

The World Digital Library (WDL) and Universal Access to Knowledge (ARI)

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Theme: The World Digital Library (WDL) makes available on the Internet, free of charge and in multilingual format, significant primary materials from countries and cultures around the world.

Summary: On 21 April 2009 UNESCO and 32 partner institutions launched the World Digital Library (WDL), a website that features unique cultural material from libraries and archives around the world. The site –www.wdl.org– includes manuscripts, maps, rare books, films, sound recordings, prints and photographs. It provides unrestricted public access, free of charge, to this material.

Analysis: On 21 April 2009 UNESCO and 32 partner institutions launched the World Digital Library (WDL), a website that features unique cultural material from libraries and archives around the world. The site –www.wdl.org– includes manuscripts, maps, rare books, films, sound recordings, prints and photographs. It provides unrestricted public access, free of charge, to this material.

Building Knowledge Societies: UNESCO's Overarching Objective

One of UNESCO's main mandates is to promote the free flow of all forms of knowledge in education, science, culture and communication. Libraries have always been part of UNESCO's work in promoting universal access to knowledge.

The Organisation therefore promotes education, research and exchanges through the improved and increased availability of content on the Internet. To this end, it cooperates with a number of partners on the creation of digital and other repositories. UNESCO is particularly committed to support the World Digital Library to expand and grow worldwide.

Technology is flattening the communications landscape at an unprecedented pace, making it easier to share information and knowledge. Still, today, as in the past, the control of knowledge is subject to serious inequality, exclusion and social conflict.

Today's knowledge divide refers to the gaps that exist in the four building blocks of Knowledge Societies, namely knowledge creation, knowledge preservation, knowledge sharing and knowledge application.

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These four building blocks are at the heart of UNESCO's efforts to harness the power of knowledge and information to foster development. Libraries, especially digital libraries, are truly at the heart of Knowledge Societies: they enable people to access, share and apply knowledge.

Why Digital Libraries?

Digital libraries extend traditional library services and offer many new options. Like any library, they should feature a high degree of *selection* of resources that meet criteria relevant to their mission, and they should provide *services* that facilitate use of the resources by their target community.

What do digital libraries offer users that cannot be found in traditional libraries? First and foremost, they are often able to provide access through distributed networks to a range of information that would prove impossible for even the greatest of the world's traditional libraries. Also high on the list of attractions for many users is the opportunity to consult digital libraries from multiple locations. Items are never inaccessible because they have been loaned, sent to be rebound, wrongly shelved, stolen or are being used by another user at the same time.

Although research and development relating to digital libraries started in certain developed parts of the world, digital libraries are in reality a global phenomenon. People the world over have a need for timely and relevant information, even if the specific needs differ from community to community. With the development of digital libraries, users can now view and study collections from all over the world.

Overcoming the digital divide is a challenge that is being faced in many countries. Librarians, scholars and educators in many countries feel they have a role to play in bridging the digital divide by creating appropriate digital libraries and by ensuring that their users are information literate. Many institutions involved in developing digital libraries are also very active in creating content for their users in local languages to make the material more easily read and understood by the local user population.

Digital Libraries and Universal Access to Knowledge

The digitisation of local information sources, be they rare manuscripts, archives, photographs, museum artefacts or works of art, is an activity undertaken by many libraries and other cultural institutions worldwide. Some initiatives have a global perspective. Europeana, Google Book Search and the World Digital Library are three hallmarks.

Europeana

Europeana gives direct access to more than 6 million digitised items from museums, libraries and archives across Europe. The target is to have 10 million digitised works available online by 2010. Over 1,000 cultural organisations from across Europe have provided material to Europeana. The Europeana interface is available in all official EU languages.

The digital objects that users can find on Europeana are not stored on a central computer, but remain with the cultural institutions and are hosted on their servers.

The selection of content is determined by EU countries and their cultural institutions. Whoever holds the material, whether individual libraries, audiovisual collections, archives or museums, decides what to digitise.

Europeana is a cultural project and not a commercial undertaking. It has a broader reach than a service such as Google Book Search because it provides access to different types of content from different types of cultural institutions, making it possible to bring together the works of a painter with relevant archival documents, as well as books written about his life.

Google Book Search

Google Book Search is a service from Google that searches the full text of books that Google scans, converts to text using optical character recognition and stores. Clicking a result from Google Book Search opens an interface in which the user may view pages from the book as well as content-related advertisements and links to the publisher's website and booksellers. Through a variety of access limitations and security measures, Google limits the number of viewable pages and attempts to prevent page printing and text copying of material under copyright.

Google Book Search allows public-domain works and other out-of-copyright material to be downloaded in PDF format. For users outside the US, though, Google must be sure that the work in question is indeed out of copyright under local laws.

Five years after its launch, Google Books has posted over 10 million books through its partnerships with libraries (29 in the world today) and agreements with publishers. The initiative has been hailed for its potential to offer unprecedented access to what may become the largest online corpus of human knowledge.

The project, however, has certainly not been without criticism. Some European intellectuals have expressed concern that the disproportionate emphasis on works in English could shape access to historical scholarship, and, ultimately, the growth and direction of future scholarship. Also, of recent interest in the headlines, at times Google has not made a distinction between books in the public domain and books under copyright, provoking the ire of right holders and leading to legal action.

Another spot of contention is Google's treatment of orphan works, those items for which it is difficult or impossible to determine the copyright holder. Google had claimed that these works became the company's property after digitisation, but some copyright holders and authors emerged seeking compensation for the use of their works. A fund has now been established by Google to provide payment to those whose works were digitised under the assumption that they were orphan works.

Libraries are designed to make books available to readers. Google aims to make money. Between the two, a workable compromise can be found. We must defend the public good against private appropriation and only a solid agreement can protect that interest.

The World Digital Library

The World Digital Library (WDL) makes available on the Internet, free of charge and in multilingual format, significant primary materials from countries and cultures around the world.

The principal objectives of the WDL are: (1) to promote international and intercultural understanding; (2) to expand the volume and variety of cultural content on the Internet; (3) to provide resources for educators, scholars and general audiences; and (4) to build capacity in partner institutions to narrow the digital divide within and between countries.

The WDL makes it possible to discover study and enjoy cultural treasures from around the world on one site. These cultural treasures include, but are not limited to, manuscripts, maps, rare books, musical scores, recordings, films, prints, photographs and architectural drawings.

Items on the WDL may easily be browsed by place, time, topic, type of item and contributing institution, or can be located by an open-ended search, in several languages. Special features include interactive geographic clusters, a timeline, advanced image-viewing and interpretive capabilities. Item-level descriptions and interviews with curators about featured items provide additional information.

Navigation tools and content descriptions are provided in Arabic, Chinese, English, French, Portuguese, Russian and Spanish. Many more languages are represented in the actual books and other primary materials, which are provided in their original languages. Browse and search features facilitate cross-cultural and cross-temporal exploration on the site. Descriptions of each item and videos, with expert curators speaking about selected items, provide context for users, and are intended to spark curiosity and encourage both students and the general public to learn more about the cultural heritage of all countries.

The World Digital Library was developed by a team at the Library of Congress, with technical assistance provided by the Bibliotheca Alexandrina of Alexandria, Egypt. Institutions contributing to the WDL include national libraries, and cultural and educational institutions from all over the world.

Examples of treasures featured include Arabic scientific manuscripts from the National Library and Archives of Egypt, early photographs of Latin America from the National Library of Brazil, the *Hyakumanto darani* –a publication from the year 764– from the National Diet Library of Japan, the famous 13th century *Devil's Bible* from the National Library of Sweden and works of Arabic, Persian and Turkish calligraphy from the collections of the US Library of Congress.

Background and Key Features

US Librarian of Congress James H. Billington proposed the establishment of the WDL in June 2005. UNESCO welcomed the idea as a contribution toward fulfilling its strategic objectives, which include promoting Knowledge Societies, building capacity in developing countries and promoting cultural diversity on the Web.

A 2006 meeting of experts from all over the world led to the establishment of working groups to develop guidelines for the project, and to a decision by the Library of Congress, UNESCO and five partner institutions –the Bibliotheca Alexandrina, the National Library of Brazil, the National Library and Archives of Egypt, the National Library of Russia and the Russian State Library– to develop and contribute content to a WDL prototype to be presented at the UNESCO General Conference in 2007. Input into the design of the prototype was solicited through a consultative process that involved UNESCO, the International Federation of Library Associations and Institutions (IFLA) and individuals and institutions in more than 40 countries.

The successful unveiling of the prototype was followed by a decision by several libraries to develop a public, freely-accessible version of the WDL for launch at UNESCO in April 2009. More than two dozen institutions contributed content to the launch version of the site. WDL now (November 2009) has 56 partners from 35 countries. Another 10 partners

in seven countries are completing the formalities and will join in the next few weeks. Discussions are underway with many more prospective partners. It is expected that the 2009 target of 60 partners will be reached ahead of schedule. The WDL will continue to add content to the site, and will enlist new partners from the widest possible range of UNESCO members in the project.

The WDL features high-quality digital items reflecting the cultural heritage of all UNESCO member countries. The WDL represents a shift in digital library projects from a focus on quantity for its own sake to quality; quantity remains a priority, but not at the expense of the quality standards established during the start-up phase.

The WDL breaks new ground in the following areas, each representing significant investments of time and effort:

- (1) Consistent metadata: each item is described by a consistent set of bibliographic information (or metadata) relating to its geographical, temporal and topical coverage, among other requirements. Consistent metadata provides the foundation for a site that is easy and interesting to explore, and that helps to reveal connections between items. The metadata also improves exposure to external search engines.
- (2) Description: among the most impressive features of the WDL are descriptions of each item, answering the questions: 'What is this item and why is it significant?' This information, written by curators and other experts, provides context for users and is designed to spark the curiosity of students and the general public to learn more about the cultural heritage of all countries.
- (3) Multilingualism: the metadata, navigation and supporting content (eg, curator videos) are translated into seven languages: Arabic, Chinese, English, French, Portuguese, Russian and Spanish. This feature complicates maintenance, but brings WDL closer to the goal of being truly universal.
- (4) Digital library technical development: the WDL team's work with state-of-the art tools and technologies led to advances in cataloguing and multilingual website development:
 - A new cataloguing application was developed to support the metadata requirements.
 - A centralised tool with a translation memory was used, which prevents translators from having to translate the same word or phrase twice.
 - An interface was developed, which features the WDL content in ways that are appealing to non-traditional users and that encourage exploration of primary sources.
 - New technologies continue to be developed, improving workflow and reducing the time elapsed between content selection and availability on the site.
- (5) Collaborative network: the WDL emphasises openness in all aspects of the project: access to content, technology transfer for capacity building, and partner, stakeholder and user participation. Technical and programmatic networks are seen as vital to WDL's sustainability and growth.

The partners of the WDL are mainly libraries, archives or other institutions that have collections of cultural content that they contribute to the WDL. Partners may also include institutions, foundations and private companies that contribute to the project in other ways, for example by sharing technology, convening or co-sponsoring meetings of working groups, or contributing financially.

While many of the partners or prospective partners that wish to contribute content to the WDL have well-established digitisation programmes with dedicated staff and equipment, others, particularly in the developing world, do not have access to these capabilities. Over the years, the Library of Congress has worked with partners in Brazil, Egypt, Iraq and Russia to establish digital conversion centres to produce high-quality digital images. Much of the content on the WDL was produced at these centres.

The WDL supports UNESCO's mission of capacity building in developing countries, and intends to work with UNESCO, partners in these countries and external funders to establish additional digital conversion centres throughout the world. These centres will produce content not only for the WDL, but for other national and international projects as well.

Content Selection Criteria

The following points will guide how partners and the WDL will approach the selection of sources that will present the history of humanity to the worldwide audience through the WDL.

- Partner institutions are encouraged to select items or collections of items for inclusion in the WDL that best represent their respective national cultures.
- In addition to presenting their national cultures, partner institutions are encouraged to contribute to the WDL collections or items from their holdings that relate to the history and culture of other countries.
- The WDL Content Selection Committee may designate selected, high-profile subjects for treatment in an international comparative perspective, eg, 'the history of writing', and call for contributions from partner institutions that relate to these subjects.
- Partner institutions are especially invited to contribute to the WDL items or collections from their holdings that are included in the Memory of the World Register.

Private and Public Partners

It is interesting to note that the WDL has received support from private and public partners, some of them for specific tasks, such as: Google, for the initial development of a WDL plan and the WDL prototype; the Qatar Foundation, to support the development of the Central Library of the Qatar Foundation as a key node in the WDL network; the Carnegie Corporation of New York to support the inclusion of cultural institutions from sub-Saharan Africa and Eurasia in the WDL; the King Abdullah University of Science and Technology, Saudi Arabia, to support activities relating to the dissemination, through the WDL, of digital versions of manuscripts and other materials relating to science in the Arab and Islamic worlds; Microsoft; the Lawrence and Mary Anne Tucker Foundation, to support the establishment of a digital conversion centre at the Iraqi National Library and Archives; and the Bridges of Understanding Foundation, for the development of Middle East-related content for inclusion in the WDL.

Conclusion

What Does the Future Hold?

UNESCO is fully committed to supporting the WDL to expand and grow worldwide. It is working with the Library of Congress to enlist new partners in the project, especially in developing countries. WDL now has 56 partners from 35 countries. Many more libraries, archives and other educational and cultural institutions from around the world have expressed their intention of participating in the WDL, meaning that the cultural treasures represented on it will continue to grow.

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