



Open access to scholarly outputs in humanities and social sciences at the National Autonomous University of Mexico

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Abstract:

The Humanities Coordination of the National Autonomous University of Mexico [Universidad Nacional Autónoma de México, UNAM] has developed an Academic Information System, denominated Humanindex, in order to identify, collect, organize, and disseminate academic outputs of UNAM scholars in Humanities and Social Sciences. Currently there are included in this information system, which is freely accessible on the Web, more than 50 000 publications (books, articles, book chapters and published papers), some of which, besides the identification data also contain links to their full text. These links come from electronic books and journals produced by UNAM research institutes and centers, UNAM Electronic Journals Gateway Project, SciELO (Scientific Electronic Library Online) and Google Scholar. Among the advantages that Humanindex provides is the identification of publications generated by UNAM scholars in diverse disciplines and subjects in the Humanities and Social Sciences. Furthermore, Humanindex allows the identification of UNAM scholars approaching different themes and issues in Humanities and Social Sciences. The above mentioned can be considered as an element for the exchange of scientific Open Access publications and for encouraging the formation of research networks between research institutions both Mexican and Latin American. The aim of this paper is to present the origin, development, characteristics and prospects of this information system and its potential to foster collaborative research in Humanities and Social Sciences.

It is a well-known fact that Journals' prices have increased considerably in the last few decades. This has diminished the possibility for universities, libraries and scholars to have

access to scientific literature generated in different disciplines, which is essential for carrying out high quality research.

On the other hand, the emergence and development of Internet brought several advantages, which have had a direct impact on scientific communication. Since the beginning, Internet proved to be a very useful means for dissemination and access to scientific outputs, for a greater number of scholars, in comparison to the printed materials. By uploading the scientific output online, it was possible to find and have a faster access to the information, as well as save it, copy it, send it and print it, without the need to pay for it.

Moreover, many authors of scientific literature do not expect a compensation or payment for their production, distribution and access by other authors. On the contrary, their main interest relies on achieving a larger dissemination and visibility of the books and articles they produce.

Taking into account all of the above mentioned, it is not hard to imagine why scientist from different disciplines have fostered the Open Access movement, considering also all the advantages the currently Information and Communication Technologies offer. This movement promotes the access to scientific literature without financial, legal or technical restrictions.

The Open Access Movement

The movement in favor of the Open Access philosophy was born in a meeting held in Budapest in 2001, summoned by the Open Society Institute (OSI). This meeting, known as BOAI (Budapest Open Access Initiative), had the main goal to speed up progress of the international efforts promoting free online availability of scholarly publications from all the disciplines.

One of the main outcomes of this meeting was the establishment of the definition and scope of Open Access, which was expressed as follows: "The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited" (Budapest Open Access Initiative, 2001).

Another cornerstone of the Open Access movement was the Bethesda Statement on Open Access Publishing, born from a meeting held in 2003 at the Howard Hughes Medical Institute, in Chevy Chase, Maryland. Additionally, another event that complemented the previous ones was the Open Access Conference, held in Berlin, in October of the same year,

where the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities was issued.

Statements resulting from these three meetings, now joined together in one, known as the BBB Statement agree on the fact that Open Access should be free of charge for the Internet users. Moreover, Open Access concept implies granting permission for the use of the scientific outputs, this means that it does not only does eliminate price barriers, but also promotes removal of barriers for the free use of information produced by scholars.

The Berlin and Bethesda statements certainly ratify what was mentioned in the Budapest Statement about Open Access by pointing out that: “By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited” (Suber, 2004).

Likewise, Sanz-Valero, D'Agostino, Castiel and Veiga de Cabo (2007) point out the term Open Acces is used to define platforms of access to scientific information sources, such as monographs, journals, theses, clinical practice manuals and any other type of publications edited in electronic format. They are accessed through the Internet, allowing the users to search, read, retrieve documents, and copy, print, and distribute them providing direct access to their full texts, using a direct, permanent and free of charge access. The Open Access also involves a commitment with the quality of contents; therefore, it is compatible with peer-review, printing and preservation of contents, as well as with other characteristics associated to the conventional scholarly literature. The main difference is that, most of the times, users can access scientific knowledge, and any payment is not required in order to have access to the information, thus reducing the barriers for research endeavors, compared to the access and dissemination restrictions imposed by the publishing conventional system.

Taking into account the main concepts expressed in the Budapest Statement and mentioned by diverse authors, the aforementioned authors give examples of the publication types usually found in Open Access, which can be grouped in the following categories:

1. Self-archiving. In this option, the authors deposit their work in disciplinary or institutional repositories. Discipline repositories would correspond to the concept of Virtual Libraries, and the best examples of them are Eprints in Library and Information Science (E-LIS) and the Health Information Search Engine (LIS for its abbreviation in Spanish) from the Health Virtual Library (BVS for its abbreviation in Spanish). Institutional repositories are a common type of repositories among universities, organizations and public institutions.

2. Open Access Journals Repositories, in which can be distinguish three modalities:

- 2.1 Platforms to electronic journals published only in electronic format. BioMed Central and PLoS Medicine are among the most important repositories of this type.

2.2 Platforms to electronic journals published in electronic and print formats. SciELO and DOAJ are examples to highlight.

2.3 Platforms allowing electronic access after a certain time (commonly called embargo period) to the previous journal printed version. In this group, we can find significant examples, such as PubMed Central and others developed by different publishing companies using this system, being one of them the New England Journal of Medicine or Lancet.

Generally speaking, the two main Open Access categories are Open Access Journals and Open Access Repositories. Open Access Journals have the same characteristics as the printed journals, except they provide free access to their content. Open Access Journals also have editors and refereed evaluations, and since their readers do not pay for the access, this cost is transferred to the authors, who have to pay in order to be published. Sometimes, costs are transferred to the author organization that supports their scholarly activity, which means they have an institutional subsidy.

Open Access Repositories do not normally have peer evaluation. Authors simply deposit their work via the Internet. However, sometimes these documents are indeed evaluated by peers. These archives generally belong to institutions (such as universities) or professional associations. Most of them currently follow the Open Archives Initiative Standards ([OAI](#)), which allow interoperability among them.

Open Access in Humanities

When comparing Open Access trends in Humanities and in other disciplines and areas such as physics, medicine and technology, Suber (2004a) points out there is a bigger number of Open Access publications in the latter areas, which can be attributed to the following reasons (among others):

The price of Science, Technology and Medicine (STM) Journals, for instance, is much higher than Humanities Journals.

Science and Technology Research has more budget than Humanities Research, which makes easier to cover the costs that sometimes Open Access publishers charge to authors for publishing in electronic journals.

There is more demand for accessing Science and Technology research findings, in comparison to the Humanities ones. For example, genomics research findings have a higher demand than Greek grammar research findings, even these last ones are equally important.

Science and Technology scholars exchange their research findings faster, in order to present them to other scholars for maintaining their leadership in their respective research area. The value of research findings in Humanities is perceived and valued from another point of view, their social impact.

Demand of Science and Technology articles decreases rapidly after its publication, whereas in Humanities, demand decrease is much slower.

In Science and Technology, journals constitute the primary source of scientific communication, whereas in Humanities books are the primary source.

Nonetheless, Open Access provides several benefits, which are also absolutely applicable to research in Humanities. “There are significant gains to making research and research results available without financial, legal and technical barriers to access. Researchers benefit from increased visibility, usage and impact for their work. Open access helps to publicise institutions research strengths. For publishers, open access brings maximum visibility, increased readership and impact for the contents; it means that a greatly improved dissemination service is being provided for research. Open access enhances the flow of knowledge between North and South and also between South and South” (International Federation of Library Associations and Institutions, 2011).

On the other hand, the publication and distribution of Open Access books and journals on Humanities and Social Sciences in Latin America and the Caribbean is related to the global trends to maximize advantages of the Information and Communication Technologies and, of course, the Internet. However, there are other factors inherent to the region, which have had a bearing on this movement. Boron and Babini (2004) point out the following factors:

- Lack of budget to print books and journals which include the research results.
- Reduced print runs, with an average of 500 copies for an academic book and 600 issues for an academic journal.
- Lack of budget in academic institutions to pay for the mail delivery service which is an impediment for the distribution of their publications to other libraries in other cities and countries.
- Practically non-existent interlibrary loan between cities and countries, because of the very high costs of ordinary mail and private delivery service.
- Periods in which the support to Social Sciences research is interrupted, which motivates interruption of scholarly publications and library collections development.

Moreover, Latin America has a solid tradition in the creation and development of important databases, in which, by using Information and Communication Technologies, it is possible to incorporate in the records, electronic versions of the publications, achieving greater visibility and access to them. (Boron and Babini, 2004) Therefore, one of the current Open Access challenges in Latin America and the Caribbean is to convert their databases in FOA (Free Online Scholarship) archives, constituted by scholarly literature, accessible free of charge via Internet.

Taking into consideration current trends in Open Access for scholarly outputs, as well as the possibilities that nowadays provide the Information and Communication Technologies, and the particular features of the scholarly outputs in our institution, the Humanities Coordination of the National Autonomous University of Mexico (UNAM) (Coordinación de Humanidades, Universidad Nacional Autónoma de México) undertook the development of Humanindex, an Academic Information System on Humanities and Social Sciences.

Humanities Coordination of the National Autonomus University of México

The main goal of the Humanities Coordination is to coordinate research activities and other academic endeavors of the UNAM Humanities Subsystem. This subsystem is formed by 10 institutes approaching research in diverse disciplines: Anthropology Institute, Bibliography Institute, Aesthetics Institute, Philology Institute, Philosophy Institute, History Institute, Law Institute, Social Sciences Institute, Education and University Institute, as well as 7 research centers, Center on Latin America and the Caribbean, Center for Interdisciplinary Research in Sciences and Humanities, Center on North America, Peninsular Centre on Humanities and Social Sciences, Regional Center for Multidisciplinary Research, University Center for Library Science Research and Foreign Language Teaching Center.

The main objectives of the Humanities Coordination are: to "foster academic development, particularly, research on Humanities and Social Sciences; disseminate the knowledge produced in the different disciplines and, link this development to the other university departments, to national and international higher education institutions, as well as to social and governmental organizations in the subject of education and culture" (<http://www.coord-hum.unam.mx/>)

Nowadays, there are 1018 scholars working in the different institutes and centers of the UNAM Humanities Subsystem. It is important to point out that although the academic position of UNAM scholars is researcher; they also perform teaching activities, especially at graduate schools.

To support achievement of its objectives, the Humanities Coordination developed an Academic Information System, denominated Humanindex. This system identifies, compiles, organizes, and disseminates outputs of scholars that are members of the institutes and centers included into the Humanities Subsystem, in order to promote and provide greater visibility for their research outcomes.

Content and origin of Humanindex information

At the present time, there are 51,747 records of scholarly publications from researchers that are part of the institutes and centers included into the UNAM Humanities Subsystem, According to the publication types, this scholarly output is formed by:

- 20,746 Journal articles,
- 14,226 Book chapters,
- 11,019 Books,
- 5,143 Published papers,
- 613 Other publication types

In order to identify, systematize, retrieve, and especially, to disseminate the information on publications produced by the Humanities Coordination scholars, in 2006 it began a major institutional project, whose first phase was to type and upload all the information included in

the curriculum vitae of every one of the scholars from the different institutes and centers of the Humanities Subsystem. Because of this, I can be mentioned that Humanindex had its origin in the processing of data and information from the curriculum vitae of each one of the UNAM Humanities Subsystem scholars. These CVs had to be standardized since they were presented in different formats and styles.

Likewise, data updating in Humanindex is made through an automated transfer of information contained in the Academic Reports System (SIAH, due to its acronym in Spanish), which is used by Humanities Subsystem scholars to report their annual outcomes, as established by the university regulation. Humanindex has been updated with the scholars' annual reports corresponding to the period 2006-2010.

Finally, it is important to mention the information on scientific publications generated by the Humanities Subsystem scholars can be accessed by any member of the academic community of UNAM, as well as members from other institutions, via Internet (<http://www.humanindex.unam.mx>). In this way, Humanindex contributes to improve dissemination and visibility of scientific publications produced by the UNAM Humanities Subsystem scholars, using the Information and Communication Technologies advantages.

Humanindex: current characteristics

At the present time, it has been developed and implemented four basic characteristics in Humanindex

- Identification of academic publications by scholar.
- Different search options.
- Links to full text
- Immediate online updating.

a) Identification of academic publications by scholar

In order to get a greater dissemination and visibility of publications generated by the Humanities Subsystem scholars, the system generates a publications list for each scholar (books, articles, book chapters, published papers). Additionally, there is the possibility of access to this publications list, through a link in each scholar personal webpage, which is placed in the institutes and centers websites. In order to move beyond the identification of bibliographic data of publications, in Humanindex have been also included a considerable number of links to articles and books full text. Likewise, in some records of articles and books have also included links to Google Scholar (<http://scholar.google.com.mx/>), which allow display citation information and full text of publications.

b) Different search options

In order to find and retrieve scientific publications included in Humanindex, a search engine was created and implemented. This engine allows retrieve information by different elements,

such as author, words included in the title, publication publisher, or journal name. There are also two search interfaces: Basic Search and Advanced Search.

The Basic Search allows the user to find information using the author name or words included in the title of scholarly publications. In the author search, you can retrieve information by using the exact words of its name or by a free search. The search "by words included in the title" allows the user to retrieve publications through words included in their title. This feature is useful to retrieve all those publications approaching the same research subject. This search can be limited by the following criteria: All the words, One of the words, Complete phrase, Exact words. The two search types mentioned above (authors and words in the title) can also be limited by the publication type, that's means, it would only retrieve Books, Articles, Book chapters, or Published papers.

This Basic Search allows the identification of different subjects and approaches on which scholars work, the persons working on them, and the institute or center in which they can be found. This allows the identification of peers who do research into the same topics or research lines, thus fostering collaborative work and the development of research networks.

The Advanced Search allows the user to search by author or title, but incorporating the use of the Boolean operators "AND" and "OR". In the Advanced Search, the user can additionally search by the publisher's name or the Journal's Title. It is worth mentioning that in this search option, results can be limited by the publication type: Books, Articles, Book chapters, Conferences, Catalogs. Also, search results may be filtered or limited by the following options: Country, Year, Refereed Products and Author's gender.

Humanindex search engine allows finding information through different access points and it also limits search results using different criteria, which translates into a high recovery rate of relevant information. It is also worth to mention that for the search engine development, it was suggested that it should be simple and user friendly, so that any person who wished to look for and to retrieve information on Humanities and Social Sciences could do so, regardless of the previous knowledge on data search they could have.

c.) Links to full text

As it was previously mentioned, one of Humanindex's main objectives is to go beyond the identification of bibliographic data for every scholarly publication; therefore, it was considered convenient to include open access to its corresponding full text, which has been done in a considerable number of articles and books.

In order to achieve this, it has been incorporated links to the articles published in the electronic journals of each Institute or Center that are part of the Humanities Subsystem. At the present time, it has been published 66 electronic journals on Humanities and Social Sciences, all of them in open access, placed in the webpages of each Institute or Center.

Another source used for incorporating links to the full text of publications included in Humanindex is the "Portal de Revistas Científicas y Arbitradas de la UNAM [UNAM Scientific and Refereed Journals Gateway] (<http://www.revista.unam.mx/>). This gateway, created and managed by the UNAM General Secretary, contains over 100 electronic journals

on different disciplines published by UNAM, and whose content can be consulted through Open Access. This portal incorporates 25 Journals on Humanities and Social Sciences.

Since Humanities System scholars publish not only in UNAM journals but also in other ones, especially Latin American journals, the Virtual Library SciELO (Scientific Electronic Library Online) is another source to establish the links to full text of publications registered in Humanindex. SciELO is a network of full-text scientific journals in Open Access from 15 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Spain, Mexico, Paraguay, Peru, Portugal, South Africa, Uruguay and Venezuela. The SciELO-Mexico collection (<http://www.scielo.org.mx/scielo.php>) is managed by the UNAM General Direction for Libraries. There is a collaboration agreement with this Direction.

Additionally to all above sources, it has been also included links to other Open Access electronic journals available on the Internet.

To finish the discussion on this topic, it is important to mention that, besides to include the links to full text above mentioned in Humanindex records, it has been also included links to Google Scholar (<http://scholar.google.com.mx/>). This is done in order to have another access point to the full text of the academic publications, as well as to identify citations for some publications generated by the Humanities Subsystem scholars.

It is important to point out that Humanindex does not digitalize, keep or concentrate the full texts included in the records. This information system works as a gateway to texts included in different websites or repositories where the Open Access electronic resources are hosted.

c) Immediate online updating.

To achieve an immediate inclusion of scientific publications generated by Humanities Subsystem scholars, a web interface was developed to allow them to register online their books, articles, book chapters and published papers, when these are issued. Likewise, scholars have the possibility to include other academic outputs throughout all the current year. Every one of the Humanities Subsystem scholars, using their own user name and password, can register his or her publications at the time they are published, which motivates an immediate dissemination and an increase visibility of them since they are incorporated automatically in Humanindex. In addition to this fact, information on academic outputs is linked to the Humanities Academic Report System (SIAH) to generate at the end of the year, a preliminary version of the annual report that every scholar has to present. This makes the elaboration of annual report easier, since scholars only have to edit and complete information, avoiding typing information twice.

Additionally, Humaindex information and the information added by scholars through the year are used to generate an up-to-date curriculum vitae or résumé. Any scholar curriculum vitae and/or résumé can be generated in Word processing or PDF formats to be printed or saved on their own computer, having the possibility to edit them according to their own needs and interests.

Prospective scenario

Humanindex current characteristics make it an ideal source to identify academic outputs, particularly publications, of UNAM scholars in Humanities and Social Sciences. It is also a useful means to gain Open Access to the different scholarly products (books, articles, book chapters, published papers). The possibilities to identify research lines, projects and works, and also scholars approaching them, constitute a key element to foster collaborative work and the development of research networks among UNAM scholars, but also among scholars from different Mexican and Latin American institutions, dedicated to Humanities and Social Sciences.

In order to achieve this scenario, the incorporation in Humaindex of academic publications and outputs from scholars of other Mexican and Latin American institutions has been considered convenient, which can be done taking advantage of the immediate updating interface of this Information System. In this way, content of this Academic Information System will be enriched, and Humanindex would also become an instrument to provide more dissemination and get better visibility for scholarly publications and outputs of Humanities and Social Sciences researchers, from Mexico and other Latin American countries.

In the future, the inclusion in Humanindex of Latin American research institutions on Humanities and Social Sciences, would allow the creation of a series of indicators on research carried out in the region. It would also allow universities and research institutions to know citation patterns and impact of scientific publications in the Humanities and Social Sciences in the Latin American region.

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