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## The study of social sciences in Latin America

There is a strong history of social science research within Latin America, and social science studies in this region have made significant contributions to international academic debates in areas such as development studies (with writings from Raúl Prebisch and Celso Furtado), education (Paulo Freire), imperialism and dependency, and liberation theology.<sup>1</sup>

In the 1970s, military regimes repressed social science institutions within public universities<sup>2</sup> so research NGOs were created to take in those university professors and researchers who did not emigrate, to ensure that independent social science research and teaching could continue. Since the return to democracy, social science departments have re-emerged within the universities, and together with the NGOs have continued to develop research and education in the social sciences.

There is significant work in the region on non-Eurocentric Latinoamericanist social sciences.<sup>3,4</sup> However, as elsewhere in the developing and transitional world, research agendas and the theoretical-methodological orientation of researchers are influenced by foreign research-funding agencies and the editorial boards of journals from developed countries (where researchers need to publish to improve their career prospects<sup>1</sup>).

### The visibility of Latin America social science research outside Latin America

The presence of authors from Latin America in the recognized international indexes has grown considerably in the past decade – most notably in the pure and applied sciences,<sup>5</sup> but also in the area of social science and humanities. Within the Social Sciences Citation Index the number of papers published annually between 1990 and 2004 with an author from the Latin American region

# Using digital libraries to provide online access to social science journals in Latin America

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**ABSTRACT:** *There is a strong history of social science research within Latin America, but its visibility (both within and outside the region) has been low for reasons of language and print distribution. The introduction of the Internet and online publication makes this information potentially more visible to the global research community, and within Latin America several organizations have undertaken to exploit this opportunity. The approaches taken show how collaboration between countries, and particularly between librarians and publishers, can provide innovative solutions. The CLACSO project uses a digital library model as a publishing platform for its member journals and this has provided a successful – and hopefully sustainable – model.*



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*there is a strong tradition of publishing journals within Latin American social sciences research institutions*

(excluding Central America) grew from 481 to 1,002. The countries that showed greatest increase were (in order) Brazil, Argentina, Chile, and Bolivia. However, to understand their relative importance, these numbers need to be compared with papers authored outside Latin America: for example in 2004 there were 1,297 papers added to the same index from Spanish-located authors, which indicates that either there is considerably less social science research taking place in Latin America, or – more probably – that the research is being published in journals not included within these indexes.

This presents an area of concern for researchers as recently highlighted in a paper by Shoshannah Holdom<sup>6</sup> which discusses the field of Latin American studies. She states that the majority of available research in this field takes place in the UK and USA, thus excluding the indigenous research – actual or potential. Indeed the number of ‘Latin American published’ journals included within international indexes is small (for example 5 in the ISI Social Sciences Citation Index, out of a total 1,712 titles included; 73 in the International Bibliography of Social Sciences, out of a total of 2,500 titles indexed).

However, there is a strong tradition of publishing journals within Latin American social sciences research institutions although access to these (in print) has been limited, due primarily to the low number of copies printed (in average 500 copies for books and 300 copies for journals), low levels of subscription, and the very high costs of postal services which make distribution difficult and also result in a low number of inter-library loans (both within and between countries).

To discover social sciences journals from Latin America, the most comprehensive source of information is Latindex,<sup>7</sup> a multi-disciplinary directory of journals from Latin America, with some links to open access full-text journals. Latindex includes 592 social science journals that conform to international standards of quality (from a total of 3,945 social science periodicals).<sup>8</sup> Another valuable index is CLASE<sup>9</sup> (Citas Latino-americanas en Ciencias Sociales y Humanas), a bibliographic database of social science

journals, with some links to open access full-text journals, from the UNAM (Universidad Nacional Autónoma de México).

One problem for the visibility of Latin American social science publications outside the region is that nearly all are published in Spanish and Portuguese which deters many researchers in the English-language countries – and also in countries where the second language (particularly of research) is English. This not only prevents access and use of the published content in other regions, but also even discovery of the journals within the Latin American indexes, which – naturally – are also in Spanish and Portuguese.

### Emerging publication trends

Emerging trends in academic publishing in Latin America are related to the distribution particularities mentioned above, plus the non-commercial model which is predominant within the region (social science research is mainly supported by government through universities and some international co-operation programmes). They have also been influenced by the recurrent financial crises in the region, which left editors with very limited resources with which to print and distribute, libraries with little or no budget with which to support local publications, and led both editors and libraries to look for alternative means of providing visibility and access to their publications. Alternatives became feasible with the advent of the World Wide Web.

Internet access is slowly being introduced as a regular service for students, professors, and researchers working in Latin American academic institutions, through the provision of virtual library services and e-publishing delivery. Also, authors are increasingly submitting their works online for publication, and desktop publishing is allowing institutions to consider using the Web to provide free or paid access to their publications. And finally, Internet connectivity is providing the librarians with a means to support both publication and access to information through institutional or co-operative Web portals.

Many institutions are now providing open

access to the full text of their printed journals, and a growing number of journals are only publishing on the Web (as a response to the financial constraints associated with the print journal). The increase in online (and in some cases e-only) social sciences publications has been noted in the research undertaken by Shoshannah Holdom who found 32 out of 45 Latin American studies journals on the Humbul Humanities Hub<sup>10</sup> were published in Latin America.

One feature of the electronic publications produced in Latin America is the predominance of an open access model. Although the rationale for this can only be guessed, it is likely that the reasons for choosing open access include the following. Firstly, they do not currently publish within a commercial environment (most rely on subsidy from their parent organization, and they also have low expectations of potential sales revenue); secondly they want to increase their visibility, and they believe that increased readership and citations will benefit the publications. There is also some evidence that free online publication boosts sales of the print product (within CLACSO, and also at IDRC in Canada<sup>11</sup>).

Open access has been endorsed in the region through events such as the 'Open Access for Developing Countries' seminar which took place in Salvador, Brazil, 21–22 September 2005. This promoted the model within the region, and recommended to

governments to make Open Access a high priority in science policies including: (i) requiring that publicly funded research is made available through Open Access; (ii) considering the cost of publication as part of the cost of research; (iii) strengthening the local OA journals, repositories and other relevant initiatives; and (iv) promoting integration of developing countries' scientific information in the worldwide body of knowledge.

The approaches to online publication within Latin America present some interesting and innovative differences between them and publications from the USA and Europe, and of particular note is the closeness of the publication, its parent organization, and the librarian community. Most

associations/institutes with publications make them prominently available on their own websites – originally as tables of contents (perhaps with abstracts), but increasingly full text (all or selected articles). There is also a growth of open archive-compliant websites which capture these publications and assist visibility through indexing within more 'public' portals such as the Latin American portals mentioned elsewhere in this paper, and also in the international Google Scholar<sup>12</sup> and the University of Texas Latin American Network Information Center (LANIC).<sup>13</sup> Many of the journals are also indexed in directories of Open Access publications such as the DOAJ (Directory of Open Access Journals)<sup>14</sup> and the UNESCO Social and Human Sciences Online Periodicals index.<sup>15</sup>

#### **Conventional and innovative Latin America portals containing social science content**

Many of the Latin American portals set up to host collections of publications have been established with sophisticated technology behind them to provide high-quality statistics and ensure compliance with international standards. In a change from conventional portals, however, they are frequently co-operative initiatives, providing training and support for participating publishers to develop standards and visibility, rather than operating as a commercial hosting service, such as Ingenta or Catchword (Atypon).<sup>16</sup>

Some restrict their content to conventional publishing models (e.g. SciELO which provides full text access to a collection of journals over several disciplines), and some have been set up as digital libraries to provide a wide range of information resources (in different media) to a particular community (but not restricted to a particular institution).

SciELO<sup>17</sup> (Scientific Electronic Library Online) includes 238 open access full-text, peer-reviewed journals from Latin America and Spain (26 journals), of which 25 are social sciences journals. SciELO was launched by the national health information system BIREME in Brazil, and today has agreements with the national research coun-

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cils of several countries<sup>18</sup> in Latin America, which have adopted the SciELO methodology to build national web portals to access their own open access peer-reviewed journals. All the national portals are harvested by SciELO to provide integrated open access to all peer-reviewed journals available in the region. The inclusion criteria for each portal are established by the national research council responsible for its maintenance, and are usually made on the basis of editorial quality and reliability of publication. Each national research council is responsible for maintaining its own content, which needs to be loaded in full-text XML. Although there is no charge to the journals for participation, if they are not able to provide their content in the correct formats they need to pay someone to provide this conversion service, which can be expensive in some countries. SciELO provides training in creating the metadata and full text files, and in how to maintain the website.

RedALyC<sup>19</sup> – Red de Revistas Científicas

de América Latina, España y Portugal – is a portal based at the Universidad Autónoma del Estado de México (UAEM) that today receives support from Spain. The service is free for users and for journal owners and provides access to 225 journals with over 25,000 articles. The journals included within the service include 192 journals from 13 Latin America countries plus 28 edited in Spain and 5 edited in other European countries and the USA. The service has been set up to include only those titles that have Latin America as the main object of study – Latinoamericanist journals. The selection criteria used by RedALyC is the same as that of Latindex, plus a requirement for peer review. In this service all the loading of content is undertaken by RedALyC at the Universidad Autónoma del Estado de México, and only requires the journals to supply PDF files for the full-text articles. Although they do not require the participating journals to manage their own content loading, they do provide training for their



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journal community to help improve the quality of editing.

CLACSO<sup>20</sup> – Consejo Latinoamericano de Ciencias Sociales – provides a portal that is based on the concept of a digital library – where the journals only represent one type of media within the database provided to users. At present it provides access to 50 open access social sciences full-text journals, and is described in more detail below.

### **CLACSO's open source/open access, co-operative, full-text digital library<sup>21</sup>**

Founded in 1967, the Latin American Council of Social Sciences is an international non-governmental institution with formal consultatory status with UNESCO. Today its members consist of 173 centres of research and postgraduate programmes in the social sciences from 21 countries within Latin America and the Caribbean. From these, 55% are university research and teaching institutions and 33% are research NGOs.

CLACSO's objectives are to promote the research and teaching of the social sciences, to strengthen the co-operation between institutions and researchers both within the region and with other regions, and to enrich the quality of debate in the public sphere.

The CLACSO digital library was launched in 1998 with the objective of providing its members with a search mechanism to locate information published by its members. It is estimated that 30% of CLACSO members offer online access to their journals, but not always in full text (although always open access) – and this number is growing quickly. Due to the importance of books in the social sciences, and the fact that many working documents and conference papers reflect research results, CLACSO decided to look for a platform to work with the full text of books, periodical articles, working documents and conference papers published by its network members.

The collection started in 1998 with collaborative books published as a result of regional research programmes sponsored by CLACSO's co-ordinating office. Subsequently member institutes of CLACSO started sending the digital version of a selection of their publications as well as digital

versions of pre-prints that had been waiting (sometime for years!) to have funds to publish in print.

In deciding on how to establish the digital library, it was decided to use a digital library software, rather than a traditional publishing one. The reason for this choice was that available digital library software would be an effective means of providing integrated access to searchable collections of different media, using standard metadata to index (and facilitate searching).

Today, the digital library is based on the open source software Greenstone<sup>22</sup> (developed by the University of Waikato in New Zealand), which has been implemented within CLACSO to provide a co-operative network environment that enables authors and editors from the member institutes to input their content online and have their own collection within this co-operative network of digital libraries. The software was selected for its ease of use, and its functionality – as well as the ability to modify and adapt it to meet local needs.

Greenstone has allowed CLACSO to build individual collections, of which there are now more than 100, divided by member institute (within countries), and also by type of document (journals, books, working documents, conference papers).

Each member institution can establish a personalized digital library with their own identification and the possibility to search within their own institutional collection of full-text documents, or within the entire collection. Each institution retains copyright ownership of their own documents on the site, but they are all published with a Creative Commons licence that permits reuse for non-commercial gain.<sup>23</sup>

Today, the collection has nearly 4,629 full-text documents, of which:

- 2,036 are periodical articles (44%);
- 1,524 are author contributions in 343 collaborative books (33%);
- 708 are working documents (15%); and
- 361 are congress papers (8%).

This digital library also offers open access to:

- a bibliographical database of all public-

*30% of CLACSO members offer online access to their journals*

ations from CLACSO members, of which a selection is available in full-text in the 'Reading Room' section of the digital library;

- a database of research projects sponsored by CLACSO;
- a database with researcher profiles;
- a directory of 50 open access journals providing full-text articles from the past three years of publication;
- videos produced by CLACSO on topics of research;
- a digital library of classroom materials (for students and professors within CLACSO's Virtual Campus).

Usage is good with more than 2,000 visitors a day and some of the newly joined journals have experienced considerable full-text download of their content. Monthly statistics are available in the portal for publishers to follow the number of downloads for each article, book, paper.

The programme is sponsored by CLACSO's member institutes (through their membership fees), the Swedish government (SIDA), the International Network for the Availability of Scientific Publications (INASP, Oxford), and ICA/IDRC (Ottawa).

To help librarians and editors within the network better understand these new e-publishing and e-library environments, since 2002 CLACSO has delivered distance-learning courses from its Virtual Campus free of charge for librarians and editors of its member institutes in 18 countries. During 2004 and 2005 additional training and familiarization workshops have been run as part of the INASP support, and a manual on publishing issues has been produced and distributed free to the editors and librarians within the network (as well as being available for sale).

#### The future of the CLACSO digital library

The establishment of the CLACSO library has proved a highly successful collaboration within a discrete subject discipline, linking the librarians and publishers, providing a service to both through one interface (rather than a digital library pointing to a separate publishing host services). However, to

ensure continued success there are still areas requiring development, as well as opportunities that need to be investigated.

The use of open source software has been an important component of this development, as it has provided the flexibility to establish a bespoke solution to the community's needs. CLACSO has not only taken and used the Greenstone software, but is also contributing to its development and implementation elsewhere in the world – for instance it is presently developing an open source interface for the Greenstone community to solve the problem of accents within the system.

Because Latin America needs to pay for access to journals from developed regions, a discussion is taking place around the principle of open access. As presented above, within Latin America there is a culture of freely available information and a lack of a commercial model for scholarly publications. However, there is an awareness that a controlled access environment (i.e. paid access) for users from regions in the world that charge for their information could benefit the service. It is possible that some development into this will be undertaken to work towards commercial agreements with worldwide brokers to sell the e-publications outside Latin America.

The decentralized management and online input of content into this co-operative virtual library is in its initial phase and showing interesting results, and this is certainly an area that will continue to be pursued. As with the SciELO service, there is a willingness from participating members to input their own content. As with SciELO, librarians are undertaking the work of loading and managing the content on behalf of their own organization and as part of their digital library operation. The process within CLACSO is already providing 10 members with their own personalized virtual library portal,<sup>24</sup> and is ultimately intended to provide each member with this facility. In this way the members are given control over their own publications, but also work within an environment with shared responsibility and access.

It is recognized that this initiative should ensure that CLACSO's contents are made

*there is a willingness from participating members to input their own content*

more visible to the worldwide research and academic community. To further this, promotion needs to be undertaken, and an important component of this is to continue to build agreements with international academic harvesters and portals so that they can easily harvest CLACSO's virtual library metadata. The converse of this is to ensure that CLACSO can harvest metadata in the future from its members to ensure that the central library provides complete access to the information produced by its members through a mixture of centralized and decentralized management.

### A final word

Shoshannah Holdom, from Oxford University, mentions that (within social sciences) 'It is Latin American academics, rather than their US and UK counterparts, who are embracing new technologies and the opportunities facilitated for effective dissemination of research' and

While emerging economies such as those in Latin America frequently look to the so-called first world for models for national development, it could be said that UK/US debates about electronic scholarly publishing might benefit from closer observation of the proliferation of e-journals in countries such as Brazil, Chile, Colombia, Cuba, Mexico, Peru, and Venezuela, for it is here that we can find real innovation in the dissemination of scholarship.<sup>25</sup>

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### References

1. Boron, Atillio A. Las ciencias sociales en la era neoliberal: entre la academia y el pensamiento crítico. Paper presented in *ALAS, Asociación Latinoamericana de Sociología*, Porto Alegre, Brasil, 2005. <http://bibliotecavirtual.clacso.org.ar/ar/libros/secret/alas/alas05.pdf>
2. Oteiza, E. Examen retrospectivo de una experiencia Latinoamericana de educación para refugiados. Paper presented at *Seminario sobre Educación para Refugiados*. Dartington, UK, 29 Mar– 1 Apr 1985. <http://168.96.200.17/ar/libros/clacso/oteiza.rtf>
3. Lander, E. (ed.) *La colonialidad del saber: eurocentrismo y ciencias sociales. Perspectivas latinoamericanas*. CLACSO, Consejo Latinoamericano de Ciencias Sociales, Buenos Aires, 2000. <http://bibliotecavirtual.clacso.org.ar/ar/libros/lander/lander.html>
4. González Casanova, P. Reestructuración de las ciencias sociales: hacia un nuevo paradigma. In Roberto Briceño León y Heinz Sonntag (eds), *Pueblo, época y desarrollo: la sociología de América Latina*, Nueva Sociedad, Caracas, 1998.
5. Hill, D. L. Latin America shows rapid rise in S&E articles. Science Resources Statistics Infobrief, Aug 2004. <http://www.nsf.gov/statistics/infbrief/nsf04336/>
6. Holdom, S. E. Journal proliferation in emerging economies: the case of Latin America. *Literary and Linguistic Computing*, 2005:20(3), 351–65.
7. [www.latindex.unam.mx/](http://www.latindex.unam.mx/)
8. Adelaida R. Personal communication, 2005.
9. <http://ahau.cichcu.unam.mx:8000/ALEPH>
10. <http://www.humbul.ac.uk>
11. [www.idrc.ca](http://www.idrc.ca)
12. [www.scholar.google](http://www.scholar.google)
13. <http://lanic.utexas.edu/>
14. [www.doaj.org](http://www.doaj.org)
15. <http://www.unesco.org/shs/shsdc/journals/shsjournals.html>
16. [www.ingentaconnect.com](http://www.ingentaconnect.com)
17. [www.scielo.org](http://www.scielo.org)
18. Brazil, Chile and Cuba (in development: Argentina, Colombia, Costa Rica, México, Perú, Uruguay).
19. [www.redalyc.org](http://www.redalyc.org)
20. [www.clacso.org.ar/biblioteca/revistas](http://www.clacso.org.ar/biblioteca/revistas)
21. [http://www.clacso.org.ar/biblioteca/ingles/document\\_view](http://www.clacso.org.ar/biblioteca/ingles/document_view)
22. [www.greenstone.org](http://www.greenstone.org)
23. [www.creativecommons.org](http://www.creativecommons.org)
24. An example is the Instituto de Estudios Peruanos: [www.clacso.org.ar/biblioteca/Members/iep](http://www.clacso.org.ar/biblioteca/Members/iep)
25. Holdom, Journal proliferation, pp. 2 and 19.

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