



The interactions between Google and librarianship: The Experience of Mexico

Jonathan Hernández

Faculty of Philosophy and Letters
National Autonomous University of Mexico / Master of
Library and Information Studies, Mexico D.F.
E-mail: jonhpz@gmail.com

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Abstract:

This paper aims to establish the contributions, the changes and the impact that Google and its services have occasioned in the field of librarianship, highlighting the case of Mexico. It also identifies two aspects of infodiversity on which Google has had a great impact.

Keywords: *Internet, Google, Infodiversity*

Introduction

In years past, a person's need for information was typically fulfilled when he or she went to the library and consulted a librarian, or documental information provided by a librarian. Although at this time printed information already surpassed the individual, with the arrival of information and communication technologies a substantial change took place in our society. This change deeply affected the way information is created, manipulated, distributed and accessed and can be attributed largely to the Internet.

At the time of its conception, use of the Internet was restricted to exchanging scientific and academic information. Shortly thereafter, in the seventies and eighties, universities and academic institutions began using the Internet to carry out projects initially oriented toward information transmission. Around this time, other services, like email and early search engines, which used rigid indexes in unfriendly interfaces and had a restricted search spectrum, were introduced. However, it wasn't until the first part of the nineties that the Internet began to have the importance it currently enjoys. Today, we are coming to see the Internet not only as a source of

information, but also as our clock, calculator, printing press, newspaper, meeting place, map, telephone, radio and television.

Infodiversity

Infodiversity is defined as *the defense of the existence of multiple, diverse manifestations of information creation, which implies the convergence of different types of information* (Morales, 2006). In this sense, the Internet is involved in the development of a rich infodiversity through the varied manifestations of information to be found in this network of networks. The Internet is a collective creation which offers extensive variations in the ways information is presented. Among these diverse forms of presenting information are those related to language (human and programming), vocabulary (email addresses, links, telephone numbers, product and user numbers, etc.), type or format (text, PDF, image and sound files), content (academic and popular), etc.

In this way, according to Morales (2006), infodiversity is sustained through five crucial aspects which must necessarily be present for it to achieve its equilibrium: plurality, recovery, preservation, availability and free access to information.

In the context of the Internet, Google touches on each of these aspects. However, I will expand upon just two of them: availability and free access to information, and will also focus particularly on Internet search and users.

Internet Search and Users

Only ten years ago, Broadband barely existed and storing information on hard drives was costly. *Compared to today*, Internet use was scarce; archives were small and Internet companies, for the most part, didn't maintain registration archives since this meant a considerable financial investment. In the last decade, however, a large part of our digitally expressed conduct – *email, search or social relationships* – takes place on the Internet.

In the last part of the nineties, during the period of dot.com crush¹, search engines led to a great deal of enthusiasm for all things related to the Internet. Although this fever cooled down, search engines continued to prosper as applications and, more recently, as business models. Though many investors may have been ruined, Internet users will never stop looking up information, and the way in which search remains an essential part of Internet use can be attributed to one simple reason: the constant growth of information in all types of formats.

As a result, the construction of an increasingly rich Internet infodiversity led to the appearance of search engines designed to find only the kind of information a user required.

Multiple search engines have appeared throughout the history of the Internet and the technology used by each one has moved toward perfection. Nevertheless, of all these search engines, none has had such a strong presence on the Internet and in our society as Google. According to the

company's website, *Google was successful precisely because it was better and faster than other, contemporary search engines at finding the right answer*².

One of the reasons why Google has become consolidated as the most popular search engine is its simple, friendly interface. The user can search for information using natural language, and the search engine is available in 150 domains and offers its interface in over 110 languages. Naturally, one of these languages is Spanish and one of these domains, Mexico (www.google.com.mx).

In Mexico the number of Internet users is constantly on the rise. In 2005, there were an estimated 17.1 million Internet users compared to the 27.2 million users in 2009. This means that in only four years the number of users has increased more than 50 percent in a country of 103.3 million inhabitants.

During this period, surveys reveal that the main activity of Mexican users after email is searching for information using search engines. Google is used by 85 per cent of these users.

Continued examination of the statistics shows that almost half of Internet users in Mexico are between 12 and 24 years old. This is also the group that spends the most time *connected*, and contrasts with the group of users 45 years and over for whom Internet use is unusual. The older age group makes up only one of every ten users³. This trend is not unique to Mexico, as the greater part of Internet users around the world are, for the most part, young people. This is the reason why this sector of the population has been dubbed the "Google Generation".

This term alludes to people born after 1993, immersed in an Internet era dominated by search engines and led by Google. Generations whose members were born before 1993, however, and who were introduced to books before the mouse and the screen, are considered intermediate generations. All indicators suggest that members of this group will need to adapt to the digital era.

This is why Prensky (2001) calls the students who grew up with the Internet and surrounded by digital communication media "digital natives". Members of this group prefer graphics to text and carry out different tasks simultaneously in digital environments. He calls those who weren't born in the midst of this technology "digital immigrants".

As Frand (2006) notes, the "Google Generation" displays characteristics that distinguish it from prior generations and that can be found in developed as well as developing countries;

"Most students entering our colleges and universities today are younger than the microcomputer, are more comfortable working on a keyboard than writing in a spiral notebook, and are happier reading from a computer screen than from paper in hand. For them, constant connectivity—being in touch with friends and family at any time and from any place—is of utmost importance".

In Mexico, specialists at the National Autonomous University of Mexico (UNAM), have reinforced these arguments and even maintain that young people's habits and conduct have changed dramatically since the introduction of the Internet.

In a parallel sense, a survey on students' perceptions of libraries and information resources carried out by OCLC⁴ in 2006 in Europe confirms Frand (2006) argument to a great extent, though the survey reveals other aspects of students' attitudes toward search as well:

- 89 per cent of higher education students use search engines to begin looking for information. Only 2 per cent begin this search on a library's website.
- 93 per cent are satisfied or very satisfied with the general experience of search engine use.
- Search engines are better adapted to the higher education student's lifestyle than physical or online libraries, and this adaptation is "nearly perfect".
- Despite their considerable investment in digital resources, books remain the first association this group makes with libraries.

Mexico's situation does not differ from that of Europe. The *Encuesta Nacional sobre Disponibilidad y Uso de las Tecnologías de Información de los Hogares 2008* (The National Survey on Availability and Use of Information Technology in the Home 2008) displays the following results:

- 53.4 per cent of Internet users in Mexico are between 18 and 24 years old.
- 43.5 per cent of users use the Internet for school work or for educational purposes. This is the predominant use of the Internet.
- 35.1 per cent use the Internet to search for general information

As can be observed in the data provided by these surveys, the Internet has far reaching repercussions in the academic and social environments of the youth sector. This is attributed to the fact that the majority of users are in the student age bracket, 18 to 24. For this reason, the Internet has become a central point for finding information for academic activities, establishing interactions with other people and searching for information of all kinds.

Due to the importance that search has acquired for users, the search engine becomes the primary brand name they associate with the Internet, and this search engine is none other than Google.

The popularization of Google is echoed in the everyday language of its users. In Mexico, for example, the terms "googlealo" (google it), "búscalo en Google" (look for it on Google), and "googlear" (to google) are ever more frequently heard and have become synonymous with "to look up on the Internet". The Oxford English Dictionary and the Macmillan Dictionary, among others, have adopted the term "google" as a verb meaning to look up information on the Internet

using Google as a search engine. This verb has become evidence of the impact Internet use has had on a culture; in this case, cyberculture.

Availability

The information availability aims to provide a user all available information required to satisfy their needs regardless of where they are. This is technically possible, but often the political and social factors do not allow (Morales, 2010). In this sense, the Internet empowers the availability of information by enabling a lot of people know about the culture of other countries, information about local and global events that could hardly be in any other media so quickly. In this way there are different initiatives that have been raised to achieve this availability, which result in the creation of digital libraries, repositories, databases, etc. However, none have been so ambitious as Google's initiative.

Google's mission is to organize the world's information and make it universally accessible and useful. This world's information is not only the information on the Internet since Google has raised the possibility of organizing printed information through the digitization of the collections of libraries and publishers to make them available to its users.

The initiative pursues many interests, but the most important lies in further positioning Google as the best (and most used) search engine, therefore it will capture a greater number of users, resulting in more revenue through its business model and thus have achieved an important role on the Internet.

The digitization of books is not a new issue for Google because this project existed long before the company did, since one of its founders was working on a project for mass digitization of books through the Digital Libraries Project (Cassin, 2008). However, it was not until Google publicly traded in 2004 when this company introduced the project called Google Print for Publisher, this project had several modifications until it became what we know today as Google Books.

Google Books is one of the Google's services that has a close relationship with the librarianship. This service has raised a series of discussions on intellectual property, as the company has been subject to legal and moral judgments by making available, literature that is protected by copyright and by the fact that if this project is fully carried out all the bibliographic heritage through the Internet will be in the hands of one company.

In order to carry out this purpose Google need two important supports: publishers and libraries, or as Google calls them, Affiliate Program and Library Project respectively. The difference between these two programs is that if the book belongs to a publisher users can view a few pages and if they are interested they can purchase the book through a link on the Google page. On the other hand, the books that have been provided by libraries and are not protected by copyright can be viewed in full, while those that are protected only have access to basic information about the book, however due to the agreement between Google and OCLC⁵, users can know which library has the book they are searching for through the OCLC interface. In the case of Mexico, the

libraries of the institutions that have agreements with OCLC will be benefited by this service.

However, the LIS associations in the world have their position on Google Books as ALA⁶ and IFLA⁷, the latter has a number of issues that must be addressed before giving their support to this initiative. In Mexico, the two most important associations in the librarianship field do not yet have a position.

Gradually, educational institutions, libraries and publishers have joined this Google initiative. In Mexico, the UNAM took the first step by signing in June 2007 an agreement with Google to digitize books published by the UNAM since 1950 to date and incorporate them into Google Book Search⁸.

In addition to the UNAM, *El Fondo de Cultura Economica (FCE)*, *Siglo XXI Editores*, *Ediciones Era*, *Publicaciones del Consejo Nacional para la Cultura y las Artes (CONACULTA)*, *Limusa / Noriega*, *Selector*, *Ediciones Castillo*, *Oceano and Plaza y Valdes*⁹, recently gave their support to Google's initiative to make printed information available through Internet.

Google argues for the importance of online availability of printed collections in countries like Mexico as follows:

"In countries where there are less Web page production as is the case of Mexico, it is in printed books where we find the most information, so it would be strategic to add this kind of local content to a network environment¹⁰".

This situation is observed in all Latin America, as this region accounts for just 1.9% of all global domains on the Internet (Morales, 2010), Mexico is in third place on the Internet domains of Latin America, below Brazil and Argentina¹¹.

Free Access to Information

Free access to information is a key factor for the existence of a balanced infodiversity, in this case on the Internet. Free access to information is a fundamental right for human beings as defined in Article 19 of the United Nations Universal Declaration of Human Rights:

"Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers".

The IFLA Internet Manifesto¹² declares that the Internet provides a medium through which everyone can enjoy this right. Consequently, access should neither be subject to any form of ideological, political, religious, or economic barriers.

Recently some media have shown the countries that establish some kind of censorship on the Internet through the blocking of content and closing down some services from foreign companies. Those services are mostly focused on the publication, dissemination and retrieval of

information such as blogs, video sharing sites, podcasts, wikis and search engines, among others.

Internet censorship is increasing steadily and governments are realizing the value that information has on the Internet. This is because information is a fundamental input that promotes economic, political and social actions, because in the Internet information flows from one place to another and from one country to another country in real time.

Google has recently released a list of countries that have requested information on certain users or request that content be removed from their search results¹³. Mexico does not reach an important place in that list and is below 10 petitions; in Mexico Internet censorship has not been established as in other countries. Nevertheless the censorship that has permeated in recent years has been in the print media.

In Latin America (except Cuba) censorship on the Internet has not been established as in other countries. Most of the actions taken to regulate Internet content in this region are focused against child pornography and access to content unsuitable for children; however there are law initiatives about the regulation of Internet content that are under discussion, but an agreement has not yet been reached.

In contrast, there are organizations that support developing countries and encourage the use of information through ICT. An example of this is the Access to Learning Award (ATLA) from the Bill & Melinda Gates Foundation, which recognizes the innovative efforts undertaken by public libraries and similar institutions outside the United States for the purpose of allowing public access to information and opportunities through free use of computers and the Internet¹⁴. It should be noted that since the award was established five countries in Latin American have received it, the last one in 2009 is The Libraries Network of Medellin, Colombia and previously in 2008 the project "Veracruz", in Mexico.

In Mexico there are many projects to strengthen the free Internet access, through the creation of access points in strategic places, such as libraries, schools and places where large amounts of people converge, such as the subway transport system. Even the National Development Plan 2007-2012 includes strategies to increase access to telecommunications services, including the Internet¹⁵.

Conclusions

In conclusion, the services provided by Google are neither a substitute nor the solution to achieve free access to information, even when these services represent an important role in the Internet. This is because the regulations on Internet content that have been established by every country are stronger than any public or private initiative.

While the digitization of printed works has important advantages for the preservation and dissemination of information, it is necessary to think about local strategies in order to increase production online and stimulate the multiplication of digital libraries, repositories, databases, etc.

Furthermore, these digital projects have to be accompanied by policies to bring users to this kind of technologies.

Finally, it is important to emphasize that censorship does not allow for the development of infodiversity, because not having access to information impedes communication, discussion, decision making, the creation of more information and the intellectual freedom of the individual; indeed censorship hampers the development of nations and violates a basic human right.

Notes

¹ The "dot-com bubble" or the "dot-com crash" was a speculative bubble during 1995–2000. This period was marked by the founding (and, in many cases, spectacular failure) of a group of new Internet-based companies commonly referred to as dot-coms.

² <http://www.google.com/intl/en/corporate/>

³ A plethora of statistics confirm those arguments: e.g. Statistics on the Availability and Use of Information Technology and Communication by National Institute of Statistics and Geography (INEGI) available at <http://inegi.org.mx/inegi/contenidos/espanol/prensa/Boletines/muestra3.asp?tema=22&s=inegi&c=279>, National Survey of Practices and Cultural Consumption by National Council for Culture and the Arts (CONACULTA) available at <http://sic.conaculta.gob.mx/encuesta/encuesta/c3.pdf> and the Studies of the Mexican Internet Association (AMIPCI) available at <http://www.amipci.org.mx/estudios/>

⁴ College Students Perceptions of the Libraries and Information Resources: A Report to the OCLC Membership 2006 <http://www.oclc.org/reports/perceptionscollege.htm>

⁵ In May 2008 OCLC and Google Inc. have signed an agreement to exchange data that will facilitate the discovery of library collections through Google search services. <http://www.oclc.org/americalatina/es/news/releases/200811.htm>

⁶ See the files concerned to the Google Book Settlement by the ALA:

<http://www.ala.org/ala/issuesadvocacy/copyright/googlebooks/>

⁷ <http://www.ifla.org/files/clm/statements/ifla-google-position.pdf>

⁸ <http://www.eluniversal.com.mx/notas/461838.html>

⁹ <http://www.jornada.unam.mx/2010/04/28/index.php?section=cultura&article=a07n1cul>

¹⁰ <http://www.jornada.unam.mx/2009/09/04/index.php?section=cultura&article=a08n1cul>

¹¹ See for statistics for Address Registry of Internet for Latin America and the Caribbean (LACNIC)

<http://lacnic.net/sp/registro/estadisticas.html>, the Number Resource Organization (NRO)

<http://www.nro.net/documents/presentations/jointstats-mar10.pdf> and the LatinoamerICANN

<http://www.latinoamericann.org/?q=node/1962>

¹² See for the IFLA/UNESCO Internet Manifesto Guidelines <http://archive.ifla.org/faife/policy/iflastat/Internet-ManifestoGuidelines.pdf>

¹³ See for Government requests directed to Google and YouTube. <http://www.google.com/governmentrequests/>

¹⁴ http://www.gatesfoundation.org/atla/Documents/ATLABrochure_ESLA.pdf

¹⁵ <http://pnd.calderon.presidencia.gob.mx/economia-competitiva-y-generadora-de-empleos/telecomunicaciones-y-transportes.html>

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