘Digital Strategy’ (launched in 2005, and completely revised in 2008), together with the Ministry of Economic Development and several other government departments. The National Library was instrumental in gaining their acceptance of the ‘3 Cs’ paradigm (*content, confidence and connection*) as the backbone of the Digital Strategy).

Within the framework of this over-arching Digital Strategy, the National Library has, since 2004:

- *developed* its ground-breaking National Digital Heritage Archive, for the preservation of its digital collections in perpetuity – this will work for Māori;
- *led* the development of a Digital Content Strategy, in consultation with national stakeholders in government, broadcasting, the creative industries, education sectors and the cultural heritage sector including Māori;
- *led* the development of the Aotearoa People’s Network (APN), obtaining government funding and launching the project in close cooperation with local authorities and commercial partners (Sun, in particular): the National Library set up the APN with its own governance structure, and began to roll out the programme (a package of connection, confidence/training and content development measures) starting in the libraries and *marae* of more geographically isolated and economically deprived areas, moving on to rural towns, and with plans for future expansion as the government’s national telecommunications regulatory actions lead to greater broadband connectivity becoming available to all, through ‘last mile’ connections in rural areas and ‘fibre to the home’ in urban areas – this will respect the uniqueness of all communities in New Zealand;
- *collaborated* in the design of a Community Partnership funding process and in decisions on the allocation of funds: in this process the National Library was particularly concerned to ensure that adequate seed funding was provided, that communities were empowered but

not dictated to, and that projects included aspects of content development and training; (it was noted that several of the organizations putting up bids were *iwi* organizations, Māori authorities or *marae*);

- *participated* in decision-making on applications to the Broadband Challenge Fund: here the National Library was particularly concerned to see that good community-based projects were rewarded, and that rural and other isolated communities were connected.

The National Library also made a significant contribution in leading New Zealand’s engagement in the multi-stakeholder World Summit on the Information Society, through the preparatory process and the two Summits, in 2003 and 2005. The Library contributed language to the Geneva 2003 ‘Principles’ concerning freedom of expression, access to information and support for cultural diversity.

Local Government and the Community

The National Library also collaborates with Local Government New Zealand (LGNZ), the central body representing local authorities throughout the country (which are the authorities running public library services). Together with LGNZ, the National Library developed a Strategic Framework for library services in 2006 and organized a national Public Libraries Summit in early 2007, to focus strategic thinking on the role and future development of public libraries in the community. The outcome was the creation of a peak body for the library sector, to enhance nationally integrated development of library services.

The National Library also collaborates with other ‘cultural memory’ institutions in the National Digital Forum: these are organizations and institutions in what is sometimes called the GLAM sector (galleries, libraries, archives and museums) – very many of them with strong roots in their local communities. One manifestation of this collaboration is ‘Matapihi’,⁴ a distributed database providing a window into the online collections of a number of New Zealand cultural organizations.

In the context of digital access to materials, it is worth noting that 20 percent of New Zealand citizens live overseas, and many of those want to know more about Māori.

It is hoped that improved cultural wellbeing will lead to beneficial social, economic and cultural outcomes. Two examples of the National Library's working relationships with *iwi*, to support cultural well being, are:

Collaboration with Taranaki iwi for the Development of the Taranaki Māori Digital Archive (2008)

The Māori Subject Headings developed by the National Library, LIANZA and Te Roopu Whakahau will be embedded in the Archive. In return, Taranaki will provide knowledge of their distinctive dialect of Māori (te reo o Taranaki) for further enhancements of the Māori subject headings project.

'Portraits of Ngāti Kahungungu 1870–1906' – an exhibition of prints based on the ATL's collection of 19th century glass plate negatives from the Napier studio of photographer Samuel Carnell

In this case, it was clearly recognized that the National Library held several of the skills sets – the expertise of Hononga Māori (staff of Services to Māori) well used to reaching out to Māori communities, curatorial expertise in the photographic area, and expertise in curating exhibitions from the collections (and in touring them). We also needed the complementary skill sets of *iwi* Māori and particularly Ngāti Kahungungu who had the *mātauranga* (knowledge) about items held in the National Library's collections and could relate these to the life of their own communities. Their researchers worked with ours to select and research the portraits for the exhibition. Together we worked out an appropriate events programme around the exhibition – both partners were passionately concerned to recount the 'stories' of the information held in the Library's collections to local peoples. A deliberate choice was made to involve leaders of the communities, and display the photographic and related material in visible places in the centres of their towns and communities (such as the new museum, Aratoi, in Masterton) in order to prompt and collect comments and identifications to further enhance knowledge about these materials.

An interesting aspect of the exhibition was that some of the photos were what in Victorian times were known as 'cartes de visite' – photocards with

text, no larger than a person's hand: the Victorian equivalent of our business cards.

In one of the 'Portraits of Ngāti Kahungungu' exhibitions, 45 of these photos were blown up to life size and positioned, unframed, at various places in their 'home town', let loose, so to speak, in their own community 100 years after they were taken. These powerful images have *mauri* – and they had life breathed into them again by being juxtaposed with relevant objects from the period, borrowed from museums, families, and archives. *Ngā uri* (descendants) could see again in these photos their recent ancestors, some of them for the first time. The importance of this cannot be exaggerated. In a culture where *whakapapa* (family trees) are often known, recited and treasured, and where particularly older people can 'whakapapa back' in some cases 1000 years to the time when Māori first arrived in New Zealand.

The exhibition and the accompanying talks, events and performances were a celebration of partnership between the National Library and the *tangata whenua* – the indigenous people – of New Zealand. The exhibition has also been recognized by our peers in the library and museum world as an exemplary model for future exhibitions.

The Poet Laureate Award

The National Library also has strong links with Ngāti Kahungungu over the poet laureate award. The investiture of the present poet laureate took place at Matahiwi *marae*, with the *tototoko* (ceremonial carved stick) for the award being created by a local artist with Ngāti Kahungungu affiliations, and with Ngāti Kahungungu as *kaitiaki* of the *tokotoko*.

The National Library also collaborated last year with the Archives New Zealand (the national archives) and the Museum of New Zealand Te Papa Tongarewa (the national museum) to develop an exhibition called 'Treaty 2 U' to explain the significance of the Treaty of Waitangi to the population at large. The exhibition was set up in a truck and trailer unit, and this 'big rig' was toured on a road-show around the country, to large places and small. It was a huge hit, the feedback was enthusiastic, they wanted us to do it again and again. This we did. It has now become a permanent display in the Museum of Wellington.

From Bi-cultural to Multicultural

New Zealand has a bi-cultural foundation and a multicultural population. The Department of Statistics (StatisticsNZ) has recently released its new 2006-base national ethnic population projections for the four broad ethnic groups: 'European' or 'other', Māori, Asian and Pacific, covering the period to 2026.⁵ While all four ethnic populations are projected to increase, the Māori, Asian and Pacific populations are expected to grow faster than the rate of New Zealand's population overall. Changes in age composition are expected for all ethnic populations.

Some statistics:

- our largest city, Auckland (with 1.2m inhabitants, nearly one quarter of the country's population), is the largest city of Polynesia and the largest Polynesian city in the world.
- As another example, there is Niue: a member state of the United Nations, with a population of about 1500 on the island, but about 15,000 Niueans living off the island (most of them in New Zealand).

Within the New Zealand government's Department of Internal Affairs, the Office of Ethnic Affairs is leading the development of enlightened and broad-based policies for the empowerment of the smaller ethnic communities within New Zealand society. The watchword is no longer just 'equal employment opportunities', it has become full acknowledgement of cultural diversity.⁶

The National Library has been engaged with Pacific communities for some years, and more recently to the needs of the Asian communities. Some examples of our collaboration with the Pasifika, Asian, refugee and migrant communities in New Zealand are:

- Tonga: 'Siu ki Moana' ('reaching across the Pacific') exhibition in 2005–2006;
- Samoa: 'Va'aomanū' ('canoe of good fortune') exhibition in 1998;
- Fiji: 'Heart of Fiji' exhibition in 1993;
- Cook Islands, Fiji, Nauru: the Library is currently working in collaboration to deliver improved school library services and training to these Pacific island states;
- Tokelau: the compilation and publication of the Tokelau National Bibliography.



Figure 3. Closing celebration of the exhibition Siu ki Moana – Reaching across the Pacific. Tongan dance. National Library of New Zealand Foyer.

It is also worth mentioning the exhibition 'A Barbarous Measure' which the National Library hosted in 2003, to highlight the official recognition of the discrimination against immigrant Chinese in 19th century New Zealand. This recognition included an official apology by the Prime Minister to the country's Chinese community, and a grant of NZD 5 million to assist with sustaining their cultural contributions to New Zealand.

There is more that we at the National Library could do – and will do – for and with these communities. We do employ staff members from most ethnic communities in New Zealand – we are building up our in-house capability and capacity, and will move on to developing new services in response to the needs of other communities in due course. For the present, it is the public libraries which provide the main lead for new services for migrant and refugee communities.

New Generation National Library

There is a strong link between these activities and the National Library's 'New Generation National Library' strategy which is designed to provide all New Zealanders with information important to all aspects of their lives.⁷ The purpose of the New Generation National Library strategy is to integrate best practices in managing published collections, unpublished collections, electronic collections, to preserve them in perpetuity, and provide access to them in ways that meet the needs of various user groups: researchers, young New Zealanders, government officials, and the

general public, in a way that is culturally respectful, professionally responsible, and which complies with New Zealand's new ICT-focused copyright legislation.

The National Library is faced with challenges and opportunities, some technological (further applications of high-speed networking, digital rights managements), some social, some institutional (collaboration is hard, but digital convergence seems to indicate a need for greater institutional collaboration, for which policy settings and mandates are evolving), some economic (maintaining and developing services and making more efficient use of resources), and cultural challenges as indicated throughout this paper. Some of these challenges arise from the very success of the Library's initiatives. For example, the National Digital Heritage Archive (NDHA) which is due to go live in late 2008 will provide us with the means to archive digitized and born-digital treasures in perpetuity. The overriding issue for the Library is the sustainability of key services and products.

Conclusions

Since the mid-1990s the National Library of New Zealand has successfully met a number of challenges. It has led a number of projects to develop information products and services and also led the national policy development that provides the framework for such products and services. It has provided authoritative policy advice to the library profession, to the wider information and cultural heritage sector, to its Minister and to various state bodies. It has lent its resources to facilitate numerous initiatives (exhibitions, conferences, community consultations, technical studies, despatch of expert advisers and national delegations to regional and international consultative meetings). In so doing, it has:

- asserted its position both as a forward-looking and technically expert provider of national information services;
- gained a reputation within the public service and internationally for being a department which is innovative and responsive to its stakeholders within government and in the community.

The key success factors are that: the National Library has a clear and unambiguous legislative mandate for action and has bid successfully for additional resources to implement projects within

that mandate. The Library is an increasingly efficient organization which attracts innovative staff and supports staff development. The Library functions well and defends its position in New Zealand's de-regulated public service, but above all the Library listens to its constituency and stakeholders, and acts on advice received.

It is true that the national context has been favourable in a number of areas, in recent years, however the single most important factor in the National Library's success has been good relationship management. The Library looks for synergies with the work of other research institutions, government authorities, and community organizations. This is particularly important for an organization which operates as the collective storehouse of the cultural memory in documentary form of two founding cultures, Māori and European – cultures with distinct yet complementary world views and patterns of social organization, and which are still learning to live together within the framework of a democratic multicultural society in a developed modern economy. The National Library's development is a never-ending learning process, where continuous improvement has become a way of life.

Summary of Sources

National Library

Main website: <http://www.natlib.govt.nz/>

NLNZ Corporate Publications

New Generation National Library Strategic Direction to 2017: <http://www.natlib.govt.nz/catalogues/library-documents/strategic-directions-to-2017>

Statement of Intent : <http://www.natlib.govt.nz/about-us/corporate-publications-research/our-statements-of-intent>

Annual Report 2006/07: <http://www.natlib.govt.nz/catalogues/library-documents/national-library-annual-report-200607>

Te Kaupapa Mahi Tahi A Plan for Partnership 2005–2010: <http://www.natlib.govt.nz/catalogues/library-documents/te-kaupapa-mahi-tahi>

NLNZ Initiatives

Tapuhi: <http://tapuhi.natlib.govt.nz/>

Matapihi: <http://www.matapihi.org.nz/>
Ngā Ūpoko Tukutuku / Māori Subject Headings:
<http://mshupoko.natlib.govt.nz/mshupoko/>
National Library Building Redevelopment:
<http://www.natlib.govt.nz/about-us/current-initiatives/building-redevelopment>
Aotearoa People's Network: <http://www.natlib.govt.nz/about-us/current-initiatives/aotearoa-new-zealand-people-s-network>
National Digital Heritage Archive (NDHA):
<http://www.natlib.govt.nz/about-us/current-initiatives/ndha>
New Zealand Digital Content Strategy: <http://www.digitalstrategy.govt.nz/Parts-of-the-Digital-Strategy/Content/New-Zealand-Digital-Content-Strategy/>
Public Libraries of New Zealand: A Strategic Framework 2006 to 2016: http://www.lianza.org.nz/library/files/store_011/StrategicFramework2006.pdf

New Zealand Legislation

National Library of New Zealand (Te Puna Matauranga o Aotearoa) Act 2003: http://www.legislation.govt.nz/act/public/2003/0019/latest/DLM191962.html?search=ts_act_national+library&sr=1
Copyright (New Technologies) Amendment Act 2008: <http://www.legislation.govt.nz/act/public/2008/0027/latest/DLM1122502.html>

Websites of the New Zealand Government

New Zealand Parliament : <http://www.parliament.nz/en-nz/Default.htm>
Archives New Zealand: <http://www.archives.govt.nz/>
Ministry for Culture and Heritage: <http://www.mch.govt.nz/>
Museum of New Zealand Te Papa Tongarewa: <http://www.tepapa.govt.nz/Tepapa/English/>
Ministry of Economic Development – Digital Strategy secretariat: <http://www.digitalstrategy.govt.nz/>
Library and Information Advisory Commission (LIAC): <http://www.liac.org.nz/>
Office of Ethnic Affairs: <http://www.ethnicaffairs.govt.nz/oeawebsite.nsf>
Office of Treaty Settlements: <http://www.ots.govt.nz/>
Treaty of Waitangi website: <http://www.nzhistory.net.nz/category/tid/133>
Statistics New Zealand: <http://www.stats.govt.nz/default.htm>

Te Puni Kōkiri (Ministry of Māori Development): <http://www.tpk.govt.nz/en/>
Te Taura Whiri i Te Reo Māori (Māori Language Commission): <http://www.tetaurawhiri.govt.nz/>
Treaty2U: www.treaty2u.govt.nz

Local Government New Zealand Website

<http://www.lgnz.co.nz/>

NGO Websites

Library & Information Association of New Zealand Aotearoa (LIANZA): <http://www.lianza.org.nz/>
Te Roopu Whakahau: <http://www.trw.org.nz/>
National Digital Forum: <http://ndf.natlib.govt.nz/>

Māori Language Websites

Kōrero Māori, an interactive site for all learners and speakers of te reo Māori: <http://www.koreromaori.co.nz/>
Māori Language.net: <http://www.maorilanguage.net/>

Notes

1. Walker, Ranginui. *He tipua: the life and times of Sir Apirana Ngata*. Auckland: Penguin Books, 2002, p. 397. On page 397 Walker writes:

There was no more fitting tribute... to the man who exhorted future generations to educate themselves for the new world with this poem that he penned in a child's autograph book:

*E tipu e rea mō ngā rā o tōu ao.
Ko tō ringa ki ngā rākau a te Pākehā hei ora mō tō tinana,
ko tō ngākau ki ngā taonga a ō tīpuna hei tikitiki mō tō māhunga,
ko tō wairua ki te Atua, nāna nei ngā mea katoa.
Grow tender shoot for the days of your world.
Turn your hand to the tools of the Pākehā for the wellbeing of your body.
Turn your heart to the treasures of your ancestors as a crown for your head.
Give your soul unto God the author of all things.*

2. See Te Kaupapa Mahi Tahi: <http://www.natlib.govt.nz/catalogues/library-documents/te-kaupapa-mahi-tahi>
3. It is worth noting that the land on which the National Library sits, in downtown Wellington, is itself the subject of a land claim adjudicated by the Waitangi Tribunal in 2008.
4. See Matapihi: <http://www.matapihi.org.nz/>
5. To view the release, go to: www.stats.govt.nz/products-and-services/info-releases/nat-ethnic-pop-proj.htm

6. See: Office of Ethnic Affairs: <http://www.ethnicaffairs.govt.nz/oeawebsite.nsf>
7. See New Generation National Library Strategic Direction to 2017: <http://www.natlib.govt.nz/catalogues/library-documents/strategic-directions-to-2017>

Revised version of a paper presented at the IFLA Pre-conference of the Section on Services to Multicultural Populations – theme: “Multicultural to Intercultural: Libraries Connecting Communities”, Vancouver, 5–7 August 2008.

About the Authors

John H. Mohi, MSc (Purdue), BEd (Otago), is Director, Māori, Pacific and International, at the National Library of New Zealand. He is a member of the Te Whanau-a-Apanui tribe of New Zealand. He held several positions as a teacher, adviser and manager of children with special educational needs for over 25 years, before joining the team of Directors at the National Library of New Zealand in 1996. As *Kaitatai*, he is responsible for leading the National

Library’s Responsiveness to Māori plan. He was also previously the Chairperson of the Culture Sub-Commission of UNESCO New Zealand, and in 1988–89 was a Rotary International Scholar. He may be contacted at: National Library of New Zealand, PO Box 1467, Wellington, New Zealand. Tel. +64 (4) 474-3000. E-mail: John.Mohi@natlib.govt.nz

Winston D. Roberts, MA (Sheffield), MCLIP is Principal Advisor – International, at the National Library of New Zealand. He works closely with the Strategic Policy directorate and the CEO on international relations. Working for the National Library, a government department, he represented New Zealand at the World Summit on the Information Society. He was formerly Coordinator of Professional Activities of IFLA, and also worked for a number of years at the British Library. He may be contacted at: National Library of New Zealand, PO Box 1467, Wellington, New Zealand. Direct tel. +64 (4) 474-3143. E-mail: winston.roberts@natlib.govt.nz

Third Meeting of the Internet Governance Forum (IGF), Hyderabad, India

Sanjay K. Bihani and Stuart Hamilton

Introduction

The third meeting of the Internet Governance Forum (IGF) was held in Hyderabad, India from 3–6 December 2008 and focused on the overall theme of 'Internet for All'. It was attended by over 1,200 participants from 94 countries representing governments, the private sector, civil society, academia, library and information professionals, the Internet community and the media. This reflects and reiterates the multi-stakeholder and democratic nature of the Forum.

The Internet Governance Forum has evolved from the Tunis World Summit on the Information Society. The inaugural meeting of the IGF took place in Athens, Greece in 2006 and the second in Rio de Janeiro, Brazil in 2007. The IGF programme and meeting were prepared through a series of open multi-stakeholder consultations held throughout 2008, a process that also designed the IGF's interactive and participatory structure. The Internet is standing at a threshold, where both limitless opportunities and daunting threats lie ahead. The challenge is to grab the opportunities and exploit them to the fullest while containing, if not eliminating, the threats. In the deliberations and discussions during this third meeting, participants exchanged their experiences on developmental and substantive issues of public policy and governance of the Internet.

Opening Ceremony and Opening Session

Mr. Jomo Kwame Sundaram, Assistant Secretary-General for Economic and Social Affairs (UNDESA) described the Internet as the backbone of our globalized world, which was transforming our lives. Thus all users should take an interest in how it was

run and managed. Mr. Jomo described the IGF as a valuable melting pot for forging a common understanding of complex Internet issues from diverse points of view and a space for frank and enlightened debate, shaping and informing the decision-making processes. He announced that the 2010 IGF Meeting would take place in Vilnius, Lithuania.

Mr. A Raja, Minister for Communications and Information Technology of the Government of India, underlined the tremendous potential of the Internet for promoting global partnership for development, as set out in the Millennium Development goals. He stressed the role of the IGF in building an Internet society which was inclusive, human centred and geared to development. India believed that IT infrastructure was the key to rapid economic and social development, and the Government of India had embarked on a national programme to make the Internet available to citizens through common service centres. He noted that access to information by the people helped democracy by having transparency in the functioning of the government and enhanced the participation of the people in the governing process.

Other speakers at the opening ceremony were Mr. Nitin Desai, Special Adviser to the Secretary-General for Internet Governance and Chairman of the multi-stakeholder Advisory Group (MAG) and Mr. Damodar Reddy, Minister for IT, Government of Andhra Pradesh.

During the opening session nine speakers from all stakeholder groups addressed the meeting. It was noted that the Internet was bringing great potential for economic and social benefit to the world.

The First Day Focused on 'Reaching The Next Billion'

A workshop on 'Realizing a Multilingual Internet' discussed issues related to multilingualism and

promoting diversity on the Internet, including accessibility and the importance of enabling access for people with disabilities. Access and multilingualism are intertwined. We cannot really talk about one without the other. The challenge of achieving universal access can be realized only if the Internet is made available to people of all languages.

A session on 'Access – Reaching the Next Billion' examined issues of access from the three main areas of supply, demand and development and was successful in reaching consensus in many areas.

A session on 'The Open Dialogue' sought to identify linkages between the themes in achieving 'Internet for All' and provided an opportunity for participants to deepen and enrich the discussion. More vigorous strategies need to be put in place to make sure that the required content is produced. The importance of localization and availability of tools was also discussed.

The Second Day Focused on 'Promoting Cyber-Security and Trust'

A workshop on 'Dimensions of cyber-security and cyber-crime' discussed the need for multi-stakeholder collaboration, cooperation and coordination at all levels – national, regional and international. Representatives of the International Telecommunication Union (ITU) presented that organization's Global Cyber Security Agenda. A high level expert group had been set up, comprising some 100 experts representing all stakeholder groups. There was general agreement on the need to intensify efforts to combat cyber-crime. A final point was made concerning the role of the IGF in this area and how it could help organizations that were dealing with these issues in various regions, and help various actors to interact with one another and find solutions. The growth of the Internet has created opportunities for cyber hackers and criminals. Viruses, spyware, phishing and botnets are obstacles to the future growth of the Internet. Cyber Security is becoming more and more complex with every advance of technology. This has perhaps become the most serious challenge for all concerned.

A session on 'Fostering Security, Privacy and Openness' discussed how the Internet was global, but privacy could be local, regional or national in context. As the Internet had become a way of

life, there were societal issues which needed to be addressed. In India, 9 million subscribers are being added every month. In these circumstances, governance was considered to become a relevant point.

Cyber security is the key to users' trust in e-business, e-governance and other online applications. Openness and trust of users on the Internet needs to be maintained and encouraged. The fight against cyber-crime should therefore be given the utmost priority in building not only confidence but also a 'User Centric Information Society'.

The Third Day Focused on 'Managing Critical Internet Resources'

'Transition from IPv4 to IPv6' was described as a self-regulating process. Projections were made that at the present rate of depletion, the IPv4 address space would be exhausted sometime around 2011. The panel noted that there was a need for the private sector, as well as public sectors and civil society, to be involved in the process. It was a shared responsibility that required promotion and enabling of a smooth transition from IPv4 (Internet Protocol version 4) dominance to an environment where IPv6 (Internet Protocol version 6) becomes dominant. The new IPv6 architecture is designed to solve the address space problem in an effective way. It supports more features such as secure routing and effective security as well as auto configuration, thereby offering complete mobility. The need for deployment of the IPv6 protocol is real and urgent. Because of the huge size and diverse coverage of the Internet it is not practical to expect a rapid and complete transition from IPv4 to IPv6. The coexistence of IPv4 and IPv6 must be managed in a practical and simple way to enable a speedy migration.

The session on 'Arrangements for Internet Governance – Global, Regional and National' session left participants with a broader understanding of different stakeholder positions on the issues. The IGF perhaps had a valuable role as a non-threatening environment for discussion, where participants could talk, share practical experiences from different perspectives, and move to the point where people listen to each other, moving from a disconnected series of statements to shared conversation.

A session on 'The Open Dialogue' discussed the transition or migration period, which required shared responsibility if it was to be completed in time. This would require governments, operators, vendors and consumers to take charge of their respective roles, and a coordinated approach to make sure that an orderly migration would happen. The IGF would be a space where work could be done to take these ideas forward.

The Fourth Day Focused on 'Emerging Issues'

A session on 'The Internet of Tomorrow – Innovation and the Evolution of the Internet' noted that the Forum should consider new pedagogical models capable of teaching tens of thousands of people at the same time, utilizing the opportunities of ICTs. The session was shown a video from the Council of Europe which launched an idea for a new multi-lateral treaty on certain minimum principles, including positive obligations to ensure the ongoing functioning of the Internet. A new treaty would promote solidarity and cooperation between states and underline the public value of human rights law. Signing up to a new multilateral treaty which ensured the functioning of the Internet would be of fundamental importance to keep the Internet open and free in the interest of future generations.

The session, 'Taking Stock and the Way Forward' was chaired by Mr. Nitin Desai, Special Adviser to the Secretary General for Internet Governance and Chairman of the Multi-stakeholder Advisory Group (MAG). It noted that the IGF had matured and had become a space where difficult issues could be addressed. The IGF Secretariat provided an overview of the anticipated schedule for the review of the IGF.

Librarians' Voices at IGF 2008

Report by Sanjay K. Bihani

Participants in IGF 2008 included an IFLA Team comprising Stuart Hamilton, IFLA HQ; Sanjay K Bihani, MEA, New Delhi and IFLA/RSCAO Member; A.R.D. Prasad, Documentation Research & Training Centre (DRTC) Bangalore; Marilen Daum, Goethe Institute, New Delhi; and Renu Seth, Goethe Institute, New Delhi.



The IFLA Team at IGF 2008. Left to right: A.R.D. Prasad, Renu Seth, Stuart Hamilton, Marilen Daum, Sanjay K Bihani.

Stuart Hamilton raised the voice of librarians and libraries as a panellist in two major workshops of IGF 2008.

In the first workshop, organized by IP Justice on 'Dynamic Coalition: Access to Knowledge (A2K)' he was one of five panellists including representatives from Google India, the Electronic Frontier Foundation, the World Intellectual Property Organisation (WIPO) and the Brazilian Government. Stuart spoke on the needs of libraries in the electronic information society, including the problems libraries in many parts of the world face just in getting connected to the Internet, and emphasized the important role that copyright exceptions and limitation play in helping libraries provide access to knowledge. There seemed to be a good consensus among the panellists that a move towards standardizing exceptions and limitations for the use of copyrighted works would contribute positively to an increased flow of information online.

In the second workshop, on 'Freedom of Expression in Cyberspace: Internet Filtering and Censorship' Stuart was one of five panellists including representatives from Freedom House, the Organisation for Security and Co-operation in Europe (OCSE), Google, and Issac Mao, who has the distinction of being referred to as China's first ever blogger. Stuart spoke in front of an audience of around 100 participants on the subject of Internet filtering and censorship. He spoke about the *IFLA/FAIFE World Report*, and the worrying trend of increasing use of filtering software in libraries worldwide. He described IFLA as The

true representative of librarians and libraries worldwide and emphasized the role of national library associations in relation to the development of libraries and the need for Internet governance in libraries. He also replied to specific questions on children and the Internet in libraries, the filtering situation in Russian libraries, and other topics. The session provided overviews of censorship around the world.

A.R.D. Prasad from DRTC, Bangalore, one of the IFLA team members, spoke at the Workshop on 'Access to Public Held Information with a Development Perspective' on the role of libraries in accessing public held or public sector information. He approached the topic from an Indian perspective, and outlined how libraries can play an effective role in making freedom of information legislation real for users, by providing access to the right channels and offering advice on how to find the information they are looking for. Libraries used to be a major source of information dissemination and should be so in future too.

I attended 14 or 15 workshops and Open Forums during the IGF meeting related to aspects of modern librarianship. It was a great experience to attend so many workshops and forums on one platform. I also participated in one workshop on 'Low Cost Sustainability Access' and spoke for the Access group on the requirement of low cost Internet access for libraries, so that the benefits of Internet can reach the masses or the general public. Free Internet access in libraries could thus fulfil the theme of this year's IGF – 'Internet for All'.

Conclusion

The issues addressed in the 87 self-organized events that took place in parallel to the main sessions provided an opportunity for the meeting participants to share experiences, ideas, and best practices. These thematic events, built around the Forum's main theme of 'Internet for All', discussed specific ideas, heard presentations on successful projects and exchanged views on the next steps to address the use and misuse of the Internet.

While in general the themes highlighted in these events were fairly diverse, there were a number of events examining different aspects of critical

Internet resources. National and regional IGF activities featured prominently, as did issues of protecting children and ensuring a safe online environment. A new issue for the forum was 'ICT and Climate Change'.

The IGF is important because of its uniqueness as a multi-stakeholder Forum that can address issues not being discussed anywhere else. The IGF looks at topics like access, diversity, security, openness or critical Internet resources, not as purely technical issues, but in terms which are more in the province of social, political, or economic analysis. Access, for instance, should not be discussed as a purely technical issue. It needs to be addressed like other basic issues of society, politics or economics.

The Internet today is standing at a threshold; both limitless opportunities and daunting threats lie ahead. The challenge is to grab the opportunities and exploit them to the fullest, while containing, if not eliminating, the threats. It was clear that achieving these objectives would be possible only by concerted and collaborative action by governments, businesses, civil society, organizations and academia. The IGF as a forum held great promise as a platform to forge precisely such a grand coalition for universal good. Time will tell – although with only two scheduled IGFs remaining, in Egypt next year, and then in Lithuania – if this promise is realized.

Notes

1. The next IGF meeting will be held in Egypt from 15–18 November 2009.
2. For more information about IFLA's involvement at the IGF, see Stuart Hamilton's blog at: <http://blogs.prodigio.nl/stuart/>

Sanjay K. Bihani is working in the Ministry of External Affairs of Government of India in New Delhi. He is a Standing Committee Member of IFLA – Asia and Oceania Section and IFLA-Government Libraries Section. He is also a Member in CLM Committee of IFLA and the Editorial Committee of IFLA Journal. He may be contacted at alio@mea.gov.in or bihanisk@hotmail.com

Stuart Hamilton is Senior Policy Advisor, IFLA Headquarters, PO Box 95312, 2509 CH The Hague, The Netherlands. Tel. +31 70 314 0884. Fax: +31 70 383 4827. E-mail: stuartjameshamilton@googlemail.com

Membership Matters

NEWS CONTENTS

Membership Matters	63
Future IFLA Conferences and Meetings	63
From Corporate Partners . . .	71

New Members

We bid a warm welcome to our 39 new members! We wish the IFLA community a Happy 2009!

Institutions

The Library for the Blind and Visually Impaired in Bosnia and Herzegovina, Bosnia and Herzegovina
Publishing and Depository Services Program, Canada
The Criminological Library/The Training Institute of Prison and Probation Services, Finland
Oulu City Library – Regional Library, Finland
Université des Sciences et Technologies de Lille (USTL – Lille 1), France

Senat Français, Service de la Bibliothèque, des Archives et de la Documentation étrangère, France
Parliament of Ghana, The Library, Ghana
Eugendes Foundation, Greece
Bose Institute, India
The Library for the blind in Montenegro, Montenegro
The Open University Library Services, United Kingdom
Western Illinois University, Malpass Library, United States
University of South Florida Library, United States

National Association

Society of Serbian Librarians, Republic of Serbia

Personal Affiliates

Letizia MONDELLO, Australia
Karolien SELHORST, Belgium
Laura NAEME, Canada
Jack HANG TAT LEONG, Canada
Aneseh HOSSEINIZADEH, Iran, Islamic Republic of

Ellie VALENTINE, United States
Scott SMITH, United States
Robert SEAL, United States
Sandra ROE, United States
Lori MESTRE, United States
Myka CARROLL, United States
Stephanie KRUEGER, United States
Loriene ROY, United States
Filippa Marullo ANZALONE, United States
Verlena SIMMS, United States

School Libraries

Colegio de San Francisco de Paula, S.L., Spain
St. Albans School, Lower School Library, United States

Student Affiliates

Noelia ESTEBAN AMATE, Spain
Alba RODRIGUEZ TOAJAS, Spain
Joni SAVAGE, United States
Kimberly GIEDD, United States
Lori SHEMANSKI, United States
Jessica BROOKS, United States

Future IFLA Conferences and Meetings

Libraries for the Blind

IFLA Libraries for the Blind Section Conference, Belgium, 17–20 August 2009

This conference will highlight the importance of delivering library services for print disabled people and show you how to improve your services through cooperation and partnership. On the second full day of the conference, we will focus on public libraries and plan to feature many short examples of

best practice in supporting print disabled people.

Further information: Helen Brazier
helen.brazier@rnib.org.uk

CPDWL and New Professionals

Continuing Professional Development and Workplace Learning Section and the New Professionals Discussion Group. IFLA Satellite Conference. University of Bologna, Italy. August 18, 19, and 20, 2009.

Theme: Moving in, moving up, and moving on: Strategies for regenerating the library and information profession.

The broad focus of this satellite meeting is the creation of a positive work environment for a multi-generational workforce.

General Themes

Managing between and across generations
Mentoring and coaching
Communication skills, e.g. goal setting, providing feedback

Future IFLA Conferences and Meetings

Organizational structures
Dealing with organizational blocks

Moving In

Attracting people to the profession
Developing retention strategies
Creating a positive work environment
Teambuilding and cohort development
Involving newcomers in professional associations

Moving Up

Developing as a leader
Working and leading within the organization

Managing Up

Challenging existing organizational structures
Relationship and network building

Moving On

Re-skilling and transferability of skills
Succession planning and passing on knowledge
New careers for information workers

Further information: Loida Garcia-Febo, Assistant Coordinator, Special Services, Queens Library, 89-11 Merrick Blvd., Jamaica, NY 11432, USA. E-mail: loidagarciafebo@gmail.com

OR

Roisin Gwyer, Associate University Librarian, The University Library, University of Portsmouth, Cambridge Road, Portsmouth, PO1 2ST, England UK. E-mail: roisin.gwyer@port.ac.uk

Information Technology and Web 2.0

IFLA Information Technology Section, supported by the Libraries and Web 2.0 Discussion Group. Pre-Conference, Florence, 19-20

August 2009. *Theme:* Emerging trends in technology: libraries between Web 2.0, semantic web and search technology.

This two-day conference will address the synergies and potential use of the new web technologies, the semantic web and new search technology which have a very deep impact on the services in the library scene.

Topics:

- Theoretical, practical and technological introductions into the new technologies and their use in libraries.
- Change functionality and technology patterns related to new services in libraries and information service.
- Experiences with and evaluation of new technologies and library services.
- Ideas how to combine these technologies in the field of the library system and/or services?
- Prospective questions in the area of technologies and library services.

It is important to note that the basic technology per se is not the theme of the conference, but rather its implantation and use.

Further information: Dr. Alenka Kavcic-Colic, Head of the Library Research Centre, National and University Library, Turjaska 1, 1000 Ljubljana, Slovenia. Tel. (+381-1) 2001131. Fax: (+386-1) 4257293. E-mail: alenka.kavcic@nuk.uni-lj.si

Literacy and Reading and Children and Young Adults

Literacy and Reading and Children and Young Adults Sections. Pre-conference, Rome, 19-20 August 2009. *Theme:* Raising a nation of readers: libraries as partners in national reading projects and programmes.

Sub-themes:

I. Start with the youngest

- How libraries encourage early and family literacy.
- Provision of programmes and resources to promote reading for and with the youngest children and their parents.
- How to establish partnership with other relevant organizations and institutions to support early literacy and reading.

II. Management Decisions and Strategies

- What are the best strategies for national library associations to provide and/or support national reading campaigns for children and young adults.
- Partnership: Why, Who, How; With what results?
- How particular libraries could contribute to reading initiative programmes, projects; not only to increase the number of readers but also to improve reading capacities.
- From local networks to national projects.

III. Good Practices as Building Blocks

- Presentations of good practices in reading promotion for children and young adults.

Further information: Ivanka Stricevic, PhD, Chair, Literacy and Reading Section, University of Zadar, Library and Information Science Department, M. Pavlinovica bb, 23000 Zadar, Croatia. Tel/fax +385 (0)23 311 540. E-mail: ivanka.stricevic@zg.t-com.hr

OR

Ingrid Bon, Chair, Libraries for Children and Young Adults Section, Biblioservice Gelderland, Zeelandsingel 40, 6845 BH ARNHEM, The Netherlands. Tel. + (31) (26) 3860233. Fax: + (31) (26) 3820019. E-mail: ingrid.bon@biblioservice.nl

Public Libraries and others

Public Libraries, Library Buildings and Equipment, Library Theory and Research, Management and Marketing, and Academic and Research Libraries Sections. Pre-conference, Torino, 19–21 August 2009. Theme: Libraries as space and place.

Topics:

1. Libraries as places and spaces for knowledge sharing and learning.
2. Libraries as meeting places fostering community.
3. Library architecture, library layout refurbishment and heritage listed buildings.
4. Libraries as third places.
5. Libraries as meeting places across cultural, professional and ethnic borders.
6. How can one strike a balance between promoting pluralism and multiculturalism on the one hand and community on the other?

Further information: Marydee Ojala. E-mail: marydee@xmission.com

Classification and Indexing

Classification and Indexing Section. Pre-conference, Florence, Italy 20–21 August 2009. Theme: Looking at the past and preparing for the future.

This pre-conference will explore the theoretical and methodological aspects of rethinking semantic access to information and knowledge and will offer a general survey of innovative projects deployed to cope with the challenges of the future, offering a unique opportunity for librarians, academics and other information professionals to be informed about the state of the art in subject indexing.

Topics:

- Systems, tools and standards in subject indexing.
- Retrieval in multilingual, multi-cultural environments.
- Web indexing and social indexing.

Further information: Leda Bultrini. E-mail: leda.bultrini@arpalazio.it

OR

Patrice Landry. Fax: +41 31 322 84 63. E-mail: patrice.landry@nb.admin.ch

IFLA World Library and Information Congress 2009 in Italy

IFLA World Library and Information Congress: 75th IFLA General Conference and Council, 23–27 August 2009. Milan, Italy. Theme: Libraries create futures: building on digital heritage.

Further information: IFLA 2009 Secretariat, 4B, 50 Speirs Wharf, Port Dundas, Glasgow G4 9TH, Scotland, UK. Tel: +44(0)141 331 0123. Fax: +44(0)207 117 4561. E-mail: ifla2009@congrex.com Conference website: <http://www.ifla.org/IV/ifla75/1st-ann2009-en.pdf>

OR

Milan City National Committee, IFLA 2009 Milan, Italy, Associazione Italiana Biblioteche. E-mail: ifla2009-pres@aib.it Website: www.aib.it

Conference Sessions Announced

Africa Section. Theme: Building on cultural heritage from the African classical world to the 21st century.

Sub-themes:

- institutional repository perspectives on the creation, dissemination, and access to African

cultural heritage including local, national, trans-national and global strategies

- surveys of preservation activities, programs, projects, best record-keeping practices, technologies for heritage information management, solutions and challenges
- expectations and specific trepidations for Library and Information Sciences in the 21st century (including, but not limited to digital curation, web archiving, computerization and networking of African cultural heritage – archives, manuscripts, etc.)
- Africa and the Mediterranean world in the classical age; influence of the classical world upon African culture and society
- advocacy – libraries on the agenda in Africa in the 21st century
- perceptions on African heritage information: cultural, political, educational, economic, legal, socio-technological.

Further information: Dr. James Daniel, Secretary, IFLA Africa Section, Director, LIS National Mathematical Centre, PMB 118 Garki GPO, Abuja, Nigeria. E-mail: jimidaniel@yahoo.com

Agricultural Libraries Discussion Group in association with the International Association of Agricultural Information Specialists (IAALD). Theme: Worldwide trends in open access to agricultural information.

Topics:

- barriers to Open Access to agricultural information in the country/region
- efforts of universities and research institutes in the country providing Open Access to agricultural information and literature
- international agricultural research institutes and Open Access
- obstacles in accessing agricultural information generated by private agencies
- efforts of national agricultural research funding bodies in facilitating Open Access

Future IFLA Conferences and Meetings

- role of international organizations such as IDRC, FAO, CGIAR in accelerating Open Access
- national agricultural libraries/information centers in support of Open Access
- emerging policies and mandates governing Open Access in the country/region.

Further information: Deva Esvara Reddy, PhD, Associate Professor of Library Science, Texas A&M University, College Station, TX, USA. Tel. +(1)(979)8621062. Fax +(1)(979)4580112. E-mail: dereddy@tamu.edu

Asia and Oceania Section. *Theme:* Preserving the past – creating the future.

This session aims to highlight the work of libraries and other information organizations in Asia-Oceania that contributes to the creation of better futures by preserving the past.

Topics:

- utilizing the preservation of materials to develop future-oriented, contextually-based information services in memory institutions
- understanding how heritage awareness through preserved artefacts can lead to better understanding of possible future developments in proactive memory institution services
- preserving or providing access to images or oral histories that capture the memories of the participants in unique events of a community's past and cultural heritage
- preserving significant cultural heritage resources and providing unified approaches to making them accessible through the collaborative efforts of libraries, archives and museums
- promoting the use of or creation of resources that document the contributions of minority groups to the development of a community's social, political, cultural or economic life.

Further information: Ms Premila Gamage, RSCAO Chair. E-mail: premilagamage@gmail.com

OR

M. Al Mamun, RSCAO Secretary. E-mail: almamun@icddrb.org

Audiovisual and Multimedia Section, with the endorsement of the Bibliographic Control Division.

Theme: Herding cats in a dust-storm: bibliographic control of audiovisual and multimedia materials in a time of rapid change.

Further information: Prof Bruce Royan, Secretary, IFLA Audiovisual & Multimedia Section, 41 Greenhill Gardens, Edinburgh, EH10 4BL, UK. Tel. +44 131 447 3151. E-mail: bruce.royan@concurrentcomputing.co.uk

Bibliography Section. *Theme:* Promoting and preserving national bibliographies, our testimony of cultural heritage.

Topics:

- How can collaborative initiatives between National Bibliographic Agencies and other cultural heritage organizations that provide authoritative bibliographic descriptions for parts of the national collection, make national bibliographies more decentralized and international in scope? How can national bibliographies benefit from such collaboration?
- How much do national bibliographic agencies contribute to the development, implementation and updating of formats, standards and languages used in recording and providing access to bibliographic information and resources, that can be shared with other cultural organizations?
- What ongoing projects are underway or planned that assist national bibliographies as they pass from traditional formats and processing to a system that allows them to work in a digital environment?

Further information: Glenn Patton, Session Organizer. E-mail: pattong@oclc.org

Continuing Professional Development and Workplace Learning and New Professionals Discussion Group. Creating a positive work environment for a multi-generational library and information workforce.

This program session will focus on the generational challenges facing the library and information profession. These include attracting and retaining new professionals, developing leaders, managing across the generations, knowledge sharing and succession planning. The session will include reports from the IFLA satellite conference organized by CPDWL and NPDG: 'Moving In, Moving Up, and Moving On: Strategies for Regenerating the Library and Information Profession' (18–20 August 2009, Bologna, Italy: see above).

Topics:

- What are the challenges involved in creating a positive work environment for a multi-generational workforce, and how best can we meet those challenges?
- Do our organizational structures provide the best development opportunities for both new and existing professionals? If not, can we change them – and how?

Further information: Susan Schnuer, Associate Director, Mortenson Center for International Library Programs, University of Illinois at Urbana-Champaign, 1402 W. Gregory Drive, Room 142, Urbana, Illinois 61801 USA. Tel. +1-217-333-0031. Fax +1-217-265-0990. E-mail: schnuer@illinois.edu. Website: www.library.uiuc.edu/Mortenson

Division for Regional Activities (Div. VIII). *Theme:* Libraries on the cultural agenda: regional comparisons.

The session will examine the extent to which libraries embrace the

notion of cultural heritage and are store houses of culture in developing countries.

Topics:

- best practices on how libraries promote culture
- programmes in libraries as cultural heritage
- case studies.

Further information: Dr Buhle Mbambo-Thata, Div VIII Secretary. E-mail: Mbambtb@unisa.ac.za

OR

Ms Premila Gamage, Division VIII Chair. E-mail: premila@ips.lk; premilagamage@gmail.com

Document Delivery and Resource Sharing Section. *Theme:* The interlending, document delivery and resource sharing tradition: evolving with the changing knowledge economy.

Topics:

- The tradition of interlending, document delivery and resource sharing – historical overviews tracing the origins and evolution, and considering the declining requests globally (with the notable exception of the United States – any research into the reasons for this is especially of interest).
- Moving away from tradition – the evolving Rethinking Resource Sharing Initiative – case studies of practical implementation of, for example, the Get IT! Button, home delivery and other initiatives.
- The impact of digital format publishing (including the increasing number of born digitals) and contract, licensing and digital copyright issues, on traditional Document Delivery and Resource Sharing. Case studies with models for solving these challenges are of special interest.

Further information: Kim Baker, Chair, Document Delivery and

Resource Sharing Standing Committee. Programme Executive, Document Supply and Information Services, National Library of South Africa, PO Box 496, Cape Town, 8000, South Africa. Tel: +27 21 487 5604. Fax: +27 21 423 3359. E-mail: kbaker.nlsa@gmail.com

Education and Training Section. *Theme:* The role of library and cultural institution professionals in cultural heritage: education for the convergence of Libraries, Archives, and Museums (LAM).

Topics:

- In the Knowledge Economy, what roles do information and/or LAM professionals play, and what kind of education will they need for the kinds of jobs that need to be performed?
- What are the basic principles of the knowledge domain with which all information workers should be familiar to effectively work with cultural heritage issues?
- How should professional qualifications approach theory and knowledge development, as opposed to the acquisition of mere technical skills?
- Does the increasing use of information and communication technologies (ICTs) create a standardized platform which prevents the cultivation of cultural differences? Are such differences an obstacle or is there a generic profile of the preferred graduate incorporating ICT?
- What combination of technological and content-based knowledge is needed to work in partnership with cultural heritage?
- Are there cultural differences that differentiate the Knowledge Economy in each country? Does this mean that there are differences and similarities in the skills required of archivists, museologists and librarians as information workers?
- What are the basic/minimum/essential qualities that such a person should demonstrate?

Further information: Anna Maria Tammaro. E-mail: annamaria.tammaro@unipr.it

Education and Training Section. Off-site Session, Department of History and Historical Documentation Studies – University of Milan. *Theme:* Recognition of qualifications and quality of LIS education: the Bologna process challenges in a changing world.

Three invited speakers will be representative of European Association for Library & Information Education and Research (EUCLID), The Asia-Pacific Conference on Library and Information Education and Practice (ALIEP) and Association for Library and Information Science Education (ALISE). The session will try to stimulate a brainstorming on questions as: What are the implications of internationalization and transnational courses for recognition of qualifications? How might those internationalization challenges push LIS education to enhancing mutual trust?

Topics:

- mobility of students and recognition of qualifications
- accreditation and enhancement of quality of LIS education in a changing environment
- experiences and reflections on Bologna Process
- international cooperation of LIS institutions
- LIS education stakeholders dialogue.

Further information: Cristobal Urbano, Facultat de Biblioteconomia i Documentació, Universitat de Barcelona. E-mail: urbano@ub.edu

E-Learning Discussion Group. *Theme:* Lifelong e-learning and libraries.

The aim is to explore the challenges and opportunities facing libraries if they are to play an increasingly active role in lifelong learning, using the e-learning tools that will ensure

Future IFLA Conferences and Meetings

that librarians become significant partners in the education process.

Topics:

- Inspiring learning in libraries: e-learning collaboration experiences with educational institutions.
- Lifelong e-learning in libraries
- Library cooperation and e-learning process
- The use of libraries in e-learning process related to education and further education.
- Pedagogical methods and e-learning strategies developed for and adapted to adult education and groups with special needs, e.g. persons with disabilities, the gender perspective.
- The professional profile of the librarian involved in e-learning, for example skills in pedagogy, didactics and ICT.
- The creation of electronic networks between public libraries, research libraries, school libraries and special libraries for e-learning.
- The development of networks between public libraries and educational institutions and organizations for e-learning.
- The use of information and communication technologies (ICT) in libraries to support lifelong e-learning.
- Library and educational policy.
- Cooperation between the library community and the educational community.

Further information: Gillian Hallam. E-mail: g.hallam@qut.edu.au

Government Information and Official Publications Section (GIOPS). *Theme:* Government publications as cultural heritage: preserving the past, keeping up with the present, embracing the future.

Topics:

- the historical significance of these publications
- the history, importance and implications of the changing nature of deposit programs

- preserving print publications in a digital world
- preserving, accessing and disseminating publications in jurisdictions without legal deposit programs.

Further information: Jackie Druery, Chair, GIOPS, Head, Learning & Research Services, Joseph S. Stauffer Library, Queen's University, Kingston, ON K7L 5C4, Canada. Tel. +1 (613) 533-3309. E-mail: drueryj@post.queensu.ca

Health and Biosciences Libraries Section. *Theme:* Consumer health: health literacy, patient empowerment & health promotion.

Topics:

- advancing and supporting health literacy
- patient empowerment
- patient decision support
- health promotion
- patient information services
- disease prevention
- access to health information.

Further information: Kate Oliver, Welch Medical Library, Johns Hopkins University, 1900 E. Monument St, Room 105, Baltimore, MD 21205. E-mail: koliver1@jhmi.edu

Information Technology Section. *Theme:* New repositories: architectures interoperability and data exchange.

This theme will cover issues of (technical/data driven) interoperability for all types of libraries when dealing with the massing up of digital repositories in a manner that supports open services, including the convergence with archiving solutions and new challenges for digital libraries from the point of view of services versus user impact.

Topics:

- Successful models of interoperability between different types of digital archives and repositories.

- Various experiences in data exchange between multimedia archives.
- New services based on successful interoperability solutions, as distributed systems and federated access to digital archives/repositories.
- Development of open APIs and open source solutions which helps to facilitate advanced services based on metadata from various types of collections and organizations.
- Case studies in open source application deployment (e.g. Library Management Systems) that enhances digital archive interoperability between a diverse range of libraries.

Further information: Dr. Alenka Kavcic-Colic, Head of the Library Research Centre, National and University Library, Turjaska 1, 1000 Ljubljana, Slovenia. Tel. (+381-1) 2001131. Fax: (+386-1) 4257293. E-mail: alenka.kavcic@nuk.uni-lj.si

OR

Reinhard Altenhöner, Chair: Information Technology Standing Committee. E-mail: R.Altenhoener@d-nb.de

Latin America and the Caribbean Section. *Theme:* Preserving and conserving the cultural heritage in Latin America and the Caribbean.

Topics:

- The role of libraries, archives and museums for preserving and conserving the cultural heritage in our region.
- Technology use in libraries, archives and museums of the region for preserving and conserving the cultural heritage in our region.
- Providing access to traditional knowledge and information in Latin America and the Caribbean.
- Access to resources that show the cultural heritage of a specific community or culture in our region.
- Experiences that contribute to development actions in other

libraries, archives and museums in the region for preserving and conserving our cultural heritage.

Further information: Mr. Filiberto Felipe Martínez, Chair, IFLA Latin America and the Caribbean Section. Tel: +(52)(55)5623 0327. Fax: +(52)(55)5550 7461. E-mail: felipe@cuib.unam.mx

OR

Mrs. Ana María Peruchena, Secretary, IFLA Latin America and the Caribbean Section. Tel. +(54)(11)48110043. Fax: +(54)(11)48163422. Correo electrónico: aperuchena@abgra.org.ar/peruzimmer@yahoo.com.ar

Library and Research Services for Parliaments Section and Library History Section. *Theme:* Changing visions, parliamentary libraries past, present and future.

Topics:

- The vision for parliaments of the future and what will be required of their libraries
- current best practices in parliamentary libraries
- how parliamentary libraries have evolved
- preservation of the parliamentary information of the past so that it can continue to serve present and future generations
- parliamentary library history
- parliamentary library buildings

Further information: Gro Sandgrind, Chair, Section on Library and Research Services for Parliaments. E-mail:grs@stortinget.no

Library Buildings and Equipment Section and Libraries for Children and Young Adults Section. *Theme:* If I was the director....

Topics:

- How to create/design/decorate libraries for children and young adults in the 21st century.

- How can a children's/young adults' library or area be designed in order to

- inspire creativity
- create spaces for play
- create spaces in which to socialise
- facilitate learning activities
- encourage reading
- ensure material is suitably displayed and stored
- generate interaction between the different media
- attract families and develop space for activities for parents and children/young adults together, for different groups of children, children of different ages and their parents.

The session covers the age range from 0–18, but will be divided into two separate 2 hour sessions. The first session will focus on 0–11 and the second session on 12–18 year olds.

Further information: Andrew Cranfield, Library Buildings and Equipment Section. E-mail: cranfield@debibliotheken.nl

OR

Ingrid Bon, Libraries for Children and Young Adults Section. E-mail: ingrid.bon@biblioservice.nl

Library Theory and Research Section. *Theme:* Research into open access.

The intention is to provide a forum for library professionals to critically discuss key issues related to developing, managing and sustaining OA across the world, including challenges and barriers, the realities of financial and institutional support, policy and planning or principles involved in matters of OA development, management and sustainability.

An LTR Best Paper Award will be given to the student paper that provides the most promising and thought-provoking discussion on

the topic. EUR 500 will be provided to the winner to support attendance expenses. To collect the award, the winner must attend and deliver the winning paper. All accepted student papers will be eligible for submission for consideration for the Education and Training LIS Student Paper Award.

Further information: Helen Partridge. E-mail: h.partridge@qut.edu.au

Library Services to Multicultural Populations Section. *Theme:* Creativity and the arts: libraries building on multicultural heritage.

Topics:

- Performing arts programmes that promote respect for cultural diversity and human creativity where oral or artistic expression in the form of traditional music, dance, theater or media encourages intercultural communication and understanding.
- Cultural heritage programmes and collections which provide a legacy of the intangible attributes of a group – culture, values and attitudes including knowledge, language, arts, rituals and performances – and promote a continuity of diversity of cultures among people living in our global society.
- Cultural heritage programmes that ensure public engagement while promoting cross-cultural dialogue and understanding.
- Exhibits, both physical or virtual, that reflect the underserved cultural and linguistic groups in the community and preserve significant cultural traditions.

Further information: Susana Alegre Landáburu, Head of International Cooperation, Subdirector General for Libraries Coordination, Ministry of Culture, Plaza del Rey, 1, 28004 Madrid, Spain. Tel. +34 91 701 74 62. Fax: +34 91 701 73 39. E-mail: susana.alegre@mcu.es

Literacy and Reading Section and Information Literacy Section.

Future IFLA Conferences and Meetings

Theme: Libraries promoting twenty-first century literacies.

Topics:

- basic print literacy (combating illiteracy)
- fluent print literacy (combating aliteracy)
- information literacy
- multicultural literacy
- visual literacy
- media literacy
- civic literacy
- economic literacy, etc.

Further information: Sylvia Chevillotte, Chair, Information Literacy Section. E-mail: Sylvie.chevillotte@univ-paris1.fr

OR

Ivanka Stricevic, Chair, Literacy and Reading Section. E-mail: ivanka.stricevic@zg.t-com.hr

Management of Library Associations Section (MLAS) with Continuing Professional Development and Workplace Learning Section (CPDWL). *Theme:* Librarians on the Cat Walk: Communicating for advocacy to influence policy and practice.

This will be a one-day session. Part 1 will focus on:

- successful advocacy programmes
- communication and promotion
- influencing the political agenda
- identifying the right arena for advocacy
- working with media

Part 2 will provide interactive practice in making presentations. Volunteers will be invited to submit their presentations, two of which will be selected for review and evaluation.

Further information: Sylvia Piggott, CPDWL Section. E-mail: spiggott@sympatico.ca

Newspapers Section. *Theme:* Newspapers in the Mediterranean

and the evolution of the modern state.

Topics:

- how collections of newspapers have been formed
- the current state of newspaper collections
- actual or planned newspaper digitization projects
- newspapers as agents of political change
- the role of newspapers in Italian unification

Further information: Ed King, Secretary, IFLA Newspapers Section. Tel. +44 7412 7362. E-mail: ed.king@bl.uk

Preservation and Conservation Core Activity. *Theme:* Convergence in preservation research between libraries, archives and museums.

This session aims at promoting the networking on preservation between all our cultural heritage institutions.

Topics:

- In the field of medieval manuscripts preservation: pictorial layers consolidation, textile or wooden supports restoration...
- Laboratories research on materials and products: fundamental research on ink, leather, parchment...
- Applied research as use of Gore-Tex and cellulose products...
- Research on optimum storage conditions for all collections: for instance, research on air in storages and identification of pollutants.

Further information: Christiane Baryla, Director of IFLA PAC Core Activity. E-mail: christiane.baryla@bnf.fr

Rare Books and Manuscripts Section, Preservation and Conservation Section and Library History Section. *Theme:* Dispersed cultural collections: preservation, reconstruction and access.

Topics:

- project management and methodology
- policies regarding preservation and digitization
- standards for cataloguing and recording provenances
- cross-institutional cooperation (national and international).

Further information: Bettina Wagner, Chair, Rare books and Manuscript Section, Bayerische Staatsbibliothek. E-mail: bettina.wagner@bsb-muenchen.de OR Per Cullhed, Chair, Preservation and Conservation Section, Uppsala University Library. E-mail: per.cullhed@ub.uu.se OR Hermina G.B. Anghelescu, Chair, Library History Section Wayne State University. E-mail: ag7662@wayne.edu

Reference and Information Services Section. *Theme:* The pro-active librarian: the how and the why.

Topics:

- marketing your reference and information services
- being user-centred instead of service-centred
- developing soft skills – communication, empathy and comfort levels
- pushing out information via blogs, mobile phone services, ‘embedded’ librarians
- what is gained when moving from the physical desk to the virtual desk?
- do technical improvements lead to service improvements?
- can the librarian act as a consultant and catalyst for collaboration?
- how can we monitor and improve the quality of the different services?

Further information: Amanda Duffy, 184 Burnt Oak Lane, Sidcup, DA15 9DG United Kingdom. E-mail: burntoak@dsl.pipex.com

Science and Technology Libraries Section. *Theme:* Open access to science and technology research worldwide: strategies and best practices.

Topics:

- Barriers to science and technology research information in a particular country or region and how Open Access may have contributed to alleviating those barriers.
- Ways in which universities, governments, and/or public funding agencies have promoted/imposed Open Access.
- Special challenges developing countries face in providing Open Access to science and technology research and similar resources.
- Why is Open Access a critical issue for policy-makers concerned with scientific and technological innovations and higher education?
- How can Open Access in developed countries promote the work of researchers in these countries, both as consumers and researchers?
- In what ways has Open Access accelerated/restricted globalization of science and technology education?

Further information: Jill Byerly Mayer, NC AHEC ILS Associate Director, Health Sciences Library, UNC Chapel Hill Chapel Hill, NC 27599-7585, USA. Tel. +1 (919)966-0960. Fax: +1 (919) 966-1029.

Serials and Other Continuing Resources Section. *Theme:* Serials in the 21st century: new concepts, new challenges.

Topics:

- Organizational models for work with e-resources. What works and what doesn't?

- E-books from selection to access: some new approaches
- New challenges as new opportunities

Further information: Eva-Lisa Holm Granath, Secretary, Serials and Other Continuing Resources Section, Linköpings universitetsbibliotek/Linköping University Library, SE-581 83 Linköping, Sweden. Tel. +46 13 281916. Fax: +46 13 282947. E-mail: evaho@bibl.liu.se

Statistics and Evaluation Section.

Theme: Statistics on the agenda.

This session will focus on library statistics as tools for advocacy and strategic decision making that look at the way statistics are – or can be – used to influence those who decide our future: publics and politicians, academics and administrators, government bodies and commercial actors.

Further information: Tord Høivik. E-mail: tordhoivik@gmail.com OR Roswitha Poll. E-mail: pollr@uni-muenster.de

Interlending and Document Supply

11th Interlending and Document Supply Conference, Hanover, Germany, 20–22 October 2009. *Theme:* Strategic alliances and partnerships in interlending and document supply.

Topics will include:

- cooperation in document supply and interlending
- national and international experiences in resource sharing

- open access activities
- rights & distribution/licensing/economic aspects
- future directions

Further information: Kim Baker, Programme Executive: Document Supply and Information Services and Cape Town Campus Coordinator, National Library of South Africa, PO Box 496, Cape Town, 8000, South Africa. Tel: +27 21 487 5604. Fax: +27 21 423 3359 . E-Mail: kbaker.nlsa@gmail.com

IFLA World Library and Information Congress 2010 in Australia

The Australian Library and Information Association and the city of Brisbane have been selected to host the International Federation of Library Associations and Institutions (IFLA) World Library and Information Congress in 2010. The theme of the Congress will be: 'Engaging, Embracing, Empowering'.

Further information from: IFLA Headquarters, PO Box 95312, 2509 CH The Hague, The Netherlands. Tel. +31 70 314 0884. Fax: +31 70 383 4827. E-mail: ifla@ifla.org. Website: www.ifla.org

IFLA World Library and Information Congress 2011 in Puerto Rico

During the closing session of the World Library and Information Congress in Quebec, it was announced that Puerto Rico had been selected as the host country for the 2011 Congress. Further details will be available at a later date.

From Corporate Partners

Publishing Development: editorial innovation at the service of global knowledge

Arnaud Pellé, Corporate Communications Manager, Emerald Group Publishing Limited

Barely one year after it was created, the Publishing Development department at Emerald Group Publishing already boasts a string of successes and achievements. In this overview, we look at what prompted the department's creation in the first place, what it has accomplished and its future outlook.

Heritage and Ambition

In 2007, Emerald crowned 40 years in publishing with the launch of the Emerald Backfiles project, the digitization of its extensive collection of past articles. Bringing management research history into the digital era was a logical step to

take for the company. It was also an ideal way to acknowledge and celebrate its achievement as a publisher and an ideal starting point to expand further on the foundation of its success, implementing ambitious development plans from the 40-year milestone onwards.

Immediately after its release in March 2008, Backfiles proved a huge success, owing not only to the richness and quality of the archive but also to the straightforwardness it brought to the research process. With over 65,000 articles and a mine of seminal papers, groundbreaking theories and concepts readily accessible, researchers and practitioners alike were now able to advance their studies, their careers, their performance and, ultimately, knowledge, at a much quicker pace.

Philosophy and Ethics

As a scholarly publisher, Emerald has always focused on the quality and relevance of the papers it publishes, privileging applicable research with the inherent scope to benefit organizations, wherever they operate. The motivation behind adopting 'Research you can use' as its official publishing philosophy lies in the company's explicit aim to promote best management practices and responsible leadership worldwide for a more equitable, global approach to business. As its portfolio has grown and it has established its reputation as the world's leading publisher of management research, Emerald responded to the need to leverage this experience by appointing a dedicated team responsible for the implementation of a radical editorial programme in line with the company's philosophy and ethics.

Editorial Expertise and Innovation

In November 2007, the Publishing Development department was created. Still under the editorial umbrella, but detached from the

core portfolio activities, the new team embarked on designing a programme to develop sustainable relationships with authors, editors and researchers in emerging economies, identify new topics of research, uncover opportunities for new titles in specific subject areas, and generate innovative ways to use the editorial expertise of the company.

Heralding a new phase of expansion, this change in the organization's structure coincided with the acquisition of a large social sciences programme of books and book series from Elsevier. Marking at once the most significant acquisition in Emerald's history and the company's first steps into book publishing, this injection of both new content and new publishing practices had several implications. On the one hand it came to strengthen the management research content of the company's existing journal portfolio. On the other hand, it brought new subject areas and additional challenges for the Publishing Development department, which undertook its integration.

As the new team organized itself to enhance the company's editorial services and output, three distinct areas emerged: new journal launches

and partnerships, regional developments, and book commissioning.

New Journals and Partnerships

Emerald has long worked alongside a number of associations as advisory groups, using their professional expertise for the development of relevant resources and to ensure that journals evolve in the right direction. Publishing journals in partnership with these associations, however, has been a novel venture for Emerald. One such innovative publication, the *Journal of European Real Estate Research*, was launched in 2008 in partnership with the European Real Estate Society (ERES). Emerald works with ERES to promote the journal and the Society to an international audience of real estate professionals, both academics and practitioners.

Launching a new journal is a complex process that requires an unhurried, well-planned approach. It can take anything between six and 24 months of painstaking surveys and reviews. And despite all the care that goes into the decision to publish a new title, it is not without risks. Since dedicating a team to the smooth running of launching new



Some new journals.

journals, from the initial proposal to the final integration to the portfolio, there has been a steady growth in new titles published year on year. The process, however, is strictly about quality rather than quantity.

Identifying niche subject areas that are missing on the international stage, measuring their potential and ensuring they offer sustainable potential for publication are key components in the genesis of a journal with suitable prospects for viability and longevity. A standardized, yet flexible, programme designed from experience, has been instrumental to the success of the new launch programme in place at Emerald. Its objective is, in a nutshell, to gauge and provide the right synergy between what people want to write about and what people want to read. In 2009, thirteen journals in total will be added to the portfolio out of an initial 69 proposals, while 40 titles are still undergoing screening. New journals are often greeted with acclaim from the communities they address, as was the *International Journal of Managing Projects in Business*, launched in 2008 and nominated for Best New Journal at the ALPSP awards.

Regional Developments in China and India

A significant proportion of new journals are targeted at audiences in specific geographical regions. In some areas, globalization, the opening of new markets and the exponential growth of the local economy have been accompanied by the apparition of new business practices and new trends in management. China and India are particularly illustrative examples of so-called emerging economies. It is fair to ascertain that the existing publishing industry in both these countries has sometimes struggled to match the sheer volume of new ideas, from the increasing numbers of local researchers, with consistent and effective publication programmes.

In an effort to promote local authorship and help generate new research output, the regional development team has put in place a complete publishing infrastructure. Building solid connections with the Indian and Chinese scholarly community reflects but one aspect of developing a regional presence in those countries. Support and assistance to authors, for whom English is not the native language, have also been provided. Throughout 2008, a total of eleven free author workshops took place at universities in China and India, offering a step-by-step guide to the publication process. Some journals offer full-text articles published in both English and the local language translation. Further plans to implement various language facilities, such as multilingual website pages, are also being considered.

The attribution of Chinese and Indian Research Fund Grants, in both the Business and Management and Library and Information Science categories, have attracted record interests from researchers. In line with the company's ethical perspective, these grants were underpinned by the condition that they reward projects intent on promoting social good in their country.

By creating and nurturing strong connections in these regions, Emerald launched six journals with a China focus in 2008 and two journals specific to India. Among them are the *Journal of Chinese and Foreign Trade Studies*, the *Journal of Chinese Entrepreneurship*, and *Indian Growth and Development Review*.

Activities in Africa and Other Regions

China and India are not the only countries from which new ideas have been proliferating. Recognizing the valuable output of research from African authors, Emerald has been one of the first publishers to develop

a significant presence in the region. In July 2008, Emerald was the main sponsor of SCECSAL, the Standing Conference of Eastern, Central and Southern African Library and Information Associations, where a representative from the Publishing Development team presented an author workshop and contributed to a Guide for African Authors with an introduction written by Dr Buhle Mbambo Thata, Chair of the IFLA Africa Section.

Original activities have multiplied to develop meaningful relationships towards the dissemination of knowledge throughout the region, owing, in particular, to the initiatives of Eric Broug, Emerald's dedicated Business Manager in Africa. Eric's ongoing archive donation campaign counts among the most striking examples. Following the success of Backfiles, it occurred to Eric to organize the relocation of unwanted print journal collections to academic libraries in African universities suffering from lack of resources.

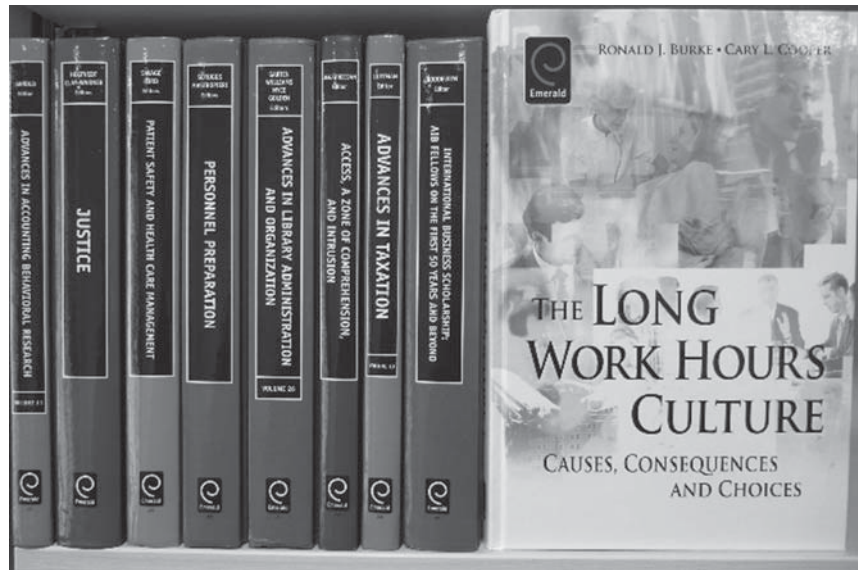
Publishing Development have been following in Eric's footsteps to develop a publishing programme in the region, in the hope to see the first Africa focused research journal launched shortly. The team is also intent on extending its reach to other regions. Two journals with a Middle East focus, and one looking at the Asia-Pacific region, were launched in 2008, while prospecting is also ongoing in South America and Eastern Europe.

Books and Book Series

Another sizable challenge for the company, it was clear that the huge acquisition comprising around 300 stand-alone books and over 240 book series (2,000 individual titles in 22 subject areas in total) from Elsevier was going to put the company's publishing experience and expertise to the test. Whereas some of the books and book series added to Emerald's traditional subject areas, Business and Management as well

as Library and Information Science, other titles extended the company's subject list with new areas such as Politics and Sociology.

One year on, the book commissioning team have successfully managed the integration of the new content to the existing portfolio, while providing existing authors with the expected support and attracting new ones. The Online Bookstore was launched within months of the acquisition, providing a full inventory of the books and books series available for browsing and purchasing. A string of high profile titles have also been published. Among them, *The Long Work Hours Culture: Causes, Consequences and Choices* by world renowned organizational health experts, Professor Ronald Burke and Professor Cary Cooper, and *Psychology of Time*, by Simon Grondin, hit the headlines. *Advances in Librarianship*, *Library and Information Science*, and *Advances in Library Administration and Organization* counts among the leading book series.



Books and book series

Momentum

At present, the momentum gathered by the Publishing Development team is showing no sign of abating. If anything, in times where the words 'recession' and 'global crisis' have become ominously ubiquitous, it is with such endeavours to boost

the editorial output of research and to disseminate relevant knowledge that organizations worldwide will find themselves better equipped to manage their operations and face the economic downturn.

INTERNATIONAL CALENDAR

2009

April 20–23, 2009. Hanoi, Vietnam.
CONSAL XIV General Conference 2009. *Theme:* Towards dynamic libraries and information services in Southeast Asian countries.

Contact: http://consal14.vn/index.php?option=com_content&task=blogcategory&id=34&Itemid=34

Conference website: <http://www.consals14.vn/>

May, June and July 2009. [3 months] Brussels, Belgium.

STIMULATE (Scientific and Technological Information Management in Universities and Libraries: an Active Training Environment) (Edition 9).

Further information: <http://www.vub.ac.be/BIBLIO/itp/>

May 25–30, 2009, Dubrovnik and Zadar, Croatia.

Libraries in the Digital Age (LIDA) 2009. *Themes:* REFLECTIONS: Changes brought by and in digital libraries in the last decade; HERITAGE and digital libraries – digitization, preservation, access.

Full information at: <http://www.ffos.hr/lida/> E-mail: lida@ffos.hr

May 26–29, 2009, Chania, Crete, Greece.

QQML 2009: Qualitative and Quantitative Methods in Libraries International Conference.

Further information: Prof. Christos H. Skiadas, Conference Chair, Director, Data Analysis and Forecasting Laboratory, Technical University of Crete. E-mail: skiadass@isast.org; skiadass@asmda.net URL: www.isast.org OR Dr. Anthi Katsirikou, Conference Secretary, University of Piraeus. E-mail: anthi@asmda.com OR secretariat@isast.org

June 22–25, 2009. Aberdeen, Scotland.

2nd Information: Interactions and Impact (i³) International Conference.

Further information: Dorothy Williams, i³ Conference Director. E-mail: i3information@rgu.ac.uk

June 23–24, 2009. Vancouver, Canada.

Second International m-libraries Conference.

Further information: leonora.crema@ubc.ca

June 29–July 3, 2009. Stockholm, Sweden.

5th International Evidence Based Library and Information Practice (EBLIP5) Conference.

Theme: Bridging the gap.

Contacts: Andrew Booth & David Herron (Co-Chairs – International Programme Committee – EBLIP5). E-mail: EBLIP5@kib.ki.se

Conference website: <http://blogs.kib.ki.se/eblip5/welcome.html>

See the Conference Video at: <http://www.youtube.com/watch?v=b-5nf2eZPw>

July 5–10, 2009. Amsterdam, Netherlands.

International Association of Music Libraries, Archives and Documentation Centres (IAML) Annual Conference.

Further information: <http://www.iaml.info/en/activities/conferences> or e-mail Roger Flury, IAML Secretary General at: roger.flury@natlib.govt.nz

July 10, 2009. Chicago, USA.

American Library Association International Relations Round Table. Pre-Conference, American Library Association Annual Conference. *Theme:* Digitization in the developing world.

Further information: Jacqueline Solis, Co-chair, International

Relations Round Table Pre-Conference. E-mail: jsolis@email.unc.edu

July 13–16, 2009, Las Vegas, USA.

WORLD COMP'09. The 2009 World Congress in Computer Science, Computer Engineering, and Applied Computing. [composed of 22 Joint Conferences]

Further information: H. R. Arabnia, PhD, Professor, Computer Science, Department of Computer Science, University of Georgia, 415 Boyd Building, Athens, Georgia 30602-7404, USA. Tel: +1 (706) 542-3480. Fax: +1(706) 542-2966. E-mail: hra@cs.uga.edu Website: <http://www.world-academy-of-science.org>

July 13–17, 2009. Accra, Ghana.

Second IAALD Africa Chapter Conference. *Theme:* Towards opening access to information and knowledge in the agricultural sciences and technology in Africa. *Further information will be posted on the Chapter's website:* <http://www.iaald-africa.org>

July 27–31, 2009. Bento Gonçalves, RS–Brazil.

WCCE 2009: 9th IFIP World Conference on Computers in Education.

Further information: Prof. Rosa Vicari, Instituto de Informática, Universidade Federal do Rio Grande do Sul, Campus do Vale – Instituto de Informática – Bloco IV, Av. Bento Gonçalves, 9500 – Bairro Agronomia, Caixa Postal 15064, 91501-970 Porto Alegre, RS, Brazil. Telephone: +55 (0xx)51 3316 6801. Fax: +55 (0xx)51 3316 7308. E-mail: rosa@inf.ufrgs.br *Conference website:* <http://www.wcce2009.org/>

August 17–20, 2009. Belgium.

IFLA Libraries for the Blind Section Conference. *Theme:*

Partnerships for print disabled people: publishers and public libraries.

Further information: Helen Brazier
helen.brazier@rnib.org.uk

August 18–20, 2009. Bologna, Italy.

IFLA Continuing Professional Development and Workplace Learning Section and the New Professionals Discussion Group. IFLA Satellite Conference.

Theme: Moving in, moving up, and moving on: Strategies for regenerating the library and information profession.

Further information: Loida Garcia-Febo, Assistant Coordinator, Special Services, Queens Library, 89–11 Merrick Blvd., Jamaica, NY 11432, USA. E-mail: loida.garciafebo@gmail.com OR Roisin Gwyer, Associate University Librarian, The University Library, University of Portsmouth, Cambridge Road, Portsmouth, PO1 2ST, England UK. E-mail: roisin.gwyer@port.ac.uk

August 19–20, 2009. Florence, Italy.

IFLA Information Technology Section supported by the Libraries and Web 2.0 Discussion Group. IFLA Pre-conference.

Theme: Emerging trends in technology: libraries between Web 2.0, semantic web and search technology.

Further information: Dr. Alenka Kavcic-Colic, Head of the Library Research Centre, National and University Library, Turjaska 1, 1000 Ljubljana, Slovenia. Tel. (+381-1) 2001131. Fax: (+386-1) 4257293. E-mail: alenka.kavcic@nuk.uni-lj.si

August 19–20, 2009. Rome, Italy.

IFLA Literacy and Reading and Children and Young Adults Sections. IFLA Pre-conference.

Theme: Raising a nation of readers: libraries as partners in national reading projects and programmes.

Further information: Ivanka Stricevic, PhD, Chair, Literacy and Reading Section, University

of Zadar, Library and Information Science Department, M. Pavlinovica bb, 23000 Zadar, Croatia. Tel/fax +385 (0)23 311 540. E-mail: ivanka.stricevic@zg.t-com.hr OR Ingrid Bon, Chair, Libraries for Children and Young Adults Section, Biblioservice Gelderland, Zeelandsingel 40, 6845 BH ARNHEM, The Netherlands. Tel. + (31) (26) 3860233. Fax: + (31) (26) 3820019. E-mail: ingrid.bon@biblioservice.nl

August 19–21, 2009. Torino, Italy.

IFLA Public Libraries, Library Buildings and Equipment, Library Theory and Research, Management and Marketing, and Academic and Research Libraries Sections. IFLA Pre-conference. *Theme:* Libraries as space and place.

Further information: Marydee Ojala. E-mail: marydee@xmission.com

August 20–21, 2009. Florence, Italy.

IFLA Classification and Indexing Section. IFLA Pre-conference.

Theme: Looking at the past and preparing for the future.

Further information: Leda Bultrini. E-mail: leda.bultrini@arpalazio.it OR Patrice Landry. Fax: +41 31 322 84 63. E-mail: patrice.landry@nb.admin.ch

August 23–27, 2009. Milan, Italy.

IFLA World Library and Information Congress: 75th IFLA General Conference and Council. *Theme:* Libraries create futures: building on digital heritage.

Further information: IFLA 2009 Secretariat, 4B, 50 Speirs Wharf, Port Dundas, Glasgow G4 9TH, Scotland, UK. Tel: +44(0)141 331 0123. Fax: +44(0)207 117 4561. E-mail: ifla2009@congrex.com Conference website: <http://www.ifla.org/IV/ifla75/1st-ann2009-en.pdf>

or

Milan City National Committee, IFLA 2009 Milan, Italy,

Associazione Italiana Biblioteche. E-mail: ifla2009-pres@aib.it Website: www.aib.it

20–22 October 2009. Hanover, Germany.

11th Interlending and Document Supply Conference.

Theme: Strategic alliances and partnerships in interlending and document supply.

Further information: Kim Baker, Programme Executive: Document Supply and Information Services and Cape Town Campus Coordinator, National Library of South Africa, PO Box 496, Cape Town, 8000, South Africa. Tel: +27 21 487 5604. Fax: +27 21 423 3359. E-mail: kbaker.nlsa@gmail.com

October 29–30, 2009. The Hague, The Netherlands.

International UDC Seminar 2009. *Theme:* Classification at a crossroads – multiple directions to usability.

Further information: E-mail: seminar2009@udcc.org Conference website: <http://www.udcc.org/seminar2009/index.htm>.

2010

June 27–July 2, 2010. Moscow, Russia.

International Association of Music Libraries, Archives and Documentation Centres (IAML). Annual Conference.

Further information: <http://www.iaml.info/en/activities/conferences> or e-mail Roger Flury, IAML Secretary General at: roger.flury@natlib.govt.nz

August, 2010. Brisbane, Australia.

IFLA World Library and Information Congress: 76th IFLA General Conference and Council. *Theme:* Engaging, Embracing, Empowering.

Information regarding the 76th IFLA General Conference and Council will be available on the IFLANET website at a later date: <http://www.ifla.org/IV/ifla76/index.htm>

Further information: IFLA Headquarters, PO Box 95312, 2509 CH The Hague, The Netherlands. Phone: +31 70 314 0884. Fax: +31 70 383 4827. E-mail: ifla@ifla.org.

2011

Puerto Rico.
IFLA World Library and Information Congress: 77th IFLA General Conference and Council.

Information regarding the 77th IFLA General Conference and Council will be available at a later date from IFLA Headquarters, PO Box 95312, 2509 CH The

Hague, The Netherlands. Phone: +31 70 314 0884. Fax: +31 70 383 4827. E-mail: ifla@ifla.org.

24–29 July.2011. Dublin, Ireland.
International Association of Music Libraries, Archives and Documentation Centres (IAML). Annual Conference.

Further information: <http://www.iaml.info/en/activities/conferences> or e-mail Roger Flury, AML Secretary General at: roger.flury@natlib.govt.nz

2012–2015

International Association of Music Libraries, Archives

and Documentation Centres (IAML). Further forthcoming conferences:

2011 Ireland, Dublin, 24–29 July
2012 Canada
2013 Denmark, Århus
2014 Austria, Vienna
2015 USA, New York

Further information: <http://www.iaml.info/en/activities/conferences> or e-mail Roger Flury, AML Secretary General at: roger.flury@natlib.govt.nz

SOMMAIRES

Lia G. Friedman and Melissa Morrone. **The Sidewalk Is Our Reference Desk: when librarians take to the streets. [Le trottoir est notre médiathèque: quand les bibliothécaires descendent dans la rue.]**

IFLA Journal 35 (2009) No. 1. pp. 8–16

Radical Reference est un collectif géré par des bénévoles qui fournit en ligne des services gratuits de consultation et de formation aux journalistes indépendants, militants politiques et membres du public (<http://radicalreference.info>) et en personne lors de manifestations de protestation et d'événements politiques. Dans cet environnement en ligne, une communauté de bénévoles très motivés et multilingues utilise des outils en source libre pour répondre aux questions lors d'une conversation permanente, alors qu'à l'occasion de manifestations de protestations et d'actions, des 'bibliothécaires ambulants' armés de 'kits de référence prêts à l'emploi' conçus sur mesure peuvent faire appel par téléphone portable au soutien de bibliothécaires qui offrent une aide en mode synchrone depuis leur poste de travail. Dans ces deux contextes, nous nous efforçons d'atteindre des populations mal desservies qui ont parfois un accès limité à des informations fiables.

Klaus Ceynowa. **Mass Digitization for Research and Study: The digitization strategy of the Bavarian State Library. [Numérisation de masse destinée à la recherche et aux études: la stratégie de numérisation de la Bibliothèque du Land de Bavière.]**

IFLA Journal 35 (2009) No. 1. pp. 17–24

La Bibliothèque du Land de Bavière est l'une des plus grandes bibliothèques de recherche d'Europe. Le profil unique des collections de la bibliothèque comprend des manuscrits extrêmement précieux, des livres imprimés rares et des

collections spécialisées très vastes couvrant des milliers d'années de patrimoine culturel. En réaction aux défis de l'ère numérique, l'un des objectifs stratégiques prioritaires de la Bibliothèque du Land de Bavière est de numériser aussi rapidement que possible ses collections uniques qui couvrent une grande partie du patrimoine culturel écrit, et de les rendre accessibles au monde entier. Afin de réaliser cet objectif stratégique, la bibliothèque a mis en oeuvre divers projets de numérisation de grande envergure, qui vont permettre de mettre en ligne 1,2 millions de livres au cours des prochaines années. L'article décrit en détails le déploiement de scanners robotisés de pointe ainsi que le partenariat avec Google dans le cadre de cette stratégie de numérisation. Il aborde aussi brièvement les implications pour le rôle que vont jouer à l'avenir les bibliothèques – particulièrement en tant qu'institutions faites de « briques et de livres » – dans un environnement d'information qui évolue rapidement.

Nancy E. Gwinn and Constance Rinaldo. **The Biodiversity Heritage Library: sharing biodiversity literature with the world. [Bibliothèque du patrimoine de la biodiversité : faire partager au monde la littérature sur la biodiversité.]**

IFLA Journal 35 (2009) No. 1. pp. 25–34

En 2005, dix grandes bibliothèques de musées d'Histoire naturelle, bibliothèques botaniques et organismes de recherche du Royaume-Uni et des États-Unis ont joint leurs forces pour développer une stratégie et un plan opérationnel afin de numériser la littérature publiée sur la biodiversité détenue dans leurs collections respectives, et pour permettre l'accès libre à cette littérature et son usage responsable, comme appartenant aux « biens de la communauté mondiale sur la biodiversité ». Dirigée depuis les bibliothèques de la Smithsonian

Institution, la Bibliothèque du patrimoine de la biodiversité (Biodiversity Heritage Library ou BHL) est considérée comme l'une des quatre pierres angulaires de l'Encyclopédie de la Vie, une initiative mondiale sans précédent visant à documenter l'intégralité des 1,8 millions d'espèces connues d'animaux, de plantes et d'autres formes de vie sur terre. Le projet est financé principalement par la Fondation John D. and Catherine T. MacArthur, la Fondation Alfred P. Sloan, la fondation Gordon and Betty Moore et la Fondation Richard Lounsbury. Cet article offre une vue d'ensemble de la BHL et de son impact potentiel sur les recherches concernant la biodiversité. Il décrit le portail de la BHL ainsi que ses services de recherche novateurs, et propose une étude de cas sur la procédure suivie par l'un de ses membres: le musée de Zoologie comparative de l'Université d'Harvard.

Günter Mühlberger and Silvia Gstrein. **eBooks on Demand (EOD): a European digitization service. [Livres numériques sur demande (EOD): un service européen de numérisation.]**

IFLA Journal 35 (2009) No. 1. pp. 35–43

Dans le cadre du projet financé par l'Union Européenne et intitulé Numérisation sur demande (2006–2008), des services de livres numériques sur demande (EOD) sont actuellement proposés dans plus de dix-huit bibliothèques de dix pays. Les services EOD permettent aux utilisateurs de commander des livres du domaine public sous forme de fichiers numériques PDF. Les livres requis sont numérisés, fournis en format numérique et conservés pour le long terme dans une bibliothèque numérique. Les services EOD fonctionnent en réseau. Chaque bibliothèque est individuellement responsable de la prise en charge de la commande et de la numérisation. La commande de livres numériques, la fourniture

au client, le paiement électronique et la reconnaissance automatique de texte, même pour les textes en caractères anciens et lettres gothiques, sont gérés depuis une base de données centralisée avec accès Internet. Les avantages fondamentaux du réseau reposent d'une part sur la charge de travail réduite pour les bibliothèques individuelles et d'autre part sur la valeur que représentent les services EOD pour l'utilisateur et le public.

Yvonne Earle. **Ikajarutit: delivering legislative library services in an Inuktitut language environment.** [Ikajarutit: fournir des services de bibliothèque législative dans un milieu où prédomine la langue Inuktitut.]

IFLA Journal 35 (2009) No. 1. pp. 44–47

Le territoire Nunavut a été créé le 1^{er} avril 1999. Dès le départ, il a été perçu comme une occasion unique de mettre en place des institutions visant à préserver la langue, la culture et les traditions des Inuit. Au Canada, aucune autre province ni aucun autre territoire ne possèdent une population parlant majoritairement une seule langue autochtone. Le gouvernement du

Nunavut souhaite que l'inuktitut devienne la langue de travail du gouvernement d'ici 2020. Dans ce contexte, la bibliothèque législative s'emploie à constituer des collections, fournir des services et former le personnel pour qu'il puisse maîtriser l'inuktitut et acquérir des compétences bibliothécaires.

John H. Mohi and Winston D. Roberts. **Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand.** [Proposer une stratégie de collaboration avec les Māori et réagir de façon appropriée à une population de plus en plus multiculturelle: la perspective de la Bibliothèque Nationale de Nouvelle-Zélande.]

IFLA Journal 35 (2009) No. 1. pp. 48–58

L'article évoque le rôle et la responsabilité de la Bibliothèque Nationale de Nouvelle-Zélande Te Puna Mātauranga o Aotearoa dans un pays possédant une tradition biculturelle et une communauté nationale multiculturelle. Le projet de la Bibliothèque visant à réagir de façon

appropriée au plan de partenariat avec les Māori Te Kaupapa Mahi Tahī se base sur des services et des produits bibliothécaires traditionnels et développe de nouveaux services électroniques comprenant la numérisation à des fins d'accès et de conservation, par l'intermédiaire d'une relation de pouvoir partagé avec les Māori. La perspective Māori est maintenue grâce à une procédure nationale de consultation et d'administration. L'article indique de nouvelles possibilités de collaboration entre la Bibliothèque Nationale et les autres promoteurs nationaux et locaux de la politique gouvernementale et fournit des exemples de relations de travail entre la Bibliothèque et les iwi (tribus). Il aborde également la collaboration de la Bibliothèque avec les communautés Pasifika et asiatique ainsi que les communautés de réfugiés et d'émigrés en Nouvelle-Zélande. Ces activités sont en rapport avec la stratégie 'Pour une Bibliothèque Nationale de la nouvelle génération', ayant pour but de fournir à tous les néo-zélandais des informations déterminantes pour tous les aspects de leurs vies. Les problèmes et les défis pour le futur sont également signalés.

ZUSAMMENFASSUNGEN

Lia G. Friedman und Melissa Morrone. **The Sidewalk is Our Reference Desk: when librarians take to the streets.** [Der Bürgersteig als Auskunftstheke: wenn Bibliothekare auf die Straße gehen.]

IFLA Journal 35 (2009) No. 1. pp. 8–16

Radical Reference ist ein von Ehrenamtlichen betriebener kostenloser Internetauskunfts- und Beratungsdienst für unabhängige Journalisten, politische Aktivistinnen und die Online-Öffentlichkeit unter (<http://radicalreference.info>). Daneben sind die Mitglieder von Radical Reference auch auf Demonstrationen und politischen Kundgebungen präsent.

Auf der Website, die mit Open Source Tools aufgebaut ist, beantworten stark gemeinschaftsorientierte, mehrsprachige freiwillige Mitarbeiter Fragen im Rahmen der laufenden Online-Diskussion. Bei Demonstrationen und Kundgebungen stehen so genannte "Street Librarians" mit maßgeschneiderten "Ready Reference Kits" über Handys mit den Auskunftspersonen (Home Support Librarians) in Verbindung, die dabei synchrone Hilfe bieten. In beiden Bereichen bietet Radical Reference einen Auskunftsdienst für Menschen, die einen eingeschränkten Zugang zu vertrauensvollen Informationen haben.

Klaus Ceynowa. **Mass Digitization for Research and Study: The digitization strategy of the Bavarian State Library.** [Massendigitalisierung für Forschung und Lehre: Die Digitalisierungsstrategie der bayrischen Staatsbibliothek.]

IFLA Journal 35 (2009) No. 1. pp. 17–24

Die bayrische Staatsbibliothek zählt zu den größten Forschungsbibliotheken Europas. Das einzigartige Bestandsprofil der Bibliothek beinhaltet extrem wertvolle Manuskripte, seltene Inkunabeln und umfassende Spezialsammlungen aus einem tausendjährigen Kulturerbe.

Angesichts der Herausforderungen des digitalen Zeitalters richtet die bayrische Staatsbibliothek ihr strategisches Hauptaugenmerk darauf, die einzigartigen Bestände – die einen Großteil unseres schriftlichen Kulturguts darstellen – so bald wie möglich zu digitalisieren und für die Welt nutzbar zu machen. Im Hinblick auf dieses strategische Ziel hat die Bibliothek mehrere Massendigitalisierungsprojekte ins Leben gerufen, wobei in den nächsten Jahren über 1,2 Millionen Bücher online bereitgestellt werden sollen. Der Einsatz von Scan-Robotern sowie eine Public-Private-Partnership mit Google als Teil dieser Digitalisierungsstrategie werden in allen Einzelheiten beschrieben. Zudem umreißt der Autor kurz die Konsequenzen im Hinblick auf die zukünftige Rolle der Bibliotheken – insbesondere in ihrer Rolle als “Bricks and Books” – Institutionen – in der schnell veränderlichen Informationslandschaft.

Nancy E. Gwinn und Constance Rinaldo. **The Biodiversity Heritage Library: sharing biodiversity literature with the world. [Die Biodiversity Heritage Library: weltweiter Zugang zur Literatur über die Biodiversität.]** IFLA Journal 35 (2009) No. 1. pp. 25–34

Zehn wichtige Bibliotheken naturhistorischer Museen, botanische Bibliotheken und Forschungsinstitutionen in Großbritannien und den Vereinigten Staaten haben sich im Jahr 2005 zur Entwicklung einer Strategie und eines Umsetzungsplans zusammgefunden, um die in ihren Beständen vorhandene einschlägige publizierte Literatur zur Biodiversität zu digitalisieren und diese Literatur weltweit zugänglich zu machen. Das beinhaltet den offenen Zugriff und die verantwortungsvolle Nutzung als Teil eines weltweiten “Gemeingutes der Biodiversität”. Die Biodiversity Heritage Library (BHL), die ihren Hauptsitz in den Smithsonian Institution Libraries hat, wurde als einer der vier Eckpfeiler der Encyclopedia of Life bezeichnet, einem beispiellosen

weltweiten Projekt zur lückenlosen Dokumentierung aller 1,8 Millionen benannten Spezies im Reich der Tiere, Pflanzen und anderer Lebensformen auf der Erde. Erhebliche finanzielle Mittel für dieses Projekt wurden von der John D. und Catherine T. MacArthur Foundation, der Alfred P. Sloan Foundation, der Gordon und Betty Moore Foundation und der Richard Lounsbury Foundation aufgebracht. Dieser Beitrag bietet einen Überblick über die BHL und ihre potenziellen Auswirkungen auf die Forschung im Rahmen der Biodiversität, er stellt das BHL-Portal und seinen innovativen Suchservice vor und präsentiert eine Fallstudie des Prozesses von einem der Mitglieder: dem Museum of Comparative Zoology an der Universität Harvard.

Günter Mühlberger und Silvia Gstrein. **eBooks on Demand (EOD): a European digitization service. [eBooks on Demand (EOD): ein europäischer Digitalisierungsservice.]** IFLA Journal 35 (2009) No. 1. pp. 35–43

Im Rahmen des von der EU-Kommission geförderten Projekts “Digitization on Demand” (2006–2008) wird zurzeit von über 18 Bibliotheken in 10 Ländern der Service “eBooks on Demand (EOD)” angeboten. Mit EOD können interessierte Benutzer bestimmte lizenzfreie Bücher als eBook im PDF-Format bestellen. Die angeforderten Bücher werden digitalisiert, als eBook ausgeliefert und in einer digitalen Bibliothek langfristig gespeichert. Realisiert wird der EOD-Service im Rahmen eines Netzwerks, wobei die einzelne Bibliothek für die Auftragsbearbeitung und die Digitalisierung verantwortlich ist.

Die Erstellung der eBooks, die Lieferung an den Kunden, die elektronische Bezahlung und die automatische Texterkennung auch für alte Texte und Frakturschrift werden hingegen über eine zentrale Datenbank

mit Webzugang abgewickelt. Die wesentlichen Vorteile des Netzwerks liegen einerseits in der Entlastung der einzelnen Bibliothek und andererseits im Wiedererkennungswert des EOD-Service für die Benutzer und die Öffentlichkeit.

Yvonne Earle. **Ikajarutit: delivering legislative library services in an Inuktitut language environment. [Ikajarutit: Legislative Bibliotheksdienste in einer Inuktitut – Sprachumgebung.]** IFLA Journal 35 (2009) No. 1. pp. 44–47

Nunavut wurde am 1. April 1999 gegründet und bildet seither ein eigenständiges Territorium. Von Anfang an stand dabei die Idee im Hintergrund, dass die Möglichkeit geschaffen werden sollte, in diesem Gebiet Institutionen für den Erhalt der Sprache, Kultur und Tradition der Inuit zu errichten. In keiner anderen kanadischen Provinz und in keinem anderen kanadischen Territorium spricht die Mehrheit der Einwohner die gleiche Ureinwohnersprache. Die Regierung von Nunavut will erreichen, dass Inuktitut bis zum Jahr 2020 zur Arbeitssprache der Regierung wird. In diesem Kontext bemüht sich die Legislative Bibliothek, entsprechende Bibliotheksbestände aufzubauen, einen Service anzubieten und die Sprachbeherrschung der Belegschaft in Inuktitut sowie ihre Bibliothekskompetenzen zu verbessern.

John H. Mohi und Winston D. Roberts. **Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand. [Eine Strategie für den Umgang mit Māori und Engagement für die zunehmende kulturelle Vielfalt der Bevölkerung: eine Perspektive der Nationalbibliothek Neuseelands (National Library of New Zealand).]** IFLA Journal 35 (2009) No. 1. pp. 48–58

Die Autoren erläutern die Rolle und die Verantwortlichkeiten der Nationalbibliothek Neuseelands (*Te Puna Mātauranga o Aotearoa*) in einem Land mit bikulturellem Ursprung und einer multikulturellen nationalen Gesellschaft. In ihren Gesprächen mit den Māori konzentriert sich die Bibliothek auf das Ziel einer strategischen Partnerschaft – “Te Kaupapa Mahi Tahī: ein Plan für Partnerschaft”. Sie stützt sich dabei auf traditionelle Bibliotheksdienstleistungen und Produkte, die mittels eines neuen elektronischen

Serviceangebots zugänglich gemacht werden. Die Digitalisierung dient dem Zugriff auf die Bestände und deren Erhalt, wobei die Teilung der Macht mit den Māori im Vordergrund steht. Die Sichtweise der Māori ist hier fester Bestandteil und wird mittels eines nationalen Beratungs- und Fördersystems einbezogen. Neue Wege für die Zusammenarbeit zwischen der Nationalbibliothek und anderen nationalen und örtlichen Architekten der Regierungspolitik werden aufgezeigt und es werden auch

Beispiele für die Arbeitsbeziehungen der Bibliothek zu den iwi (den Volksstämmen) genannt. Auch die Zusammenarbeit der Bibliothek mit Pasifika, Asian und den Flüchtlings- und Migrantengemeinschaften in Neuseeland kommt zur Sprache. All das ist Teil der “New Generation National Library” - Strategie, die alle Neuseeländer mit Informationen versorgen soll, die für alle Aspekte ihres Lebens wichtig sind. Zukünftige Diskussionsthemen und Herausforderungen werden ebenfalls angesprochen.

RESÚMENES

Lia G. Friedman y Melissa Morrone. **The Sidewalk is Our Reference Desk: when librarians take to the streets. [Las aceras son nuestros despachos de referencia: cuando los bibliotecarios salen a las calles.]**

IFLA Journal 35 (2009) No. 1, pp. 8-16

Radical Reference es un colectivo gestionado por voluntarios que ofrece servicios gratuitos de referencia y formación a periodistas independientes, activistas políticos y el público usuario de la red (<http://radicalreference.info>). También actúa en persona durante protestas y actos políticos. En nuestro sitio web una comunidad de voluntarios multilingües que colaboran intensamente utiliza herramientas de código abierto para responder a preguntas en un diálogo que no deja de evolucionar, mientras que en las protestas y actos, los “bibliotecarios de la calle”, armados con “Kits de referencia preparados” hechos a medida, se conectan mediante teléfono móvil con los bibliotecarios de apoyo en las sedes de las bibliotecas, quienes prestan una ayuda sincronizada. En ambos contextos tratamos por todos los medios de llegar hasta la población más desatendida que podría tener un acceso limitado a información fiable.

Klaus Ceynowa. **Mass Digitization for Research and Study: the digitization strategy of the Bavarian State Library. [Digitalización masiva para investigaciones y estudios: la estrategia de digitalización para la Biblioteca Estatal de Baviera.]**

IFLA Journal 35 (2009) No. 1, pp. 17-24

La Biblioteca Estatal de Baviera es una de las más importantes de toda Europa para el campo de la investigación. El carácter exclusivo de la colección de la biblioteca se caracteriza por manuscritos extremadamente valiosos, libros impresos raros y colecciones especiales completas fruto de miles de años de legado cultural. Para responder a los retos de la edad digital, un objetivo estratégico fundamental de la biblioteca estatal de Baviera es digitalizar lo antes posible sus colecciones únicas, que constituyen una parte sustancial del legado de la cultura escrita, así como permitir que puedan ser utilizadas en cualquier parte del mundo. Con el fin de cumplir dicho objetivo, la biblioteca lleva a cabo una serie de proyectos de digitalización a gran escala que permitirán poner en la red más de 1,2 millones de libros en los próximos años. El estudio describe en detalle la puesta en marcha de escáneres robóticos

de tecnología punta, así como la creación de una alianza entre el sector público y privado con Google, que forma parte de esta estrategia de digitalización. Las repercusiones para la futura función de las bibliotecas, especialmente como instituciones de “infraestructura y libros”, en un mundo de la información sujeto a una rápida transformación, también se abordan brevemente.

Nancy E. Gwinn y Constance Rinaldo. **The Biodiversity Heritage Library: sharing biodiversity literature with the world. [La Biodiversity Heritage Library: un vehículo esencial para compartir documentación sobre diversidad con todo el mundo.]**

IFLA Journal 35 (2009) No. 1, pp. 25-34

Diez importantes bibliotecas de museos de historia natural, bibliotecas de botánica e instituciones de investigación en el Reino Unido y Estados Unidos se unieron en 2005 para desarrollar una estrategia y un plan operativo que permitieran digitalizar la documentación para su libre acceso y uso responsable como parte de un “espacio público de la diversidad” a escala mundial. Con sede en Smithsonian Institution Libraries, la Biodiversity Heritage Library (BHL) está considerada como una de las cuatro piedras

angulares de la Encyclopedia of Life, una iniciativa mundial sin precedentes cuyo propósito es documentar los 1,8 millones de especies registradas de animales, plantas y otras formas de vida en la tierra. La financiación para el proyecto procede principalmente de la Fundación John D. y Catherine T. MacArthur, la Fundación Alfred P. Sloan, la Fundación Gordon and Betty Moore y la Fundación Richard Lounsbury. Este documento ofrece una exposición general de la BHL y cómo puede contribuir a la investigación de la biodiversidad. También describe el portal BHL y sus innovadores servicios de búsqueda, y proporciona un caso práctico en el que uno de los miembros explica el proceso. El Museo de Zoología Comparativa de la Universidad de Harvard.

Günter Mühlberger y Silvia Gstrein. **eBooks on Demand (EOD): a European digitization service. [Libros electrónicos sobre demanda (EOD): un servicio europeo de digitalización.]** IFLA Journal 35 (2009) No. 1, pp. 35–43

En el marco del proyecto financiado por la Unión Europea “Digitization on Demand” (2006-2008), el servicio de libros electrónicos sobre demanda (EOD) está disponible actualmente en más de dieciocho bibliotecas de diez países. EOD permite a los usuarios pedir libros de dominio público en formato PDF. Los libros solicitados se digitalizan y se entregan en formato electrónico para posteriormente guardarse en una biblioteca digital a largo plazo. El servicio EOD se presta a través de una red. Cada biblioteca se encarga de procesar el pedido y la digitalización. El pedido de libros

electrónicos, su entrega al cliente, el pago electrónico y el reconocimiento automático del texto, incluso en el caso de textos con fuentes góticas, se lleva a cabo mediante una base de datos central a la que se accede mediante Internet. La ventaja básica de la red radica, por un lado, en la menor carga de trabajo de las bibliotecas individuales y, por otro, en las ventajas que ofrece el reconocimiento del servicio EOD para el usuario y el público en general.

Yvonne Earle. **Ikajarutit: delivering legislative library services in an Inuktitut language environment. [Ikajarutit: prestación de servicios de biblioteconomía en materia de legislación en un entorno de habla inuktitut.]** IFLA Journal 35 (2009) No. 1, pp. 44–47

El Territorio Nunavut fue reconocido el 1 de abril de 1999. Desde el principio, se consideró como una oportunidad para que las instituciones protegieran el idioma, la cultura y la tradición de los inuit. No hay ninguna otra provincia o territorio canadienses donde la mayor parte de la población hable un único idioma aborigen, y el Gobierno de Nunavut tiene como objetivo conseguir que el inuktitut sea el idioma de trabajo del gobierno antes de 2020. En este contexto, la Biblioteca Legislativa trabaja para crear colecciones, prestar servicios y dotar a sus empleados de mayores conocimientos de inuktitut y de biblioteconomía.

John H. Mohi y Winston D. Roberts. **Delivering a Strategy for Working with Māori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the**

National Library of New Zealand. [Creación de una estrategia para trabajar con los māori y aumentar la sensibilidad hacia una población cada vez más multicultural: una perspectiva de la Biblioteca Nacional de Nueva Zelanda.] IFLA Journal 35 (2009) No. 1, pp. 48–58

Expone la función y las responsabilidades de la Biblioteca Nacional de Nueva Zelanda Te Puna Mātauranga o Aotearoa en un país que se asienta en dos culturas y que cuenta con una comunidad multicultural. El plan de la biblioteca para aumentar la sensibilidad hacia los māori: “Te Kaupapa Mahi Tahī: un plan para formar alianzas” se basa en servicios y productos bibliotecarios tradicionales y su propósito es desarrollar nuevos servicios electrónicos, incluida la digitalización del acceso y la conservación, a través de una relación de intercambio de poderes con los māori. Se mantiene una perspectiva māori a lo largo de un proceso nacional consultivo y facilitador. El documento expone nuevas vías de colaboración entre la Biblioteca Nacional y otros responsables de elaborar políticas gubernamentales en el ámbito local y facilita ejemplos de las relaciones de trabajo de la Biblioteca con los iwi (tribus). También se describe la colaboración de la Biblioteca con las comunidades Pasifika, asiática, de refugiados y emigrantes en Nueva Zelanda. Estas actividades se enlazan con la estrategia “Biblioteca Nacional de Nueva Generación”, cuyo propósito es facilitar información importante a todos los neocelandeses sobre todos los aspectos de sus vidas. También se señalan los problemas y retos para el futuro.

Рефераты статей

Лиа Г.Фридман и Мелисса Морроне. **The Sidewalk Is Our Reference Desk: when librarians take to the streets. [Тротуар – это наша справочная**

стойка: когда библиотекари выходят на улицу.] IFLA Journal 35 (2009) No. 1, pp. 8–16

Radical Reference является волонтерской структурой, которая оказывает бесплатные справочные услуги и инструктирует независимых

журналистов, политических активистов и Интернет-сообщество (<http://radicalreference.info>), в том числе посредством личного контакта во время протестных и других политических мероприятий. В нашем интерактивном окружении хорошо сплоченное, многоязычное сообщество волонтеров использует инструментарий открытых программных средств для ответа на вопросы в ситуации постоянно меняющегося разговора. В ходе самих протестов и акций “уличные библиотекари”, вооруженные специально разработанными “Комплектами для быстрой справки”, используют сотовые телефоны для подключения к библиотечной группе поддержки на дому, которая предоставляет синхронную помощь. В обоих контекстах мы стараемся дотянуться до недополучающего помощь населения, которое может иметь ограниченный доступ к заслуживающей доверие информации.

Клаус Сейнова. **Mass Digitization for Research and Study: The digitization strategy of the Bavarian State Library.** [Массовое оцифровывание для нужд изучения и исследования: стратегия Баварской государственной библиотеки по оцифровыванию.] IFLA Journal 35 (2009) No. 1. pp. 17–24

Баварская государственная библиотека является одной из крупнейших научно-технических библиотек Европы. Уникальный профиль коллекции библиотеки характеризуется наличием исключительно ценных рукописей, редчайших печатных изданий и всеобъемлющих специализированных коллекций, отражающих тысячелетия культурного наследия. Отвечая на вызовы эпохи цифровых технологий, Баварская государственная библиотека видит своей первейшей стратегической задачей скорейшее оцифровывание своей уникальной коллекции, представляющей собой значительную часть печатного культурного наследия, с тем, чтобы они стали доступными для пользователей по всему миру. Преследуя эту стратегическую цель, библиотека предпринимает ряд широкомасштабных проектов по

оцифровыванию, результатом которых станет появление более 1,2 млн. книг в цифровом формате в течение нескольких ближайших лет. Детально описывается процесс размещения в библиотеке самых современных роботизированных сканнеров, а также частно-государственное партнерство с *Google*, что является частью стратегии по оцифровыванию. Также вкратце обсуждаются последствия стремительно изменяющегося информационного ландшафта для будущей роли библиотек, особенно в качестве “базовых книжных” учреждений.

Нэнси И.Гуинн и Констанс Риналдо. **The Biodiversity Heritage Library: sharing biodiversity literature with the world.** [Библиотека наследия в области биоразнообразия: делюсь литературой по биоразнообразию с миром.] IFLA Journal 35 (2009) No. 1. pp. 25–34

Десять крупнейших библиотек в рамках музеев естественной истории, ботанических садов и научно-исследовательских институтов Великобритании и США в 2005 году объединили свои усилия для разработки стратегии и операционного плана по оцифровке содержащейся в их коллекциях опубликованной литературы по биоразнообразию и обеспечения свободного доступа к этой литературе и ответственного ее использования как части глобального достояния в области биоразнообразия. Библиотека наследия в области биоразнообразия (BHL), которая расположена в комплексе библиотек Смитсоновского института, была вовлечена в качестве одного из четырех краеугольных камней Энциклопедии жизни – беспрецедентного глобального усилия по документированию всех 1,8 млн. известных видов животных, растений и других форм жизни на Земле. Основное финансирование под этот проект предоставлено Фондом Джона Д. И Катерины Т. Макартур, Фондом Альфреда П. Слоана, Фондом Гордона и Бэтти Мур и Фондом Ричарда Лаунсбери. В данной работе дается обзор деятельности BHL и ее потенциального влияния на исследования в области

биоразнообразия, описывается портал BHL и его инновационная поисковая система, а также приводится исследование этого процесса на примере одного из членов квартета – Музея сравнительной зоологии Гарвардского университета.

Гюнтер Мюльбергер и Сильвия Гшрайн. **eBooks on Demand (EOD). A European digitization service.** [E-книги по запросу (ЕПЗ): европейская услуга по оцифровке.] IFLA Journal 35 (2009) No. 1. pp. 35–43

В рамках спонсируемого Европейским союзом проекта “Оцифровка по запросу” (2006–2008 гг.), в настоящее время услуга “E-книги по запросу” (ЕПЗ) доступна в более чем 18 библиотеках из десяти стран ЕС. ЕПЗ позволяет пользователям заказывать книги общего пользования в виде e-книг формата PDF. Запрашиваемые книги подвергаются оцифровке, доставляются в виде e-книг и сохраняются на длительное время в цифровой библиотеке. Услуга ЕПЗ осуществляется в рамках сети. Индивидуальные библиотеки отвечают за обработку запроса и оцифровку. Заказ e-книг, доставка потребителю, электронные платежи и автоматическое распознавание текста, даже для текстов со старыми и готическими шрифтами, поддерживается через центральную базу данных с доступом в Интернет. Основным преимуществом такой сети является, с одной стороны, уменьшение нагрузки на индивидуальные библиотеки, а, с другой стороны, признание ценности услуги ЕПЗ для пользователя и общественности.

Ивон Эрле. **Ikajarutit: delivering legislative library services in an Inuktitut language environment.** [Ikajarutit: предоставляя услуги законодательной библиотеки в условиях распространения инуитского языка.] IFLA Journal 35 (2009) No. 1. pp. 44–47

Территория Нунавут обрела свое существование 1 апреля 1999 года. С самого начала она рассматривалась как возможность

формирования учреждений, которые бы способствовали сохранению инуитского языка, культуры и традиций. Ни в одной другой канадской провинции или территории большинство населения не говорит на едином туземном языке, и правительство Нунавут задалось целью сделать к 2020 году *Inuktitut* (инуитский язык) рабочим языком правительства. В этих условиях законодательная библиотека работает над выстраиванием коллекции, предоставлением услуг и развитием способностей персонала в области владения инуитским языком и библиотечными навыками.

Джон Х.Мохи и Уинстон Д.Робертс.
Delivering a Strategy for Working with M_ori, and Developing Responsiveness to an Increasingly Multicultural Population: a perspective from the National Library of New Zealand.
[Выстраивание стратегии по работе

с маорийским языком и развитие восприимчивости к проблемам мультикультурного населения: проекция на Национальную библиотеку Новой Зеландии.]

IFLA Journal 35 (2009) No. 1. pp. 48–58

Описывается роль и функциональные обязанности Национальной библиотеки Новой Зеландии – *Te Puna M_tauranga o Aotearoa* – в стране с би-культурными основами и мультикультурной национальной средой. План библиотеки по развитию восприимчивости в отношении маори – “*Te Kaupapa Mahi Tahī: План партнерства*”, основываясь на традиционных библиотечных услугах и продуктах, предусматривает развитие новых электронных видов услуг, в том числе оцифровки для доступа и сохранения, через выстраивание отношений с маори по принципу разделения власти.

Перспектива проблематики маори поддерживается посредством национального процесса консультаций и содействия. Упоминаются новые направления сотрудничества Национальной библиотеки с другими национальными и местными разработчиками правительственной политики, а также приводятся примеры рабочих контактов и связей библиотеки с *iwi* (племенами). Описывается сотрудничество библиотеки с тихоокеанским, азиатским, беженским и эмигрантским сообществами Новой Зеландии. Эти виды деятельности осуществляются в соответствии со стратегией “Национальная библиотека нового поколения”, разработанной для того, чтобы снабдить всех новозеландцев информацией, важной для различных аспектов их жизнедеятельности. Также указывается на некоторые проблемные вопросы и вызовы будущего.

IFLA JOURNAL – NOTES FOR CONTRIBUTORS

Aims and Scope

IFLA Journal is a peer reviewed journal which publishes original articles, IFLA conference papers, and news of current IFLA activities. Content is selected to reflect the variety of the international information profession, ranging from freedom of access to information, knowledge management, services to the visually impaired and intellectual property.

Writing for the IFLA Journal

Contributions to the journal may include: original articles and features; news and information about current and forthcoming activities and events in the field of library and information services; announcements of new publications, products or services; information about education and training opportunities, fellowships, honours and awards; personal news; obituaries; letters to the Editor.

Articles and features

Articles and features are normally published only in English. Authors whose first language is not English should not be inhibited from submitting contributions in English because of this; the correction of minor grammatical and linguistic errors in English is considered to be an integral part of the editorial process.

Articles and features should normally be between 3000 and 7000 words in length. Articles must be original contributions which have not been published elsewhere, and which are not under consideration elsewhere.

Article should be accompanied by an English-language abstract of not more than 150 words, five or six keywords, a brief statement of the professional qualifications and experience of the author(s), including current official designation and full address and contact details, and a recent photograph (not a passport photo) of each of the authors suitable for publication.

Authors are expected to check their work carefully before submitting it, particularly with regard to factual accuracy, completeness and consistency. They should provide sufficient background information to enable readers unfamiliar with the activity or country being described to understand it easily. Acronyms and abbreviations should be spelled out in full the first time they are used.

Other contributions

The primary language of publication for contributions other than articles and features is English, but such contributions may be published in the other working languages of IFLA - French, German, Russian or Spanish – if appropriate.

Illustrative material

Contributors are encouraged to submit photographs and other illustrations to accompany their contributions. They should be submitted either in TIF format (300 dpi minimum) or in hard copy as positive prints or transparencies and be clearly captioned and credited to the originator. Please note that colour images will be published in colour online and black and white in print. Further guidance on the submission of artwork available at <http://www.sagepub.com/authors/journal/submission.sp/>

Bibliographical references

References should follow the full form stipulated in ISO 690-1987, *Documentation – Bibliographic references – Content, form and structure*, using either the numeric or the Harvard method of citation in the text. Lists of references should appear at the end of a contribution, not as footnotes.

Copyright

All contributors are required to sign a Journal Contributor's Publishing Agreement' granting to IFLA the exclusive licence to publish. Copyright remains with the author(s). Authors are responsible for obtaining copyright clearance for the publication of any copyrighted material (including illustrative material) which may be included in their contribution.

Format

All contributions should, whenever possible, be submitted in standard electronic formats, as e-mail attachments. The preferred format for textual matter is MS Word. Contributors who are unable to submit their work in electronic format should supply textual matter in clearly typewritten manuscript.

Publication

All unsolicited articles are refereed anonymously by members of the Editorial Committee, whose decision with regard to the publication of any article or feature is final. Other contributions are published at the discretion of the Editor, if necessary after consultation with the Editorial Committee. All manuscripts are reviewed as rapidly as possible, and authors should expect to have reviewer's comments within approximately 6 weeks of submission.

Authors of articles, features and reviews will receive one complimentary copy of the issue in which their work appears and are given controlled online access to a pdf file of their article, in addition to one year's free personal subscription to the print edition of IFLA Journal.

Submission

All contributions (except advertisements), in whatever format, should be addressed to:

The Editor, IFLA Journal, Apt. 1C, Edificio Rosa dos Ventos, Rua Rosa Parracho no. 27, Bairro do Rosario, 2750-778 Cascais, Portugal.
E-mail. zest@sapo.pt