INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE DISSEMINATION OF SCHOLARLY KNOWLEDGE IN A PUBLIC UNIVERSITY IN THE PERIPHERY: THE CASE OF SOCIAL SCIENCES AND HUMANITIES IN THE UNIVERSIDAD DE LA REPÚBLICA, URUGUAY

by

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ABSTRACT

This study examines the process of publication and dissemination of scholarly generated knowledge in the context of technological advances and the internationalization of higher education. Within a world-systems theoretical framework, this study analyzes the use of information and communication technology (ICT) in the dissemination of academically-generated knowledge in the social sciences and humanities within a Latin American public university, the Universidad de la República (UR), in Uruguay. There, academic life was being readjusted by the latest university reform and proposals for increased state control, changes which in turn were constrained by entrenched institutional culture, a tradition of university autonomy, and the federalist structure that characterizes the UR. The research specifically investigated the strategies that have been used by local researchers to communicate research results in the context of regional undertakings to build portals and virtual libraries, and assessed the value of ICT to disseminate local research. The study is based on information collected from forty four in-depth interviews with key university and other related actors, observations, and published and unpublished documents gathered during a six-month period in 2007 and 2008. The analysis of this case showed that, within the constraints of the institution and location in the periphery, researchers’ behaviours in relationship to dissemination of results followed patterns adequate to local, regional, or international parameters as needed to best reach individual goals. Use of ICT and publication strategies were influenced by discipline, as well as by historical developments of each school, department, and the university culture in general. Yet, regardless of discipline, culture or history, internationalization of higher education and regional ICT developments were increasingly pushing local modes of dissemination of knowledge to standardized modes accepted at the center (e.g., publishing in peer-reviewed journals). The UR case illustrated the need to consider the whole process at multiple levels (from the individual to
the international) in order to accurately determine weaknesses (such as need for training in ICT and the development of stronger dissemination strategies) and to devise sustainable and more equitable solutions.
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| ADUR         | Asociación de Docentes Universitarios del Uruguay
               Association of University Professors of Uruguay |
| AECI         | Agencia Española de Cooperación Internacional para el Desarrollo
               Spanish Office of International Cooperation for Development |
| AFUR         | Asociación de Funcionarios Universitarios del Uruguay
               Association of University Administrative Staff of Uruguay |
| AGESIC       | Agencia para el Desarrollo del Gobierno de Gestión Electrónica y la Sociedad de
               la Información y del Conocimiento
               Office for the Development of Government of Electronic Management and the
               Information and Knowledge Society |
| ANEP         | Administración Nacional de Educación Pública
               National Administration of Public Education |
| ANII         | Agencia Nacional de Investigación e Innovación
               National Office of Research and Innovation |
| AUGM         | Asociación de Universidades Grupo Montevideo
               Association of Universities Group Montevideo |
| BID          | Banco Interamericano de Desarrollo
               InterAmerican Development Bank |
| CAPES        | Coordenação de Aperfeiçoamento de Pessoal de Nível Superior
               Coordination for the Improvement of Higher Level Personnel (Brazil) |
| CDC          | Consejo Directivo Central
               Central Directive Council |
| CECSO        | Centro de Estudiantes de Ciencias Sociales
               Social Sciences Student Center |
| CEIL         | Centro de Estudios Interdisciplinarios Latinoamericanos
               Center of Latin American Interdisciplinary Studies |
| CEIU         | Centro de Estudios Interdisciplinarios Uruguayos
               Center of Uruguayan Interdisciplinary Studies |
| CONICYT      | Consejo Nacional de Investigaciones Científicas y Técnicas
               National Council of Scientific and Technical Research |
CSIC  Comisión Sectorial de Investigación Científica  
Sectorial Commission of Scientific Research

CUTI  Cámara Uruguaya de Tecnologías de la Información  
Uruguayan Chamber of Information Technologies

FCS  Facultad de Ciencias Sociales  
School of Social Sciences

FCU  Fundación de Cultura Universitaria  
Foundation of University Culture

FEUU  Federación de Estudiantes Universitarios del Uruguay  
Federation of University Students of Uruguay

FHCE  Facultad de Humanidades y Ciencias de la Educación  
School of Humanities and Education Sciences

IDB  Interamerican Development Bank

IFI  International Financing Institutions

IMF  International Monetary Fund

ISEF  Instituto Superior de Educación Física  
Higher Institute of Physical Education

LASA  Latin American Studies Association

MEC  Ministerio de Educación y Cultura  
Ministry of Education and Culture

MGAP  Ministerio de Agricultura, Ganadería y Pesca  
Ministry of Agriculture, Livestock and Fisheries

OEA  Organización de Estados Americanos  
American States Organization

OPP  Oficina de Planeamiento y Presupuesto  
Office of Planning and Budget

ORT  Universidad ORT Uruguay

PEDECIBA  Programa de Desarrollo de las Ciencias Básicas  
Basic Sciences Development Program

PDT  Programa de Desarrollo Tecnológico  
Technological Development Program
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<th>Abbreviation</th>
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| RAU          | Red Académica Uruguaya
              | Uruguayan Academic Network |
| RDT or DT    | (Régimen) de dedicación total
              | Total (exclusive) dedication regime |
| SAP          | Structural Adjustment Programme |
| SeCIU        | Servicio Central Informático de la Universidad
              | Central Computer Service of the University |
| UBA          | Universidad de Buenos Aires (Argentina) |
| UCUDAL       | Universidad Católica del Uruguay Dámaso Antonio Larrañaga |
| UDE          | Universidad de la Empresa |
| UR           | Universidad de la República |
| UM           | Universidad de Montevideo |
| UNDP         | United Nations Development Programme |
| WB           | World Bank |
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I. THE SCIENCE THAT GOT LOST

La ciencia que no se ve, no existe.\(^1\) Such is the motto adopted by Redalyc, one of several projects to create databases and repositories of scholarly production undertaken recently in Latin America. It is a phrase that frames the concern among some Latin Americans about the scarce visibility of their scholarly production and the poor representation it has in international databases and rankings.\(^2\)

More recently, the processes of internationalization (Knight, 2003) of higher education and the expansion of ICT has renewed interest in the issue, and other authors outside the region have expressed concerns about the barriers encountered by researchers in the periphery to the publication and distribution of scholarly knowledge. Especially in public institutions, these barriers have resulted in lack of visibility of local academic production, making it difficult for many intellectuals and professionals from the periphery to participate in the global exchange of ideas. From institutions’ lack of adequate financial means to connectivity difficulties, a number of issues combine to produce a phenomenon that has been identified as lost science (Gibbs, 1995), whereby knowledge produced in the periphery often does not get published and, even when it does, it does not circulate as widely as it would be desirable, sometimes suffering from poor distribution even within the same country or region (Braun & Glänzel, 1990; Everett, 1998; Gibbs, 1995).

In these contexts, some authors argue that the advances of ICT provide the necessary platform for access to and dissemination of scientific research and scholarship (Holdom, 2005; Babini, 2006). Some Latin American governments as well as research and other academic institutions and organizations have taken into their hands to increase the accessibility to Latin American research through the use of ICT. During the last decade they have initiated a range of

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\(^1\) *The science that is not seen, does not exist.*
\(^2\) For the situation in Latin America in general see Cetto & Alonso-Gamboa, 1998 or Patalano, 2005; for Brazil see Alvarenga de Araújo, Dias, Ribeiro Garcia & Araújo da Silva, 2006 or Araujo, Moreira & Lana-Peixoto, 2006; for Cuba see Araújo Ruiz, 2004; for Costa Rica see Córdoba González, 2006.
ventures to improve availability and free access to online scholarly publications (Babini & Fraga, 2006).

An example of such a venture is the Scientific Electronic Library Online (SciELO), a model of cooperative electronic publishing of scientific journals successfully established in Brazil, and expanded recently to other Latin American countries (SciELO, 2008). Other collaborative ventures, such as Latindex, Redalyc, and CLACSO’s Network of Virtual Libraries have been striving to provide online catalogues, directories, and indexes of scholarly publications in Latin America, as well as open access to full-text articles and books (CLACSO, 2008; Latindex, 2008; Redalyc, 2008). These developments have made available a wide range of online scholarly publications and are therefore a source of hope for access to research and scholarship in Latin America.

Yet, while ICT is being praised for having (at least partially) addressed issues such as unpublished results or isolation from a wider academic community, it has also been criticized for having widened the gap for certain groups (Arunachalam, 1999, 2003), and there is the danger that peripheral countries might find themselves in a position of not being able to bridge that gap. So, while countries such as Brazil or Mexico (countries I’ll identify here as the semi-periphery) might have the size and capacity to establish their own independent ICT platforms for the dissemination of scholarly knowledge, other countries such as Peru, Costa Rica, or Uruguay (the periphery), with a reduced scientific production and resources, have less capacity to develop systems on their own. On the other hand, some authors contend that these countries could only benefit from regional

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3 SciELO was conceived to meet the scientific communication needs of Latin American countries by providing an efficient way to assure universal visibility and accessibility to their scientific literature. In 2008 it supported 550 journals.

4 Latindex, the Regional System of On-Line Information for Scientific Journals in Latin America, the Caribbean, Spain and Portugal, is a cooperative effort by a network of institutions to gather and disseminate bibliographic information about scientific production in the region. In 2008 its directory offered information about over 16 thousand journal titles.

5 Redalyc, the Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal, offered access to over 540 journals (most of them in the social sciences and humanities) among other projects related with the dissemination of scholarly knowledge.

6 CLACSO, the Latin American Social Sciences Council, is an international non-profit organization integrated by 228 centers and programs spanning across 25 countries in Latin America and the Caribbean, providing support to social sciences in the region at many levels, including a database and network of virtual libraries.
strengthening, and that ICT could help disseminate their scholarly production and assist them to fully benefit from the steps already taken by their neighbours to provide a framework and systematize access to all Latin American scholarly research (Neves, 2004; Rivero Díaz, 2006; Villanueva, 2006).

I.1. What About the Little Guys? Focus of Research and Problem

Unfortunately, there is little to no information or research conducted about the present situation of academic production and dissemination in these peripheral areas (e.g., Central American countries, Ecuador, Peru, Uruguay), as most literature about Latin America is actually concentrated on research and publishing activities carried out in the semi-periphery (Brazil, Mexico and Argentina). Given the apparent initial success of utilizing ICT to disseminate scholarly knowledge in the semi-periphery (Haider, 2005; Holdom, 2005), in this study I set to explore the degree to which ICT has been used in the periphery for that purpose and whether that use could be better matched to the specific needs of Latin American countries with less resources, so that they not only avoid being left behind but also benefit from developments taking place in the region.

Within that context of the general developments that have taken place in Latin America during the last decade in the area of ICT and research dissemination, I focused my study on one of the peripheral countries in Latin America, namely Uruguay. It is within peripheral countries such as this, that I assume the benefits from inclusion in the global exchange of ideas through ICT would have a greater impact, given that, for example, their reduced size would make it unlikely for printing to ever become a sustainable option.

In Uruguay, at the public national university, the Universidad de la República, I explored the responses of faculty members, staff members, editors and librarians, to the forces of internationalization, with a particular focus on how the changes resulting from these forces affected
their efforts to disseminate academic knowledge. The individual dissemination strategies used, while inscribed within the institutional frame and (written and unwritten) policies of each department, school, and the university in general, also did respond to sometimes contradictory national and international pressures. I specifically studied how these strategies kept academics isolated or helped them participate in the regional and global exchange of ideas.

My approach to this study was to examine critically what the literature posed as a problem, that is, the lack of dissemination and visibility, specially when it was conceived as low representation in international indices. While efforts seemed to have been concentrated on providing the technology that would improve publishing and access in the periphery, I thought it necessary to keep in mind that problems are rarely limited to a technical gap:

As Jim Gray, an oft-quoted U.S. computer scientist, said, “May all your problems be technical” (Computer Science 2004, 95). Building a technical framework for scholarship is much easier than understanding what to build, for whom, for what purposes, and how their usage of the technologies will evolve over time. […] Scholarly information and practices […] do not exist in a vacuum. Social, economic, technical, and political trends all influence the environment for scholarship. Social factors can have profound influences on how technologies are developed and deployed. (Borgman, 2007:3)

I saw the use of technology to facilitate and improve accessibility to Latin American-generated scholarly knowledge as just part of the picture. Issues of prejudice, language, and status or differential symbolic capital (Bourdieu, 2001) between research carried out in countries of the core and the periphery, also represent barriers to the dissemination of Latin American research. So, I needed an approach that would be less eager to find a problem to “fix” by providing more ICT tools, and more willing to first observe and evaluate the present situation of academic periodical publications within the context of research conducted in the periphery: “[I]t is incredibly arrogant to assume either that we usually know the way or that Latins are eager to follow the way as we see it. For social science investigators, at the very least, the question about Latin America must be, ‘What have we here, and how does it work?’ not ‘How can we change it?’” (Blair, p.50 in Ross, 1970).
In addition, the lack of studies on the topic in the particular university and country, made this approach not only a preference, but a necessity. Only after evaluating the situation in the light of its particular context, and as defined by the different stakeholders directly involved in the successive steps of the process of production and dissemination of academic knowledge, could I consider where the problem was. For that, I would also have to shift between a micro-perspective and a macro-perspective, from the individual, through the institutional and national context, to the international or global forces.

I.2. A World Within a World Within a World

An issue such as the dissemination of academic knowledge needs to be observed in a context that goes beyond the institutional or even the national sphere, more so in light of the extent to which internationalization of higher education and technological advances have been challenging traditional forms of knowledge dissemination in the periphery. Therefore, as a theoretical framework for this study, I drew from the world system perspective.

Wallerstein (1975) explained this perspective as stemming from a point of view largely expressed by Asians, Africans and Latin Americans or those particularly interested in these regions, with arguments that had in common a criticism of the developmentalist perspective. The world system analysis is an approach to social analysis and social change, rather than a theory. The common assumption, explicit or implicit, linking these arguments is that:

[T]he modern world comprises a single capitalist world-economy, which has emerged historically since the sixteenth century and which still exists today. […] [N]ational states are not societies that have separate, parallel histories, but [are] parts of a whole […] Since different parts of the world play and have played differing roles in the capitalist world-economy, they have dramatically different internal socio-economic profiles and hence distinctive politics. But to understand the internal class contradictions and political struggles of a particular state, we must first situate it in the world-economy. […] We can then understand the ways in which various political and cultural thrusts may
be efforts to alter or preserve a position within this world-economy which is to the advantage or disadvantage of a particular group located within a particular state. (Wallerstein, 1975:16)

By taking this approach, I am acknowledging that, despite my focus on a particular educational institution in Uruguay, the past and present situation of this country, as well as the historical development of its educational system, have been shaped by their relationships with other regions of the world, as well as by their immersion in a network of economic, cultural, and power relations.

Wallerstein describes our world system as characterized by mechanisms which bring about a redistribution of resources from the periphery to the core. This concept can be applied, for example, to resources generated in the realm of academia such as the transfer of scientific knowledge in the form of brain drain, articles and other written products, or research conducted in the periphery that follows a research agenda set by the centre. It is in this, more circumscribed aspect of academia, that I use the world-system perspective for this study.

Wallerstein also highlights the dialectical nature of the world-system perspective, meaning that when analyzing the system—indeed, the academic knowledge system—one asks “not what is the formal structure but what is the consequence for both the whole and the parts of maintaining or changing a certain structure at that particular positions of that moment in time” (Wallerstein, 1975:17)

Latin American scholars Torres and Schugurensky (2001) support the use of a world-system perspective when it comes to the impact of internationalization processes on education. According to them: “[a]n analysis of university restructuring has to take into account the context of power dynamics in the economic world system and particularly the role of corporative enterprises and supranational organisms in the promotion of particular reforms [of] higher education” (2001:12).
I.2.a. Center-Periphery Relations in the Academic World

Since the emergence of dependency theory in the 1960s and 1970s, a new worldview “categorized countries according to four levels of involvement with the world economy – center, semi-periphery, periphery, and external” (Wallerstein, 1974, in Abdenur, 2002:60). Applied to the academic sphere, I will restrict the divisions to center or core countries (i.e., U.S., U.K.), the semi-periphery (i.e., Brazil, Mexico), and the periphery (i.e., Uruguay, Peru). In addition, although the notion of periphery within a world-system is usually linked to Wallerstein (1975; 1999) and more commonly used in relation to economic aspects, I will use here the more strictly applied notion put forth by Stolte-Heinskanen (in Maričić, 2002:n/a) as it relates directly to scientific activity:

Most of the world’s scientific activities are concentrated in a few countries, which from a global perspective can be defined as the center. Other countries, which for historical, economic, social, cultural reasons, represent the smaller share of global scientific activity may be characterized as the periphery. Although the concept of periphery is usually associated with the Third World countries that are relative latecomers to western science, many small, economically advanced countries (in Europe for instance) for structural and cultural (or linguistic) reasons are also in a peripheral position.

Maričić (2002:n/a) points out that both types of countries (scientifically peripheral, whether economically developed or developing) “face similar problems with respect to the automatic adoption of evaluation procedures developed in the centre for assessing its scientific activity.” A peripheral country in a scientific aspect, according to Maričić would be one characterized by smallness, lack of societal equilibrium, and communication barriers. In regards to the first aspect, a scientific community would be considered to be relatively small

in regard to the fields of current research. The sheer size of the country (geographic and/or demographic), is not of sole importance, but rather the structure of its scientific endeavour. Peripheral scientific communities have a sub-critical research mass in many of the research fields pursued. Under such circumstances there is frequently a lack of qualified scientists to take part in the peer review process. Instead, subjective “in-person assessments” come to the forefront. (Maričić, 2002:n/a)
The smallness of peripheral scientific communities produces in turn what Maričić (2002:n/a) denominates a societal non-equilibrium, that is, the lack of commonly-agreed, self-regulatory mechanisms adopted in other societies. In Uruguay, that situation was clear, for example, in the lack of agreement on citation standards for a particular discipline (Editor, 207), or the absence of an external (at the national level) regulatory body for academic journals that would grant external validity. As a consequence, widely different formats coexisted under the same banner.8

As for communication barriers, Marčić (2002:n/a) explains that any barrier that works against bringing closer science from the periphery and the center “hampers the very substance of this human endeavour [science]. The ideological and political barriers may be regarded as special cases, and they may or may not persist for long, but the sociocultural barriers are very serious, and among them the language could be regarded as the most important.”

In chapter III, I will further explore the barriers faced by peripheral countries when doing research. For now, I would like to add to Maričić’s clarification, that center-periphery relationships that exist at the global level also take place within regions and countries. In Latin America, for example, it is often the case that most important research centers and institutions of higher education are located in the biggest urban centers, generally the capital city of each country. In Uruguay, and until very recently, research and higher education had been concentrated exclusively in the capital city of Montevideo. Although some attempts have been made and plans are in place to counterbalance this situation by opening programs and higher education institutions in the rest of the country, centralization and predominance of scholarly activity in Montevideo is expected to continue. Uruguay (or Montevideo), in turn, finds itself in a peripheral relation to its bigger neighbours, Argentina (mainly Buenos Aires) and Brazil. These countries, in turn, although central

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7 When citing or referring to an interviewee’s comments, I’ll identify him/her by the main role under which the person was interviewed plus a number. For further details on the interviews please see Chapter II.
8 SciELO and the other enterprises mentioned before had started to fill that regulatory role of by requiring periodical publications to comply to a list of parameters in order to be accepted in the main international indices and databases.
within the context of the Latin American region, are peripheral to the academic centers at a worldwide level.

So, center-periphery dynamics do not only operate between what have been distinguished as economically “developed” and “developing” countries, but also within regions and countries: the relationship is relative and fluid and changes as we pick different aspects to study. As Stolte-Heinsakanen’s explanation above indicated, an economically developed country might still be peripheral when it comes to science production. In addition, a particular center-periphery situation within science might shift if we look at different disciplines. For example, in the field of anthropology, Kuwayana (2004:9) argues that a world system of anthropology would have the United States, Great Britain, and France at the core, because “even though there are internal differences, their collective power is such that other countries, including those in the rest of Europe, have been relegated to the periphery” (in Ribeiro & Escobar, 2006:2-3). As we can see in this particular case, the understanding of a world system that organizes academic interactions and flow of scholarly products is key to understand the issue of scholarly production in the periphery:

> [T]he world system of anthropology defines the politics involved in the production, dissemination, and consumption of knowledge about other peoples and cultures. Influential scholars in the core countries are in a position to decide what kinds of knowledge should be given authority and merit attention. The peer-review system at prestigious journals reinforces this structure. Thus, knowledge produced in the periphery, however significant and valuable, is destined to be buried locally unless it meets the standards and expectations of the core. (Kuwayana, 2004:9-10, in Ribeiro & Escobar, 2006:3)  

The same type of relations can be extended to other disciplines with other participants in each relative position. Yet, leaving aside the particularities of each discipline, it is the world system of science (taken as a unit) that I will be referring to throughout this study. Also, despite acknowledging vast differences in scientific production within countries, due to the ease of using

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9 Further analysis on the nuances of center-periphery relationships can be found in Archetti (2006) and Yamashita (2006).
data at the state level, I still will be referring to countries as a unit, with the understanding that I will be talking about the main centers of scientific production in said country.

I.3. A Critical Look

I will approach my object of study from a critical perspective. As Escobar (2000:166) points out, a critical approach offers appropriate tools for “the analysis of apparatuses that systematically link power and knowledge.” This approach helps to “illuminate the dominant sites of knowledge production and [to recognize] this process as political,” allowing to “examine critically the grounds upon which development has been defined” and considering the question of alternatives. As this perspective links the issues of power, development and communication, considering technological networks and the interactions of the local and the global, it is therefore particularly well suited for my study.

We will see that despite the discourse of unprecedented change brought about by ICT and the internationalization of higher education, and despite having been object of numerous criticisms, systems like peer-reviewed journal are remarkably resistant to change – which also brings the question of who benefits from the system.

The perspectives presented here fall under the umbrella of critical research approaches and they have in common “an emancipatory intent aimed at uncovering oppressive ideologies in society” (Jackson et al, 2003:215 in Smyth & Holmes, 2005:1). This concern is based on a particular value orientation: “Criticalists find contemporary society to be unfair, unequal, and both subtly and overtly oppressive for many people” (Carspecken, 1996:7). Consequently, criticalists consider that research should incorporate a concern for social change and action. As research is conceived as being value-laden, critical awareness and self-reflection are of major importance. Issues of power and how it affects social relations appear as key elements in this type of research.

Questions related to contested power, “who controls the production, access, and distribution of knowledge, and whose and which knowledge” is privileged and deemed legitimate, are not new
Yet, as information and knowledge take on a chief role in the 21st century in determining who holds power, it is imperative to bring a critical perspective to the study of these issues. The time to do so is particularly opportune. The fact that “[w]e are witnessing a transitional period for science communication due to the impact of the information technology” (Maričić, 2002:n/a) presents us with the perfect opportunity to critically revise forms of science communication and scholarly communication in general. Bringing a critical perspective will hopefully promote insights into new forms of understanding and working with science communication, because “[w]hile the new technologies receive the most attention, it is the underlying social and policy changes that are most profound and that will have the most lasting effects on the future scholarly environment. This is an opportune moment to think about what we should be building” (Borgman, 2007:xviii).

I.3. Common Grounds

I.3.a. Open Science, Open Access, and the Common Good

One of the problems in research and academic communication is to bridge differences by setting a common background as a starting point for discussions. That difficulty increases when conducting interdisciplinary and international research. Lacking a common ground of understanding, assumptions are made based on the particular experiences and inclinations that are never fully stated. I thought it useful then to make some of these assumptions explicit and to briefly define some of the concepts that I will be using.

The basic assumption underlining this study is that science should be “open.” Borgman (2007) notes that the notion of “open science” has a long tradition in Western thought: “Scholarship is a cumulative process, and its success depends on wide and rapid dissemination of new knowledge.
so that findings can be discarded if they are unreliable or built on if they are confirmed. Society overall benefits from the open exchange of ideas within the scholarly community” (Borgman, 2007:15). Borgman goes on to explain that open science is based on the premise that scholarly information is a form of “public good,” and therefore, one of its key defining elements is that it can be shared without its value being diminished. The interest in improving processes and structures that enhance scholarly communication and access to scholarly knowledge “is an implicit endorsement of open science” (Borgman, 2007:16) that “benefits both scholars and the society at large” (Borgman, 2007:65). The ideas of “open science” and “public good” become even more relevant when we refer to public institutions such as the Universidad de la República, given that they are supported by public funding and incorporate in their mandate an explicit obligation to give back to the community and to contribute to the improvement of society (UR, 2009).

Yet, regardless of what the ideal principles of science and public education might be, the reality has turned out to be far from open. Already in the 1970s, Ivan Illich (1971:n/a) was denouncing the degradation of the cooperative nature of science:

[A] valuable body of scientific objects and data may be withheld from general access —and even from qualified scientists— under the guise of national security. Until recently science was the one forum which functioned like an anarchist's dream. Each man capable of doing research had more or less the same opportunity of access to its tools and to a hearing by the community of peers. Now bureaucratization and organization have placed much of science beyond public reach. Indeed, what used to be an international network of scientific information has been splintered into an arena of competing teams. The members as well as the artifacts of the scientific community have been locked into national and corporate programs oriented toward practical achievement, to the radical impoverishment of the men who support these nations and corporations.

The reasons behind an increasingly “closed” science might have changed with the passing of the decades, but the fact that science has become anything but “open” still applies. Borgman (2007:16) decried the fact that “open science has come under threat in recent years due to changes in

10 Of course, the speed of the transmission is more pertinent for the hard sciences than social sciences or humanities.
intellectual property regimes, an increasing emphasis on data as scientific capital, and new models of electronic publishing.”

Fortunately, models of scholarship such as “open access publishing” and “knowledge commons” have been lately put forward as a way to reinstate the basic principles of open science (Borgman, 2007). “Open access” (OA) or “open access publishing” has been generally described as the process through which material is made accessible on internet for free and without barriers to read and use.\(^{11}\) Although the definition of “open access research literature” has been restricted in some cases by incorporating peer-review processes (Borgman, 2007:100) or various forms of payment or control of access (Willinsky, 2006, in Borgman, 2007:103), I will refering here to the more general and broader use of the term – as this was how OA was understood by most of my interviewees.

I.3.b. Communicating About Communication

As for concepts such as communication, dissemination, information and knowledge, Borgman (Borgman, 2007) points out that hundreds of versions exist. For our purposes here, it will suffice to conceptualize scholarly knowledge as processed information presented in the form of, for example, academic articles in journals. Yet, I will sometimes use scholarly information and knowledge interchangeably.

Similarly, I will use the concepts of communication and dissemination (of that scholarly knowledge) interchangeably. I will distinguish, though, between communication/dissemination and distribution of scholarly information/knowledge. The first terms I will use to refer to all the activities after the text is written, including the activity of making it public (whether orally or in written format). Distribution will be limited to the particular activities that are performed to facilitate that

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\(^{11}\) See Open Access in http://en.wikipedia.org/wiki/Open-access
those written texts (once they are available, electronically or in print) reach their audiences, such as indexing, e-mailing, inclusion in databases or physical distribution of printed copies.

I.4. Summary

Through this study I wanted to look at the process of dissemination of scholarly communication in the periphery, under the particular form of periodical publications in a public university and in light of the recent global processes of ICT development and internationalization of higher education. To approach this subject I chose a critical point of view that takes into account the particular relative position of the researcher and its production, the academic institution, and the peripheral nation within the world-system. After having defined some of the basics concepts and premises I will be using throughout this study, I will expand on the methodology and the particular questions that have guided this study in the next chapter.
II. BEHIND THE SCENES: Methodological Considerations and Background Literature

[Psychologist Leon] Festinger, who coined the phrase cognitive dissonance, observed that when our beliefs collide with the objective facts, we’re overwhelmingly inclined to throw out the evidence. Or at least to reinterpret the facts so as to protect the belief system. Grierson, 2007:55

II.1. Research Objectives

For this study I set out to explore current forms of dissemination in a Latin American university - the Universidad de la República (UR) of Uruguay, the national public university and main center for research in the country. My main objective was to find out about the publishing strategies employed by academics within a framework of rapid technological development and increasingly globalized higher education - as both elements are changing the way academic production is disseminated. I particularly focused on publications, and within them, the utilization (or not) of newer technologies for journal publishing.

A better understanding of the current state and the dynamics of change in academic publishing in the light of internationalization and technological advances would serve to inform current institutional and national restructuring efforts as well as regional and international development efforts and provide a baseline with which to assess changes in the coming years. But following Wallerstein’s (1999) and Flyvbjerg’s (2006b) promotion of a more value-laden and engaged practice of social sciences that strengthens the pertinence of academic research, the research was also generally guided by the following questions (paraphrasing Flyvbjerg): Who gains and who loses in the process of scholarly dissemination, by which mechanisms of power? In light of the answer to the first question, are current practices desirable? What can and should be done? These
broader questions helped in providing an evaluation of the situation and recommendations for the future.

II.2. Qualitative Approach and Case Study

When exploring topics where there is little or no previous research information on which to base the direction of the study, it serves to use an approach that provides enough flexibility to make choices as the fieldwork progresses. Since the issue of academic publishing in Uruguay hadn’t been investigated (Rocca, 2000), I needed an approach that would suit the exploratory nature of this study and provide insights about the different elements involved in the efforts to disseminate academic knowledge in the periphery. Using a qualitative approach allowed me to take into consideration the context in which the activities of research dissemination took place –a key element– as well as to gain a better insight into the complexity of academic publishing in the periphery. Flyvbjerg (2006a) stresses the key role that qualitative case studies play in understanding complex issues. Considering the various interrelated forces at play facilitated a holistic, in-depth study of the phenomenon and helped me to understand how the diverse members of the university experience and navigate the structures in which they find themselves.

With a qualitative approach, the search for meaning implies the need to consider the insiders’ or emic perspective of the phenomenon under study, that is, to portray the phenomenon as the participants understand it. This interest in the insiders’ view is based on the belief that reality is socially constructed and therefore multiple interpretations of the same phenomenon are possible (Merriam, 1998). The best way to access the emic perspective on a certain phenomenon is to study it in its context. Therefore, the choice of a case study for research is most appropriate when the context of the object of study is especially significant to understand the phenomenon, or when the boundaries between the phenomenon and the context are not clear.
II.2.a. Case Study

There is a long tradition across disciplines of using case studies for the research of various topics, such as in sociology (Mitchell, 1983), political sciences (Leftwich, 1991), psychology (Langhout, 2003), health (Paré, 2002; Seguire, 2000; Zucker, 2001), information systems (Darke, Shanks & Broadbent, 1998; Kozma & Anderson, 2002; Paré, 2002), and organizational studies (Lee, 1989). Education in general (Figueroa & Valle, 1996; Haigh, 2001; McCowan, 2006) and higher education in particular (Corcoran, Walker & Wals, 2004; Darko-Ampem, 2004; Muthayan, 2005) are not exceptions when it comes to the use of case studies for research. The value of case studies has not only been evident in research but also when used for other purposes such as policy development (Flybjerg, 2006a; Leftwich, 1991), program evaluation (Cohen, 1990; Laperriere, 2006), and teaching (Leenders & Erskine, 1973; Leftwich, 1991; Kyburz-Graber, 2004).

Case study research has been a popular choice to conduct research in various areas of education and it has been found to be “the most suited to the study of higher education institutions” (Muthayan, 2005:66) as well as “the most widely used qualitative research method in information systems research [because it] is well suited to understanding the interactions between information technology-related innovations and organizational contexts” (Darke et al. 1998). Previous and recent studies on Latin American (Schugurensky, 1994) and African (Darko-Ampem, 2004; Muthayan, 2005) universities in particular, serve as examples on how case studies can greatly contribute to furthering our understanding of different issues related to knowledge production and dissemination in institutions of higher education in peripheral countries. As Wagley (in Ross, 1970:83) puts it: “I find that I learn most from … detailed studies of a circumscribed unit in a limited time and place.”

Various authors (Gomm, Hammersley & Foster, 2000; Gerring, 2004; Merriam, 1998; Verschuren, 2003; Yin, 2003) agree on the value of qualitative case studies: case studies offer valuable possibilities when looking to answer how and why questions (as opposed to the who, what,
where, how many and how much questions more common of quantitative inquiry). A case study is best used in situations where the boundaries between the phenomenon and context are not clearly evident, as one of its strength is that by studying the phenomenon within its real-life context, a case study has the capacity to contextualize social action.

The open-ended, emergent quality of case studies often leads to the discovery of unanticipated findings and data sources. For the researcher, this quality translates into little or no control and a requisite for flexibility and constant awareness of possibilities for data gathering. On the other hand, this opportunistic data-gathering approach, where various sources of evidence are used, allows the incorporation of multiple perspectives and voices. This richness of information, in turn, allows for a more holistic understanding and analysis of the studied phenomenon and strengthens the confidence in the study.

II.2.b. Selection of Case and Scope

The initial review of the literature about Latin American academic publishing revealed a scarce but growing literature on the topic. To understand the increased interest in academic publishing in the region it was necessary to consider the wider development of Latin American higher education in the last couple of decades. According to the literature on Latin American higher education, policies put forward in the 1980s and early 1990s criticized the public spending of resources to maintain public universities. These were perceived as outdated and inefficient and were increasingly forced to justify their existence. It was in that context that the research output of public universities became increasingly scrutinized.

As I’ve mentioned before, the literature available on Latin American academic publications provided a general analysis of Latin America or focused on one or two main countries, while the situation of smaller countries like Uruguay were ignored. So, to explore the dynamics of academic publishing in those countries, I chose the Universidad de la República (UR), the national public
university of Uruguay, as a case study. The university selected is typical in the sense that it faces similar challenges as other institutions in the periphery when it comes to research production and dissemination (Maričić, 2002; Villanueva, 2006). Its relevance in the regional context is that it is a case of macrouniversity, and in the national context its relevance is due to the fact that UR is the country’s oldest and still the largest and most important university, carrying between 70 to 85% of the country’s research and academic activity (Universia, 200712). Traditionally the only university in Uruguay, the UR has been facing increased pressure to compete against relatively new and expanding private universities.13

As the topic of the dissemination of scholarly knowledge directly relates to two of the main roles of the university –research and, less so, outreach– I considered both in this research. The other two main roles (teaching, and linkage, the relationship between universities and industry or business [Jameson, 1997]) were beyond the scope of this research.

Existing literature on Latin America scientific publications and preliminary explorations on Uruguay showed different patterns of publishing behaviour between the hard sciences and other disciplines (most notably social sciences, humanities, arts and life sciences) (Cetto & Alonso-Gamboa, 1997, 1998). The fieldwork research further confirmed that the hard sciences, being more responsive to academic activities as carried out in the center, at an international level, and often in English, do concentrate –or aspire to carry– their dissemination efforts within the most prestigious peer-reviewed and indexed periodical publications in the center. Therefore, and being interested in the possibilities and capacities of enterprises to publish locally, I focused on the possibilities that

13 The four Uruguayan private universities were excluded from this research. Still, exploratory interviews pointed to the fact that the private universities share some patterns of academic production such as lack of interest from authorities about publishing activities, disconnection between authors, editors, and librarians, itinerant editors, less-than-ideal work conditions, amateur editorial work and publications.
ICT offer to the other disciplines, particularly in the research-oriented (as opposed to the professional-oriented such as Law or Accounting) social sciences and humanities.

II.3. Data Collection

The importance of context for case studies, as for other qualitative studies, requires them to be carried in the field. The fieldwork for this study took place from October 2007 to April 2008 in Montevideo, Uruguay. Given constraints on time and resources, practical considerations came into play in the planning of the fieldwork research. Still, the fact that I had an insider’s knowledge of the university and country as well as previous contacts, expedited the process and allowing a depth in the study that would have probably not been possible by an outsider in the same timeframe. In Uruguay, I visited the Universidad de la República and met with faculty, researchers, editors, librarians, students, staff and others interested in scholarly publishing. I also met with commercial publishers and printers, and members of private universities.

Because of their focus on complex issues and the need to provide holistic description, qualitative approaches generally include and combine more than one data source. Although there are no agreed upon methods for collecting data for case studies, interviews, observation and documentation tend to be the most commonly used. For this study I used these research techniques and multiple sources to gather data, including primary and secondary sources. Since the available literature on the particular topic of Uruguayan academic written production was almost nonexistent, I had to rely heavily on interviews with key actors and informants, observations, unpublished documents, as well as internal statistical and administrative information. Given that the university was at the moment of my fieldwork going through a process of reform, I also resorted to media coverage of university affairs, official statements, public debates, pamphlets and other grey literature as sources of information about ongoing debates.
II.3.a. Interviews

For interviews, I started with a list of previous-held contacts. These were people who I knew were involved in research and publishing, such as faculty members who acted as researchers and/or editors. I then used a network selection or snowball sampling technique to be referred by my contacts and interviewees to potential respondents. I was looking as well for people in supporting, facilitating, or decision-making roles either as administrative or librarians, so I searched in directories and university websites, looking to identify people involved in publishing or who would know about different aspects of the process of publishing and disseminating research. When appropriate, I asked my interviewees at the end of the interviews to be introduced to those people I had identified, or to be referred to other people they would consider knowledgeable about the subject. In many instances, though, during the course of the interviews, the interviewees themselves offered names of people “I should definitely talk to.”

The reason I wanted a wide sample was to strengthen the internal validity of my research. With such objective, I looked for internal differences within the sample, exploring academic production and publishing cultures by discipline, school, and other significant aspects, such as the informants’ stage in their careers. The purposive sample evolved during the fieldwork, as I identified the main subgroups related to academic publishing (researchers, advanced students, editors, publishers, librarians, administrative staff). The number of interviewees in each category responded to their relevance to illuminate certain aspects of the research topic.

Accessing a wide cross-section of the key players in the process of publishing and disseminating research also served to strengthen the external validity of the research, as I compared and contrasted the concerns and issues existing within the UR and Uruguay with those expressed in the literature about the academic publishing industry in the rest of Latin America. The choice of this
approach proved to be invaluable because it usually confirmed, but at times challenged what appeared in the literature.

Through non-structured in-depth interviews I reviewed the cultural, editorial, and institutional issues present in scholarly publishing today in Uruguay, as well as the potential viability and contribution of technology, specifically open source online publishing software.\(^{14}\) The issues addressed ranged from the research culture that supports or hinders the participation in scholarly publishing to the technical means by which publications are produced and disseminated (see Appendix A for interview guidelines).

Forty-four interviews were carried out in total (see Appendix B for information on interviewees) in addition to contacts with several informants to gather specific information. Many of the interviewees acted in more than one capacity, discipline, or school, so, even if they were interviewed primarily in one of these positions, their answers, of course, were informed by the interviewees’ experiences in all of them.

The interviews consisted of a couple of broad open-ended questions at the beginning, followed by more specific open-ended questions organized under topics as the interview proceeded. The interviewees’ responses included the individual’s views about academic knowledge dissemination, publishing and related topics, both in their roles of producers and consumers of academic knowledge. They provided evaluations as well as factual information about the university and academic life, from historical reconstructions of the university’s past to current data on library usage and working conditions. Finally, I asked focused questions towards the end of the interviews to gather specific data and to double-check information provided during the interview or by other

\(^{14}\) This study is part of the research carried out by the Public Knowledge Project and Open Journal Systems (http://pkp.sfu.ca and http://pkp.sfu.ca/ojs).
sources. In some cases, I used a list of the interviewee’s publications\textsuperscript{15} previously collected from the Internet to elicit, challenge or foster detailed responses.

The use of open-ended interviews allowed the interviewees to speak for themselves, answering according to their priorities and at the same time allowing me to better examine how the different actors perceive and experience reality. The interviews lasted on average one hour; most of them took place at the university’s offices and were electronically recorded. The interviews and all other communications with the informants were conducted in Spanish. I was responsible for the transcription of all the interviews, as well as the translation into English of the quotes that appear in this study.

II.3.b. Observation & Documents

The collection of primary data also incorporated the observation of available university resources, and included visits to university libraries and computer rooms, attendance to journal and book presentations, and to internal and external conferences, during the same 6-month period as the interviews. The principal aim of these observations was to be able to compare and contrast against the interviewees’ own evaluation of their resources.

I chose the methods according to their usefulness to clarify certain aspects of this research. For example, to evaluate libraries’ resources, in addition to interviews with librarians and users, I relied on visits to the libraries and direct observation and use of the resources. This allowed me to have a direct experience, for example, of the difficulty researchers have when trying to access materials from libraries, especially when these libraries are run by only one or two staff members. In two cases I had to visit the libraries three times before finding them open, regardless of the

\textsuperscript{15} Initially, I requested a complete list of the participants’ publications as background data for comparative purposes, but given the lack of success, this aspect of the research was discarded. I relied on internet searches and scattered information posted on websites to compose a list of some of the interviewees’ publications. Many UR faculty members in the social sciences and humanities didn’t have a personal page, and in the cases they did, it was often incomplete or outdated. Therefore, a more thorough evaluation of the actual publications was not possible during this study.
schedules posted on the libraries’ websites or entrances. I chose to visit with more frequency the libraries that would be most likely used by academics in the social sciences and humanities, but also visited other libraries such as the one in the School of Veterinary and the School of Engineering for comparative purposes.

For the evaluation of ICT resources I also relied relatively more on direct observation and use of computers and websites than on interviews. This direct observation was necessary because an interviewee could deem a particular ICT-related situation as “good” – for example, because their department had gained access to internet in the previous two years – but a visit to the department would show that the connection was slow and unreliable and that there was only two or three outdated desktop computers to be shared among several professors.

As for documents, I collected articles about the university that appeared in the press (the three main national daily newspapers and two main weekly newspapers) for roughly the 6-month period I was in the country. I also gathered information about policies and the on-going reform on the university’s website, blogs, and grey literature produced by the university. The collection of those various materials as well as the on-site visits and observations allowed for a more complete understanding of the situation and made it possible to detect inconsistencies or confirm assertions made by the interviewees.

II.3.c. Triangulation and Validity

Brewer (2000:75) notes that “all methods impose perspectives on reality by the type of data that they collect, and each tends to reveal something slightly different about the same …‘reality’.” According to this author, qualitative researchers tend to “collect data from all sources and in all ways as best fits the purpose.” He recommends this methodological pragmatism to ensure a more rounded picture of studied phenomenon.
Denzin (1989, in Flick) sees triangulation as increasing scope, depth and consistency in methodological proceedings. The use of multiple sources of data with the intent of corroborating information provided by other sources was especially important in this case because the regulatory and structural changes that the university was undergoing produced voids and contradictory information. The information provided in institutional websites and documents and the information gathered during interviews often complemented each other, but it also served to detect inconsistencies, suggesting further aspects to explore. While Merriam (1998) calls attention to the fact that when employing a wide range of data sources, information might appear incompatible or even contradictory, Flyvbjerg (2006a; 2006b) warns against trying to reconcile these disparate versions of the phenomenon, because in there, he claims, resides the rich contribution of case studies.

The study was also informed by innumerable other, not-directly related readings and informal observations, discussions about and personal experiences with different educational systems, before, during, and after the period of research. Although it would be impossible to include all these influences here, I think it is important to acknowledge them.

The triangulation of methods (interviews, observations, participant observation, and document analysis) and sources (researchers, editors, administrative staff, etc.) provided validity and credibility to the study. As I mentioned before, I compared and contrasted information from the literature about the academic publishing industry in Latin America with information I obtained while in Uruguay. I also compared and contrasted the information obtained in interviews (with people from the UR as well as from outside), observation (library and ICT resources at different departments and schools), and documents (produced within the UR and external documents as well) with one another. The triangulation of data obtained from the different groups of interviewees also improved the trustworthiness of the data. By using a variety of sources and an suitable combination of methods, I tried to achieve a richer and more valid interpretation.
II.4. Limitations

II.4.a. Generalizability

Although case studies have been criticized for their lack of generalizability, this criticism stems from a poor understanding of how qualitative research contributes to knowledge development. In response to that, some authors have attempted to redefine the concept of generalizability to suit qualitative research, and qualitative case studies in particular (Donmoyer, 1990; Stake, 1995). For example, Eisner (1991) argues that in qualitative research “it is primarily the readers who determine whether the study or evaluation generalizes to their situation” (in LeCompte, Millroy & Preissle, 1992:748-9). It was in this function of pointing to important theoretical questions and connections that I approached related case studies and literature (Darko-Ampem, 2004; Maričić, 2002; Muthayan, 2005; Schugurensky, 1994; Villanueva, 2006) – proving that they can be extremely useful when addressing similar issues in other contexts. Also, in terms of generalizability, I was less interested in finding commonalities between the UR and other universities than in providing tools for internal (e.g., university authorities implementing reforms) and external evaluation (e.g., governmental agencies evaluating UR research and productive activities), as well as informing international development strategies of transfer of technology. Although I do not intend to generalize my findings, the common global forces that are affecting higher education institutions in Uruguay, might see similar responses and outcomes in other public universities and locations in the periphery.

II.4.b. Bias and Reflexivity

Any research study, and more so in the case of social research, face the problem of the bias introduced in the study by the researcher. As a researcher, you have to be aware of the impact of the researcher on the interviewees and vice versa, as well, the process of co-construction of meaning that
takes place. As one interviewee reflected: “I don’t know why [this topic] came up now, at the end of the interview, but, well, maybe … by objectivating, these things start to come up” (Faculty member, 19).

Acknowledging Wallerstein’s (1999) calls for awareness about the set of values that permeates social science, I tried to keep an awareness of my own biases throughout my fieldwork stage. Having been a student and a researcher at UR more than a decade ago, and having spent the last decade abroad immersed in other higher education systems, allowed me to compare institutions of higher education in time and across cultures – at the same time giving me an intimate knowledge of the university and the necessary distance to observe biases.16

The fact that among the interviewees were people I knew to various degrees and people I had never met before, provided a wider spectrum of responses. Established trust that only long term interactions can create allowed for candid evaluations and opinions. In those cases, the interviewees were comfortable enough to provide “off the record” information, information that would probably not have been otherwise revealed. In contrast, in some of the cases where I had had no previous contacts with the interviewee, at times there was a sense of vagueness in the responses.

The shared-experience, culture and language, on the other hand, created some unexpected problems. For example, the interviewee would hint at something (“you know”) rather than stating it explicitly, assuming –correctly or incorrectly– a shared understanding about the issue being discussed, and required me to keep pushing for explicit statements of what the interviewee meant.

To prevent skewing the interview to previously held notions I started the interviews with very general open questions in the line of “What do you do in UR?,” “What do you do –if anything– with your research after finishing?” or “Tell me about the journal.” Moreover, towards the end of

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16 “What people see is a function of what they have been trained or have learned to see in the course of growing up. Perceptual patterns are learned and culturally determined. Because they are culturally determined, they also are consistent. You see what you want to see and you don’t see what you cannot see because it does not fit with your experience, your prior learning. Our experience makes us see the world in a certain way. Our interests, values, and culture act as filters and lead us to distort, block, and even create what we choose to see and hear. We perceive what we expect to perceive. We perceive things according to our cultural map.” (Mooij, 1998:48)
each interview I asked whether they wanted to add anything else or had any question about the research or the umbrella project under which it was conducted, to make sure that we had covered all aspects the interviewee considered important.

One problem of using interviews is that interviewees might purposefully withhold or distort information. The fact that most of the interviewees were peers and familiar with the research process partially reduced that risk. Been perceived as a peer but at the same time an outsider also might have given interviewees some degree of freedom to answer. In some cases, the interviewees explicitly stated that they were withholding information (usually details that involved other people, or politically-charged information). Others adhered to purposely vague, politically correct responses, with a shared understanding that their position partially constrained them from giving some opinions – which also hinted to the politically charged nature of some of the issues discussed. In general, interviewees stated clearly when their opinions were purely personal, rather than being facts or an institutional position about a certain issue. They were also open when giving an opinion that they thought they weren’t qualified enough to give. Others acknowledged that their statements were only given within the context of anonymity and were not to be reproduced. Sometimes they gave both a more personal reading on the subjects discussed, as well as a more objective analysis of the situation. By resorting to several sources of data, I reduced the risk of accepting information uncritically.

II.5. Ethical Considerations

To reduce the chance of inappropriate research practices, ethical standards have been established to conduct qualitative research. Among the suggested steps to assure compliance with ethical standards are requesting ethical clearance by appointed institutions prior to commencing research and collecting written or oral consent from participants (Borg & Gall, 1989; Patton, 1990; LeCompte et al., 1992; Creswell, 1994; Bogdan & Biklen, 2007). Ethical clearance was granted by
the University of British Columbia (UBC) Behavioural Research Ethics Board and the subjects were all informed, consenting adults.

Given that the subjects were familiar with research procedures and were in many cases actively interested in the topic being studied, I foresaw neither risks to the participants, nor major problems with collaboration. When some interviewees expressed apprehension at the request to sign the written informed consent required by UBC Ethics Board, the oral consent was considered sufficient. It is interesting to note that most interviewees, even those that agreed to sign the consent, had something (mostly negative) to comment on the request for a signature – an aspect of the ethic procedures that the Ethic Board should review when research is carried in other cultures. Had the research not taken place in an academic setting, the difficulty to obtain signatures from interviewees would have been even greater – as stated by one interviewee.

Although ethical considerations come into play at the stages of accessing subjects and data gathering, it is during the reporting of results, where ethical considerations should be given more importance, as the forms and ways of disseminating the results can have consequences – negative or positive– for those involved. Sharing research findings with the participants, using pseudonyms, changing identifiable characteristics, or compounding characteristics of various subjects into one, are some of the avenues that researchers have used to protect the identity of the participants. In this study, information gathered was generally not of a sensitive nature. Yet some participants requested anonymity, and given the small size of the Uruguayan academic community, I eventually decided to maintain the anonymity and confidentiality of all participants by leaving out the names of the interviewees and informants and by removing from quotes, as much as possible, any other information that would identify them or others. As one interviewee explained: “given the small scale [of the academic community in Uruguay] there is an almost linear association between the name [of a person] and a topic” (Faculty member, 05).
The researcher has the moral obligation to provide some type of feedback to their subjects, especially in cases such as this, where subjects (and their departments and schools) might benefit from the process of reflecting in which they participated and from learning about the diverse strategies that exist for dissemination of their research. As part of this obligation to provide feedback, a workshop on online publishing was carried out by the Public Knowledge Project towards the end of the fieldwork period, to which all the interviewees until that point were invited and which several of them attended, together with other people interested in the issue. In addition to the information presented here and published in related articles (accessible free and online, in English and Spanish), I wrote, at the request of some interviewees, a brief evaluative report of the resources needed to have an online journal (which they needed to strengthen their case in front of authorities when requesting support for publishing initiatives), and participated in meetings with that purpose.

II.6. **Data Analysis and Presentation of Findings**

In the first round of analysis I looked to establish the topics that appeared in the interviews, which, as expected, varied between the different groups of interviewees (e.g., researchers versus librarians versus editors), but also overlapped at points (e.g., when researchers and librarians, in addition to editors, talked about journals). By assessing the weight and importance given by interviewees to some issues, I started to pinpoint emergent themes. After the interviews were coded by themes, they were grouped according to recurrent themes (e.g., information about structures and policies, libraries and journals, conditions of production). I weighed the frequency and emphasis with which some of these themes were mentioned, and themes mentioned only once or twice were discarded (e.g., gender issues). Organizing data in categories and searching for patterns or themes helped to describe and explain processes and structures, as well as to identify contradictions. The next step incorporated other data sources to describe various aspects of the university and the
process of knowledge dissemination. Then, I attempted to look at explanations and rationales behind the patterns described. By systematically organizing and re-organizing the data, I sought to make sense and gain insights of the phenomenon at hand.

The process of qualitative research has been equated to an art by some authors and the presentation of results has progressively incorporated art-inspired techniques requiring the researcher to decide what and how to report the findings (Macdonald & Walker, 1975; Stake, 1995). Flyvbjerg (2006b:239) talks about “the irreducible quality of good case narratives,” and while he agrees with the statement that summarizing case studies “is often difficult, especially as concerns case process” (241), he sees this aspect of case studies as an asset: “Good studies should be read as narratives in their entirety” (241).

While I chose to present this study following a relatively traditional structure, in the narrative itself, at times I departed slightly from a more academic or detached stance. I did so in an attempt to partially recover the initial dialogic structure used in scientific circles, one of narrating and sharing findings and experiences in letters. I feel this approach has increasingly been left aside for an often vacuous and highly formalized style of writing more concerned with demonstrating authority, claiming and maintaining it, than starting or continuing a dialogue. With that goal in mind I incorporated myself in the narrative, endowing statements with the fallibility of the individual, instead of resorting to the omitted (and omniscient\(^\text{17}\)) subject that invests an opinion or claim with the force of truth. Or as Nelly Richard (2004:88-9) says:

I introduce a subjective memory that betrays, with its first-person verbalization, the objectivity rule of academic knowledge, whose pretensions of validity and whose systematic nature rely generally on the nondefinition of the person. This nondefinition of the personal guarantees the abstraction of the philosophical and scientific metadiscourse entrusted with transcending the precarious detail of the

\(^{17}\) Omniscient as in “having infinite awareness, understanding, and insight; possessed of universal or complete knowledge” (Merriam-Webster Online Dictionary, http://www.merriam-webster.com/dictionary/omniscient).
enunciative contingency of the subject, silencing the accident of its modes, voices, nouns, persons, and genders from its discourse.\textsuperscript{18}

Finally, another aspect of the narrative I want to bring attention to my use of rhetorical practices (Lillid & Curry, 2006) typical of high context cultures (Hall, 1989), which rely on less explicit communication than would be used in low context cultures. I think the following quote best explains the point: “Chinese culture is like this,” says Prof. Yan. ‘I tell you everything around the center. So you must know what I mean. From all the information I give you, you should know; you cannot miss it.’”\textsuperscript{19}

\section*{II.6.a. Organization}

I divided this study in four main sections, themselves divided in chapters. After providing the general introduction to the problem, theoretical framework and the research design and execution in this first section, I next present the available literature on the topic of academic knowledge dissemination in Latin America, focusing on the general problems faced by periodical publications. Given that there was no direct study on Uruguay, the situation discussed in general under the title of Latin America will have to serve as a starting point for our discussion. I will assume that the situation in Uruguay would somewhat compare to the circumstances described for other countries.

In a second section, I will provide background information about the Uruguayan university to familiarize the reader with the context and facilitate interpretation of the rest of the information. I present there the main historical and institutional aspects of the Universidad de la República (UR),

\textsuperscript{18} It has been a concern of mine for some time that universities don’t seem at all encumbered with making their production more accessible to the general public. I think disregarding the way information is presented has the sad effect of often rendering research results unintelligible for anyone outside the specific field. This lack of concern for the form stems probably in part from the institutional lack of support for a researcher’s output that gives back to the community at large, and the relative weight given to internal communication such as journal articles. As Arms (2006) puts it: “a high proportion of the peer-reviewed literature is written to enhance resumes, not to convey scientific and scholarly information.”

outlining those structures most closely related to the dissemination of scholarly knowledge (e.g.,
libraries and publication offices) and the problems they face.

In the third section, I proceed to portray the present situation of academic publishing in
Uruguay as perceived by its different actors, and their responses to the pressures of
internationalization and technology. I provide the differing diagnoses of academic publishing
advanced by the various actors and how these diagnoses are reflected in different strategies and
informal school policies. In the final chapter, I discuss the findings and present the main conclusions
from the study, with suggestions for further research.

III. DISSEMINATION OF SCHOLARLY KNOWLEDGE IN LATIN AMERICA

Since the 1990s, the number of studies dealing with the topic of academic
communication has been steadily increasing; this trend has been attributed to the progressive
restructuring of the system of academic communication paired with the fast development of
information technology and electronic publications (Borgman, 2000; Russell, 2000). In Latin
America, the process of implementing technology for publication and dissemination of
academically produced knowledge has been identified by some Latin American organizations as
a key step to sustain the work of local scientists, and so, not only has it become a topic of
research among scholars but also the focus of attention of several organizations and projects in
the region during the last couple of decades (SciELO, 2008; Latindex, 2008; Redalyc, 2008).

Next, I will present the literature around the dissemination of scholarly knowledge in
Latin America, with an emphasis on academic periodical publications. After an overview of
the historic development and problems of scholarly publications in the region, I will focus on the
changes brought about by information and communication technology (ICT) and the direct

20 Given that language often overrides geographic or political considerations, much of the literature centers around
research and publications in Spanish and Portuguese, regardless of whether they are from Latin America, the Iberian
Peninsula or Africa. Still, as far as possible, the discussion will be centered in Spanish and Portuguese-speaking
countries in Latin America.
implications these technological advances had on the increased dissemination of Latin American research. I will discuss how ICT has been utilized to expand Latin American undertakings to facilitate the process of publishing thereby increasing regional and global access to Latin American research.

III.1. Yesterday as Today: A Brief History of Journals in Latin America

Journals in Latin America first appeared in the 1770s and until the nineteenth century consisted mainly of encyclopaedic publications studying natural phenomena and general scientific matters, usually organized, written, and published by single authors or scientific societies (Cetto & Alonso-Gamboa, 1998). During the 20th century, universities and academic institutions, as well as scholarly or professional associations, took on the role of scientific bodies previously played by the scientific societies. Many avenues emerged for the publication of academic work in universities, which eventually led to an explosion of new titles after 1940. By 1962, there were 950 active Latin American scientific periodicals (excluding the social sciences and humanities), mainly published by universities and scientific and professional bodies, but also by governmental institutions, museums and other organizations. Most of these journals were of local or national character, and were concentrated in a few countries (60% from Argentina, Brazil and Mexico, 18% from Colombia, Peru and Venezuela) and disciplines (50% in medical sciences and 13% in agriculture). As much as 85% of these journals contained original material, and included an abstract (in one or two languages) and a bibliography. According to Cetto and Alonso-Gamboa (1998:85), “these and other features indicate that, at least in some countries and in a few disciplines, there was in the early 1960s a scientific community (or an established institution) capable of sustaining a publication of good standard and adhering to the international rules of the game.”
Much of what characterized these publications continues to be valid today, according to the existing literature. For example, publications were often sustained by the personal effort of one or a few scientists, with minimal technical support and precarious financing, which contributed to low periodicity and irregularity of publication. Most of them were published only in Spanish or Portuguese and their international distribution was in general very poor, a reality which authors take as explaining the low profile Latin American journals had in international indices, which has remained constant around 3 or 4% across the years. The under-representation of Latin American journals in those international databases (Cetto & Alonso-Gamboa, 1998) has been used to explain the difficulty in evaluating more recent Latin American scientific production, although the prolonged and generalized political and economic crises that hit the region between the 1970s to the early 1990s severely affected academic institutions and consequently their capacity to produce, disseminate and have access to scientific literature.

III.2. Barriers to Academic Publishing in the Periphery

Academic publishing in the periphery is fragile for various reasons, and many of the problems faced by scholars and publications in Latin America (Albornoz, 2005; Arocena & Sutz, 2001; Patalano, 2005) are not exclusive of that region. Despite enormous differences in resources and capacities for academic publishing within and between the periphery and semi-periphery, common issues affect publishing in those regions. Next, I will present some of these issues and expand on those we have seen in chapter II, but focusing on Latin America.

III.2.a. Size

In many regions of the periphery, the community of scholars is too small to provide a critical mass. Pimienta (1992:3) notes that scholars comprise a very low percentage of the total population of countries in the periphery: “the relationship between the researchers’ population

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21 For information on the situation in other peripheral regions see, for Asia: Arunachalam, 1999, 2003, 2006; Canagarajah, 2002; and Toong Tjiek, 2006; for Africa: Altbach, 1997; Ouya, 2006; Ubogu, 2001; Zeleza, 1996; and for Eastern Europe see Maričić, 2002.
and the national population is between 1 to 10 per 1000 in industrialized countries, while in developing countries it is approximately 10 times less.” To get a better idea of the relationship, the author compares the researchers’ population of Latin America in the early 1990s to be of more or less the same size as the researchers’ population of France.

A direct consequence of the limited number of scholars is that the number of articles they produce renders it difficult, for example, to publish local journals with the regularity required by international\textsuperscript{22} standards (Albornoz, 2005; Maričić, 2002). It is common then, that journals in the periphery publish with less assiduity, often one or two issues a year, others just publish when they have enough articles. Another direct consequence of the reduced size is the difficult application of a strict peer-review system: there might not be enough specialists in a discipline or outside an institution to serve as external peer reviewers (Maričić, 2002).

III.2.b. Incentives

Journals play different roles for scholars in the center and in the periphery: for many Latin American scholars, the incentives to publish are limited. While in the center, publications are a clear means for promotion and prestige and have a significant exchange value, in the periphery, publications often do not grant the same level of economic return or status.

In Perú, Villanueva (2006:n/a) points out the fact that “tenured positions are reached on the basis of teaching abilities alone, with little consideration into research abilities and merits,” and “teaching responsibilities are not waived or diminished for the upper echelon of academics,” a situation which is replicated in many other countries in the region (Kent, 1996). Full-time positions in institutions of higher education are the exception, requiring academics to work various part-time jobs in order to make ends meet. For example, only 30% of academic positions in Mexico are full-time in terms of hours worked (Gil, Franco, et al. in Kent, 1996:89), 20% in

\textsuperscript{22} Rather than “international” these standards should be called “central,” as they are defined by the center, yet I will refer sometimes here to these standards as international to avoid confusion.
Central America (Tierney, 1996), and 16% in Uruguay (Bentancur, 2006). Under these conditions, time and funds for research and participation in national or international academic meetings is reduced.

This lack of support for research translates into a lower push for academics to publish. Villanueva (2006:n/a) explains further: “It is not that the social benefits of accessing knowledge are to be dismissed or discounted; it is that the set of benefits is different, because we are discussing different societies where knowledge plays a different role.” Also, because “not until recently was publishing a criterion for advancement, [publishing is] mostly done in local newspapers or journals of limited circulation” (Kent, 1996:89).

Conditions in the periphery also provide less incentive for publishing houses: scholarly periodical publications are mostly perceived as a service and carried by universities, rather than as a money-making business by a company. Many universities with publishing divisions produce books and journals for prestige reasons, and to establish themselves as leaders in their respective fields. Without a significant commercial reason, “most of these publications are expected to sell slowly and without financial gain for the publishing house or the author” (Villanueva, 2006:n/a).

Finally, the local production of knowledge is not highly valued by the Latin American economic and political elites, further discouraging efforts to research and publish (Arocena & Sutz, 2005).

III.2.c. Funding

In the periphery, science, as reflected by R&D expenditures, is a marginal activity. Researchers rarely participate collectively in setting a research agenda, and are disconnected from other social actors, businesses and productive sectors, and public policies (Arocena & Sutz, 2001). Therefore, scientific and technological development does not play the same key role in economic and social development as it does in the center.
Research institutions’ lack of adequate financial means hinders access to publications, research activities and dissemination of research results. Most university budgets do not allocate a specific amount for publishing activity. Also, greater sales do not increase the publishing budget as the earnings go back to the general funds of the university, and there are very few cases of self-financing (de Sagastizábal, Rubio, & González, 2006).

Important sources of funding for research in the periphery are international NGOs and foundations, which tend to provide funds for publication as an end product of research. The material thus published does not have to be actually sold to recover the investment (Villanueva, 2006). The unreliability of funding impacts directly on the sustainability of journals, which tend to be short-lived projects.

For libraries, scarce to non-existent funding or short-term budgets mean incomplete, outdated collections and no capacity for long-term planning. For journals, it means they must rely on a mixture of funding sources, including grant bodies, institutional subsidies or membership fees. For scholars, lack of funding translates in low salaries and multiple employment, meaning that professors might need to supplement income with other unrelated work, leaving less time for research and pursuing publication avenues.

III.2.d. Language

Although language is probably the ultimate barrier for readers and authors alike, its importance is usually downplayed by considering language in science as a non-issue23 (Rassool, 2006). Yet, language in science is anything but unproblematic. Some authors have raised the question about “the relations between language dominance (the use of English as a global science creole), the dissemination of knowledge, [and] epistemology” (Ribeiro & Escobar, 2003:3). Also, some studies seem to contradict the notion that one common language is the reality in science. For example, articles available in a Brazilian information science journal in

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23 English would have become that common language for science since the 1930s, after German lost that role.
any language other than Portuguese, regardless of the topic of the material or were the links were situated on the journals’ website, were significantly less accessed by local researchers than those in Portuguese (Araújo, Colaco, & Dias, 2004). The native language of the writer also seemed to be the language of choice at the time of writing. For example, a study in Brazil found that more than 90% of the papers on multiple sclerosis were written in Portuguese (Araujo, Moreira, & Lana-Peixoto, 2006).

It is also interesting to note that the inclusion of translated abstracts, though considered one of the standards to measure quality, might cause other problems. For example, in a Brazilian article, the wrong English translation of the Portuguese abstract provided a different interpretation of the results24 (Brunelli, Borba & Costa, 2005). In addition, the Spanish version of the abstract, which would be almost a mirror image to the Portuguese version, has been obviously translated from the English version – carrying the mistake. Some authors claim that “one important reason why many scientific articles do not meet the requirements from international journal reviewers, especially those submitted in English, is the result of poor and literal translation of the text” (Rassool, 2006:428).

Although the discussion about language exceeds the scope of this study, we have to acknowledge that knowledge production is never disinterested or neutral but rather a social product with political roots25 (Tierney, 1996; Said, 2001), and, within this process, the choice of

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24 Portuguese version: “Veirificou-se que a penetração da Revista é iniciante na América Latina e satisfatória no Brasil.” English version: “It was evidenced that the Journal’s role is inexpressive in Latin America, with a merely satisfactory penetration in Brazil.” Spanish version: “Se concluye que la penetración de la Revista en América Latina es inexpressiva y, en Brasil, es sólo satisfactoria.”

25 According to Tierney (1996:16), “the way knowledge gets defined privileges certain discourses and organizational arrangements and silences others. Thus, to understand how knowledge gets produced, we need to investigate the many areas where knowledge is located rather than unproblematically assume that a university is a disinterested arena where objective scientists may pursue their work.” Kitchin and Fuller (2005:10) note that, for evaluation purposes, it is expected that a scholar’s production “will consist of refereed articles in international journals that have a high citation index or research monographs published and distributed by international publishing houses. … as they are perceived to denote ‘quality’ and are much more likely to have a wider, global impact. Almost inevitably this means writing in English … What these measures mean is that … papers in regional, national, non-English or lower-ranked journals … take on less ‘worth’ in such evaluative systems.”
language is never innocent (Bourdieu, 1991; Wallerstein, 1998, 1999). Given the implications stemming from the decisions about which language to use for scholarly communication and the impact of choice of language for the dissemination of scholarly production from the periphery, it could be argued that the issue has not been discussed nearly enough in the literature.

III.2.e. Differing Cultural Parameters in Writing and Editing

Clearly language, but also differences in writing styles and parameters are key to communicating effectively (Carlino, 2004; Morales, Rincón, & Romero, 2004; Vega, 2001). The differences in writing styles preferred by some languages and cultures, make texts less appealing for reviewers with no knowledge of those traditions (Angelova & Riazantseva, 1999). In addition, some authors note that given the difficulty existing in the periphery to access up-to-date material there is a tendency to put more emphasis on foundational work and less on “the latest trends” in the discipline (Canagarajah, 2002; Kandiah, 2005).

As for editing, there is generally no standardized approaches to writing and publishing in Latin America. For example, journals in Latin America show “a very low level of bibliographic control, particularly in the case of the assignment of ISSN numbers” (Cano, 1995:121), and only 21% in a sample of 311 periodicals from the region involved editorial boards (Cano, 1995). The lack of common parameters, such as the use of terminology or key words affects the search and retrieval of information (Alvarenga, Dias, Ribeiro, & Araújo, 2006; Araújo, Colaco, & Dias, 2004).

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26 “Edward Sapir and Benjamin Lee Whorf hypothesized that the structure of language has a significant influence on perception and categorization. This implies that the worldview of people depends on the structure and characteristics of the language they speak. Users of markedly different grammars are led by their grammars toward different types of observations and different evaluations of similar acts of observation, and thus are not equivalent observers, but must arrive at somewhat different views of the world. According to this viewpoint, language is not only and instrument for describing events, it also shapes events. Observers using different languages will posit different facts under the same circumstances, or they will arrange similar facts in different ways” (Mooij, 1998:52-3). Mooij goes on to give examples of untranslatable concepts, asserting that “[l]anguage is much more important than many […] realize. It is common knowledge among those who are bi- or trilingual that copy carrying cultural values is difficult to translate. Monolingual people generally do not understand this” (55). De Sousa Santos (2007:39) summarizes it best: “language enables certain ideas to be explained and not others”. 
The variations found between journals can be partly explained by the development of a small number of publications directed to a local or national-wide readership. With ICT and the push for internationalization this lack of standardization starts to be perceived as a problem. The absence of financial and professional support for publishing enterprises that follow international guidelines compound that problem. As an answer to that, some authors have pointed out the need for formal training in the varied aspects of scholarly writing and publishing (Babini, Vergara, Sadier, González, & Medici, 2006).

III.3. **Underrepresentation in Databases: The Chicken or the Egg?**

Partly because of having different language and publishing standards, but also partly because of the structural situation between the center and the periphery, few Latin American journals are indexed in international databases. According to the literature on the topic, this affects the journals’ visibility outside their immediate community, limiting the range of influence of Latin American scientific production to the national or regional level. Latin American research is thus underrepresented in the principal databases: “the participation of Latin American scientists in the ‘principal current of science’ –measured according the percentage of articles signed by authors in the region in the principal databases– was practically nil: less than 3% in the principal databases” (Aguado & Rogel, 2006:210).

Not being indexed in the main databases has repercussions in the way periphery journals are perceived, at home as well as abroad, with publications and knowledge produced in the periphery considered less valuable. This perception, in turn, affects the distribution of resources: at the time of granting projects or positions, it is not unusual that governments, academic and funding institutions, from the periphery as well as the center, give more weight to publications in journals from the center. Consequently, periphery scientists sometimes prefer to publish in journals in the U.S. or Western Europe over journals in their own countries or region, while
center scientists rarely, if ever, publish in journals in the periphery. For the same reasons, libraries and individuals might subscribe to journals from the center, ignoring Latin American journals. These choices, in turn, keep weakening the science in the periphery. The problem is compounded because the majority of databases and indexing services for academic content are compiled and produced in the center. The literature points out other biases that do little to help the situation, among them, the situation of dependency, the perception of the periphery as homogeneous (Zeleza, 1996), misguided attempts to help (Avery & Allen, 2002; Pimienta, 1992; Zeleza, 1996), and preconceived notions about who could or should be a reader/user versus an author/producer, editor, peer-reviewer, or publisher (Altbach, 1997; Witten, Loots, Trujillo, & Bainbridge, 2001).

What remains to be seen, and the literature does not clarify, is to what extent one condition (e.g., low visibility, lack of status, bias, differing parameters) is a consequence of the other. As it stands, the system seems to be organized so as to maintain the status quo: the barriers to the production and distribution of knowledge result in a failure to participate in global scholarly networks (Patalano, 2005), making it increasingly difficult for Latin American scholars to carry on with their work and participate in the global exchange of ideas.

III.4. Technology to the Rescue – or Not?

Despite the agreement on the existing problems in the periphery regarding circulation of information, across the literature, ambivalence exists regarding the impact technology might have to solve those problems. The advent of telecommunication technologies has been seen by some as the key to permit investigators to access international databases and to communicate with other researchers around the world, and access to adequate and up-to-date scientific and technical information has been deemed essential for the economic and social development of the region, especially to support decision making processes in the planning, formulation and
implementation of public policies, as well as to support professional development and practice (Arocena, 2004; Demo, 2005; Fischman, Ball, & Gvirtz, 2003; IESALC/UNESCO, 2006; Schugurensky & Myers, 2001; Tierney, 1996).

But while the general trend is to embrace ICTs and to see electronic journal publishing as providing a tool to combat issues faced in the periphery, some authors have voiced their concern about how the patterns of social exclusion might be replicated in the virtual world, widening the gap between the center and the periphery and making researchers even more dependent on the knowledge monopoly of the center (Wallerstein, 1975; Everett, 1998; Arunachalam, 1999, 2003, 2006).

One of the points raised is that the levels of access to information and the capacity to use technology and difficulties in carrying academic activities vary widely between regions, institutions and individuals. In Latin America, most of the regional production is concentrated in Mexico, Brazil, Argentina and Chile. Although these countries are considered as part of the semi-periphery, it is also possible to observe the dynamics of center-periphery taking place within these countries. There, the majority of research is done in public universities and research centers, which together with the best libraries and communication infrastructure, are concentrated in the principal urban centers. Researchers in rural or small urban centres are at a disadvantage when compared to their peers in the main cities, as shown by the higher index of international publications of researchers in urban areas. In Brazil, for example, most of the production is concentrated in Sao Paulo (Araujo et al., 2006). The differences also depend on the topics: researchers working on applied issues tend to be more isolated and their research tends to draw less international interest (Benítez, Miranda, & Oria, 2000).

Regardless of more or less optimistic perceptions, governments and institutions in Latin America have started to address problems in scholarly communication by resorting to ICT. Technology has been taken as a tool to minimize the negative impact of many of the issues faced
in the region, easing that distance between center and periphery in a way that would not otherwise be possible. The apparent initial success in the form of repositories and virtual libraries that utilize ICTs to disseminate scholarly knowledge has set the basis for a hopeful future.

III.4.a. Online Journals

The many possibilities that technology offers, have raised a discussion among scholars about which is the best form to disseminate academic research. While the pre-technology discussion would have probably centered on journals (Albornoz, 2005) versus books (Osca-Lunch & Haba, 2005) as the best formal modes of scholarly communication, ICT has multiplied the formal as well as informal avenues for communication, including internet discussions (Matzat, 2004), self-publishing on the web (Russell, 2000), institutional repositories (Piccotto, 2006) and websites (Téllez, 2006), digital libraries (Babini, 2006a; 2006b; Babini et al., 2006; Witten et al., 2001; Zeleza, 1996), guild publications (Patalano, 2005), unified databases (de Almeida, Calvacanti, de Souza, Rogerio, & de Alencar, 2006) or databases concentrating on theses (Ubogu, 2001) or disciplines (Stephen & Harrison, 2002). While these approaches are not necessarily exclusive and, together with blogs, podcasts, wikis and other new technologies will probably gain wider acceptance in the near future, I will concentrate here on online journals.

The outlook regarding the future of online periodical publishing among scientists in English-speaking countries at the end of last century was cautious but positive (Borrego, 2000). In Latin America, the opinion poured in articles was also ambivalent. Most authors, as do their Anglo peers, opted for a cautious but positive outlook. Case in point was Villanueva (2006:n/a), who, after noting that as an inevitable consequence of the “newness” of the medium, internet was not seen as “an adequate output for publishing ‘real’ information, as books or journals,” he prophesized that the “widespread dissemination of Internet publications will, eventually,
transform this attitude.” Others, like Borrego (2000) were especially optimistic, claiming that the internet gave status to the material regardless of the format.

Where predictions are tentative, reality seems to be less dubious: in Latin America, the advantages offered by online publishing in accessing and disseminating scholarly production seem to have offset concerns of legitimacy. The number of local and regional online free-access journals shows that there is an unfulfilled need in Latin America to access and publish information. A measure of the success has clearly been manifested in the region by the relative amount of online open access journals (15%) as proportion of all academic journals in the region, compared to 1 to 4% in other regions of the world (Haider, 2005).

While a general lack of communication infrastructure and slow, unreliable, and expensive connections still seem to be a major problem in parts of the periphery (Arunachalam, 1999, 2003, 2006; Avery & Allen, 2002), in Latin America that concern appears to have been more of an issue during the 1990s (Benítez et al., 2000; Pimienta, 1992, 1993; Subotzky, 1999) than today. As some examples in Brazil showed, scholars still found problems such as slow connection speed (Araújo, Colaco, & Dias, 2004) or journal websites that were often down (Alvarenga et al., 2006) but, even in those cases, users highlighted the benefits of ICT to access and disseminate research.

Online journals are only a very recent development, yet, given the limitations for printed publications, it is expected that the number of online journals will continue to grow (Babini, 2006b). Supporting this point, Holdom (2005:351) argues that a direct consequence of Latin America’s growth in connectivity has been “the proliferation of freely available, scholarly, peer-reviewed electronic journals.”27 Latin American academics, pushed by “the financial and

27 Holdom (2005) notes, for example, that from 45 online resources catalogued in the Humbul Humanities Hub that offered an electronic journal devoted to Latin American and Hispanic studies, 32 were online publications from Latin American countries. Holdom concludes: “although the US and UK clearly have a greater capacity to produce electronic journals, it is academics, editors and organizations from the developing countries who are making the best use of technology in an academic capacity and exploiting the opportunities it offers for dissemination of research.”
material constraints and other restrictions placed upon academic publication, and the lack of international visibility of Latin American scholarly print journals” (Holdom, 2005:351) have embraced ICT and the opportunities for effective dissemination of research brought by it.

III.4.b. More Training Than Technology

Lately, the concern among scholars appears to have shifted from connectivity issues and the hidden dangers of ICT towards lack of training in those skills needed to best utilize that technology. In Cuba, a study assessing the level of technological knowledge among Cuban researchers with the goal of managing e-publishing, showed the need for more training (Araújo, 2004). Also, the widespread concern with the lack of professionalism in the academic publishing sector has taken the form of an increased interest in training opportunities. While only Mexico, Brazil and Argentina, and recently Uruguay, offered alternatives for systematic training in editing and publishing (de Sagastizábal et al., 2006; CLAEH, 2008), the rest of the countries have also witnessed recent efforts to provide skill-enhancing workshops (Aguirre, Cetto, Córdoba, Flores, & Román, 2006; Babini & Fraga, 2006; UAEM, 2007).

As noted before, one issue encountered by Latin American journal editors is the collecting of articles that adhere to certain parameters. Consequently, training has been provided to address key aspects of scientific writing such as “the format of scientific documents, the stages of preparation, the analysis of the parts of a scientific paper, the preparation of tables and figures, the process of selecting journals, sending of manuscripts, interactions with editor and referees, indexation of journals, authorship-related issues, ethics and fraud” (BIREME/ PAHO/ WHO, 2006: n/a).

(356) In July 2008, SciELO and Redalyc were listing over 500 journals, while Latindex had links to 2,618 online periodical publications.
Regional institutions have also set the objective of improving local journals in order to gain credibility among local researchers (who otherwise prefer to publish in international journals). To solve the problem of the quality of editorial work, a series of criteria have been developed to bring journals to international standards and training has been provided to ensure that all reviewers have the skills and capabilities to edit (Cano, 1995; Aguirre et al., 2006; Babini & Fraga, 2006). Workshops for editors on quality criteria have shown that, formal parameters –for example, adding the institutional affiliation after the name of the editorial committee– were perceived as easier to adopt. On the other hand, quality criteria that required editors to modify long-standing working strategies, encountered more resistance –for example, adopting a peer-review system, including a minimum number of original articles, maintaining periodicity, or increasing the percentage of authors and committee members external to the publishing institution (Aguirre et al., 2006). Although the criteria are prerequisites to be included in international databases, they require investments in time, money, and human resources that are often outside the capacity of the journals. Still, the evaluation of these workshops showed positive attitudes regarding the benefits of technology for reducing time and production costs, and possibly facilitating the adoption of some of the quality criteria. The authors also foresaw open access to be the modality of more success in the region (Aguirre et al., 2006).

III.5. Leapfrogging: Skip and Join the Virtual World of Internet

But these attempts to improve writing, editing and publishing quality would not be of much use, if there weren’t appropriate avenues to organize and make those articles and journals available. The problem of lack of visibility has been partially solved in Latin America by the creation of regional indexing systems. The advances of ICT, especially in open source software, have provided the necessary platform for dissemination of and access to research and scholarship (Babini, 2006b; Holdom, 2005). And as we’ve seen previously, open access (OA) has been
enthusiastically embraced in the region. The idea of open access is not necessarily new in the region, having been around in Latin America at least for the past 15 years (Pimienta, 1992). Still, OA has a different connotation in the periphery than it does in the center. While in the center it has been mainly a response to the abusive prices of journals, in Latin America it came about to solve the lack of access to information, resources, and visibility. As we have seen earlier, one of the main problems for the dissemination of scholarly knowledge in Latin America was the unbearable costs of printed publishing and distributing, especially when the topics were only of local interest. Both issues, costs and visibility, are greatly helped by ICT and OA. According to Villanueva (2006:n/a), OA “is potentially the only way that researchers in developing countries have to reach and be reached by the international communities that conduct most of the research and have access to most of the funds.”

Acknowledging the fact that “the science that is not seen, does not exist” (Redalyc, 2006), some Latin American organizations have initiated a range of ventures during the last decade in order to improve availability and access to online scholarly publications (Babini & Fraga, 2006). An example of such a venture is the Scientific Electronic Library Online (SciELO), a model of open access, cooperative electronic publishing of scientific journals on the internet that has been successfully established in Brazil over the past decade. SciELO was conceived to meet the scientific communication needs of developing countries by providing an efficient way to ensure universal visibility and accessibility to their scientific literature, thereby contributing to overcome the phenomenon known as “lost science” (Gibbs, 1995). The project is backed up by the Brazilian Institute of Information in Science and Technology (IBICT), a governmental organization, and has a permanent team supporting journals in Brazil and other Latin American countries in collaboration with other organizations. Initially, SciELO dealt mainly with health and technology-related disciplines but has expanded to cover other disciplines. Presently available also in Argentina, Chile, Colombia, Cuba, Spain, Portugal and
Venezuela, the initiative is being developed in Costa Rica, Mexico, Peru, Paraguay, Uruguay, and the Caribbean (SciELO, 2008).

Other collaborative ventures have been striving to provide on-line catalogues, directories, and indexes of scholarly publications, as well as direct, open access to full-text articles and books published in Latin America and the Iberian Peninsula. Such is the case of Latindex (the Regional System of On-Line Information for Scientific Journals in Latin America, the Caribbean, Spain and Portugal) and Redalyc (the Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal) in Mexico, and CLACSO’s Network of Virtual Libraries, headquartered in Argentina.

Latindex is a cooperative effort by a network of institutions to gather and disseminate bibliographic information about scientific production in the region. Its directory offers basic information on over 16 thousand journal titles, its catalogue provides detailed information on 3,161 journals and the website links to 2,618 online journals (Latindex, 2008). Redalyc is a portal supported by the Autonomous University of the State of Mexico, offering access to over 500 journals, among other projects related with the dissemination of scholarly knowledge (Redalyc, 2008). CLACSO, the Latin American Social Sciences Council, is an international non-profit organization integrated by 228 research centers and graduate programs spanning across 25 countries in Latin America and the Caribbean, providing support to social sciences in the region at many levels, including a database and network of virtual libraries (CLACSO, 2008).

As I mentioned in the introduction, while bigger Latin American countries have the capacity to establish their own independent ICT networks and platforms for the dissemination of scholarly knowledge, smaller countries with difficulties to develop systems on their own could benefit from regional strengthening (Neves, 2004; Rivero, 2006; Villanueva, 2006). For these small- and middle-sized Latin American countries, open-access journals, free online-based editing and publishing software, and regional databases could help disseminate their scholarly
production, and assist them to fully benefit from the steps already taken in the region to provide a framework and systematize access to Latin American, Spanish and Portuguese scholarly research.

**III.6. Latin American Journals Today**

Despite the difficulties faced by Latin American scholars when doing research, the number of research articles in Latin America, as well as in other parts of the periphery, have had a higher rate of increase than in the USA and Western Europe in the last decade, at least in some cases (Bliziotis, Paraschakis, Vergidis, Karavasiou & Falagas, 2005). Publication trends, though, vary between disciplines: a study on communication patterns in different disciplines in the National Autonomous University of Mexico showed that researchers in exact, natural and applied sciences publish mainly through articles in international peer-reviewed journals and are therefore better represented in main international databases. Researchers in social sciences and humanities, on the other hand, prefer to publish in regional journals, as shown by their corresponding presence and absence in regional and international databases (Russell & Liberman, 2002). The differences between disciplines are clear, with local journals in medicine, agriculture, social sciences, arts and humanities being more numerous (or more accepted) than in the hard sciences. Some other studies has also shown that the use of technology also varies according to fields of knowledge, but the number of case studies is still insufficient to provide a complete picture of what is going on in terms of online journal publishing in Latin America. Given the novelty of the topic and the speed with which changes take place, much of the information available is, at best, patchy.

Not only do studies present an incomplete picture of the present situation of the academic publishing industry in the region, but there is also a lack of a common goal set for the industry.

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28 See, for example, studies in Brazil in the areas of medicine (Araujo et al., 2006; Brunelli et al., 2005) and information science (Alvarenga, 2006; Araújo et al., 2004), and in Cuba in the areas of chemistry and biology (Araújo, 2004).
Concerns range from the difficulty faced by Latin American scholars when trying to publish in the center, to bringing journals to the standards required by international databases, to creating regional or language-centered (Spanish-Portuguese) databases. Arocena and Sutz (2001:1231) explain the situation as being worsened by faulty evaluation systems:

The academic evaluation mostly takes into account how many papers the researchers published during the period under evaluation. If the project is related to problems of a very local nature and therefore it is difficult to publish results in mainstream journals –an overwhelmingly difficult issue for applied sciences in Latin America–, the evaluation criteria mainly register the missing papers. While the research system is in transition, the academic evaluation system lags behind, and therefore, schizophrenia is an understandable outcome.

Based on the existing literature, one could argue that, in Latin America, the academic publishing industry itself seems to suffer from schizophrenia, with various, sometimes contradictory, goals coexisting. Enterprises like SciELO and Latindex are clearly driven by the will of playing a role in the international academic arena. While some enterprises seem to pursue acceptance by complying with conditions set by the center, authors like Vessuri (1991) and Pimienta (1992; 1993) warn against the dangers of blind imitation. For them, researchers in the periphery face an uphill battle because they are competing under disadvantageous conditions and will not be acknowledged by the center because of existing biases. Less clearly stated are the alternatives to compliance. While Pimienta advocates careful evaluation and discerning adaptation to assure that quality measures are implemented in such a way so as to be still efficient and sensible within the local context, Vessuri promotes setting their own high standards. Tierney (1996) and Abdenur (2002) also assert that the best choice is for Latin

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29 In order to show the futility of trying to tailor research output to the conditions set by the center, Vessuri (1991) presented the example of the failed attempt by a successful Brazilian journal to switch from Portuguese to English in order to increase citations outside Brazil: having the articles in English did not make any difference in the number of citations.
American countries to derive their own definition and parameters on how to best conduct research (and dissemination of information) taking into account their culture and context.\textsuperscript{30}

While these discussions take place (or don’t), the number of online journals (and other research products) as well as the amount of resources to develop online dissemination of scholarly research in Latin America continues to increase. Although, as we have seen, the complexity of the issue and the lack of comprehensive data do not facilitate an evaluation of the current situation of academic publishing in Latin America, everything points to the increased formalization and professionalization of the academic publishing industry.\textsuperscript{31} In addition, with the expansion of technology, there is a renewed interest in the topic, which in turn, will fuel further studies and allow for a better understanding of the future of scholarly publishing in the region. With this general panorama of Latin American journal publishing and ICT in place, we can next concentrate on how these issues play in Uruguay.

\textsuperscript{30} According to Tierney (1996), since research is value oriented and socially constructed, we need to consider the political nature of knowledge production: “as long as Central American institutions accept the traditional view of knowledge production, they will inevitably shortchange themselves, reward developed countries, and maintain traditional forms of power and privilege. … researchers in Central American universities might develop their own concepts of what counts for knowledge and concentrate on achieving quality within that framework” (Tierney, 1996:21).

\textsuperscript{31} This turned out to be consistent with the findings on this thesis.
IV. THE STAGE (UNIVERSITY)

The simplest rationale for the existence of a publicly funded university is that it provides some form of public good. ... Consequently, one way to pose the issue of the future role of universities is to ask what public goods they can provide that cannot be provided in other way. (Cowan, in Kahin, 2006:135)

IV.1. A University Unlike Yours

Every writer knows they should keep their readers in mind when writing. And every translator knows that it is often easier to convey an entirely new concept than to explain a concept from a source language with an equivalent in the target language – because in the latter case, readers’ brains tend to automatically refer to the pre-existing idea to decode the message, thereby unknowingly transforming the concept into something quite far from its original meaning. University, unfortunately, is one of those concepts.

Having common European roots is probably one of the few aspects that would identify a public national university like the Universidad de la República (UR) and an Anglo-American such as the University of British Columbia as belonging to the same category. Early in my research, a couple of incidents hinted to the extent to which having to translate this Uruguayan version of university would become a challenge. So, when my interlocutors’ extrapolations provided UR libraries with magnet cards for after-hour access, took research work out of the hands of undergraduates to give it to graduate students, and converted community involvement into some form of marketing strategy, I realized I would need to go into some detail about public universities in Latin America in general and the UR in particular.

So, while explaining all the aspects that differentiate this and that reality of university extends beyond the scope of this study, this chapter is an attempt to give the readers a better idea of what a national public university in Uruguay means – this common background information
being needed to better understand the forms that the production and dissemination of scholarly knowledge takes at UR. Even then, I will have to ask my readers to collaborate by withholding any impulse to equate their idea of an Anglo-American university (with its campuses and libraries, its tuition and university paraphernalia, its graduate students and tenured professors) with the UR. I will present next a quick overview of the history of universities in Latin America, followed with the specific developments of UR in the more reduced context of Uruguay’s history, focusing on the most recent changes.

IV.2. Going Back a Few Centuries: Universities in Latin America

Latin America saw the establishment of the first universities in the 16th century. These institutions covered the ideological, political, economic and social needs of the colonial society. When in the early 19th century most Latin American countries gained independence, universities developed a close relationship with the new formed states and playing a key role in the social and political arena of the new nations by forming the elites that would direct the new republics (Brunner, 1990; Rama, 1996).

In 1918, a social and popular movement that started in the National University of Córdoba, Argentina, gave public universities in Latin America a specific identity and political profile that would make them strong vehicles for criticism and opposition to political debates (Kent, 1996; Didriksson, 2002). Up until the 1980s, the conditions gained as a result of the Cordoba Reform, such as state subsidy, gratuity, and institutional and academic autonomy from the state (e.g., such as the decision on budget allocation) were reinforced in most Latin American countries (Fernández, 2003).

IV.2.a. The Modern University in Latin America

From the 1950s to the 1970s, Latin America would see the modernization of its universities and the development of a form of university particular to the region: the macro-
university. Macro-universities are public universities with a high index of enrolment and coverage in relation to the rest of the national educative system. They are characterized, among other things, by size, co-government, autonomy, system of competition for faculty positions, public financing, freedom in teaching, and democratization of access. Most of the oldest universities became macro-universities during this period, and despite recent changes, they still maintain today a considerable predominance. Among their advantages are the concentration of human and material resources, complexity and range of their functions, and the identity provided by its history (Didriksson, 2002; IESALC /UNESCO, 2006).

Yet the process of expansion during those decades also brought about an array of new problems. As middle classes, women and other sectors gained access to higher education, public university resources were stretched (Kent, 1996; Tierney, 1996). Universities broadened career opportunities through diversification and closer links to job markets, but they still lost touch with basic and technical research and development. The attempt to strengthen postgraduate training and research capacities (which demanded stronger financial resources) also further weakened universities (Didriksson, 2002).

The political and economic circumstances of the following decades would present additional challenges to universities. The rise of military dictatorships in Latin America during the 1970s and 1980s saw the persecution of students and educators, and universities, which were seen as loci of resistance, suffered budget cuts and other constraining regulations, when not outright closure (Henales & Edwards, 2002; Jameson, 1997). By the time democracies were restored, the public debt had grown dramatically, and during the 1980s and 1990s, international financial institutions (IFIs) such as the World Bank (WB) and the International Monetary Fund (IMF) proposed a series of austerity measures, where payment of external debt and control of fiscal deficit and inflation took priority over expenditures on areas such as health and education,
which were drastically curtailed (Bonal, 2004; Henales & Edwards, 2002; Lopez & Flores, 2006; Maldonado, 2000; Rodríguez-Gómez & Alcántara, 2003).

Together with funding cuts, educative reforms promoted during those decades intended to address issues of massification, inequality of access, and programs deemed obsolete or irrelevant, among other issues. The changes pointed towards privatization of the higher education system and promotion of a technology- and market-oriented university that emphasized productivity, efficiency, and efficacy, and was increasingly responsive to the needs of a capitalist globalized world. The measures were very controversial (Cowan, 2006; Dridiksson, 2002; Fischman, Ball & Gvirtz, 2003; Kempner, 1998; Torres & Schugurensky, 2001), yet, educational reforms were applied across Latin America (López & Flores, 2006). The extent to which the reforms were put into practice varied greatly, Chile being an extreme case of early adoption of reforms under the military regime. The higher education reforms tried to replicate the policies of the industrialized countries that compose the core of the international knowledge network, promoting among other measures, evaluation and accreditation systems and partnerships between universities and industry (Alcántara & Arcos, 2004; Campos & Sánchez, 2005; Fernández, 2003; Rhoades, Maldonado, Ordorika & Velázquez, 2004). The consequences of these reforms are still being felt today (Bonal, 2004; Henales & Edwards, 2002; Ledesma, 2002; López & Flores, 2006).

Among the critics of these reforms, there is the perception that the changes imposed had transformed the social role of the university, diminishing its capacity for criticism and for contributing to the general society and the betterment of the human condition, by reducing its role to one of human capital formation understood as mere skill training to perform a function (Bloom, 1987; Cazés, Ibarra & Porter, 2000; Hinkelammert, 2005; Mariñez, 2002; Mendes, 2004). As an example, León (2004) decries that this new university model promotes a student
who gives priority to individual conquests over social ones, that is, someone who values individualism and competition over solidarity and the interests of the community. Others claim that the pressure on faculty and universities to perform according to productivity standards might negatively affect the quality of education by lowering standards or promoting the curving of results (Labaree, 1997; Loder, 2006; Smith, 1990; Sykes, 1990).

IV.2.b. The Latin American University of Today and Tomorrow

Beyond fear of change or idealized notions of the past (Calderón, 2000; Kent, 1996), the measures effectively cut public funding, which translated into relatively lower salaries, part-time and contractual appointments, and in general, working conditions that have contributed to the de-professionalization of the faculty body. Full time appointments in Latin America hover between 16 and 30% of the total faculty positions, and are at 16% in Uruguay (Pebé, 2004; Bentancur, 2006). Those conditions not only short-change faculty but obviously affect negatively their capacity to carry and disseminate research.

The most recent discussions around higher education incorporate information and communication technology (ICT) as a key to solve many of the problems of higher education (IESALC-UNESCO, 2006) and the challenge of internationalization. The swift expansion of ICT in the region in the last decade has brought about what some authors call the third reform of Latin American higher education. Some points discussed at the moment are increased transparency and flexibility of higher education systems (to facilitate the mobility of students and professors), distance education and transnational programs through the internet, as well as the procedures that need to be put in place to guide these programs (Fernández, 2003; Narváez, 2005).
Other lines of discussion on the future of Latin American universities continue to be committed to the ideal of a macro-university (Dridiksson, 2002) or look for a university model based on uniquely Latin American roots and realities (Mignolo, 2003; Ramiro, 2006; Rhoades et al., 2004), which could mediate local experiences and global knowledge (Coraggio, 2001b).32

These questions around which university model best suit Latin American needs are of vital importance to the planning and organization of academic knowledge dissemination, because the way a university is conceived will determine the use given to the academic knowledge that is been generated, as well as the policies regarding dissemination of knowledge that will be put into place. Also, trying to compete at an international level doesn’t come without its costs for researchers in the periphery. Would researchers be expected to actively participate in the mainstream (center) knowledge exchange? Or would university-generated research better serve local and regional needs if the efforts are concentrated into producing knowledge that is locally and regionally relevant and that is circulated within those limits? Would national interests be better served by having different university models to cater to different goals, pushing researchers in some areas or disciplines to engage in a global-level discussion, while others remain focused locally? These concerns that appear in the literature about the future of higher education in Latin America also formed part of the discussions being ping-ponged in university corridors, governmental halls and media outlets while I was carrying my field work research in Uruguay.

In the next section, I will present a quick overview of UR’s history, to focus then on the most recent developments that have eventually led the UR to yet another reform. Would it be possible for this institution, entering the 21st century with expectations and promises to join the

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32 About the difficulties to articulate alternative world-views, avoiding scientific imperialism without falling into epistemological relativism, see Gallopín and Vessuri (2006).
global currents of internationalization and technologization, to overcome its federalist legacy and face the new challenges as a uni-versity?

IV.3. So, What’s With This University?

As we will see next, the Universidad de la República shares with other Latin American macro-universities a general common pattern in terms of historic development, the key role they played in their respective countries, and the outside pressures to change it has been recently experiencing. Yet in some aspects, it is unique.

IV.3.a. A Short History of the Universidad de la República

In Uruguay, shortly after the country was born as a new republic, the foundational process of a national university was initiated, and the Universidad de la República was officially inaugurated in 1849. In the next five decades the university would move towards positivism and the decentralization of its structure. Transforming the university in a federation of schools would greatly influence the functioning of the university until the present.

The period stretching until 1935 ended with the law that separated the university from secondary education. During this stage the student population increased significantly due to the law of free education, and schools multiplied. The 1918 student movement for university reform of the University of Córdoba strongly impacted Uruguay and resulted in increased student participation in university government. In 1929, the Federation of University Students of Uruguay (FEUU) was created, an influential organization still in existence today.

The federative structure imposed in 1908 had institutions functioning without coordination, repeating services, competing for budget funds and acting under different regulations. To address those issues and to help create a sense of unity, the Organic Law was signed in 1958: it consecrated the merit-based competitive system for the designation of faculty

33 For a more detailed history, see UR (2006a) and Pebé (2004).
members, free education, university autonomy in all aspects, and co-government by faculty members, students and alumni.

Between 1958 and 1973, the university tried to influence the productive and cultural life of the country from a Latin American perspective. Projects were developed to allow access to broader sectors of society, assisting students through scholarships, cafeterias and student housing. The Department of Community Involvement was created, engaging multidisciplinary teams with pilot projects in unprivileged areas. Also, the Institute of Economy was created in the School of Economic Sciences to study the productive stagnation and increased inflation in the country. In 1967 Darcy Ribeiro, a Brazilian professor in exile, lead a seminar about the modifications required to transform a European model of university that had become progressively less attuned to local needs. At the end of this period, the university’s constant criticisms of the government strained relations between university and governmental authorities. Throughout its life the university had clashed with successive governments, responding to a push and pull dynamic around university autonomy, state control and university criticism of governmental policies. University occupation and strikes were usually used as pressure tactics; in more conflictive times, such as the military dictatorship of the 1970s, the tensions led to violent confrontations.

In June 1973, a coup d'état took place in Uruguay and four months later the military occupied the university. The government closed the university and ordered the detention and submission to military justice of the university president, all the deans and members of the Central Directive Council. The Ministry of Education and Culture (MEC) was put in charge of the university. During 1974 there was very little activity as the new working conditions were established. The period until 1985 was characterized by persecution and destruction: the university lost almost 40% of faculty members, as they got fired, quit, or their contracts were not
renewed. Those faculty positions were then occupied by direct designation. The student movement was dismembered and a police regime installed in the buildings that were progressively reopened. During this period, the military government closed various programs and institutes, destroyed libraries and archives, dismantled the academic structure, substituted study plans and curricula, restricted student admissions, established entrance exams and a system of limited openings. Research and extension programs at the university were brought to a halt, and the level of teaching deteriorated.

IV.3.b. The Return to Democracy and Rebuilding of the University

The return to democracy in 1984 signalled the end of the military intervention in the university, and the university went through the process of returning to the Law of 1958 and to previously existing structures. The university started then and until today a move towards technological and scientific renovation, updating its programs, and strengthening its teaching, researching and extension activities in an attempt to better respond to social, regional and international contexts (Pebé & Collazo, 2004). During this period a series of academic units were created to foster research, community involvement, and teaching. In this framework, numerous agreements were signed with state agencies and businesses, and the areas of science and technology received increased support through agreements between the government, national research agencies and international agencies (see Appendix C for a chronicle of the Institutionalization of Science and Technology in Uruguay).

In 1995, in the context of the reforms suggested by the IFIs, which, among other things, promoted privatization, the Uruguayan government passed the first legislation granting university status to private institutions of higher education, which had been expanding their
activities and gaining strength since the mid 1980s. This development challenged UR’s position as the one and only university in the country. But what brought about more resistance to the reform of the 1990s was the perceived threat to the idea that UR had of itself. The next, rather extensive quote, explains in detail what I mean by that, and summarizes the essence of the Uruguayan idea of its public university:

> Modern universities are uniquely placed to provide a sense of national culture. By studying and teaching the social and cultural history of the nation, this culture is extended through time. Where this is valuable, and how we can see these as a public good, is in the way it conditions the citizens of a nation. The teaching function of this university creates graduates who are all steeped in the same cultural tradition at least within one nation state. They have a common view of regarding their social and cultural roots; they share a worldview; if the University is working well, the graduates sit well into the existing society and can further its aims in the future. All of this has clear advantages socially, administratively, and economically. In this tradition, of course, the humanities take a central place in the university structure, since they are the repository of social culture that is so important in this sort of cultural extension. (Cowan, in Kahin, 2006:135)

This model of university was put into question in favour of a more entrepreneurial model of university, which pressured UR authorities to evaluate the university’s relevance and to implement adjustments. As a consequence, the mid 1990s saw the UR involved in constant and prolonged strikes resisting measures, for example, to cut the budget and to restrict enrolment. Although the UR managed to keep student access unrestricted, hiring and salary rises in many areas of the UR were frozen for a decade.

In 1999, the UR celebrated its 150 years. At the onset of the 21st century, despite its shortcomings and struggle to preserve the local monopoly on higher education (Coraggio, 34 Since then, four private institutions have been granted university status (Universidad Católica del Uruguay, Universidad ORT, Universidad de Montevideo and Universidad de la Empresa) and many others a status roughly comparable to colleges (Institutos Universitarios). These relatively new, privately-funded, for-profit institutes of higher education have flourished, despite being often vilified as mere diploma factories. They have been expanding the disciplines and degrees they cover, increasingly including graduate diplomas, research and community involvement activities, as well as exchanges and agreements with foreign institutions. Even then, their activities cannot yet compare to the share of activities carried by UR, and so far, they have lacked the capacity or interest to take on the expanse of roles that the public university covers.
2001a), the UR still carried over 80% of the research in the country. For example, between 1990 and 2004, Uruguay multiplied 4-fold the number of articles published in the Science Citation Index. Most of these articles came from UR researchers (Dirección General de Planeamiento, 2006, 2007; Universia, 2007). The UR also concentrated the majority of tertiary-level education—with 81,774 students (2007), 7,914 teaching positions (2006), and 5,168 staff members (2006)—, as well as postgraduate degrees (Fuenmayor, 2003; Pebé, 2004). And rather than shrinking, the UR seemed to be expanding: “The yearly registration in graduate degrees, that was 400 students in 1998-1999, jumped significantly from 2000 onwards, among other things because the opening of new options, reaching almost to 1,000 from 2001 to 2003” (UR & CSIC, 2007:3).

IV.3.c. The Present Reform

Eventually, the UR, as other sister institutions in Chile and Argentina, disappointed with the results of the last wave of changes, have began to consider a reform of that last reform (Bentancur, 2007). At the same time, the pressures of internationalization and technological advances made further adjustments increasingly urgent. So, in 2007, UR authorities introduced a project for a major university reform that is still taking place. Next, I will review some of the main points of this reform.

Under the assumption that knowledge is a source of social and individual power (UR, 2008:15) and looking to reduce inequalities, one of the present reform’s principal tenets has been to democratize access to knowledge as well as improve the quality of education:

In a more interconnected world were the expansion of knowledge increasingly determines social life, the generalization of advanced education must contribute to the inhabitants of the country to live and act creatively at a national, regional and international scale. Democratization of knowledge seeks to overcome internal as well as external inequalities; it’s a particularly important key to facing underdevelopment in the 21st century. (UR, 2008:17)
From this new standpoint, learning became a lifelong process taking place everywhere, not just within education institutes – a notion that explained the strong effort to link the university with other aspects of life like work and citizenship. The general goals promoted by this new concept of university were: a) learn to continuously learn, b) exercise citizenship, c) creatively develop the working life, d) access diverse cultural forms, and e) collaborate with the improvement of individual and collective quality of life (UR, 2007; 2008).

Among the problems pinpointed was the fact that UR functioned as a federation, each school, department or institute operating under different parameters. The plans for UR’s renewal attempted to streamline activities and unify services. Several members of the university, whom I interviewed, agreed that UR’s federative structure was one of the main problems to overcome:

If we’re sincere, [the university] works much more like a federation of schools than like a university. … the university, being such a big and complex institution, specially in its form, a school is completely different than the other … A student who enters [the UR], doesn’t identify him or herself as a student of the UR, but s/he feels a student of Law School, Agriculture, or Humanities. It doesn’t happen that s/he says: “I’m student of the university.” (Administrative staff, 39)

Interviewees explained these differences in historical terms, and how those developments still had consequences in the situation and functioning of each school in the present:

[The schools] have completely different realities, even within the same area. I’m not talking from a scientific-technological area to a social one: even within the social areas, you go to the School of Economic Sciences or Social Sciences and Humanities or Psychology or Communication and I would like to see what do you find as a common denominator … they are very different realities, with very different emphasis and orientations … there are institutional histories that generate its own institutional cultures which are very difficult to fight. (Administrative staff, 31)

Inside the UR, the basic sciences are favoured [in terms of budget]: basic sciences and engineering, chemistry, agronomy, that type of thing, then the social sciences, and within the social sciences, sociology and social work and political science obviously, and the School of
Humanities comes at last. ... the School [of Humanities] hasn’t had [a proactive] policy of demanding … another budget, because there’s always the excuse that this is the historical budget of the School. Well, what does historical mean? That it will be perpetuated for the centuries of the centuries? When the School of Humanities and Sciences separated and Social Sciences was created, Social Sciences was given a new budget, and Humanities stayed with an historical budget. (Faculty member, 06)

The federative structure effectively affected UR’s functioning. Among the problems brought by a federative organization was the inefficiency and waste of resources that came with unnecessary repetition; as a professor pointed out: “Schools are ill-organized with many areas being repeated in more than one school … in 2001 there were 35 biology departments in all the university, 35!” (Faculty member, 32). Knowledge circulation was also affected by this structure: for example, one issue mentioned during the interviews was the weakness resulting from operating as small units, as when purchasing journal titles separately rather than as one single institution.

To compensate these deficiencies, some measures have already started to be implemented. To foster communication across schools and disciplines, schools have been grouped in knowledge areas (see UR’s Organization Chart in Appendix D) and thematic networks have been established (e.g., environment, ethics and development, health promotion, gender studies). University services have been reorganized in an effort to bring some institutes of higher education into the UR and all UR services up to the same level. For example, the reorganization included the incorporation of the Higher Institute of Physical Education – previously dependent from the Ministry of Education and Culture (MEC)— to the university. It also clustered the Institute National School of Fine Arts and the School of Music under the School of Arts and the schools of Communication and Library Sciences under the School of Communication Sciences. The reform was also centralizing the library services, and was trying
to improve access to information through agreements with the government and foreign 
organizations.

IV.3.c.i  External Integration

Another issue this reform was trying to address was the perception of the university as isolated and disconnected from the rest of society. The opening towards society was being put into practice through research and community involvement activities increasingly linked with different social organizations such as professional associations, cooperatives, producers, and unions. Nationally, the university had been opening centers in other regions of the country, in an attempt to decentralize and bring the university to the rest of the country. Internationally, it had been strengthening links and signing agreements with foundations, universities and other institutions around the world. Other measures included the creation of administrative units such as a centralized Communication Unit, to strengthen the links first, within the university, and second, between the university and society.

The reorganization and creation of these new units and programs tried to change the image of the university in general, and to remedy the lack of visibility of the university’s activities, including aspects pertaining to dissemination of research. As one UR administrator noted, for example, the UR had finally started to act on the need to find ways of sharing its work more widely with the community:

There’s a broad consensus that the university is a very endogenous thing, very enclosed in itself and that it didn’t have communication channels, it didn’t have ways to communicate what was happening inside here. … Generate that idea that I have to go out of the traditional spaces in which I always operated. … if these publications only end up circulating the [traditional] circuits … which is the link … with the society? The fact that a citizen would ask “What is the university doing?” talks clearly about [the problem of isolation] – I don’t think the university is not doing anything, I think it’s doing a lot, the issue is that it’s not been seen. (Administrative staff, 39)
Having held the monopoly of higher education for most of its life, only recently has UR felt the need to create a unified front, a unique identity different from other, private, universities:

Another of the lines that [the university president] is trying to promote … is how to recover the university identity... During a long time it was the only university, then, it was not necessary… to strengthen that… Then there is the idea to recover or at least start to form, to create, to strengthen that general university identity above and beyond of the schools. (Administrative staff, 39)

Yet, the reform, with its process of unification and opening to society and the world, was perceived as bringing a new set of problems, and resistance to change took the form of defence of autonomy in decision making. Even trying to provide unified services was perceived as difficult: “If the schools don’t want it, you can’t force [them], it’s a service that is offered, because schools in that, have autonomy” (Administrative staff, 39). As this last interviewee noted, tradition and resistance to change was expected to be obstacles when implementing a reform, including reforms in the way scholarly communication is approached.

This last reform was expected to take much time and discussions to organize and implement. As it was expressed in the interviews, changes don’t come easy to an institution with such a long history and entrenched culture of federative operations and participatory decision-making processes. Yet, the reform presented us with a perfect timing for evaluating the current situation and possibilities regarding some aspects of academic life like the dissemination of research products, and the opportunity to assess the introduction of changes in that respect.

IV.4. **Summary**

From the previous chapter, I would like to highlight the following points. First, the fact that there is an entrenched idea, within sectors of the academic community, of the UR as a university of culture. This concept does not only appear at the level of discourse, but it also appears in policies and applied *de facto*. The consequence is a distrust of an entrepreneurial
model of university and activities that are associated with it, such as the importance given to publishing articles in journals.

A second point I would like to highlight is that the historically inherited fractioned nature of the university and the recent struggling forces for one-ness, as well as the highly political and politicized character of the UR, make it very difficult to implement changes, such as determining common publishing parameters. The dynamics of center-periphery also operate within the university, even within one institution or school, with the resulting differential access to resources and power and levels of participation and isolation. So, the difficulties to implement changes are not only in terms of beliefs or attitudes towards policies, but for some departments and schools, actual infrastructure barriers are a key deterrent to benefit from the possibilities brought about by ICT.

The direct consequence to my study of the differences existing within the university, is that I need to acknowledge diverse realities and expectations among schools and among disciplines and not treat the university as a unity. This situation, in turn, supports my focus on the social sciences and humanities. Though the scholars in the hard sciences, for example, might be better equipped in terms of ICT infrastructure and know how to have an online journal, they are not interested. Taking these main points into consideration will also give me the frame needed to understand scholars’ struggle to carry academic activities. In the next chapter, in order to complete the picture, I will present the main structures that the UR possesses in relation to the dissemination of academic knowledge, and how these structures support or hinder researchers’ effort to publish and distribute their works.
V. STRUCTURES RELATED TO DISSEMINATION OF SCHOLARLY PRODUCTS

Focusing on the issue of dissemination of academically generated knowledge, I will next set out those structures or spaces of the Universidad de la República (UR), which support (or would be in a position to support) this aspect of academic activity. Those spaces were the Sectorial Commission for Scientific Research (CSIC), the publication offices of each school and the university in general, the libraries, and the ICT services. I will also expand briefly on structures outside UR, such as publishing companies, given that they were the other main avenue researchers and editors commonly used to disseminate their research and produce their journals. I will give an overview of the situation and challenges each structure faced to provide the services that they were meant to provide, stressing how this affected local publishing efforts.

V.1. Sectorial Commission for Scientific Research (CSIC)

CSIC was created in 1990 with the objective of supporting research in the UR through various programs. In 1995, this unit created the Publications Program in an attempt to provide funding for the dissemination of academically-produced knowledge, given that Uruguay lacked national agencies or organizations for the advancement of the sciences or national agencies that would support this aspect of academic activity (CSIC, 2008a; Rocca, 2000).

CSIC was often mentioned as the one place researchers knew to provide funding for publications, regardless of whether they made use of it or not, or whether they thought it was useful or not. CSIC’s effort to support publications faced its share of problems, such as funding and instability. Given that the Publications Program didn’t have allocated funds, it operated intermittently in 1995, 1996 and 1999 (Rocca, 2000). Due to the economic crisis that Uruguay suffered in 2002, the program was temporarily closed and did not open again until 2007. As a consequence of the program being shut down for such a long period “the demand of the requests went down … [and the] Publications [Program] was working at its minimum” (Administrative
staff, 38). The instability of the program represented a major drawback as the applicants couldn’t prepare or plan ahead and it only benefited those who had something ready to publish, like a finished thesis (Rocca, 2000). It didn’t work either for timely topics, as one faculty members complained: “If I had requested funding [to CSIC for publishing, the request] would have moved for the following year and I wanted to publish [the book] that [particular] year because [it coincided with an important date]” (Faculty member, 13).

The expectation in CSIC was that the demand would pick up again once the program was given a fixed budget and became permanent – as it was intended for 2008 onwards. The plan for the improvement of the Publication Program also included the expansion of services to other publication avenues such as posters, CDs, DVDs, research groups’ websites, a journal’s special issue or publication of a journal article:

There are some journals that require payment, it’s not much money, but for what salaries are in our university, it’s a substantial amount, it can determine the difference that someone can publish in that journal or not … journals where it is important that the researchers in our university participate. Then, this year [2007] the possibility was included to publish there [through competition for CSIC funds]. (Administrative staff, 08)

A stable Publications Program would address the reservations some professors had about applying for publications funds to CSIC, such as the delays in the process between the calls and the availability of the money, or the lack of guarantee that the process would actually go through, as one faculty member deplored:

Suddenly there are budget cuts or things like that and they cancel projects, then you have been working … and it’s very fucked up the sense of frustration because one not only does [the publication], when you are doing this, you are prioritizing this, and leaving aside other things … later they tell you that it is cancelled until they vote who knows what, it infuriates … and frustrates you … It’s healthier not to count on some things and do it [publish] anyway. (Faculty member, 13)
This last professor also raised some issues that were yet to be addressed by CSIC, such as author rights, control over the product, and the possibilities for distribution:

I’m also a bit reluctant … because … I never checked properly the issue of rights … I printed 500 copies and, from those I gave 150 to a distributor … Then, I must have given away 200 copies to students, colleagues. If they [CSIC] pay the publication, they give me 3, 5, 10 copies and the research stays in the hands of whomever will be distributing that, because they pay for the publication. (Faculty member, 13)

Other problems noted by the interviewees were the insufficient amount provided for publications, as well as the requirements and conditions under which the funds were given. For instance, funds were provided as a one-time occurrence, restricting the opportunities for periodical publications: “If you wanted a more permanent publication like a local journal it would have to be organized in some other way” (Administrative staff, 38). Also, the application for CSIC’s research funds didn’t require a plan for dissemination of results, other than reports to CSIC (Rocca, 2000). Because in CSIC’s regulations to grant funding for publishing there was no provision for distribution, it was up to the researcher to include the distribution in the budget, and in case this was not included, it was up to the researcher or editor to eventually organize the distribution of the publication. The danger existed, then, that once the products were published, they remained stashed away, resulting in a waste of the resources that went first into researching and second into publishing. The lack of institutional frames or guidelines caused the responsibility and burden of disseminating research to fall squarely on the researcher’s or editor’s shoulders:

[A distribution plan] is not required. Simply what they do is bring the original [and] bring budgets provided by publishing companies. Some including distribution, others not, with very different prices. That’s still not solved, there’s no knowledge within CSIC to normalize or standardize the

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35 In 2008, the program had $200,000 CAD available to distribute as follows: the maximum amount given for publication of results in the form of books, videos, CDs, DVDs, and (for the first time in 2008) a journal’s special issue, was approximately $2,500 CAD. Articles accepted for publication or published in peer-reviewed journals were granted up to $600 CAD, and research groups’ websites could receive up to $1,000 CAD.
procedure … The faculty member has to take the decision of what’s best: to contract to print more copies or to distribute. (Administrative staff, 38)

After selecting and distributing the funds for publication, CSIC didn’t get involved with the distribution or further dissemination of the works funded. Although they posted on their website a catalogue of the titles of books and other products published with their support (the information was organized by discipline, each item including a photo of the cover, a summary of the content, and bibliographical data), there was no search engine nor information on the price or how or where to access the product (CSIC, 2008b).

While it was possible to include a “publication” item when applying for research funds, a couple of reasons were mentioned as to why researchers tended not to do it. One reason was the fact that every item (including basic office supplies) had to be considered within the project budget. Most departments usually didn’t offer, or at least didn’t guarantee, support for research. Given that the money for every research expense had to come from that research budget, the amounts awarded tended to be insufficient, and less urgent aspects like publications tended to be left for later consideration. Some interviewees argued that more generous amounts would leave more room to consider the inclusion of publications:

Because the economic conditions are so tight, you have to buy everything, even the paper … No school has enough resources so that you can say, well, I don’t worry about paper, about toner, of basic things … You have to get it somewhere [the money for those expenses]. … So, all that brings the researcher to forget about the publication. (Faculty member, 28)

In the publications of R&D, the funds for research, the amounts that are been given [to publish] are laughable, are not enough. They’re trying to increase the amounts more and more for R&D competitions … and thereby to give an incentive to publication. But the publications are left to the effort of each researcher. (Faculty member, 32)
Yet another reason cited by interviewees as a barrier to the dissemination of research was the administrative regulations associated with the execution of funds for expenses and investment.36

CSIC gives you [funds] for salaries, expenses and investment. The salary part is all right … the one of expenses and investment is complicated … the researchers are already burnt … and ask little for expenses and investment. [The funds] are transferred to the school … [and are paid] in a system of thirds.37 Then, these problems get combined and the people are wary already … even CSIC recommended in difficult years like in 2001, around there, that people request less expenses and investments, to request more salaries. For all those reasons, people request little for publishing, the publications they solve as they can. (Faculty member, 32)

It is interesting to note that although the dissemination of academic products was receiving more support than before in the form of funds for publication, much of it took the form of printed publications, and especially books. Among Rocca’s (2000) tentative explanations for this phenomenon, is the symbolic prestige of this format, which still serves as a reference for wide academic sectors. Judging from the interviewees’ responses, this last explanation seems to have a considerable weight: printed books appeared to be preferred even though there might not have been the most efficient way, given the high costs and reduced circulation, as a foreign expert assessed:

A visitor, an expert in publications, from an Australian university, recommended [around 1999] that, because the visibility of Uruguayan works was so low, that actually it wasn’t worth investing so much in the classic format of the book, which would have a circulation restricted to the country; that perhaps it was worth it to invest in new formats that had to do with internet.

(Administrative staff, 38)

36 The process of allocation of funds was further delayed because CSIC was not the executive unit, rather, it acted as a broker for funding for publication of research results: the schools ranked the works, CSIC selected the ones to be funded, allocated the money, and made recommendations, but the order to finance the publications was given by the CDC.

37 In this system, the researcher couldn’t request the payment of the second instalment if anyone else in the same school, who was also receiving funds from the CSIC, hadn’t used up and reported the use of the first instalment. To overcome these administrative constraints, researchers in some schools had organized informally to work out a system where researchers could execute all their allocated money, in turns, thus preventing delays and money being locked by someone not using their portion in time.
This willingness of the UR to finance publications that would knowingly have a very restricted reach shows that considerations other than efficiency come into play when disseminating research results.

Combining the calls for publications made in 1995, 1996 and 1999, CSIC had supported 133 publications, 58 of them in the social sciences, arts and humanities, and 71 in science and technology (4 were not identified by discipline). Of the total of publications, 18 were in English, 15 of those were articles in science and technology published in journals in the US, Canada, Chile and the UK. Most of the publications in the social sciences and humanities were books: 85% (Rocca, 2000:21).

As CSIC turns the Publication Program into a permanent service and the program is fine-tuned, it could be expected the requirements to be readjusted and the control increased, as it has indeed been happening, for example, by requiring works published with CSIC money to be identified with UR and CSIC seals. We have seen how the lack of a controlled process within a common framework and the disconnection between various efforts to support academic publishing ended up undermining those efforts. Therefore, adding specific requirements such as presenting a plan for distribution of the product after publishing and eventual follow-up, could avoid wasting resources in printing works that never leave deposits.

V.2. Publication Offices and Publishing Houses

V.2.a. Publishing inside the Universidad de la República

Depending on the type of product and the resources they were able to secure, researchers had, at least in theory, some options when considering sending their work for publication. Many UR schools had (or used to) their own Publications Office, a unit that published mainly documents for internal circulation such as advances of research or support materials for classes. For example, the Publications Office of the School of Social Sciences used to publish working
documents, students’ monographs, research advances and even journal issues. The unit experienced many problems for years, including changes in space due to construction of the school’s building, changes in personnel, or lack of funding for the maintenance of equipment, all of which resulted in lengthy delays. Since 2007, the workshop has been closed, and options were being considered to take the works to be printed somewhere else. The School of Social Sciences was not the only one to experience difficulties with its printing, as we can learn from a faculty member’s comments on the failure of the Publications Office of the School of Humanities:

Even though there is a Publications Office … [the school] doesn’t even manage, for example, to publish the students’ dissertations, which aren’t even that many. They are not even uploaded, even though they could. OK, print publications is expensive for our university budgets, but uploading is perhaps not so costly and yet, it still not done. (Faculty member, 02)

The situation at the center offices was not much better. While other research products had been handled sometimes by the university’s Central Department of Publications (CDP), in recent years, the CDP had been progressively dismantled. At the moment I carried the fieldwork its role was being redefined, to the point were some interviewees thought the unit had closed or did not know whether it still existed. None of them mentioned it as an option they would consider for future publications.

Initially created in 1969, the CDP seemed to have been left without a clear direction after the return to democracy. As the department was left adrift and without control, the presses and other machinery became progressively obsolete, were moved or sold, and the staff relocated, so that by 2008 the staff had been reduced to a third. The distribution wasn’t much better, as a faculty member indicated: “[The university’s department of publications] has a lot of things to sell, because they never distributed them well, then [only] two people would buy them. [Consequently,] they have a storage full of books” (Faculty member, 23).
An administrative staff member (39) explained that part of the dismantling had to do with the changes that the editorial market had been experiencing in the last couple of decades and the arrival of new technologies that reconfigured the dynamics of the printing and editing processes – changes that the university failed to adapt to. As part of the new university reform, the CDP would become part of the Central Communication Unit (CCU) and, according to this interviewee, ideally, its activities would be reconfigured in a format closer to what would be expected of a university press, including long-term planning and post-editorial activity that took care of promotions and presentations. This renovated CDP would work more in line with the market rather than being disconnected from it, and would strive for self-sustainance, a move that would also require dropping the printing part of the equation to focus on editing:

[It’s] much more viable to talk about a University Editing Department than a Department of Publications, because the fact is that a printing press implies a lot of costs for the university and it’s a job that if it’s outsourced to other printing companies, it can be much cheaper. One can concentrate simply in the editing task and create a distinct, attractive editorial line.

(Administrative staff, 39)

Although there was a sense that the university needed to reconsider the role and activities of the CDP, the changes were to be discussed once the authorities were to be selected and the CCU started to operate in full at some point during 2008. With that goal in mind, some steps had already been taken, like retraining one of CDP’s staff members. Another step towards supporting publishing endeavours was the initiative of the CCU to provide support in the form of copyeditors and designers for schools and departments that intended to publish but didn’t have the personnel or skills to carry some of the tasks in the publishing process. Also, to give more visibility to university publications, the university bookstore was moved from the CDP’s building to a more centrally located university building – the plan being to represent most schools and have a catalogue with all the publications in this centralized and more visible point of sale.
Although it seemed to be no question as to the need for initiatives to support the researchers’ effort to disseminate research done at the UR, there was some questioning about the control or efficiency of the process. For example, although it would have made sense if the Publication Program of CSIC and CDP coordinated efforts, CSIC’s website offered no information that hinted towards that direction and a CSIC staff member knew of no contact either. On the other hand, an administrative staff member in the Central Communication Unit suggested that there could be a possibility for collaboration between both services, given that CSIC had a relevant archive of part of the university’s production (e.g., the 133 CSIC-funded publications mentioned before as well as final reports of CSIC-funded research).

V.2.b. Publishing Outside the Universidad de la República

Somewhat in between the commercial publishers and the Publications Offices of the UR, was the Foundation of University Culture (FCU), a non profit organization created in 1968 by the Center of Law Students with the goal of disseminating law sciences as well as social and culture in general, mainly through publications (FCU, 2008, http://www.fcu.com.uy). FCU focused on materials for student use which were commercially viable, so, though they used to support journals in humanities and the social sciences, they did so at a loss, and once the authorities changed and more strict commercial criteria were implemented, the support ceased. Although the FCU still published a few titles not directly related to law, none of my interviewees mentioned this organization as an option they would consider to disseminate their research.

As another option to publish their work in Uruguay, researchers could resort to commercial publishers. According to interviewed representatives of commercial publishers in Montevideo, they accepted academic material for publishing as an attempt to bring science closer to the general public and build a body of knowledge. One publisher expressed the company’s
objectives as looking “to represent the academic life and research of [the] country … we’re trying to generate a bridge, very difficult to cross sometimes, between the academic world and the public. … for the dissemination of national knowledge” (Publisher, 18). Another said to want to “support certain types of publications that are of very good level. The articles [received for a journal in humanities] … are really of a very good level” (Publisher, 26). The publishing companies’ expressed interest in the academia resided primarily in its long-term value: academics and students, although a somewhat limited community, provided a writing and readership base that remained stable over time.

The modalities of financing the publishing costs included either the client or the publisher covering all the costs, as well as agreements to share the risk by splitting the costs between the two parties. The amount of involvement of the publishers could be just just to unify formal parameters (e.g., assuring a common format, writing and font style, especially in cases of edited books or journal issues) or to merely provide the seal of quality of a publisher so that “you know that the published material is good” (Publisher, 26). Other times they worked in closer contact with the author(s), helping them shape the content for a general public.

The size of the community (the country’s population in general and the academic community in particular) appeared as a variable that strongly affected the way the publishing world worked:

We’ve hired people … who are academics themselves … they are our eyes in this academic world … in such a small country where we all know each other and where the academic world is all super knotted, they can tell us, look, such person is with such research line. … We then chose what … we think could be of interest for our readers. [One edited book can include] almost all the research community, at least … the better known … There, it is clear how the universe in this country is, at least in the social sciences. (Publisher, 18)

According to the same publisher, though, the amount of written material produced didn’t reflect the size of the community: “Uruguayans write like crazy, everybody writes, …
information, there is a lot, what to publish there is a lot, but of course, I have to [select] … The
wealth of knowledge we’re generating, it’s huge” (Publisher, 18).

The size of the market did affect distribution strategies, which were sometimes limited to
word of mouth, presentations, conferences or giving back the copies to the client for distribution.
At times, bookstores contacted the publishers directly to request material, for example when
professors recommended books to students and the bookstores could expect a certain amount of
sales; other publishers worked directly with the main library chains. More organized distribution
required an investment in infrastructure and staff that smaller publishers couldn’t face, but bigger
publishers would rely on for distribution in Montevideo. A couple of other avenues were
mentioned as available for distribution in the rest of the country and abroad, yet the options for
distribution were very limited and costly. Bigger companies also sold through their offices
abroad, though selling Uruguayan authors abroad was considered very rare for academic works.

The scale of production also affected the running of the publishing companies: regardless
of their size, employees of publishing companies had to wear many hats. One publisher
explained this situation as a result of the reduced volume they handled: “I handle all [aspects of
publishing]. You know how in Uruguay we all do everything. … We have a lot of …
consultants. We rely on them often, [the reduced volume] does not justify having somebody here
[in the editing company, as employee] working on that” (Publisher, 18). This pressure to attend
to multiple tasks was given also as a reason for delaying less-urgent issues such as technological
updates: “We’re a family business, at the moment my brother and I handle it … we’re in charge
of everything … for that reason we’re slow [in incorporating ICT] … other things take up our
time … if you have things to do, you prioritize them and we’re always leaving [the website] for
later” (Publisher, 26).
To put the publishing activity in context, the interviewees reported that the sales were usually in the low hundreds for academic journals or books, and up to the low thousands for materials of a more general readership. Then, success in a small country took on a particular meaning: just managing to go through the process and publish the book or journal was considered a success. Still, like in any publishing company the commercial viability (or promise of) was considered, the two or three yearly commercial successes sustaining the other fifteen commercial failures.

V.3. Libraries

V.3.a. The Reform in the Library

In 2004, an internal evaluation was carried to assess the state and needs of the UR libraries. The conclusions stated that the libraries did not work as a system as there was no integrated management or centralized coordination that determined the policies to be followed. International standards were not applied, and libraries had an unequal informatic infrastructure: some of them were extremely lacking in this respect, but in general they were far from having the necessary infrastructure according to international standards. For example, there were 82 computer equipment for 125 professional staff members while international standards recommend 1 multimedia computer with updated technology for each staff member. As for equipment available to library users, the amount was also deemed highly inadequate as standards recommend 1 machine per 10 students. In addition to scarce equipment, there was lack of maintenance and training in their use. There was also uneven informatics knowledge among the personnel supporting the libraries and the demand for training was important (Seroubian, 2004).

Following the report, the same process of reform that would sweep the UR at the time of my fieldwork, was started in the libraries about four year previously. According to one interviewee (Librarian, 29), the push for internationalization had motivated the re-evaluation of
certain services offered by the university and the implementation of several initiatives to update and upgrade them. Among those services were the libraries.

One of the major problems being addressed was that the 30 different library services of the university, including schools and institutes in Montevideo and the rest of the country, found themselves at very different levels of development. The differences extended to several areas: the funding they received and the independence to use that funding, criteria for operation, number and training of personnel, availability and quality of ICT, size and characteristics of the collections, infrastructure, and users’ requirements. To complicate things further, the resources did not diverge exclusively from library to library but they were also irregular within the same service: for example, a library would have good resources in terms of their collection but would be experiencing deficiencies in staff or building facilities.

In this framework of uneven development, university libraries had been working for the previous four years to create one common university library system, based on a common working catalogue and criteria, with updated, streamlined, and generally improved services. The acquisition of journals, for example, had already been centralized in order to obtain better prices, better access, and especially in order not to duplicate purchases and waste resources as it had happened before. Another goal was to achieve increased visibility outside the university by using a unified format that facilitated the exchange with other institutions. Journals, for example, were already unified in the web, and other materials were expected to follow, as an administrative staff commented enthusiastically: “They have put online the search system. … They are digitizing everything, the books. Now that they are re-indexing, entering the journals as well, … re-cataloguing some books with magnets” (Administrative staff, 11). The final objective was to have all the collections digitized and entered into the system.
In 2007, the university issued an international call for proposals for a management software that would unify the collection, and the system was going to be implemented during 2008. Among the expected upgrades were the inclusion of theses – initially bibliographical data, and eventually all the content for those cases that authors’ rights and patents so allowed. Another aspect that was going to be improved was the unification of lending criteria, and a universal automatic lending system, for which they needed to implement the general use of bar codes and create a unique user with one only card. This, in coordination with other services (e.g., class enrolment) would facilitate interlibrary loans and control of the collections (Librarian, 29).

V.3.b. Hurdles Still to Overcome

Yet, collections varied widely between libraries, as did the level of satisfaction with them. According to informants, the budget to acquire books and journals, whether relatively decent or non-existent, was never enough to satisfy requests or to attend to the needs of the different users. As with every other activity in the university, the economic crisis of 2002 had worsened the situation, dramatically reducing the funds available for purchases. Donations and exchanges, especially for some libraries, constituted considerable avenues for expanding their collection, yet, donations brought their own set of problems, clogging up space and further occupying already scarce and overworked staff.

In addition to purchases and donations, all the libraries participated in one way or another in networks with other libraries, which allowed them to request (and provide) specific materials. Informal arrangements among departments to combine purchases in order to share expenses and increase access, had been formalized in the new administration of the libraries, as I mentioned before in the case of the centralized negotiation and purchase of journals. Still, the extent to which the lack of funding hindered the circulation of information, was clearly shown in the following comment: “We don’t have money for the post, … we have all the journals for the
exchange [of journals with other institutions], they’re in envelopes and we don’t have money to send them” (Librarian, 33).

The inadequate funding was clearly reflected in the under-staffing of the libraries, which in turn was reflected in the libraries’ hours of operation, which were extremely short even during classes. While some of the bigger libraries had around 13 staff members, others were operating with only one, and sometimes temporary, staff member (see Appendix E for data on the UR libraries). Regardless of the number of staff members available, they seemed to be perpetually insufficient, as one librarian worriedly commented: “There are a lot of people [users] for one person [staff] alone [to serve] almost 800 users, without counting the new generation that starts now” (Librarian, 34). The lack of automation found in some libraries compounded the problem. All the interviewed librarians agreed that digitization and technological development would relieve staff from repetitive tasks (e.g., checking out books) or tasks that could be performed directly by the user (e.g., search for books in shelves), and help with the maintenance of the collection (e.g., the implementation of security systems).

Management issues and building infrastructure were also mentioned as sometimes causing problems. Management commissions lengthened decision-making times, stalled action, and sometimes required employees to contend with opposing orders or to take executive decisions – a move that was not always well received in a university with a strong democratic tradition. In terms of infrastructure, many of the libraries were located in inadequate rooms or buildings: in one case a mid-size room held the reception, the collection, the computers, the deposit and the reading space of one school’s library, while in two other cases the libraries were located in old family houses, ill-designed for holding a library. Yet in other cases they were housed in spacious, well-lit rooms with plenty of space to study – the state of the library
corresponding in general to the state of funding of the school (e.g., the hard sciences were better supplied than the humanities).

As for ICT resources, the level of hardware, software and internet connections available also varied from library to library: some libraries had the only computers for students’ use in that school (for searches or any other use, with or without access to internet, and as little as three machines per school). One librarian complained:

At this moment [we] have a tremendous deficit of computers, three computers broke one after the other and we can’t replace them … [the computers don’t have internet access because] they’re ancient and they can’t handle it. We have a network problem here … The room [where the computers are] it’s a very, very old room … [the computers] are there for bibliographic searches exclusively. If [users] want to search any database … the university bibliographic databases are directly in the university server, they can’t [access it] … we have to do the search [for them]. (Librarian, 33)

In another library, the librarian showed me around: “Here [we have computers for students to use], upstairs. Five or six, with access to internet, but only one that works. And this one here, where they have the library database” (Librarian, 34). Even in those cases where the library had the hardware, software and appropriate connections, the situation with the digitization (when collections had not yet been transferred online) or access rights (when the purchased rights only allowed two simultaneous users of a resource) sometimes impeded adequate access to resources.

The university reform itself had caused additional problems. With insufficient or ill-prepared staff, the changes often meant improvising and overworking, which the staff resented: “Personnel, we’re always few people, for all the rearrangements we’re doing, that we continue doing, that are coming in the future” (Librarian, 33). These less-than-ideal conditions created tensions and political problems as well, as observed by a faculty member: “The merger [of libraries] was fatal because it generated winners and losers … only now it’s starting to work
more as a library.” (Faculty member, 28). The changes that were being implemented encountered not only resistance from library staff but also from schools’ authorities and users, suspicious or concerned about consequences of the new ways of operating.

V.3.c. Library’s Support for Local Production

The library’s role as it related to the production and dissemination of local journals was mainly concentrated in promoting access to those journals by having them in the library and by distributing them to other institutions, primarily through exchange arrangements. As one librarian explains:

We handle the exchange. … The Library of Congress has a branch in Rio de Janeiro, a librarian … stops by, recovers the information … these publications that the school itself publishes, whether it’s journal, document … She enters them into the Library of Congress, and … sends a list … if they have more than a copy of things, the other copy they … offer as exchange. … We look for journals, especially the Latin American ones, of universities … with the same characteristics … that might have journals with certain [criteria], on internet … [last year] we managed to obtain three titles more through exchange. (Librarian, 33)

Other ways librarians contributed, were by helping with the search for journals to which researchers might be able to submit articles, processing the indexing of journals into databases, or reviewing bibliography. Those instances of collaborations were not institutionalized and only happened when both the librarians, and researchers or professors in charge of editing and publishing the journals were in communication and agreed to collaborate, which was not always the case. Among the reasons editors gave not to work with librarians were the perception that the libraries were already burdened by their own problems, the fact that the library’s location or schedule made communication difficult, or that professors preferred to maintain control of the material in their department for easier and more reliable access.
In a few years, once the new systems are implemented, and the technology upgrades and digitization are ready, there might be a chance for the libraries to take on additional roles of supporting local journals by hosting and managing electronic versions of printed journals. They might also be able to expand services that had been provided randomly or unsystematically, such as managing applications and inclusion in international databases and exchanges. As it is now, most researchers didn’t consider the library as a resource that would help them with their dissemination efforts (other than keeping a donated copy in stock).

V.4. Information and Communication Technology (ICT)

V.4.a. ICT services

Originally created in 1966, the general ICT center of the Universidad de la República (UR), evolved into the Central Computer Service of the University (SECIU), a unit that since 1988 had been in charge of the overarching networks, systems and servers of the UR. SECIU managed the Uruguayan Academic Network (RAU), which connected all services of the UR and other educational and research entities in Uruguay, and was in charge of the registration to the domain uy, video-conference services, modalities of connection to internet and hosting of websites (SECIU, 2008). Among the latest policies promoted by the unit were the standardization of formats and protocols and fostering the use of open source and open access software in UR. The direct involvement with the schools and the extent to which the services could refer to SECIU for support was, according to some informants, minimal, and the contact was mainly between technicians and SECIU. In most cases, SECIU wasn’t mentioned at all as a resource by researchers or editors.

Within and between the schools, ICT services varied wildly; in the words of a staff member: “There are schools that seem from the First World and others that seem from the Fourth

38 Source: http://www.universidad.edu.uy/odfpdf/
in relations to ICTs” (Administrative staff, 31). Availability of technicians could be one or two part-time staff on short-term contracts for a whole school, like in the case of the School of Humanities and Education Sciences, or a relatively informal team of three administrative staff in the process of constituting an ICT unit, as in the case of the School of Social Sciences. One administrative staff detailed the creation of such unit:

In this context … of unification [of the School of Social Sciences] in one building, it became very important to centralize or at least coordinate ICT mechanisms, from the most basic thing of hardware maintenance, updating of software up to … computer tools. … A little bit of money was taken from each academic unit, they agreed, then we built a central unit, a little bit of equipment and a little bit of personnel, three, who take care of the basic computer maintenance of the whole school. (Administrative staff, 11)

In both cases, the initiatives to provide ICT services seemed to have come from staff and faculty members –frustrated with the poor quality of the websites–, rather than the schools’ authorities. As it could be expected, on the other extreme of the spectrum of ICT resources were the more technical schools. The School of Sciences, for example, had a separate department with permanent staff with some of the school’s departments enjoying the help of additional technicians. Other ICT-related resources also divided across the lines of the hard sciences and the rest, as one administrative staff member pointed out and various instances of observation confirmed:

We do know that there are schools that don’t have a computer room … while others have 100 computers for the students, or 60 … Also, the discipline that they are working … for example, all the professors in engineering, due to their training and work are very familiarized with ICTs, but one in Philosophy, or even Anthropology, doesn’t, not necessarily, and even less the higher ranks who are the most senior. (Administrative staff, 31)

While the School of Engineering, for example, had several computer rooms with dozens of computers each for a total of 9,222 students (Census 2007), the almost 5,000 students of the
School of Social Sciences had to work with 15 computers in one single room, as described by an administrative staff:

The computer room is for student use … except when the professors use it to give classes … We started it … in 2002 … 15 computers with two seats per computer, it will have more. … It’s in a very uncomfortable place, without ventilation, but at least there is place, and they are good computers. Now it is [open] 4 hours a day because [personnel is being selected]. The idea is to have it open 10 hours [a day] the next year. (Administrative staff, 11)

The situation for professors also varied widely: while professors in the School of Social Sciences had at least one computer for their use in a private office, professors in the School of Humanities had to share a couple of computers per department – some of which were connected to internet only two years ago.

V.4.b. Websites

It was clear that the situation in terms of availability of hardware, software, and connectivity had to be improved, yet the state of UR websites presented its share of issues. In general, university webpages showed a lack of overarching planning and maintenance and often displayed outdated information, including personal websites of professors and staff and their contact information, but also making it difficult to find reports, theses, or articles on websites or institutional repositories. Old webpages would not be removed when new ones were created, duplicating information and increasing confusion: “Information about the university is not systematized; is there, fragmented, you have to go webpage by webpage looking for documents, some things are not accounted for, in some schools yes, others not, and some information is simply not there” (Administrative staff, 08).

Having no overarching system made it difficult to find information of any type, to locate and communicate with people, and phone, paper, and face-to-face communication were still common. This made communication and access to information difficult or impossible for people
living far from the university or outside Montevideo, and definitely more expensive and time-consuming for everyone.

This situation of disarray was a direct result of the federative structure of UR, and it was explained by the fact that in many institutes and departments the tasks of building websites and updating of information fell on administrative staff already overburden with multiple tasks and responsibilities, and who would often lack specific training or skills in web design or web maintenance. A common complaint of faculty members and editors was to have to constantly beg that person to upload documents or modify websites. The account of one staff member about the development of the website(s) of the School of Social Sciences, where “a central façade, where you have some central stuff and some search engines … links to the five pages of the departments, which work with quite their own and different aesthetic, … contents, without communication among them” (Administrative staff, 11), serves as example of the state of the websites of the UR. The state of each website would depend on “the director of the department, the person in charge of their website, and their moods”, as well as their, often lacking, ICT knowledge:

The website has improved a bit in the last year but it … has much to improve. The website is managed by [a staff member] who uploads content, updates information … but doesn’t have a great programming knowledge, [therefore he doesn’t] modify the structure, but [changes] some contents. … This year what we did was a common typography, a common identity, development plans. … But even then, this commission gets together sporadically (Administrative staff, 11)

Another reason for the lagging behind in website development and thorough exploitation of opportunities provided by ICT could be partially explained as an indirect consequence of the policies of freezing the hiring and promotions of faculty members – which had resulted in an aging faculty body with (in general) limited knowledge of the use of ICT (beyond the basic uses of word processors, emails and internet searches). That generational gap in the use of ICT was being breached with some ingenuity by the new generations, given that at least some of the
younger students, faculty members and administrative staff seemed to feel more at ease with the incorporation of ICT communication for organizational and communication purposes. A couple of examples of original solutions were blogs created in the School of Fine Arts for the library and student services (http://biblioenba.blogspirit.com and http://blogs.montevideo.com.uy/blognoticia_14200_1.html), which came to solve the lack of a technician and allowed for a fast and easily-updated online communication system. The same format was employed by students in School of Humanities and Educational Sciences (http://estudiantefhce.blogspot.com) to keep abreast of information of interest to them and to provide a support that student services of that school failed to provide, as well as by a junior professor to showcase his work, courses, and links of interest (http://eduardoalvarezpedrosian.blogspot.com).

V.4.c. **ICTs in the Future of the Universidad de la República**

The lack of ICT knowledge had already been identified by UR authorities as a problem, and a project was already in the process of addressing the issue, at least at the level of junior faculty members:

In the evaluation we do of [some teaching innovation] projects, we saw that suddenly each one was reinventing the wheel, started from scratch, lost tons of hours, because this [faculty member] was not a computer technician, but from any other discipline and tried to do as best as they could, [which was a] waste of time and energy … Sometimes even within the same school … there was no connection. What here is missing is a push at the central level of all this. (Administrative staff, 31)

In response to this evaluation, a program was created to streamline efforts and help professors and students incorporate the use of ICT in the daily teaching and learning process: “We’re trying to generalize the use [of ICT] … with the goal that those who have problems of access to information or that are behind in the issue of teaching can reinforce their capacities”
(Administrative staff, 31). The program planned to research, to provide training and skill development in ICT-lead teaching (mainly to lower-rank faculty), and to offer a technical center to serve as reference, set standards, and give technical support. Services would be unified to the extent possible. The project, partially financed by the Spanish Office of International Cooperation for Development (AECI), had a three year duration, after which “the continuity of the projects is a problem” (Administrative staff, 31). Although coming from a Teaching Unit and with the goal to incorporate ICT in pedagogy and education, upgrading ICT skills would be expected to improve UR faculty’s use of ICT in general.

The disorganization in UR websites and faculty members “reinventing the wheel” when using ICT, showed that there was much to do in order to bring the use of ICT in the UR to ideal levels. The need for better ICT services was also recognized as an issue to be addressed through other aspects of the university reform. As we have seen before in this chapter, CSIC had incorporated some funding for research groups’ websites and the libraries were undergoing a process of technological updating. Also, the recently created Central Communication Unit (CCU) created a new, professional-looking university portal that was being constantly updated and served effectively as a communication tool between the central offices and the rest of the academic community in particular, and the society in general. CCU offered some help to other university services, but ultimately it was up to those services to deal with their ICT needs and decide whether they could afford to have staff dedicated to provide ICT services. The federative structure of the university and lack of a centralized coordination had affected negatively the use of ICT, and it remained to be seen, whether the reform and the various attempts to technologize teaching and research at UR, but also operations and functioning, would be able to overcome a long lasting tradition of independent working and federative organization – a problem perhaps less visible that the cost of adequate hardware and software or lack of ICT skills.
V.5. Summary

The provision of services to support publication and dissemination of scholarly works in the UR were undergoing a process of revision and transition that, combined with its lack of coordination, played a role in making dissemination of research products a difficult process for researchers in the UR. At the technological level, there was a clear underutilization of possibilities afforded by computer technology. There were several reasons for this underutilization: lack of adequate ICT skills among researchers and administrative staff, insufficient ICT personnel hired on a temporary and part-time basis, outdated and insufficient ICT equipment available to academics, or relatively slower and expensive connections. At a national level, the scale and the peripheral status of the country, made scholarly production expensive and less saleable to other markets.

In the previous chapters we familiarized ourselves with the regional, national and institutional conditions in which peripheral academics work and the dissemination channels’ constraints (specifically, periodical publications). In the following two chapters I will focus on the answer to my main question about the strategies employed by academics to disseminate their work in a context of internationalization and technological development, and learn the forms that periodical publications have taken and the changes they are experiencing in light of those global pressures.
VI. CONDITIONS OF PRODUCTION: A RESEARCHER’S POINT OF VIEW

In this chapter we will look at the working conditions of faculty members at the Universidad de la República (UR) in their role as producers, organizers, and distributors of academic knowledge. In order to evaluate the existing academic publishing arena, we need to understand researchers’ behaviours in that area: where, why, and how often do they publish, which strategies do they use to do it, and the choices they make in that respect. Knowing the institutional (a public macro-university) and positional (a small country in the periphery) constraints under which they operate, will help us understand the choices they make when faced with the tasks of disseminating academic knowledge, as well as their choices to join or ignore the center currents of academic knowledge exchange.

VI.1. A Hard Day’s Work

As I mentioned earlier, very few in the faculty body of the UR were employed as full-time faculty members.39 The appointments as faculty members could range from as little as 2 hours per week to more than 40, adding hours up to a maximum allowed of 60.40 Many faculty members supplemented their income by taking other positions within the UR as researchers or administrators. One faculty member stated that “in order to more or less live, the position [20 hours, rank 141], you have to complement [your income] with two projects that give you something else, so that you have [a] more or less decent [income].” (Faculty member, 03).

39 Only 16% of UR professors (32,033) had one or more contracts with UR to work 40 hours or more per week as a faculty member. Some of these faculty members (20,120 or 6%) received a compensation or bonus for exclusive dedication to the UR, known as “total dedication regime” (RDT or DT). These conditions were not exclusive to the UR. The prevalence of part time appointments was also a problem in the private universities. There, professors could be hired to teach only one course and paid only for the few hours they taught. In those cases, they would not be expected to carry research or to publish, as noted by some interviewees (Faculty members 16, 17). Beyond educational institutions, multi-employment and work overload was mentioned as a characteristic of employment in the country as a whole – a situation triggered by economic instability and job insecurity paired with relative low salaries, high education levels and high living costs (Dirección General de Planeamiento, 2006).

40 “The regulation regarding accumulation of hours in public charges for educators, allows to accumulate a total of 60 hours” (Faculty member, 13).

41 Faculty member positions are divided in 5 ranks. Ranks 1 and 2 could be roughly explained as “faculty members in training,” with somewhat curtailed access to independent research and teaching work, while ranks 3 and up enjoy full benefits but also increased responsibilities.
Another faculty member agreed that taking on more jobs was necessary to generate enough income to survive:

My schedule is 15 hours weekly … my salary is very low. I make 2,300 pesos [115 CAD] \(^{42}\) which is a pittance. If I said I [teach] because of the money, it’s a lie, it’s not enough. … With miserable salaries one cannot do anything, has to work in another thing to be able to eat, more so if you want to marry, have children, all that. (Faculty member, 19, Rank 1)

The part-time positions and meagre salaries were also a reality for the higher ranks: “I make 6,500 pesos per month, 250 [USD] dollars. 20 hours, [rank] 3.” (Faculty member, 13). As a consequence, faculty members also took on additional work at NGOs, private enterprises, the government, or worked independently. Several interviewees reported work-related activities for up to 60 or 70 hours weekly:

I’m faculty, assistant, rank 1, in the department [X. There,] like the majority of faculty, I teach, participate in courses, do research, very little, for various reasons, community involvement. At the same time, although I’m in this department, I have been for a couple of years “on loan” to the department [Y]. … I worked in a seminar. And in [another school] I’m director of the research area. There I develop a line of research and coordinate the rest. [In that school] I have, I don’t know exactly, … about 35 hours a week, and [in this school] I have 20. In addition, I have a few little hours more, … in a primary/secondary school, for the free times. So, from Monday to Saturday, I’m a bit [busy]. (Faculty member, 15)

Not only did faculty members hold multiple jobs but each position as faculty member entailed numerous tasks. During those hours they were expected to teach, research, carry outreach activities to benefit the community, and take part in the administration of the university, for example, by participating in committees. As a faculty member commented: “I’m researcher, teacher, and … I’m editor of the journal. Other colleagues … are in the budget commission, in management of the school … My assistant … who does all the part of editing and correcting, is also a professor, he teaches, researches” (Faculty member, 28). The expectations to research and

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\(^{42}\) The amounts by themselves might not say much, but to put the salaries in context of costs and expenses, a computer would cost the same or more than in Canada, an average book would cost between CAD 10 and 50.
participate in administrative and management activities were raised for faculty members who held positions in ranks 3 and above, yet, as another faculty member pointed out, those requirements were an ideal difficult to fulfill in reality: “The university has three legs: community involvement, teaching and research … The ideal would be that [faculty] do the three, but three things is complicated, it takes a lot of time” (Faculty member, 21).

Not surprisingly, professors expressed frustration at trying to fulfill the requirements and not being able to perform to the best of their abilities: “In the past 10 years I have had an average of four jobs at any one time … This means that you’re always giving the least amount required” (Faculty member, 02). Another professor placed the situation in an international context, stressing the additional strain of job insecurity that plagued UR professors: “There is no time ... You’re running in between what you try to produce, teaching, and all that is administrative. Not only in Uruguay, that’s is all over the world, but here, in addition, you’re thinking, well, and next year: What do I do? How do I do it?” (Faculty member, 05).

In the context of job insecurity, multi-employment was pursued by some faculty members as a strategy to ensure safety against political and economic downturns; a not-all-eggs-in-one-basket strategy, as one professor put it:

I work 20 hours in the university school [and have two teaching positions in other institutions] … a total of 59 hours [weekly]. If I had a full time [position] in the university, I would make 32,000 pesos [CAD 1600, monthly], and with all the other jobs, together I make around 38 [CAD1900]. I make more being multi-employed than [being] a full-time [professor] in the university. … Plus, our university, as you know, is a very politicized university, … the re-elections to faculty … positions are politicized … Then, as a strategy, in order not to put all eggs in the same basket, and for total amount [of income], if you have another possibility, it's a priority [to take various positions] over doing full time at the UR. (Faculty member, 13)

Multi-employment was also perceived as granting increased freedom to study topics or work in ways that were not favoured in the academic environment of the UR. By choosing to
operate in other environments, faculty members could carry activities not contemplated or hindered by UR’s culture or administrative structures:

One starts to play with the multi-employment … beyond multi-employment for survival reasons. … Environments like NGOs, for example, give you a much wider degree of freedom than the university to organize seminars, conferences, topics that in the university are taboo. There is more money and more opportunities to do [some topics] at the level of the NGOs. Then one works there in the frontier between the academic but more directly applied to lobbying of the NGOs or social movements. (Faculty member, 05)

Multi-employment had some indirect and unintended consequences for the dissemination of knowledge outside the walls of the university. The communication between different institutions and areas was fostered by way of the same people working in different spaces: “Several faculty members from [UR], give classes in the [tertiary institutes for training of teachers], there is a communication by way of the facts, not institutionally” (Faculty member, 15).

Beyond positive spinning and survival strategies, the part-time and short-term contracts of faculty members coupled with relative low salaries rendered long term projects or any other planning difficult:

And while you’re working, you are already thinking of the next year, generally short-term projects, even those of the CSIC you’re always running behind administrative stuff because you never have the money to get things done, you’re always putting out of your own pocket so that later you get refunded. The tranquility to sit down [is missing]. (Faculty member, 05)

The general consensus among faculty was that the situation of being all the time at full speed and attending to the basics, “doing the minimum to be paid at the end of the month” (Faculty member, 02), conspired against the efforts needed to discuss their work with others, and specifically, worry about dissemination after publishing. The long working hours and heavy teaching loads left little energy for research and even less so for dissemination of results:
From the 20 hours I have [in the university], … for example, this semester I’m teaching 2 courses, of 2 hours each of direct class. … each course I teach actually takes 10 hours weekly of work, preparing, correcting, etc. In addition, I’m the only professor [in that topic] that there is, then, I have approximately 60 students that have to take exams, … and I don’t have [teaching assistants], then I have to do absolutely everything myself. It takes me more than what corresponds to the 10 weekly hours... Last semester, because of a problem with the curricula, and that one professor … didn’t teach a course, they gave it to me … I had to teach 3 courses with 20 hours and still I researched, published and did the things I told you. (Faculty member, 13)

It’s complicated [the administrative aspects]. It demands a lot of effort. Because all this project of restructuring the [institute], it meant for me to cancel my sabbatical. One is passionate about research, and I keep doing it, but sometimes 15 days have passed and I wasn’t able to go to the library, … it has been more than two months that I haven’t been to the archive. (Faculty member, 09)

Another faculty member lamented that the only time to write was on her free time:

“Often, that time of production and systematization is the time to rest, time outside your working time … You end up doing it in your holidays, as a hobby, not paid.” (Faculty member, 02). The current situation seemed to be a consequence of relatively recent changes in the working conditions of the faculty. Previously, presumably better conditions had facilitated research activities, as one administrative staff member recalled:

At that time [70’s and 80’s] research was practically nil … there were no specific resources for research during the dictatorship, and there weren’t before either, but research was done anyway because faculty members had another type of dedication, almost all were [full time dedication] … it was another form of work completely different … [Before,] professors researched with the hours that their own school gave, and it was another historical, cultural and social reality. … university professors were … well paid … and in general had a long exclusive dedication to the university. That has been lost. … It was lost during the dictatorship and … today it hasn’t been fully recovered. We have a minimal percentage of 17% [of faculty members with full-time dedication], which is very little. Universities have 60, 70 [%]. And we have the famous multi-employment, in which you run from one side, you run to the other, give classes but also do this other thing, you have public and private activity, and that doesn’t allow for stable or long-term
research teams. And before … it was the reverse, the norm was: if you were university professor you were … dedicated exclusively to the university … I’m generalizing, but it has varied a lot the ways of doing research. (Administrative staff, 31)

Under the present conditions, though, the university was described by many interviewees as something one had to contend with, as being very costly a place for the individual to develop those activities typical of an academic career: “It requires a certain level of energy put into carving a space for yourself in those tiny, very scarce spaces available. You have to keep an eye open” (Faculty member, 02). The lack of clear regulations or directions in some areas paired with the over-bureaucratization typical of democratic organizations, was to be blamed for those conditions, according to one interviewee:

[University structures] allow you to act … and get yourself in the interstices and manage to get support, with very slow rhythms … It’s not that there’s something totally structured, monolithic, and that prevents you [from acting], no, no. Sometimes, what bothers you more is that it is so unstructured that it is very complicated … it wears you out … You need to dedicate a lot of time to administration and paperwork, done by researchers who have substantial interests on other directions. Well, that’s what happens with democratic organizations. If you put a manager, … you can do something that is more technocratic, more efficient, but maybe it doesn’t adjust to what suits researchers. I think it is necessary to find a healthy equilibrium. (Administrative staff, 08)

Restricted opportunities for advancement also frustrated faculty members: “After 8 years of [basic labour, you] manage to get a higher rank and only then can you do research on your own. I don’t think that’s exactly how it should work” (Faculty member, 04). Responding to this discontent, after almost a decade of frozen salaries, hiring and promotions, there was a university-wide call in June 2007 for faculty members to apply for long overdue promotions. Although it represented an improvement in comparison with previous years, the increases were minimal, as a faculty member remarked: “The university made a call for those aspiring for a rank promotion, professors who consider themselves qualified to have a higher rank. I applied for [one rank above] and apparently I will get it … It is still not resolved, but anyway, from the point
of view of the salary, it’s 800 pesos [40 CAD]” (Faculty member, 13). The change didn’t translate either in an expansion of the faculty body that would have allowed to strengthen research teams: “Because the budget of the university has improved, money was destined for those who are overqualified, that is, all the positions. We applied, I came out very well [with one rank higher], but [it was also] an inconvenience, because initially we thought: with a higher rank we freed up a position, but no, that one was cancelled” (Faculty member, 09).

Interviewees recognized that some researchers managed to survive and even thrived in that environment: “There are people who do it, I know for a fact, we should ask them what are their strategies, I think it is about patronages, it’s about occupying certain places, and find out which are the mechanisms to get resources” (Faculty member, 05). Many found it easier to create those niches of activity in the NGO sector or the government, and therefore limited the time and effort they dedicated to activities within the university. This seemed to be especially true for faculty members in the lower ranks.

So, despite less than ideal working conditions, and regardless of their rank, many faculty members managed to research and publish. If we consider their production and pair it with the information provided by CSIC and private publishers I presented previously, the amount and quality of output didn’t seem to be an issue to be concerned about – although it was clear that the effort to produce did weigh heavily on the individuals, especially junior researchers. Few incentives coupled with various obstacles to publishing, though, undermined those efforts to write.

VI.2. Publication Confusion

In addition to facing heavy working loads, relative low salaries, multi-employment, job insecurity, and scarce opportunities for advancement, faculty members generally did not enjoy
either direct institutional incentives to publish or any direct benefit from publishing. 43 When applying for positions at the UR, they felt that their written production “wasn’t counted” (Faculty member, 03) or, even when not abundant, was considered “enough to qualify” (Faculty member, 05). This last interviewee felt that his lack of production under certain formats was a direct consequence of the lack of incentives: “In my particular case [publishing in peer-reviewed journals] hasn’t been one of the strengths. … Why? Because this environment doesn’t require it” (Faculty member, 05).

The perception that publications were not counted at the time of granting positions or promotion was not corroborated by other interviews. Senior professors noted that in the last few years, at the time of renewing positions, publications had started to be increasingly taken into account, as well as whether the articles were published in peer-reviewed journals or not (Faculty member, 01). Comparing the situation with the past the pressure was increasingly being felt, so that with more opportunities to publish there had been a corresponding greater pressure to do so: “Now, if you don’t publish, you don’t exist; you’re nobody, it’s like a necessity” (Administrative staff, 31). Yet another professor was of the opinion that publications had always been considered:

43 Supporting what the literature on dissemination of academic knowledge reported and I discussed in chapter IV, interviewees agreed that the value of publishing and the criteria for evaluation of publications were markedly different between the hard sciences and other disciplines. Institutions funding the hard sciences, like the Basic Sciences Development Program (PEDECIBA), promoted research and publishing by ranking and providing a research fund to scientists based on periodical evaluations of, among other things, publishing activity. As for criteria to evaluate publications, researchers in the hard sciences strived to publish in a center, peer-reviewed journal. Consequently, they were well aware of rankings systems and indexes, favouring journals in the center over books and any other forms of dissemination of scholarly knowledge, including local or regional journals, or journals in Spanish. As one faculty member put it, there was no interest in publishing there “because nobody reads them … there are interesting articles but at the international level they are not in the libraries … [after all] there are so many journals that why would you be concerned with a journal in Brazil or Argentina when you can read Yankee or European journals?” (Faculty member, 21). Considering these differences between disciplines, I will be referring here to researchers and writing mainly in the social sciences and humanities.
Yes, [publications] always had some weight for the board. There is an item in the open competitions that the UR makes, which rates publications [by considering] whether you do them by yourself, if you’re the only author, in group, [if] they’re books or simply working booklets for the students. All that is evaluated, … but it’s not the only thing that counts. … depending on each board, it’s not specified. (Faculty member, 23)

This last comment point to the real problem: it was not that publications weren’t considered, instead, the problem seemed to stem first, from the fact that the requirements regarding publishing and the evaluation parameters were not clearly stated. Second, the parameters seemed to vary wildly by discipline, as the testimony of this faculty member attested:

It’s good that someone motivates you, requires you to produce and publish. [Yet in my area it is] not required [to research or have] determined publications, for your contract to be renewed … like in other places. … It seems to me that depends on each tribunal, which type of publication is weighted [when evaluating]. What I’ve published [in one discipline] doesn’t count at all [in another], I’ve applied to a competition recently … They don’t even count it as a report of intellectual production or capacity or anything. (Faculty member, 19)

The comparison of three different schools offered by another faculty member, highlighted the lack of common criteria for written production across schools and disciplines:

[In the School of Fine Arts] perhaps some professor might write, but I think not. It’s not an issue like in [the School of Humanities] where [you] have to publish. [You] also don’t have … a system that you have to update your CV … [In Communication] they don’t have a journal, they publish books but very self-referential as well, for the programme. (Faculty member, 24)

An administrative staff member explained those extreme situations coexisting within the same institution as “[schools having] very different realities, with very different emphasis and orientations … There are institutional histories that generate their own institutional cultures which are very difficult to fight” (Administrative staff, 31).

Obviously, the picture within the social sciences and humanities was less straightforward than in the hard sciences and did not necessarily coincide with some of the literature’s implicit presentation of the social sciences as unified in their parameters. For example, the Institute of
Economics in the School of Social Sciences was mentioned often as an example of a discipline in the social sciences that followed the ideal of the hard sciences: to publish in English, in peer-reviewed, ranked journals from the center. In contrast to this, some departments in the School of Humanities and Educational Sciences were perceived as having no awareness of international parameters and sticking to a traditional profile:

The School of Humanities stayed in an essayist profile and not a scientific one, to put it in some way. While the School of Social Sciences, from its origins, had it very clear that they wanted to have an international involvement ... In comparison with other schools, the School of Science, I think it’s the one that is most submerged in the international tendency. (Faculty member, 05)

Obviously, this situation created confusion among faculty members, especially the ones in the lower ranks who were trying to figure out the nature of a(n inexistent) system.

VI.3. Too Small to Play

The size of the country, and consequently, the size of the research community, was mentioned as affecting conditions of production and dissemination of research, confirming what was indicated in the literature about the problems associated with research and publishing in small academic communities. For instance, a member expressed his concern about having no qualified peers who could evaluate his work, while another professor questioned the plausibility of objective evaluations in such close quarters: “Sometimes you have a person [evaluating], … who works with you, who evaluates, and … [that person] awards friends and protégés … You always have that issue, the peer-review and the country of proximities, no?” (Faculty member, 24). If, at the time of being evaluated, the actual output of the applicants turned out to be inadequately assessed or given less importance than personal connections, this, too, would reduce the concern about gaining merits by publishing. Whether this actually happened or was merely a perception is not relevant, when, in either case, researchers would be discouraged.
A small academic community also translated into an environment without the possibility to dialogue with peers. This was especially true for researchers in disciplines only represented at the UR, without counterparts at private universities – as one faculty member observed:

The social sciences in Uruguay … it’s a very small community … the environment is not the most adequate in any sense, … it’s not very stimulating. … The problem is, who are your peers? If I don’t have a community of reference, … you start to interact with communities [of related disciplines] … but I want to talk with [people in my discipline] … It’s important even at the affective, psychological level. It’s important to know that you have a community beyond the institution, which, by the way, is the only one … which is a problem as well. … when you have more than one department [in that discipline] a wider community is generated, different orientations, a greater mobility. (Faculty member, 24)

In addition, one faculty member felt that the lack of peers to discuss could negatively affect the quality of what was produced: “The disadvantage [of the small size] is that … there are topics that do not even appear, not even mentioned … nor do you have anybody that when you write an article in a peer-reviewed journal would answer … saying: Look, you’re missing this” (Faculty member, 05). Another faculty member deplored the lack of opportunities for professional development that comes from having a group of scholars that can serve as mentors in your field of specialization: “What I deeply regret is that here … many vocations can be drowned by not having people that can show you a bit another way or another bibliography” (Faculty member, 19).

Yet, a small community also translated in some advantages for the individuals. For example, one faculty members considered that the reduced size of the community created a less demanding environment that facilitated researchers to create a name for themselves, and to quickly become recognized as an expert:

You give a talk or a seminar and 40 listened to it, but each one of these 40 commented it to another 10. And it works like that in other places as well, but because of the scale is so reduced, there is an association almost linear between the name of a person and a topic, then you don’t need to make yourself known that much … In that sense the demand is a lot less when compared
to what would happen if I were working in other countries, even in the region, Brazil, Argentina even it’s another level, Brazil especially. (Faculty member, 05)

A researcher who, before graduating, had participated in research projects, presented papers at conferences and published, also attributed the possibilities for greater involvement in the academic life while still a student to the characteristics of the country:

In a certain way, we do have here a certain advantage compared to Argentina. They do not publish student works [in their discipline]. The first [paper] I published [was] in [a conference] … [it] was done after 15 or 18 years of not having a conference [in this discipline, in Uruguay], so, there was some enthusiasm … and so they let [students participate] … and now there’s this tradition that in national conferences the students can publish. (Researcher, 12)

Yet, while the fact that a candidate could expect little or no competition from other scholars might have fostered a more relaxed work environment, it also meant that the push to achieve more or publish simply wasn’t there: “[For a specific faculty position] there was nobody else that applied, I was the only one, then, you also have that advantage: they have to fill the position. … what you have to understand is the context, no? Which, for Uruguayan scientists is an advantage and a disadvantage” (Faculty member, 05). Once a permanent position was obtained, the person continued to have little incentive to work beyond a certain level, as often, as we have seen before, there were no evaluation procedures in place that would require, for example, a certain level of production for the position to be renewed. What was missing, was “the incentive that … if you do not produce, we will evaluate you and the next year your contract is at risk. Not here. The academics that have a permanent position are public employees, and unless you do something really wrong, you go ahead, … if I’m ok with my boss, I’ll continue another 5 years more” (Faculty member, 05).

Under those less than ideal work conditions and the lack of institutional or contextual incentives, it wouldn’t be difficult to imagine that no written production existed. Yet, as we have
seen in the previous chapter, it did.44 So, why did professors and researchers write and publish? What compelled them to do it? In the next section I will review some of the incentives that worked in lieu of institutional incentives used in the center to promote production and that were brought up by faculty, students and researchers during the interviews as reasons for carrying this academic activity.

VI.4. Incentives

VI.4.a. Personal Incentives

Many interviewees mentioned personal satisfaction as a reason to produce written outputs, such as a sense of duty or the feeling of accomplishment. One faculty member said thriving to excel, beyond what was paid or required, was an obligation of a faculty member’s work, and the reason why he researched and published: “It’s the educational and scientific … compromise I assumed, then, to be at peace with my conscience, I do these things” (Faculty member, 13). Following a similar line, another researcher referred to the need to make knowledge public: “You also publish to make knowledge public, to present the data that has been obtained, and so that this doesn’t remain forgotten in a report that was presented [abroad, and otherwise] nobody ends up knowing about it. … [You write] to disseminate, and for [the results] to stay for the future” (Researcher, 12). Publishing was considered to fulfill a personal need to see one’s work crystallized: “For me, the sending of the article is a fundamental part of the process of systematization. I need to do it [write] because I need to see that all the energy I put in this [research], materializes in something concrete” (Faculty member, 02). And yet another commented about a particular project carried by a small team, financed from their own pocket, presented in conferences locally and abroad, and receiving press coverage, as being done just “for the sake of it”: “[It] was something totally personal, there were no economic resources …

44 And in the words of an editor, I cited previously, that production was indeed “plenty.” Informants agreed that, if anything, the production exceeded the possibilities for finding an outlet for publication (Rocca, 2000; Publisher, 18).
[we] made observations, some interviews … we applied a questionnaire to 150 women in
different places, it was done, it was all for the sake of it” (Faculty member, 03). But these
motivations didn’t cover the whole gamut of experiences. Other, external, reasons were also
mentioned during the interviews as reasons to put their research in writing and try to publish.

VI.4.b. Push To Publish

One of the obvious reasons to put research results to paper, was the demand by a funding
agency to provide research advances, reports or a final publication: “Yes, at least in
[international funding agency] there are annual reports and now a final report is being elaborated,
and there has been dissemination, by the international agency and by us, independently” (Faculty
member, 06).

There was also the request of someone in a higher position to present research results in
written format; especially students and junior researchers and faculty members reported that the
urge to publish often came at the insistence of the director of the research team or a professor in
their department or institute: “I have worked always within a team, in general with coordinators,
… so the head that organizes and is in charge of dissemination is that person [with whom] one
collaborates” (Researcher, 03). Another interviewee agreed: “Faculty members in Linguistics
explicitly encourage their students to work with all the corpus they have generated and publish
things or do their monographies, with promises of future publications” (Faculty member, 19).

Although this scenario didn’t seem to take place in every department,\footnote{In general, it appeared that students weren’t given any information on how, when, or where to publish and how that might be necessary or help their future career. A researcher, for example, said that as a student, he didn’t know that some publications were valued more than others. Other interviewees complained about not having enjoyed that mentoring relationship or any publishing-related information when they were students: “Nobody tells you that for your profession, for your work, what you have to do is that [to publish in peer-reviewed journals], because that is how you gain the merits … At the beginning … nobody tells you but you [ultimately] realize” (Faculty member, 04). Yet, a detail escaped most when analyzing the production of young researchers and faculty members in the UR: “It has to be taken into account that we are talking about a Licenciatura [a degree roughly equivalent to a B.A./Sc. or M.A./Sc. depending on the case], which is a very basic level, a good level, but basic. Abroad, yes, people publish and publish, but we’re talking more at the level of PhD, no?” ( Faculty member, 06). Another professor pointed out the unfairness of a situation that pressured undergraduate and recent graduates to produce at the level of doctorates, but they couldn't do it, and it was not the right time for them to do it” (Faculty member, 06).} one faculty member was
of the opinion that the guidance of senior researchers would be ideal for students to have, as it would help them learn the mechanisms of publishing, especially publishing abroad: “[T]hat’s what they need: people with 40 hours, full time, that in addition, they are in the loop, and … will open the doors for them, to publish together. … That is a first step, well, let’s write, and those who know that this in some other parts of the planet is more natural, they demand it from you” (Faculty member, 05).

Not surprisingly, reasons to publish were influenced by the rank of the respondent or the stage in their career. Interviewees concurred that when a scholar was recognized as a specialist in a field or topic, after a certain trajectory, s/he would be invited to submit articles or to participate or contribute to a future edited or compiled book: “People would request articles from me … Many times they offered me [publishing opportunities] from abroad” (Faculty member, 23). For junior researchers, the way to receive invitations was by participating in conferences and other events and having contacts with other institutions or colleagues, especially foreign ones, which would open the doors to participate in publications:

The way you get to publish in a book that you didn’t organize is that you have some type of academic link from your line of research with another research line … and as you participate in academic activities organized by other centers, whether national or foreign … in the majority of cases, they have invited me to publish. … or that after a conference you keep some contact and they tell you: “Look, I’m going to publish a book about such and such,” and there they invite you, that’s a bit the way. (Faculty member, 15)

Working in other projects outside the university, would also lead to invitations to collaborate with chapters for edited books or to write something specific: “[I] try to pick work that gives me a possibility to publish. … Look for possibilities to publish outside the university, by working [also] in other places … Based on the work with community teachers [I have been and higher ranked faculty. Especially in the case of the hard sciences, the need for recent graduates to produce “at the level of the First World under conditions of the Third … generates many important problems because the lower ranks … have a lot of requirements, and don’t have the money or materials to do them right, then they end up very frustrated, and I know many cases of people who end up … all abroad, and brilliant” (Faculty member, 05).
invited to publish] in primary school journals, of [a state agency]” (Faculty member, 02). So, often, the active-passive strategy of placing themselves in junctures were they were likely to be invited or included in publications, allowed researchers to be nudged into publishing. By asserting their presence they increased the possibility to be considered when the opportunities for publication arose – an effective response to the absence of permanent, reliable publications, funds that one could count on, or clear institutional publishing policy.

VI.4.c. Intent to Pursue Studies Abroad or Have an International Presence

As we have noted earlier in the chapter, while a few decades before, a researcher could have an academic career independently of what was accepted in the center, this situation was changing, for example, with the increased opportunities (and pressure) to do graduate studies. Then, when applying to do graduate studies abroad, a CV without presentations or articles in peer-reviewed journals could be a disadvantage, and so researchers and faculty members who would want to pursue graduate studies, experienced an increased pressure to conform to the parameters set by the center: “I know I have to do it [write academically] because I it is the way to be [in academics] and to make a career academically, and if I aspire to … apply for a higher rank, or … go somewhere else [abroad], I cannot just stay in what I’m doing outside the university” (Faculty member, 02). Most interviewees were aware of a difference in parameters in and outside Uruguay:

I think at this moment it has much more weight, for example, [if you have done] graduate studies. Obviously, transitively, a person that has graduate studies is supposed to have publications. But I think what they’re looking most is that we’re, in a certain way, building [a faculty] body ... I’m totally aware that … in Uruguay, as a country where social sciences still doesn’t function in state-of-the-art manner … weight and prestige operate somewhat different … If I were to apply to Fulbright or to international funds or things of excellence, I’m fried. Me as [well as] other people. (Faculty member, 19)
The choice whether to give presentations or to publish, to do so at a national, regional or international level, and to publish in peer-reviewed journals as opposed to just any publication, appeared strongly influenced by the individual’s objective for his/her career, paired with the requirements of particular disciplines or schools. So, if a professor’s intention was to remain in Uruguay and s/he worked in a discipline which offered no incentives to publish in journals in the center, it made little sense to invest the extra effort needed to write for the academy or in a foreign language. Instead, the professor could choose those avenues that best suited his/her purposes, like being well-known locally as a specialist in a specific topic (reputation), as in the following case:

[My strategy of dissemination] is not a strategy because there wasn’t on my part either an interest in showing [my production] in the formats internationally recognized. There have been many communications in seminars, in conferences … mostly in “orality.” Then the result is that people know what you’re at, you’re working on this topic, they know it here. (Faculty member, 05).

On the other hand, those who looked to continue their training abroad or maintain a more active engagement with the global currents of knowledge exchange, looked to be informed about the parameters promoted in the center and to produce in accordance with these. These career-related considerations influenced the decision to publish in determined formats, and related to that, whether to publish locally, regionally or in the primary academic centers.

VI.5. Publishing Strategies

VI.5.a. Which Format for Dissemination?

Researchers resorted to a wide variety of avenues to disseminate their research. Aside from presentations, various written formats were cited as valid within the Uruguayan context:

46 Scholars presented at conferences, seminars, symposia, or fora within the school and university, or in more public spaces co-organized by governmental agencies, NGOs and other associations, locally, nationally and internationally. Whether this medium was especially efficient or effective in a “country of proximities,” or because it reached the target population (for example, decision makers), or yet, because it allowed for a dialogue difficult to have without (frequent and academic) periodical publications, presentations were seemingly a popular way to disseminate.
not only the article in the well-known peer-reviewed journal, but articles in any type of journals, non-academic periodical publications (such as weekly or monthly newspapers), publications in CDs and online, chapters in books, volumes in series, conference proceedings and books were all mentioned during the interviewees and cited in CVs. Several researchers considered it important to disseminate their research through non-academic publications: “[Next year I’m publishing in] a general publication, is an article [in a yearly periodical publication]… it’s not an academic publication, but they asked me for it and because it’s of mass circulation, it seemed interesting to me that they would have included a topic [in my field]” (Faculty member, 13). Another faculty member stressed the value of non-academic publications favoured in one department: “[In Social Work] they publish a lot in [a well-respected periodical publication], but it’s a journal [for the general public] that is not academic. And they publish a lot in journals that come out in [a teaching institute] and that type of things … they have value, of course they do” (Faculty member, 25).

Although respondents made it clear that not all avenues were on an equal footing, there was no unequivocal parameter on the relative value of each type of contribution, as there was in the hard sciences. As we have seen earlier in this chapter, this situation can be read as a result of lack of overarching evaluation parameters [either at UR’s or national level] and the fact that some disciplines in the social sciences and humanities haven’t been as influenced yet by the evaluation parameters promoted in the center.

Conference proceedings were mentioned often as a popular outlet for publications, especially for students, or junior faculty members, who had less resources and possibilities to access funds: “I published some summaries in a conference here … Then, I’ve published in conference proceedings, I’ve presented in conferences and it comes out there” (Faculty member,
19). Conferences provided the added advantage of allowing to kill two birds with one stone: “Given that everything is costly, when I participate in a conference, I take the precaution that that conference is a conference where they publish what I send ... I put them as publications in my CV” (Faculty member, 02). As the same faculty member noted, those facilities overrode the fact that they might not carry the same weight as other publications: “Implicitly a presentation in a conference that has been published doesn’t have the same weight as a book of yours or participating in a journal. Also, there are journals and journals” (Faculty member, 02).

Being aware of what was needed publishing-wise to reach his goals, one faculty member pondered the choice between his own preferences and what he considered to be strategic publications:

I always publish in a [well-respected weekly newspaper] … now there has been some time since I’ve published journalistic articles like that, to have a little fun. … Now I’m publishing more book chapters –which is exactly what I don’t have to do–, than journal articles… I have to fulfill these commitments and also, I’m a bit fed up with the peer-review journal system. (Faculty member, 24)

One researcher rescued the value of frequent publishing activity in the form of articles as allowing one to see that “the great work is the result of [articles, across time] … one can see the changes, the turns … maturation, depth, sometimes one can even see the regressions … one sees the academic development of a person” (Faculty member, 04). Yet, not everywhere were articles given such preponderance. In certain fields, such as history, the weight of recognized scholars still dominated, setting standards of excellence at the production of series of massive volumes: “In some departments in Humanities, [the Department of] History in particular, the emphasis is in … The book … The vision continues to be very 19th century” (Faculty member, 04). Another researcher compared disciplines’ preferences and styles:

[Anthropology goes more and more towards narrative and essay form, … it’s not like you focus on an object and put 2 variables and publish a text, like a sociologist, a biologist or a student of
linguistics can do,… [the nature of the discipline] may be constrictive for publication. … there is a problem of object. … In anthropology … there is a strong craft-like thing. (Faculty member, 19).

Various researchers as well as data from CSIC about preferences for the book format when applying for funds (Rocca, 2000) confirmed that idea of the book as still being of primary importance in some disciplines, such as the humanities: “The hierarchy, a book is better. Knowing anyway that the references to journals is what puts you in the last discussion. But the book is the one that crystallizes a line of thought” (Faculty member, 05).

VI.5.b. Attitudes Towards Publishing Formats: Pros and Cons of Books and Journals

Among the attitudes that affected publishing were the unspoken rules of hierarchy, informal culture of the university and departments, as well as political and philosophical leanings of the researchers. Both, books and articles, as the preferred avenues for publication, had their defenders as well as critics and detractors. Intrinsic benefits of each medium were given as a rational to prefer one over the other. There were also preferences that followed the motivational lines of a generational gap, inclinations laid down by the nature of each discipline, and political reasons based on hierarchies and power struggles. Some academics analyzed the preference for books as serving as an excuse for researchers to idle. One conjectured that a common evaluation system for publications would render the quantity and quality of the production visible, thereby destabilizing the existing generational gap between senior professors stuck in old formats and junior professors more in tune with the needs of a globalized, technologized academic world.

Academics were equally critical of the weaknesses of the peer-review system (for example, when personal considerations rather than quality came into play at the time of evaluating an article), the publish-or-perish mentality, and “colonizing intentions:”

I don’t agree that much with entering the technocratic model, because … I was in a conference … where all the Chilenans were like crazy about indexing … It’s fine to reach a period of formalization … [but] also, I’ve never read so much rubbish in my life as now … you have to fill
all those journals, then you read any type of thing … Now it’s a time of overproduction [at a
global scale] … and we never had such a level of opacity of contemporary thought. … I think it’s
all right this thing of indexing, but at the same time … I don’t trust the system too much … it
worries me a lot what I see in Brazil, the guy who tries to organize his thinking in such a way so
that it fits [established spaces]. I’m [also] a bit fed up with the peer-review journal system
because I peer-review some [journals] and there are things that are not ok (Faculty member, 24)

The caution expressed by this last professor about overproduction, directs us to another
barrier to publishing that was brought up into the discussion and that had to do with cultural
attitudes and self-perception. An excessive interest in publishing was sometimes perceived as an
act that, while acceptable in other realms like business, was harshly criticized in the academy:
“Here there’s a lot of people that yes, they love the exposition and that, I feel that luckily in Latin
America exposition is not the only thing that matters” (Faculty member, 02). An excessive
attempt to publish was doubted as not being serious enough or sacrificing quality for quantity.

Talking about a colleague and himself, a faculty member explained:

We’re people that perhaps, for … self-consciousness … or whatever, we don’t publish just
anything all the time, nor are we looking to see which publication we can make at any cost…
There are people who are more restless … that when [a call for publishing funds] opens [they
say] let’s introduce a topic, it doesn’t matter what … It’s also good that the publications be of
quality … the younger people have this institutional norm of publishing anything at any price. …
as if they were taking out burgers, but it seems to me that this is the key to “success” here, to be
intrepid, send things, send whatever, it doesn’t matter, send, apply. That is the sociology of
academic life. (Faculty member, 19)

Another faculty member agreed with the previous statements: “Sometimes it plays
against us, that we are very demanding with ourselves in the quality of what you want to show
the world. In that, I’m very, very critical, self-critical of my work” (Faculty member, 02).

As we could see in this section, considering the context of production is crucial when
evaluating research output. Historical events that caused a wider-than-normal generational gap or
cultural-informed behaviour are examples of elements that can strongly influence scholarly
knowledge production and dissemination. In the next section we will see that political considerations also play a key role.

VI.5.c. Publish Home or Abroad?

An incident that took place not long before I started my fieldwork research in Uruguay had triggered plenty of discussions among members of the university: a minister in the government had dismissed publishing in foreign journals, arguing that research should be focused only on issues of Uruguayan interest. The comment, considered extremist, was picked by the media and discussed at length in academic circles. The incident was mentioned during several of my interviews, and the extent to which interviewees expanded about the topic, showed that they had previously discussed the issue at length. When asked about publishing in the country or abroad, a UR staff member put the state of affairs in context by going in depth in the situation of each discipline, and continuing with the political implications of the minister’s statement:

[Where and in what format to publish] depends on the area and depends what is more relevant ... If you published a book that had an impact at the national level, that, for historians or people … in the School of Humanities, is very relevant. Now, in other places of the academic field, that has relative [little] importance, it’s almost popular science … it’s much more important to have an article in Science than to have four books in Uruguay. … Sometimes there are colonizing intentions that answer to blocks of power, that say … where do you have to publish [in order to be quality researchers] … The impact must be measured based on the own characteristics of that sector of the academic community. … One cannot say that the fact of having publications in the journals of very high international impact is the one and only criterion to evaluate [someone’s] production, because evidently the impact at the national level and the extra-academic community is of very high relevance. (Administrative staff, 08)

The interviewee did recognize though, that there were practical aspects individuals need to consider to foster their careers. In those cases, the interviewee recommended:

As a more reasonable strategy for an academic who wants to play in all fields … the best would be: I publish my book here, I have an impact in my community here, and at the same time I write
a small article and I send it to some [international] journal … Maybe nobody will read that article about Uruguay, but because it follows determined criteria, in six or seven months they give me back the “It’s ok” … [and] in a year they publish it, and then I put that contribution in my CV. Nobody will bug me, in the two registers. Of course, there is a false opposition… is relevant [only] which matters to Uruguay … The contrary is also false: it only matters that what has an impact in … a completely universalist and transnational [academic] community … Not one thing, nor the other, and both. (Administrative staff, 08)

For many researchers, though, the decision to publish abroad rather than in Uruguay had less to do with political underpinnings than with concrete and practical reasons. Certain disciplines or fields within the social sciences and humanities simply lacked any national peer-reviewed, academic journal that would serve as an outlet for their production: “Here there are no scientific publication [in my specific field] in the topic I work” (Researcher, 12). In most areas there were one or, at most, two national periodical publications of academic character. From that, it followed then, that often researchers had to wait for special compiled publications (as in conference proceedings or the availability of extraordinary funds for edited publications) or try to publish abroad; Brazil and Argentina were the countries most often cited as being an outlet for local researchers. Other Latin American countries, like Chile and Mexico followed, but sometimes expanding the search for outlets to the region would not be enough as there might not have been any peer-reviewed journal at that level either: “In 2005, a South American journal [in my field] started to be edited, but is quite restricted … the dissemination and where you can find it. [It is online,] edited by an Argentinean and … in Colombia. … Before, there was nothing practically” (Researcher, 12). Within Europe, Spain and Portugal were the most popular

47 Both countries appeared as providing an outlet to Uruguayan scholars, for publishing as well as for everything else: purchase of books and access to other information, offering options of graduate studies not available in Uruguay, supplying faculty for graduate degrees at UR, providing colleagues for networks, discussion, and collaborations, as well as external reviewers for evaluations, peer-reviewed journals, etc. The ties to Buenos Aires, in the case of Argentina, appeared especially strong, highlighting the semi-periphery-periphery relationship between Buenos Aires and Montevideo, and in general of Uruguay with its two big neighbours.
countries to publish, and to a lesser extent other countries like France or the UK. When publishing in English, the United States of course, but also other unexpected places, like Korea, were mentioned.

The decision to publish abroad or locally served different purposes, which interviewees had very clearly worked out: “I’m more interested in publishing outside than here … for different reasons … I also think it’s important to publish here, but here to publish is a militant act … an act of saying, I’m concerned about … to generate something here. … This year I published a book here [in Uruguay] and another outside [abroad]” (Faculty member, 24). Very conscious of their approach, other professors presented their reasons to chose local outlets over foreign ones based on their professional goals:

It … has to do with your choice of a career path: if you’re focused on an academic career it makes more sense that you put your energy in looking for … peer-reviewed journals, keep on sending articles. … I’m more interested in working in places with a higher level of applicability, … action-research. … When you’re working with issues that have to do with the people, what moves to the last priority is [publishing, the academic career]. A resolution to the problem becomes the main priority, not my career. (Faculty member, 02)

So, even when aware of the requirements for an international academic career, if they planned to concentrate in local projects, there was no reason to attend to international parameters of production: “[My] strategy was to grow within Uruguay, [so] you don’t get involved in the whirl of the international academic movement, in which if you don’t publish, you don’t exist” (Faculty member, 05).

Even when academics were interested in publishing abroad, to have more ample dissemination or for any other reason, the additional effort that required, meant it was not always possible to contemplate a more organized publication strategy: “I have not been able to dedicate energy to look for journals abroad to publish there, but there are colleagues who do it” (Faculty member, 02). In this sense, the part-time positions and multi-employment really curtailed the
possibility to dedicate time to devise publishing strategies or to investigate foreign publishing avenues.

Publishing abroad presented an additional set of hurdles such as writing in a foreign language or different style, or working on topics which might not interest journals in the center. An interviewee that had successfully published abroad granted that not everybody had been able to overcome those barriers: “It depends … mainly on the topic, because even some [senior researchers] who have tried to publish outside and have not managed. … [or it] has taken them quite a lot [of effort] to publish” (Researcher, 12).

That is not to say that publishing in Uruguay was easy and faculty members underlined the fact that the effort to publish demanded quite a commitment: “I see … people who are around 40, 45 years [old] … in the academic world… it’s not easy for them [to publish]” (Faculty member, 23), “Everything here generally depends on your own negotiations and willingness to do something” (Faculty member, 02). Those negotiations included obtaining funds from the most diverse sources, such as private enterprises and foreign institutions, and even paying out of your own pocket, as one academic said:

[The books I published] I paid it out of my pocket. Otherwise the work is left at nothing. … I printed 500 copies … with a private printing company … I spent about 700 dollars … it would be great that they pay me, … not because of the amount of money but to feel as a professional, that they value the work you do … On the other hand, when I pay it myself I see it as an investment in my professional career. (Faculty member, 13)

Not surprisingly, a faculty member expressed his dissatisfaction with the possibilities for publishing:

In this country, it’s very hard to publish, get a book out, well done … to obtain funds for that is very difficult … but I also know, because I’ve seen it, that, if one is determined … there are ways to do it. But it is a huge work. I see what it is done in other centers, especially in Brazil, for example, and the thing is quite simpler. (Faculty member, 15)
Yet other interviewees gave the impression that the situation had improved and it had become easier to publish:

When I started to publish here in Uruguay [early 1990s], very few people published in [my field] … and there was no kind of support. That has changed a lot now because now you have funds you can compete for. There are different types of funds [like CSIC] and there’s another publishing market and other publishing possibilities as well. (Faculty member, 24)

Even if it had become easier, most interviewees in the social sciences and humanities agreed that the demands of publishing and the commitment it required to see a work finally published weren’t compensated by the uncertain benefits they would receive from publishing. This was even more so when the commitment included organizing the publication with private publishing companies and even taking care of the distribution.

VI.5.d. Once Published: What’s Next? Use of ICT for Distribution

Taking publishing into their own hands, sometimes involved the control of the product after printing, including the distribution. Fearing that once published, copies of their work would not be properly promoted and distributed, interviewees complained about having little control of the published product. As a response, some scholars disengaged from the process once the article or book was published: “I don’t worry after [publishing] about [readership] … I haven’t looked into following-up the product that much, because otherwise you go nuts” (Faculty member, 24).

Others, more concerned with the product getting as much dissemination as possible (or just because they had more time and patience to do so) kept a closer contact with publishers and booksellers, requested updates and feedback, made suggestions for better dissemination, even took copies themselves for targeted distribution, or arranged to post the material online: “I think in a while I’ll just put the book online, and that’s it … if I see there’s certain autonomy [from the publishing company’s part] and nothing happens, I’ll put the entire book” (Faculty member, 24).

Being online seemed to have increased, at least in the last few years, the chances for authors to
get some feedback on who and for what did some people access what they wrote, even if it was unauthorized reprinting (Faculty member, 01).

To foster feedback some researchers had started “to include our email contacts in the publications” (Faculty member, 03). This taking matters in their own hands was explained as the individual’s response to the void of the university in matters of publishing and distribution:

Each time I publish a book … I go through the libraries and check, I don’t know what presence it has, … distribution is an issue were the university fails … because it doesn’t put … someone with a business mentality. [In] Argentina, Chile, and the rest, [publishing and distribution didn’t function until they] gain some independence from the bureaucratic administration of the university, that mentality of public employee, who fulfills [duties, but is not fully involved] and there is no initiative … [Here] you tell the department or publications to send [your product] abroad, they don’t have a budget [for that]. I have sent [myself publications] to colleagues … each delivery costs me 500 pesos [25USD]. (Faculty member, 09)

Another faculty member said that the issue of who reads their work after it was published, “worries me, because I see that there are many things that are not read at all. There is a lot of bad dissemination” (Faculty member, 01). Not only did this lack of university dissemination policy required an individualized follow-up system that consumed faculty’s valuable time and money, but it also robbed them and the university from the possibility of recognizing this production with the institution’s seal. In that respect, a faculty member lamented the fact that he had to go outside the university for publication and could not publish with the seal of the university as it should be the case for research carried within the university (Faculty member, 09).

Yet, though ICT had facilitated some individuals’ attempts to improve distribution of their works, it far from solved the issue. We’ll see in the next section that some of the reasons why researchers haven’t been able to benefit from ICT as much as hoped, replicate the experiences of staff members and librarians we have seen in the previous chapter.
VI.5.e. Use Of (and Attitudes Towards) Technology for Publications

VI.5.e.i Access to Online Publications

The words of one interviewee condensed the attitudes many in the social sciences and humanities seemed to host towards computers: “I have like a negative tropism towards the computer” (Faculty member, 02). Regardless of their positive or negative attitudes, interviewees in the social sciences and humanities generally reported a concrete lack of skills beyond the use of emails and word processors. Sometimes, the lack of knowledge about ICT tools and its possibilities extended to ignorance about the online resources available to researchers, such as the open access journals available through SciELO, Latindex or Redalyc. Some interviewees said to never have heard of these Latin American databases, others that they had heard about those databases but didn’t use them; only a couple of interviewees said that they sometimes resorted to SciELO:48 “Sometimes I use them [databases], SciELO I use [to] search for articles, authors… And also Red Iris, several Spanish [journals] are indexed [there] … I tell the students to search in SciELO because there’s everything. [But] in general, you tell [students] SciELO and they think sky.49” (Faculty member, 24).

The superficial level to which some researchers used online resources was clear in the comment of one interviewee, who used general search engines like Google but was unaware of, for example, the existence of Google Scholar:

I [search] clumsily, however I can in cyberspace, but very disorganized. … Few articles, [mainly] books. I do thematic searches but we don’t have training in that, I don’t know how to search [in internet] … I haven’t generated [the habit of] systematically going to internet, checking, see what is there, check issues, or … sign in fora where they send you [information]. (Faculty member, 02)

Interpersonal connections and bibliographies still played a key role in pointing researchers towards further readings: “[I find out what I need] based on what I read and also the...

48 Given SciELO’s original focus on medicine, the database is best known and used in the medical sciences in Uruguay. Five of the six Uruguayan journals that were listed in 2008 in SciELO were medicine related.

49 “SciELO,” in Spanish, is pronounced in the same way as “cielo” – the Spanish word for “sky.”
bibliography that they are citing and you see around. Depending on the topic I also go to the internet, see what has been published and if it possible to get it” (Faculty member, 03). Students and professors often accessed articles and other material through the exchange with other colleagues, as they did a decade ago, the only change being perhaps that the photocopy was increasingly being substituted for electronic versions sent by email or as pdf.

In any case, the lack of search skills wasn’t perceived as an impediment to access sufficient information. If anything, interviewees complained about the lack of time being the reason why they lagged behind in all what they thought they should read. One interviewee remarked: “Sincerely, I don’t go looking around because it’s so short the time I have, that I don’t” (Faculty member, 06). Internet, with its superabundance of information didn’t help the time-strapped researchers. A researcher noted feeling overwhelmed by the glut of information available online: “On internet, I look around in general, but is so much, that the time it takes, if I don’t have something specific [to look for], I get to a point that I start to search and enough, enough, I’ll see if I get the book [instead]. …For searches, I understand that internet is great, but I’m more of the book on paper” (Faculty member, 03). As this last interviewee, many others mentioned their attachment to paper over the so-perceived fleeting nature of electronic format, though respondents themselves attributed this preference to their own habitue, irrational preferences, and prejudices:

Whether electronic or paper … depends on each case. Electronic journals and that at the same time have the hard copy version, I give it a little more importance than those that are only electronic. That’s a prejudice, I don’t have reasons, I know that there are electronic journals that are refereed … But I do believe there is an idea that if something is on paper is like more lasting, more solid, and therefore, has symbolically, a greater support. I think that [this perception] is generalized. … Students, for example, only as a reference, the majority still has a hard time reading on the screen, they even demand the paper at the photocopy [place], when one tells them no, there’s the link, go read on the computer. (Faculty member, 05)
Regardless of considerations of comfort or status, when having a printed version was not an option, respondents did enjoy the possibility of having the easier access to material that technology granted:

[Online publications] facilitate a lot of things … if not, I wouldn’t have access to half the bibliography [I use]… We receive [only] 5 or 6, perhaps more, good international [printed] journals in the department. … If it weren’t for this type of network [SciELO, etc.] the truth is that I would be dead … and for the articles that the North American universities publish, that a lot of them let you [access]. (Faculty member, 24)

Another faculty member agreed and valued the fact that the university had contracted packages like EBSCO, because “that has opened up the universe, and enter the world, because if not, you live in total isolation” (Faculty member, 09). For researchers in a peripheral country then, online open access did make a difference at the time of accessing information.

Yet, there was a third barrier other than the lack of knowledge or time that ultimately constrained the access to online information. A faculty member noted that beyond ignorance, the problem of accessing online materials was that: “once that you’re conscious that [tools] exist, then, the difficulty [is one] of access” (Faculty member, 05). The cost of accessing some materials became then the final barrier that appeared constraining research activities:

Access to international journals, form here to the outside … there’s no access [because] the journals through internet you have to subscribe and pay … One of the issues that has come up, during instances were faculty members can talk, is the lack of access [to material]. It’s an issue … the access, not the dissemination … I think the ANII was going to make quite a big investment to see if it could gain access through the databases in Brazil. It’s a necessity and the people say it. (Administrative staff, 38)

Researchers resorted to several strategies to access the otherwise paid materials. When material became available during a promotion or another similar situation, they would download at once everything that might seem useful. Researchers would also contact the author directly to request a copy of a specific article. To access foreign libraries, a common route was to request
material from some contact who might be studying or working abroad who was member of a
library or had access to one. And yet others, through their involvement in projects abroad did
have their own access to foreign libraries.

All of these solutions though, acted as mere patches. As the literature pointed out, the
prohibitive costs of journals in the center indeed acted as a very real barrier for researchers in the
periphery, preventing them from staying updated: “In my topic [of study], for example, it is very
clear, the area of social sciences works with very few key authors and without a contemporary
discussion, it seems to me” (Faculty member, 05). For some, this lack of access to current
research was a concern at the time of publishing in the center, aware that outdated citations
would translate into their article being rejected (Researcher, 22).

VI.5.e.ii Attitudes Towards Publishing Online

A concern about publishing in electronic format was losing control of the work, as a
faculty member expressed: “It seems to me … you have the responsibility to answer if someone
[comments on your work,] it would be very unprofessional if I upload something, people send
me stuff and I wouldn’t be able to answer … because I don’t have time or … find it annoying, or
… I think it’s stupid” (Faculty member, 02). That loss of control was perceived by other
researcher in terms of facilitating plagiarism:

There’s also an issue of author’s copyrights if somebody writes [online, using a journal article]
without citing … is done more often in internet, that one downloads things and don’t cite the
sources. [With printed journals] it’s more difficult because the journal is there … it would seem
that the [printed] journals are cited more. (Faculty member, 23)

This concern in regards to OA, intellectual property rights and plagiarism was also raised
during the workshop (even though it could be argued that controlling plagiarized content has
become easier with internet). This concern was partially explained by Uruguay’s laxer attitudes
towards copyright and the almost zero possibility of enforcement. Some interviewees felt this
problem extended to other areas such as media, as they complained issues researched in the UR would be reported by journalists without giving proper attribution.

The traditions within disciplines and areas still carried some weight in the adoption or rejection of electronic format as a valid medium for publication. In some areas, print still was perceived as more serious, as one interviewee explained:

Here, in the academic environment, having things published in print … it’s not qualitatively the same [as having it published online]. It is still a little bit better to have something in print. Luckily this has been changing, but still in areas like humanities in particular, the book [not the article in the journal], paper, printed [is more valued]. … [In] Humanities there is a hard line of the traditional … you have to write a book … it has to be in the libraries, … even if there is nobody [you have to] do the presentation of the book. All of that still has its weight. … It is not the same in the School of Social Sciences, Sciences, the hard sciences, Engineering, all those are “closer to the world.” (Faculty member, 02)

Despite those few misgivings about plagiarism and attributed value, some faculty members embraced the new technologies enthusiastically, declaring themselves active users of the electronic medium for publishing: “I have published and will and would publish online” (Faculty member, 01). Younger faculty members and students, had, not surprisingly, incorporated the use of the new technologies to a greater extent: “There are students .. who are disseminating their work in internet, with audiovisuals, texts, etc., they have their blog, their website, so, the electronic medium is little by little entering … The oldest people, we have a lot of prejudice, but in the younger generations it’s much more natural” (Faculty member, 05). As we have seen previously, students, faculty members, and administrative staff in a couple of schools had made good use of blogs to serve their needs:

I think [online publishing] is great. People in [the School of] Humanities are accepting it a little bit more, given that it is cheaper, in a place where there is no money. At least on that account, it has entered … But, a lot of people [say], well, I cannot publish this research result, but I do a CD and I circulate it. CD more than a website, it’s an issue of medium [something physical, tangible], I don’t have a book but have a CD. (Faculty member, 02)
Between these extremes, the majority were happy to be able to use electronic-based resources and, despite any reservations, thankful for the possibilities it granted.

VI.6. Summary

Working conditions and institutional policies were not conducive to foster written production (specially in the form of journal articles), yet UR researchers’ written production surpassed the university’s and the national publishers’ capacity to publish in print. Online publishing came to partially cover the need for outlets to publish.

As the literature had established for the rest of Latin America, the publishing behaviour in the hard sciences differed from the publishing behaviour among the scholars in the social sciences and humanities. But within the latter, the publication preferences were not homogeneous, spanning the whole gamut of possibilities. In fact, a wider array of dissemination avenues seemed to be acceptable for UR researchers in those areas than what is acceptable in the center (we will see more on these options in the next chapter, section 5).

Also in accordance to what was said in the literature, the attitudes towards ICT could be considered as generally positive. Aside from some attachment to old ways and media, most of the misgivings regarding ICT stemmed from a combination of the poor working conditions (e.g., no time, incentives, or possibilities to upgrade skills to proper benefit from ICT) and lack of resources (e.g., to access databases and current publications, computers and connectivity costs) rather than a rejection of ICT per se.

The reasons for the underutilization of the possibilities offered by ICTs were manifold, as we were able to see in the last two chapters, and they could be summarized as follow. At an individual level there was a lack of knowledge of the array of possibilities and possible benefits brought about by the use of some technologies (what knowledge), a lack of specific skills to best
use that technology (*how to* knowledge) and lack of time to dedicate to acquire new technology-related skills. There were also negative attitudes (i.e., prejudices, mistrust) towards ICT in particular or change in general. In addition, for an individual, the costs of hardware, software and fast internet connection were still relatively high.

These barriers at the individual level were compounded by the lack of remedial structures available at an institutional level. Among them, the most salient were the fact that there was no common policy or overarching services regarding ICT (because of the federative structure) and a decision-making process within the schools that prevented executive decisions (participative management style). Even at the level of the institution, the costs of hardware, software and fast internet connections were still too high and technology became quickly outdated. The lack of suitable personnel on long-term contracts dedicated exclusively to ICT tasks made the inadequacies of the ICT infrastructure more noticeable.

Having reviewed the conditions of production from the point of view of the authors, we will be looking next at these aspects of the publishing world from the point of view of the journal editors. In the next chapter, we will see how most of the same ICT-related issues mentioned by researchers, resurfaced during the interviewes to editors. We will see as well, how the lack of an institutional framework when it comes to academic publishing of works carry the state of disarray from the researchers to the editors’ arena, and how particular issues, such as distribution, become a fundamental aspect of the problem.
VII. THE UNIVERSITY’S EDITORS AND JOURNALS

The situation for journals in the Universidad de la República (UR) mirrored many of the challenges or constraints (as well as the responses to those challenges) identified more broadly for Latin American journals in chapter III. For example, academic journals were driven mainly by the efforts of one single person, and consequently, were unsustainable in the long run. Some journals reached beyond borders, by accepting articles in languages other than Spanish, translating them (mainly to English), or by improving international distribution, whether through international connections or making use of the Brazilian and Mexican databases mentioned before. Also, scholars in the UR, as their Latin American counterparts, held positive attitudes towards at least some of the changes brought about by technology.

Yet, other conditions were not as clear cut in Uruguay as the literature presented in general for Latin America. For example, even though there was a very clear distinction between the hard sciences and the rest of the disciplines in terms of preferences for publications and ICT resources, the social sciences and humanities did not present the homogenous front that the literature suggested. Rather, in Uruguay, the internal differences within social sciences and humanities were as diverse as between the hard sciences and the rest.

In this chapter I present the state of journals or journal-like publications produced in the UR, as viewed mainly by editors, but also by other concerned academics. Based on the journals studied, I also advance an initial sketch of a typography.

VII.1. No Word for Journal: A Word About Translated Realities

One of the first problems I run when trying to study academic publishing in Latin America, was the fact that, in Spanish, there is no specific word for “journal.” The closest translation, “revista académica,” means literally “academic magazine.” This speaks of an incompatibility that goes beyond language differences and usage of terms: it speaks about an
academic product that takes a broader form than the parameters defined by a journal as understood in the center. This encompassing understanding of an academically oriented serial publication has been changing in the last decades, as forces such as the internationalization of higher education and projects like SciELO push for the standarization of academic products. Yet, although it was clear that, as the literature predicted, UR journals, as other Latin American journals, were shifting towards a type of publication that incorporated the formal parameters promoted in the center, diverse forms of serial publications still coexisted. So, in the analysis I included as journals a wider selection of periodical publications containing academic articles than what it would perhaps be considered in international indices. I’ll explain the differences between journal types later in the chapter.

**VII.2. Why a Journal?**

According to interviewees, the main two reasons to have a local journal were to provide UR researchers with a space to publish academic material, and to disseminate research beyond the department or institute. The lack of national journals in which to publish was a concern echoed by most interviewees in the social sciences and humanities.\(^{50}\) This concern about lack of spaces to publish one’s work existed already at the level of advanced students and continued for professors as well as alumni: “There are advanced students, young graduates [interested in having a journal]. Which is the objective? That young people could have a space where to publish, which nowadays, it doesn’t exist” (Faculty member, 05). Another faculty member’s comments on the plan for a future journal showed that the lack of spaces to publish extended also

\(^{50}\) Faculty members, researchers, and students had complained about the lack of outlets for decades and as a response, periodically, they would attempt to launch a journal, with more or less successful, but generally short-lived, results. Nowadays, the idea that there were no journals in which to publish seemed to be a remnant of pre-internet times, when the information was effectively circumscribed to what you would find in the library. With the expansion of internet, an open access electronic journal available in Spanish, even if published in Colombia or Spain, could potentially serve as well for local communications as a journal published in Uruguay. Yet, most instances of UR researchers publishing in foreign journals seemed to have come as a result of the researcher participating in a conference or in an international research group and being consequently invited to participate in a publication, rather than stemming from the researcher’s active pursue of publishing avenues in foreign journals.
to alumni: “[O]utside the university … the people who are interested in publishing are [alumni] and [the publication] would be academic in nature” (Faculty member, 13).

A second reason to have a journal was the perceived need to disseminate local research, outside the institution, and sometimes outside the country: “When the Institute of Political Science is created, the journal is also created as a tool to disseminate local research” (Editor, 28). While some of the existing journals aimed to extend their reach mainly to the national academic community, professionals, and practitioners, most of them had a wider reach throughout the region, by including contributors or reviewers from Latin American countries, while others reached Europe and Anglo America as well. In this sense, the objectives of the editors coincided with the objectives presented in the university reform mentioned in previous chapters, namely, opening up the university and what it generated to the rest of the society:

Why did I have this idea [to start a journal in my discipline]? Because it seemed to me that the moment arrived for us to have a publication, a presence … to the outside, because you see how here everything is very inwards, no? The production in [this discipline] stays inside here, and I think that’s a pity. So for the faculty in the department as well as … an encouragement for the people who are graduating, to start putting their works [on paper]. The goal, which is written in the first issue, and so I keep it, is the dissemination of works. (Editor, 06)

At the time of my fieldwork, those two perceived needs (creating spaces to publish and making research known outside of university walls), their allignment with the directives of the new university reform, and the facilities brought about by ICT, seemed to have merged, helping to jump-start several journals, to give new life to long-standing ones, and to rekindle the interest

51 A faculty member commented that the interest in dissemination was not so much an answer to the pressure coming from the private universities and to justify the role of the public university, so as a conviction of the role of the university to give back to the society, a statement made in the university regulations. It was perceived as an issue of how to imagine the university, that existed strongly in the social imaginary of the Uruguayan society, and also within the social sciences (Faculty member, 05).
in a few almost forgotten journals. Yet, the list of hurdles to get a journal’s issue out was long. We’ll see next the main problems faced by editors trying to produce a journal in the periphery.

VII.3. A Hard Day’s Work: Editors’ Version

VII.3.a. Unsustainable Journals

VII.3.a.i No Institutional Support

The main reasons for journals failing confirmed what the literature mentioned as the weaknesses of Latin American journals: lack of institutional support translated in inadequate funding, staffing, resources or assistance, making most journals unsustainable in the long run.

Interviewees’ responses also confirmed that lack of institutional support was a weakness of the academic system of dissemination of information: they saw the non-existent institutional framework to support journals as partially to blame for the precarious situation most journals were in. Neither the university as a whole nor the separate schools provided enough support for publishing and had progressively lost the structures to support publishing activities (only in the last year had this element of academic activity regained some attention). A researcher commented on the absence of institutional policies affecting every aspect of academic activities, while another mentioned wishfully that having policies to support, reward or recognize publishing activity would be desirable: “It would be nice to have a publishing system in the university or school ... With an institutional policy, things are easier” (Faculty member, 04).

As we have seen in previous chapters, there were no national agencies that would support this aspect of academic activity in the social sciences and humanities (Chapter V.1.). Government subsidy, whether managed by a governmental agency or through the UR, seemed to be the only option: “Outside the U.S./U.K., government subsidy is a common means of subsidizing academic publishing. In places where profit is unlikely, this is necessary, this is often the only means of getting academic work published.” (Morrison, 2004:10). With the recent
creation of the National Office of Research and Innovation and an increase interest in academic publishing within the UR and at the national level, the situation could change in the future.

VII.3.a.ii No Money

From all the shortages that lack of institutional support brought about, financial constraints were identified as one of the main factors preventing the development, maintenance, or improvement of journals, because they affected everything else. Funds were secured year by year (i.e., anthropology), or they were saved in advance for a few issues by pooling funds from various departmental projects (i.e., education, political science). Yet, one problem compounded the other creating a vicious circle. For example, insufficient or inexistent funds for personnel made it difficult to spend time planning adequate or long term strategies to raise funds. Without strategies or planning for long-term funding, or the necessary structures to charge and process payments, journals often found themselves in financial trouble within a couple years of starting or after a few issues had been published.

VII.3.a.iii One Person Show

Lack of institutional support structures had also a direct impact on the way the journals were run in terms of staffing. In words of one interviewee: “[Journals] often come from a personal initiative and you [might] have or you don’t have institutional support” (Administrative staff, 31). Effectively, the journals included in the sample (see Appendix F) were mainly established at instances of the director of a department or institute or a full-time faculty member, rank 3 or above, who had therefore some time to dedicate to the organizing and running of the journal. In general, the journals owed their existence to the interest and drive of that one person, who would also manage most journal-related issues on a (very) part-time basis, including negotiations to come up with funds. The activity of running a journal was carried as part of the administrative tasks a faculty member was expected to perform; only in one case was the editor a
non-faculty member and had a partial time appointment as editor (social work). Long term planning was complicated by the scarce time editors had to devote to journal-related tasks, as well as lack of support personnel available. On occasions, a second person would provide some administrative support (social work, CEIL) to upload or format documents, but also on a very part-time basis, and sometimes, without appropriate training or skills.

Journals run as a one-person show are of course, not sustainable. If for any reason the person was not available for an extended period of time, journal issues would be delayed. With little time to spare, usually no assistance, and minimal or no funding, the person in charge of the journal could logically carry on the work just for a limited period. Respondents stressed the fact that projects depended on an individual’s initiative and willingness to take all the work on his/her shoulders. One faculty explained the difficulties time-strapped professors had working as editors as follows:

You can say, it is great, each one is in charge of one part of the process [of publishing a journal online]. A lie. Here that’s not the way it is. Generally, projects of this nature, what ends up happening is that one or two people … more committed or … in a more compromised position end up having to take on [the work]. Because we are all generally at full speed … with less hours of sleep. … you say I have 2 hours [available], is 2 hours, not 2½ hours … and anything else that alters that becomes conflictive, generates unease, and then the projects don’t work or are abandoned. (Faculty member, 02)

The explanation given for why some initiatives didn’t prosper was because the people in charge of the journal did so out of goodwill, with plenty of personal sacrifice and nothing in the way of resources, working from issue to issue and solving problems and learning about editing and publishing on the go, without any long-term planning. Eventually, the enthusiasm waned, people became busy with other projects or had other activities to attend to. If the journal was successful or had incorporated a peer-review system, it meant additional work for the editor:

It’s very hard work, it takes a lot of time, and also, it brings as a collateral effect that the requests [you receive from journals to act as reviewer] multiply … For example, I went for holidays with 2
articles … for me to review. And that’s something I hadn’t foreseen [when adopting the international peer-reviewed system], and it takes time. (Editor, 28)

Plus, there was no direct benefit to managing a journal, as commented by various interviewees, including this one:

Being in charge or working in publishing a journal, online or not, wouldn’t bring any benefit to my career, at the time of advancing, or even keeping my job, or improving my possibilities of economic development. The people who do it or makes an effort, is because s/he finds motivations in other things, or you love editing, … is your hobby or you take it as a personal issue. (Faculty member, 02)

The lack of personnel affected other aspects of the development of a journal, such as adding or improving an online version. Discussing the likelihood of publishing an online journal (or improving an existent one), considering that available free software made at least that part of the equation not dependent on funds, most interviewees responded with enthusiasm, expressing that the interest for online journals was there. The main issue they perceived as a deterrent was having the people (paid, with time, and ideally both) that could be in charge of a journal. Asked about the interest in producing journals locally, one faculty member put it bluntly: “If you pay someone 500 dollars to manage it, surely there will be interest [in producing a journal]” (Faculty member, 05).

Although journal publishing in the social sciences and humanities can be perceived as being a difficult enterprise everywhere (Willinsky & Mendis, 2007), the context in which the UR editors have to work complicates matters even further. Even when UR editors might have access to an open source editing and online publishing software like OJS, the assumption that, for example, editors e-mailing reviewers “can be done in a matter of moments in an Internet café, as easily as a university office” (Willinksy & Mendis, 2007:5), would be inaccurate in the case of UR editors. As we have seen in previous chapters, ICT accessibility is not at the level of
countries like the United States or Canada, making the use of online-based resources much more difficult.

VII.3.b. Submissions and Distribution: A Problem of Training?

Other than the triad of lack of support, money, and personnel, a less-often mentioned difficulty for local journals, was the lack of enough submissions to produce more issues per year, or even to run the journal at all. This was not always the case: for some, the number of submissions was not the problem. In those cases it was the amount of work each issue demanded, that had editors decide on keeping the output at one or maximum two issues a year. Asked whether, in the event that budget and personnel allowed to increase frequency, would there be enough material to publish more issues per year, an editor replied: “Not every year, this year we could have [published two issues], but not every year there is this [level of submissions]” (Editor, 06). A comment along the same lines appeared in another interview: “It’s difficult to achieve a production enough so as to work in two journals at the same time [in] a unit formed by 30 researchers, no? If they were more, well. Among them, more than half are lower ranks” (Administrative staff, 11).

These comments hinted at the conception of publishing existing in the UR that involved that first concern of providing a space for UR researchers to publish: implicit was the idea that mainly faculty, researchers, or advanced students in that specific department or university (or even Uruguay) could contribute to the journal. The lack of awareness about the need to make broader open calls for contributions (or make calls in first place) also spoke of the insular or amateur nature of the management of some of the journals.

This brings us to yet another problem that was not mentioned directly but was possible to distil from the responses: a lack of in-depth knowledge of the editing and academic publishing
field. The need to develop editing-related skills had been already recognized by institutions of education, as proved by the two newly-created diplomas, one in editing (since 2007, by the private institution of higher education CLAEH) and copy-editing (since 2008, by the UR). Authorities at CLAEH also expressed interest to work in conjunction with the appropriate governmental institutions to create awareness about the issue of professionalization of editing (Editor, 37).

Without specific training, faculty members or administrative staff in charge of editing tasks would keep on missing key steps to link the writers with their readers. And without a holistic and more thorough understanding of the publishing world and its challenges at the local and global level, they would be evaluating the various options available for dissemination of scholarly knowledge without all the necessary information: better preparation would allow clearer decisions, for example, on whether to embrace a wider academic community or keep a national or regional focus according to what better suited each case.

The amateur character of journal management had consequences at other levels. In the case of some journals, as we have seen, the management style failed to bring enough submissions, yet, in many more cases, it created problems at the time of distribution: “It’s obvious that, for example, you talk about the problem of having … a journal and you don’t talk about the issue of distribution … and that’s a fault, you should plan something, at the same time” (Faculty member, 04). The lack of all-encompassing planning meant that the efforts to disseminate knowledge reached at most the printing (or uploading) stage, but there was no plan about what to do afterwards to make sure that the material reached its intended audience. In some cases, once the journal or book was printed or uploaded, the job was considered done: how to make it reach the intended audience or any audience at all was not given enough thought.
Often, interviewees reported or showed me printed journals or books being left piled up in shelves, closets and deposits.

Dissemination efforts were sometimes limited to donating issues to the libraries, department or even, as in the case of the journal of political science, arranging with the corresponding professional association to give each member a copy. Printed copies were also used as presents, as presentation cards in conferences, and as a medium of exchange between libraries. Online journals or articles were uploaded, generally to a website of the department or institution. The link could be listed on a library’s website, or an e-mail could be sent to a self-compiled list of possible readers. Sometimes the whole text was uploaded, sometimes just the index, but either way, with most UR website having no search engine, it was necessary to browse several institutional pages and then browse the journal issue by issue or document by document in order to find something. The Uruguayan Journal of Political Science appeared in SciELO for the first time in 2007 and this and other new journals (i.e., CEIL) were in the process of or were planning to apply to be included in SciELO and other regional databases, suggesting that indeed Uruguayan efforts to disseminate scholarly-generated knowledge could be greatly helped by regional enterprises with the same goal.

VII.4. External Evaluation of Journals

An aspect that some believed would create a culture of journal publishing, and which went beyond the university, was a national evaluation system of journals: “When I started [working, rankings of periodical publications] didn’t matter. What was important was that it had dissemination. For the Uruguayan journals there is no ranking like it could be in the US” (Faculty member, 23).

With the creation of the National Agency of Research and Innovation (ANII) it was expected that common parameters would be established: “Journals don’t have an evaluation in
Uruguay, there are no system that evaluates them. Now, there are attempts to try to put something in the agenda … with the attempt to generate a research agency, [based on] North American [models] and with a lot of influence from Brazil … it’s another style, more productive” (Faculty member, 24).

The lack of agreed-upon parameters or any other type of control, had resulted in a variety of formats for journals and periodical publications in Uruguay. The nation-wide universe of academic-slanted periodical publications had included student-led journals (e.g., *Diverso* and *La Hermana Cruzada*, in anthropology), journals of professional and scientific associations (e.g., *Revista de Historia Económica, Comunicaciones de la Sociedad Malacológica del Uruguay*), independent private journals (e.g., *Hermes Criollo*, in literature; *Edificar*, in architecture), journals in the private universities and research institutes (e.g., *Revista Prisma*, of the Catholic University; *Cuadernos del CLAEH*, of CLAEH), as well as other periodical publications where researchers and academics usually published (e.g., *Relaciones*, which although considered to be directed to the general public, would circulate generally within the academia or highly educated public, and appeared listed in Redalyc).

Some journals, like the *Comunicaciones de la Sociedad Malacológica*, had been published since 1961, others had only survived for a couple of issues. The line between the purely academic journals, or those oriented more to practitioners, decision makers, or the general public, was blurred – independently of the quality. In Redalyc, many of the listed publications were missing the data on several parameters. Yet, at least within the journals published in the UR in the social sciences and humanities (for details on each one see the table in Appendix F), it was possible to group the analyzed journals in types, which I will present next.
VII.5. Journal Types

a) The edited or compiled journal. Some journals in Uruguay were organized around one topic per issue. One could only speculate that this arrangement answered to a couple of peculiarities of the context in which the journals developed. One was that journals, given the small size of the academic community, were by necessity very general in scope. The other was the lack of search engines, which required readers to scan through all the issues and articles to find the topic they were looking. So, having a “monographic” issue partially solved those problems: if you were looking for topic $x$ you knew or would be informed that journal $y$ had published an issue on topic $x$ at a certain date. Whether that was the case or not, this format raised concerns among some researchers:

The journals in Uruguay are compiled journals in many cases, which is quite strange … I think it’s the only case in the world that I know of compiled journals52 [What to include] is left to the judgement of the compiler, which on one hand makes the effort to get the money [through] personal contacts … even though it has all the institutional seals, I depend on the financing I obtain … well, then it’s a journal directed by me. It’s institutional in the sense that I’m here [in the university], otherwise … it’s not a much more formalized thing [than that]. [The journal then] has a very personal mark from the person directing it … You won’t find editorial boards, it will be very rare, even less so, international editorial boards, … and if they exist, they exist in paper … so, everything goes into the terrain of affectivities and the group of alliances. Here … publications … are secret up until they come out, which also borders on ethical problems … and of transparency. (Faculty member, 24)

Although some of these last assertions were not sustained by facts –i.e., several journals did work with editorial boards, some of them formed by a variety of international specialists–,

52 Another particularity of some journals in Uruguay was the inclusion of one or two translations of articles that had appeared in one of the journals in the center. One faculty member suggested to “translate two very good articles … that are in English … into Spanish, and… [include] national articles” (Faculty member, 05). Another suggested to include a translation of very well-known authors, rescuing them from oblivion, with the argument that these authors “wrote much better than I would ever be able to write” (Faculty member, 35). An editor noted that this strategy had actually brought international readership up because academics in the periphery, like those in the center, prefer to read in their own language (Editor, 28).
the perception among many researchers was that the way local journals were managed
endangered the possibility for impartiality. The yearly issue of the Department of Anthropology
fell arguably within this category, as well as the yearly book containing articles published in the
Department of Sociology. The Uruguayan Journal of Political Science was also planning to profit
from the CSICs initiative to give funds to a journal’s special issue and produce monographic
issues.

b) *The endogamic club.* These were the journals where the authors, editors, reviewers (if
any) and readers belonged to the same group. The journal had limited circulation and the
parameters were loose, for example, in terms of length of articles, style, or format. The journals’
goal seemed to systematize the production of a department, by giving a more formalized and
preservable form to the works written by the department’s scholars – and could serve as an
institutional reservoir. A case in point seemed to be the journals in the School of Psychology, the
journals in the Department of Philosophy, and according to some interviewees, the journal of the
Department of Political Science during its initial phase in the 1990s.

c) *Sleeping beauty.* These journals, which to all extents seemed finished, appeared in the
register of Redalyc as still functioning or were not considered as definitively finished by
interviewees, who expected the journals would eventually continue to be published. The
“current” status was corroborated by interviews: the fact that a journal hadn’t been published in
years didn’t mean that it was not going to be continued at some point in the future. Like seeds in
the desert, they could wait for years underground until the next influx of rain (money or someone
with optimistic inclinations and enthusiasm) would allow them to flourish again. In this situation
were the journals of the School of Music and the Department of Social Work. Reviving was
indeed a possibility, as it was proved by Galileo, a journal in philosophy that appeared as having two “epochs,” and by Encuentros, a journal that after experiencing problems with its printed version and distribution decided to go online and multiply, continuing under the form of two new journals.

d) The journal journal: These were the journals that most closely resembled a journal as understood in the center. Many of these aimed to comply with all the requirements of an international, peer-reviewed, ranked journal to increase their visibility, reach, and status. Among them was a journal in the School of Social Sciences: “The Department of Political Science this year, or last year, indexed their journal. [Publication is] every 6 months, and Political Science already has the experience of publishing with peer-review, it just managed to get indexed [by SciELO]” (Administrative staff, 11). Other three online journals had been launched between 2007 and 2008 aiming to comply with these parameters in the School of Humanities.

The use of this format was the most recent and elicited opposing responses. Various respondents who praised the prospect of more possibilities for publishing and dissemination of their work, criticized at the same time what they perceived as being the fetishization of the journal article and the publish-or-perish mentality that had started to be felt in the region. One researcher commented about what was being discussed while doing graduate studies in Argentina: “They commented, it reaches a point where [publishing] is like a paranoia … that you have to have a publishing strategy … to be clear that you have to publish, and publish, everything” (Researcher, 12). Another mocked the presumption of quality brought about by rankings: “They are technocratic criteria because if an article is good and I published [it] in [some obscure state in Brazil], it’s worth 0.5 but if I publish it in the [main international journal in my field] it’s worth 25, and it’s the same article” (Faculty member, 24). Despite these
misgivings, the changes that were being implemented at the institutional and national levels in terms of more control, support and systematization of academic publishing, would signal that sooner or later the rest of UR journals would eventually follow the same direction towards standardization under parameters established in the center.

VII.6. Use of ICT for Journal Publishing

Electronic versions of printed journals were used in a couple of cases in addition to the printed version to increase visibility and access. In most cases, an electronic journal was the only option because of the greater cost associated with printing, and even more so, distribution of printed copies. Most editors of those journals with electronic-only version commented that, had they had the option, they would also prefer to publish a printed version. The reasons for having that printed version were the status given by that tangible object, and sometimes, to reach those without easy access to internet.

Only a couple of journals had printed-only versions. Such was the case of the journal of social work, which hadn’t been published in a few years presumably because of lack of funds. The other printed-only journals were in education. The editor of one of them expressed no interest in providing an electronic version, while the other was trying to provide an online version, but encountered difficulties to find the personnel with the skills to do so. This lack of personnel with suitable ICT skills created delays and was a constant source of problems for the publication of other online journals, such as the ones published by the CEIL. All the journals that printed their issues, charged for them, although the amounts were minimal –as low as 100 pesos (about 5 CAD)– and were mainly meant to cover part of the printing costs. Those journals which in addition provided a full-text, online version, did so free of charge (e.g. anthropology, political science) as an added service.
The utilization of ICT was mentioned as considering dissemination beyond national borders, not within. In general, reaching readers nationally was not mentioned, except in physical education. This looking to the outside over the inside, replicated the center-periphery relations between Montevideo and the rest of the country and showed the macrocephalic nature of relationships in Uruguay, despite UR’s claims (and actual efforts) to decentralize their activities (a move also attempted at a national level by the government).

A preference for printed books, shown for example in the funding provided by the CSIC, even if it was not an cost-efficient medium for such a reduced community as the Uruguayan, could be a reflection that local dissemination was still considered important on its own right or that the local market might be the only market for specific works. It might also have been a reflection of readers’ preference for printed publications, and the lack of a clear university policy in that respect. Or it might be attributed to parts of the country not having easy access to high-speed internet. This particular situation might soon be reverted with the recent implementation of measures to address connectivity issues at a national level. I will present a more in depth description and analysis of the results in the final chapter.

VII.7. Summary

Several formats of periodical publications coexisted within the UR, which could be grouped under the umbrella term of journal – that is, with most of its content being original articles, but an increased pressure was being felt for the professionalization of editorial activities and for the compliance with parameters set by the center. There was also a clear shift towards electronic publications over printed ones, but that shift was mainly due to insufficient funds that made printed publications and their distribution impossible.
Electronic was equated with OA (as free) and among the journal editors, none expressed the plan or interest to charge for any type of access to the content. So, once pushed by economic reasons to publish online, they kept this format because of the benefit of presumed increased visibility. Yet, for many, that last aspect failed when the journals were not linked to databases or in any other way searchable – as most journal editors did not apply to be included in the regional databases. In this sense, the web was utilized mostly as an electronic version of a bulletin board, and had an equivalent effect in distribution, reaching only those who passed by. In the final chapter I will expand on the consequences that these uses of ICT had had for the dissemination of UR-generated knowledge.
VIII. THE SCIENCE THAT GOT IGNORED

In this final chapter, I provide a discussion of the findings, presenting the main conclusions from the study in regards to attitudes towards ICT, OA, and the changing world of academic periodical publications. Having identified barriers to the dissemination of scholarly knowledge in a public university in the periphery, I will tie them to visions of a university and more broadly, to national policies, as they respond to international pressures. Finally, I will point to possible avenues to address some of the problems identified and suggest further avenues for research.

VIII.1. Attitudes Towards Technology and Open Access

VIII.1.a. I Like Technology – If Only I Knew How to Use It

As expected, results showed various approaches and levels of use of ICT to disseminate locally produced knowledge. Historical reasons and practices inherent to each department or discipline were provided as explanations for the preferences of where and how to publish. Different disciplines have different products, needs and readership. As Borgman (2007) remarked, documents produced in the humanities can be more often directly accessed by a general readership than, for example, in the hard sciences; hence, the broader formats found as acceptable in the humanities and social sciences.

Yet, while it was clear that no one single approach to publication would address all the particular needs of the different disciplines, contrary to what could be expected from the literature, needs and preferences were not as neatly divided between the hard sciences, the social sciences, and the humanities. As we saw in the case of the social sciences, the preferences spanned the whole gamut of possibilities, from publications typically perceived as preferred by the hard sciences to (ranked electronic journals from the center) to those preferred by the humanities (printed books).
As for ICT, its differential use between departments and especially schools had to do in great part with the availability of technicians or personnel with enough ICT skills (*how to knowledge*). Even in those cases when researchers and editors were eager to adopt ICT tools to publish online, the lack of the necessary ICT skills or resources to acquire them, delayed or prevented them from benefiting from ICT developments. Another deterrent was the misinformation or lack of knowledge regarding the extent of ICT tools available (*what knowledge*). For example, many editors ignored the possibilities available to receive and process payments through internet. In this sense, the findings coincide with the literature in that the need exists in Latin America for training in ICT skills. It was noticed as well an increased preoccupation in the region with providing those skills and the professionalization of the publishing industry.

**VIII.1.b. Open Access? Of Course Open Access!**

Despite the success open access (OA) has had in the periphery—as shown by the fast embracing of the system across the periphery (Holdom, 2005)—interview responses showed confusion and misinformation about what OA meant. The concepts of open source, open access, free (as not paid), and internet were sometimes equated and used interchangeably. Consequently, the possibility to charge for articles provided online was not fully comprehended or explicitly resisted, even among editors. The underlying assumption in that respect was that making content available on the internet had no cost: salaries, training, connections, software, upgrading and maintenance of hardware, programming, etc., were usually not considered and almost never mentioned as part of the cost of publishing a journal, not even when I pressed for that information during interviews. This perception is not particular to the UR; as Borgman notes, predictions on how inexpensive electronic publishing was going to be was based on many
assumptions including “the amount of labour that would be contributed to the publishing process” (Borgman, 2007:111). Many in the UR still seemed to think that electronic publishing eliminated all costs. This idea was based in turn on the false premise that printed publications costs were limited to the actual printing costs, perhaps formatting or design costs, and little more.53

As a consequence of these assumptions, nobody saw a contradiction in charging for a printed version of a journal but refusing to charge when offering its full-text version online. While most saw charging for printed copies of journals as justified by the need to cover the printing costs (or at least part of them), the general perception was that it would be somewhat unethical to charge for content provided on the internet (which was presumed not to cost anything).

Printed and online versions were perceived as offering two different sets of benefits: not to be competing but rather complementing each other by adding value to each other. A printed copy was still considered as the ideal in terms of comfort at the time of reading. In the areas of social sciences and humanities specially, there was still a high value attached to having a hard copy (whether as producers or consumers). In general, there was the perception that the existence of a printed version of a journal still provided more legitimacy – even if researchers used the online version only.

For editors, the online copy was seen as a second best option when paying for a printed issue was out of the question. The editors of those journals that didn’t have a printed version explained this option as being merely because they couldn’t afford the printing costs, and even

53 The patchy knowledge about the process of publication, as I’ve mentioned earlier, could be explained by the fact that until two years ago there was no formal training in editing and publishing; existing editors and publishers worked in the industry and were self-taught, while most of those in the UR who were in charge of editing and publishing were professors who learned about the process on the go.
less so the distribution costs. Those journals that had been able to offer a printed version (such as in anthropology and political science), provided an online version as an additional service. The electronic version supported a wider dissemination and partly overcame problems of distribution, for example, by making it possible to reach international readers. It was not used to provide extra income through subscriptions or purchases.

VIII.1.c. Distribution Is the Weakest Link

As seen in the previous section, making the information accessible online represented a means to achieve wider dissemination and overcome lack of resources for distribution. Yet, the wider dissemination that potentially could be achieved by using internet, was seriously compromised by the fact that in some cases, after uploading the articles or journals, no further steps were taken to ensure that the content reached its intended or widest possible audiences. The lack of additional services (i.e., indexing, searching capabilities) undermined the degree to which someone could actually reach the content, so that it could be assumed that mainly or exclusively people who already knew about the existence of the journals would be accessing them.

While most journals relied only on dissemination through e-mail lists they had created or links from websites, some of them were in the process of applying to be accepted in international databases or preparing to do so, with only one of the journals in the area of social sciences and humanities already appearing there at the time I conducted the fieldwork.\(^5\) Few journals in the area were indexed in databases, in part, due to ignorance about possibilities or the existence of databases and ranking systems. In other cases it was lack of interest, and yet in other cases the

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\(^5\) One of the Latin American databases, Latindex (2008), listed 166 titles for Uruguay, but included a wide range of periodical publications not only from the UR but other universities, museums, NGOS, and governmental agencies – most of them in law, biology and medicine. Redalyc (2008) only listed one Uruguayan periodical publication, and SciELO (2008) only seven (6 in medicine, 1 in political sciences), although in the case of SciELO, the contents were fully available and searchable.
journal did not comply with the minimum requirements to be included, and the people in charge did not have the time or resources to go through the very taxing process of applying for indexing of the journals. While the desire for increased visibility existed, other more pressing concerns about journal operations (such as having to learn about the editorial process on the go while producing the journal, or trying to operate to center standards without center-level resources) took precedence over other issues.

A better coordinated effort at the institutional level was needed as the requirements of dissemination surpassed the possibilities (in most cases) of any individual editor or even department. After the process of technification, update and centralization of the libraries is completed, the libraries could more formally take on the roles of indexing and distribution of UR journals, perhaps in coordination with CSIC and the communication unit.

**VIII.2. A Lopsided Exchange**

In general, the attitudes towards open access, open source and internet-based tools for scholarly publications, were informed in part by the perceived nature of technology as such (internet content perceived as being, by definition, free) in part from previously held notions regarding the role of a public university, and in part from the conditions under which knowledge is to be produced and disseminated. In accordance to the principles of open science and open access mentioned in chapter II, most interviewees held a negative perception about the need to pay or to request payment for services such as articles or journals provided online by a public institution such as the UR.

Their rejection of the idea of charging or paying for academic knowledge reflected the strongly embedded notion of education as a public good and inalienable right. In addition, they cited regulations that forbade selling for profit products generated as part of activities carried in
the public university. Some interviewees’ rejection of any type of charges (whether charging authors to publish or readers to access articles) was based on the principle that publicly-financed institutions should not profit from the services or products they provide. This notion was held even by editors when not charging for online journals put into question any possibility of a self-sustaining journals and even jeopardized the survival of the journal. Interviewees were of the opinion that the costs of publishing a journal should be covered by other means, mainly institutionally.

So, while OA is a much debated issue in the center, in Uruguay OA remained in some aspects a non-issue: everybody seemed to agree that academy-generated knowledge available online should be provided for free. Content information provided online was equated with OA by default rather than planning. In this context, the most salient benefit of ICT & OA for publications in the periphery, at least at the moment, lies in the promise of achieving a wider dissemination, as opposed to, for example, providing tools for financing journals.

OA in the periphery became an issue only as it related to access to journals in the center, which were kept out of reach from researchers in the periphery by steep subscription rates. Interviewees complained and reported on others’ complaining about the difficulty of access of literature from the center due to associated costs. While charging was not up for consideration when making local material accessible online, accessing material that did require payment did become a major problem for interviewees.

So, despite the promises of ICT and OA to help circulate knowledge, the reality seems to come with its share of glitches. Authors such as Abdenur (2002) claim ICT and OA as offering more pros than cons. He highlighted, for example, the potential to enhance the exchange between academic communities across Latin America and between areas of the periphery. Until now, high costs and few funding opportunities often made it easier for Latin American researchers to
have exchanges with peers in the U.S. or Europe than with other Latin American countries. ICT and OA carried the promise to revert this situation by facilitating interactions across the periphery. This has shown to be partially true as some researchers mentioned the use of Latindex and other Spanish-language databases. Yet, in other cases, it has perhaps facilitated the centralization of information, making it easier (arguably cheaper, but definitely faster and more reliable) for scientists in the periphery to submit articles to journals in the center. Some of these articles, become then, through this process, “lost” to the periphery, as they are written in a foreign language and published in journals too expensive for the budgets of universities and scholars in the periphery to subscribe to. These developments question the extent to which ICT and OA will actually redress imbalances in scientific exchange.

Authors such as Altbach (2002) praised the possibility of ICT and OA to counteract “the unbalanced production and flow of academic literature worldwide [which] has deprived the Third World of information that is crucial to social and scientific development” (Altbach in Abdenur, 2002:59). Of course, for that to happen, journals, institutions, and scholars in the center have to choose to go OA, relinquishing in the process earnings or benefits that come from publishing in determined journals.55

As it stands now, the rebalancing seems to be happening more by the increased production and distribution of material from the periphery through OA journals and the creation of national and regional databases, than by the freeing of journals from the center or the revision of the journal system and indices in the center that would help incorporate the production of the periphery. While the periphery has been moving fast to catch up (for example, by enterprises like SciELO or Redalyc, adapting to international parameters, putting OA journals online), making an international scientific exchange a reality would require the center to step up by making some

55 One path to open access increasingly being used is for authors to self-archive what they have published in journals, for example, in repositories run by libraries or universities.
changes to the way the scholarly communication system works. In addition of making journals OA and reviewing the citation indices, other measures that have been suggested are to include reviewers and editors from the periphery or to provide resources for translations.

Some authors have serious doubts that this shift will ever occur, indicating that some of the flaws are inherent to the system and cannot be overcome by simply stepping up ICT tools but rather by a thorough revision of the system. Villanueva (2006), for example, warned against the potential for misuse of OA, pointing that a passive use of OA could deepen the gap between center and periphery: “OA as a tool to democratize knowledge will not happen, since OA is actually a new way of developing the traditional, merit-based and peer-reviewed methodology of scientific work, stemming from different economic and commercial assumptions” (Villanueva, 2006:n/a). As we have seen in this section, issues related to the dissemination of scholarly knowledge go beyond ICT and OA, and point to underlying structures on which science dissemination is based. I will next present some of these underlying aspects of the journal system.


VIII.3.a. Attitudes Toward the Journal System

It could be questioned that, without disregarding the contributions that ICT and OA have had and will probably have in the future in facilitating the flow of academic-generated knowledge, more consideration should be paid to how economic and political aspects influence research and publications. Arnove (1980:50) suggested one should take into account the position of a country within the international system, given that “inequities in productive power … help explain what skills are developed in whom and who benefits from highly skilled talent, what research is conducted [where] and who has access to or consumes that research.”
So, it is necessary to take into account what researchers in the periphery considered when choosing where to publish. The question for some was not much a matter of online versus printed but of national versus international as well as rankings. From the interviews and websites it was clear that some departments and areas in the UR, not only from the hard sciences but also some in the social sciences, didn’t have interest in publishing in the periphery (or in Spanish) nor in any places other than those recognized by the center. Despite other avenues being still recognized as valid and valuable, given the changes being promoted towards a more technocratic university, it would not be surprising that where more than what was published would increasingly matter.

The range of attitudes towards the journal system among people in the UR could be divided in three main positions. First, some were not aware of the existence of a journal system or expressed a lack of interest in the parameters set by the center. This position was more prevalent in the humanities, where, as we have seen, traditional parameters (such as the printed book) still constituted the golden rule. Articles in journals were not a (or the only) measure of academic success, so, international expectations didn’t affect them.

Second, others were aware but were also critical of recent and possible future developments. This position was held inclusive by those who might have felt they needed to adhere to center parameters for practical career considerations. Some interviewees deplored, for example, the fact of having to study issues that were determined by the center or in general abroad. Others reflected upon the situation as a reality that they had to contend with: to receive funding or to be included in journals in the center they had to be strategic about what topics they chose to work on. That was clearer among researchers in the hard sciences but also affected people in the social sciences.
The remarks of several interviewees showed uneasiness towards some of the developments they were perceiving as taking place. Even when not necessarily having established an overarching picture of the issues and direction the university was taking, they were aware about how adopting international parameters would affect higher education and their own practices. Among the concerns was the push to publish (publish-or-perish mentality), having to compete on unequal footing, or having to lower the standards at the undergraduate level to justify an extended (graduate) education.

To one extreme some were highly critical of the system –even when they didn’t possess all the information to make a judgment– and wished for a different option. In the sciences, they were more aware of the inequalities, having had to deal with publications in the center, and the fact that publishing locally or regionally had none or almost no value. Although some of the most critical stances came from the social sciences and humanities, scholars in many of these disciplines had the luxury of having the option to operate without adopting center-determined parameters and still have a successful career. As we mentioned earlier, infamous comments by a governmental authority had made this aspect of research (nationally or internationally-oriented) a hot topic that opposed conflicting views and created clashes about the final objectives and use of local research.

Finally, in some cases, there was an uncritical acceptance of parameters set by the center. This attitude was taken by some in the social sciences and humanities in an attempt to be more scientific or professional. The argument was that editors in the periphery should be doing all they could to comply with these parameters, regardless of contextual barriers. The consideration of different conditions, resources, position in the system, needs, objectives, or benefits accrued by publications was perceived by some interviewees as excuses not to produce up to (center) standards. In practice, discounting the differences meant that in the absence of adequate
institutional support and resources, the contextual differences had to be made up by sheer effort from individuals.

The expectation was to be finally included in the center rankings. These expectations implied idealization and/or simplification of the complexities of the international system of academic journals, citations and indices (Arunachalam & Manorama, 1989; Dong, Loh & Mondry, 2005; Flowerdew, 2001; Gaillard, 1992; Salager-Meyer, 2008). For example, Sancho (1992:222) states that,

> traditional indicators are based on conditions and assumptions that are only relevant to industrialized countries where a very long tradition of scientific and technical activity exists, a well established information infrastructure and appropriate systems to collect reliable data are used, and where the “publish or perish” maxim is strongly enforced.

Sancho goes on to note, that “journals of developed countries mostly reject papers from Third World institutions” and that “those papers are cited less frequently than their colleagues in the developed countries.” Consequently, she concludes, the typical use of information from the Science Citation Index (SCI), usually provided to evaluate a country’s scientific output in terms of production and diffusion, is misleading. In other cases, “the contribution is not suppressed … but its value shifts from a new contribution to knowledge to a confirmation of existing knowledge through … a process of exotization” (Lillis & Curry, 2006:30).

Among the balancing strategies, some authors have recommended the creation and use of other specialized, national or international databases to account for production in the periphery, that would incorporate publication data coming from international or local sources not covered by SCI (Sancho, 1992; Salomon, Sagaste & Sachs-Jeantet, 1994). Spagnolo (1990) specifically advocated long-term strategies aimed at strengthening local journals, in this case, from Brazil, and highlighted the crucial role that governmental agencies play in that process.
To sustain local research capacity and to help foster local developmental goals it has been deemed crucial to support measures to improve access to scholarly knowledge by academics, decision makers, and community members at large (Arocena, 2004; Demo, 2005; Richard, 2002; Schugurensky & Myers, 2001). Yet, care has to be exercised when attempting to join the global exchange of knowledge on a less disadvantageous footing: the adoption of ICT, OA, or specific publishing systems, has to be done in such a way so as not to further disadvantage those in the periphery. The selective and critical incorporation of publishing parameters developed and used in the center should be adapted to suit local needs and possibilities. To understand the attitudes towards the journal system as well as to make a decision on whether to drop, adopt, or adapt this system of scholarly dissemination, the journal system has to be considered within the broader system in which it is embedded: a global system of universities, research centers, and knowledge.

VIII.3.b. Looking for Alternatives

As a charged political issue with responses informed mostly from ideological perspectives or self-interest, higher education, its products and its legitimizing forms seem difficult to be separated from individual, institutional and national motives or specific visions of a society. From the literature we saw in chapter IV, it was possible to distil that the core of the discussion about the future of Latin American universities in light of the most recent developments in technology and internationalization came down to a basic assumption regarding values about what a Latin American university should be. Those assumptions were for the most part not stated, and at times it was not clear whether the authors themselves were aware of those assumptions. And so the discussion was set as a battle of polar and excluding opposites: the new version of a market-oriented university versus the traditional public university of humanistic
inclinations, updated with a unique twist that has yet to be defined, but generally fell under the umbrella term of alternative.

As we have seen, for many authors, a public university education should go beyond training for the workforce or producing citizen-financed research for the benefit of industries. Rather, it should foster critical and independent thinking and create a culture of responsibility, ethic, and social justice that serves as development force for active citizenship (Hinkelammert, 2005).

Along this line, for example, Tierney (1996) rejects the idealized notion of the university, research, and knowledge production as value-free and apolitical, and ascribes instead to a “cultural framework” of constructed realities. The author notes that within a cultural perspective, knowledge production is a dynamic process that helps define and is defined by the worlds in which it is situated. The manner in which individuals define knowledge creates a particular way of seeing the world [and] privileges certain discourses and organizational arrangements and silences others. Thus, to understand how knowledge gets produced, we need to investigate the many areas where knowledge is located rather than unproblematically assume that a university is a disinterested arena where objective scientists may pursue their work. Knowledge, then, from a cultural perspective, becomes an ideological construct that organizes beliefs, actions, and expectations. (Tierney 1996:16)

Within that framework he advises Latin American universities (he refers to Central American universities specifically) to rethink knowledge and regionalization of advanced training as well as research and pedagogy that considers the context and culture of the region. He proposes to ditch the hierarchical notion that basic research is better than applied research, that doing research is more important than teaching, and even to question what we understand as researching and teaching, arguing that “[t]he value assumptions taken for granted in Western culture concerning the nature of education, research and organizational behaviour are only a very limited subset of a much larger array of possibilities” (Schwartzman, 1985, in Tierney:24). He further criticizes the past developments in higher education arguing that “traditional notions of
research have extended to Central American universities so that academic quality and research are inevitably defined within a context that for the most part exists exclusively in the developed world” (Tierney, 1996:24). This context should be made explicit and questioned in all its complexity when evaluating the production of knowledge, an aspect that seems to be absent of too many programs meant to develop the capacities for knowledge dissemination in the periphery. Tierney thus brings in the political dimension of knowledge production, sometimes ignored by taking the form of assumptions not expressed.

So, we see here how models of universities have a direct impact in imagining the form that knowledge and its dissemination should take. From the opposing views, the former option points clearly towards acceptance of parameters set in the center. The latter, opens the field to other possible forms scholarly production could take (for an example, see below). In the UR, as we saw previously, that vision was still strongly held, yet, more and more the precepts of the new model of university (sometimes called technocratic, entrepreneurial, or managerial) was finding its way in the measures and policies implemented in the UR and the Uruguayan government.

As an alternative to the model being promoted from the center, Tierney suggests that universities should expand “configurations of research and pedagogy that meet more fully the needs of the individuals with whom they are involved” (Tierney, 1996:25).\(^{56}\) He recognizes the challenge implied in developing alternatives to research, pedagogy or knowledge as it is understood in science as carried presently in the center, because it would require a shift beyond current paradigms. He also reminds us that such revolutions are possible, pointing out the epistemological and ontological changes that took place from research as understood during nineteenth century Germany to today’s research in the United States.

\(^{56}\) This search of alternatives that challenge the entrepreneurial model of university and of different ways of conceiving knowledge and knowledge production is not privy of Latin America; similar concerns are being expressed, for example, in Africa (see Subotzky, 1999, and Muthayan, 2005).
It is indeed a change of paradigm as de Sousa Santos (2007) proposes when he talks about post-abyssal thinking, that is needed here. Without this change in paradigm, no amount of compliance will solve inequalities and uneven profiting from scholarly knowledge. But to develop a post-abyssal thinking according to de Sousa, “requires a gigantic decentring effort” that “no single scholar can do ... alone,” and that needs to draw “on a collective effort to develop an epistemology of the South”, which he calls “subaltern cosmopolitanism” (de Sousa, 2007:13). This alternative view “defends that the understanding of the world by far exceeds the Western understanding of the world” and stems from “the idea that the diversity of the world is inexhaustible and that such diversity still lacks an adequate epistemology” (de Sousa, 2007:25).

Experiments with alternatives are already taking place. In Latin America, an example is the Universidad Nacional Experimental de Yaracuy57 in Venezuela, with its attempt to reinstate the value of the humanities, to integrate knowledge areas, and to create a more flexible, less hierarchical and less bureaucratic university: a university of culture (Castillos Castellanos, 2004). Other examples are the endogenous university models emerging in Ecuador in response to a void in state policies in higher education (Jameson, 1997) or indigenous models of university in Bolivia.58

A common thread that seems to run through these alternative models is the stress on a more holistic and humanistic approach to education, highly engaged in the community, sometimes reminiscent of a Freiran approach to education (Freire, 1985). These are enterprises that look to assure the full participation of Latin Americans by “support[ing] research conceived by Latin Americans, carried out by Latin Americans, and reported by Latin Americans,” a need that was already recognized decades ago (Weagley, in Ross, 1970:75).

57 See Universidad Nacional Experimental de Yaracuy at http://www.unev.edu.ve
58 See Universidad Indígena Tupak Katari at http://www.katari.org/universidad-indigena-tupak-katari/
On a broader level, these searches for alternative forms of understanding and integrating scholarships from around the world are starting to become more prevalent in some disciplines such as anthropology, as shown but the discussions around world anthropologies. This is a critical movement grown out from the acknowledgment of the power structures reigning in the academic world, and the recognition that the “lost science” of the periphery is not lost only because of difficulties in publishing and distributing but also, and perhaps mainly, because of existing power structures:

[s]imply put, the world system of anthropology defines the politics involved in the production, dissemination, and consumption of knowledge about other peoples and cultures. Influential scholars in the core countries are in a position to decide what kinds of knowledge should be given authority and merit attention. The peer-review system at prestigious journals reinforces this structure. Thus, knowledge produced in the periphery, however significant and valuable, is destined to be buried locally unless it meets the standards and expectations of the core.
(Kuwayama, 2004:9-10, in Ribeiro & Escobar, 2006:3)

Ribeiro and Escobar (2006:24) are quick to point out that the challenging of present structures is not “an attempt on the part of the periphery to strike back, as in some simplistic interpretations of the aims of postcolonial theory vis-à-vis the former imperial powers,” but that it constitutes an “enlargement of […] horizons that will make our scholarly practice a richer cosmopolitics, one that is capable of dealing with the challenges arising in the twenty-first century.”

De Sousa goes a step further with his concept of post-abyssal thinking understood as “learning from the South through an epistemology of the South [that] confronts the monoculture of modern science with the ecology of knowledge” (2007:26-27). For him, scientific knowledge could not be socially distributed in an equitable manner,

as it was originally designed to convert this side of the line into the subject of knowledge and the other side into an object of knowledge. The real-world interventions it favours tend to be those which cater to the social groups that have greater access to scientific knowledge. As long as
abyssal lines go on being drawn, the struggle for cognitive justice will not be successful if it is solely based on the idea of a more equal distribution of scientific knowledge. Apart from the fact that an equitable distribution is impossible under conditions of capitalism and colonialism, scientific knowledge has intrinsic limits in relation to the types of real-world intervention it makes possible. (de Sousa, 2007:31)

This discussion though, was not taking place in Uruguay, at least not to the extent that it would be needed to affect policies. Aside from a few instances when interviewees expressed concern about the present and future development of higher education and, specifically, scientific publications (see section VIII.3.a.), and when a minister’s comments regarding the objective of scientific publications (see section VI.5.c.) generated university-wide discussions, the issue of higher education and the production of scientific knowledge was not contextualized within a comprehensive, global perspective. Those who expressed concern did so with a sense of inevitability. At an institutional level, though, the discourse was more enthusiastic. We’ll see next where the Uruguayan government and the UR seemed to be heading in regards to the generation of scientific knowledge.

VIII.4. What Does the Future Look Like? Uruguay on the Virtual Road

As to how these changes should be achieved in Uruguay and specifically, within the UR, is less clear, as the battle between opposite visions was still taking place in the UR. Sectors of the UR were still clinging to traditional humanistic interests, acknowledging the value of educated citizenship *per se* and definitions of success that go beyond those promoted by a managerial version of university more focused on measurable results (UR, 2007, 2008; Administrative staff, 31). Yet, at the same time, the reform pushes for technification through new programs and measures that seem to follow the nationwide move to technification.
The lack of common policies between the UR, the productive sector, and government had resulted in an educated workforce that didn’t find suitable work opportunities and emigrated in a process commonly known as brain drain. To create the conditions that would help retain that educated workforce, in the hopes to stop and if possible revert the trend of having educated Uruguayans as the main national export, the government initiated several programs and agencies to keep, reconnect, or bring back scientists and professionals living abroad.

Attempts to strengthen the scientific community and encourage knowledge production in general are framed within a wider strategy to achieve knowledge-based development in Uruguay (Betarte, Cancela & Moleri, 2008). Having relied traditionally on agricultural production and provision of services such as finance and tourism, Uruguay recently turned software production into its main export. The government seems to find this development promising; in 2004, the UR and the CUTI (Uruguayan Chamber of Information Technologies) set the goal of achieving USD 500 million in software and information services exports (Betarte, Cancela & Moleri, 2008).

With that goal for the future, it only made sense to promote the development of skilled information workers: at the time of my fieldwork, Uruguay was in the process of implementing nationwide the One Laptop Per Child (OLPC) program. As part of this nationwide project to foster ICT and improve connectivity, the government had also provided free Wi-Fi access in the main plazas of towns around the country as well as shopping centers and some direct bus lines (informant, personal communication).

Another example of governmental bet on ICT and research for development, which affected university researchers more directly, was the creation in 2007 of the National Agency of

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59 With approximately 14% of its population living abroad, Uruguay is among the countries with highest percentage of emigrants, a group that is disproportionately young and educated (Pellegrino & Vigorito, 2005; UR, 2006b).

60 This program aimed to provide every school child between the ages of 6 and 12 with a laptop. Uruguay was the first country to sign up for the OLPC program with 300,000 machines, and had been supporting its implementation with a parallel nation-wide initiative to improve education and communication at a large scale, the Plan Ceibal (http://ceibal.edu.uy). Started with a pilot study in 2007, the OLPC program was scheduled to be completed in mid 2009.
Research and Innovation (ANII), an institution for the control and promotion of science and technology. Although initially it was strongly resisted by sectors of the UR, the ANII had started to promote various initiatives to develop a more effective use of technologies and better access to research, including a national database of researchers and a national system of grants and graduate-level degrees (ANII, 2008).

As a staff member pointed out (Administrative staff, 31), issues such as brain drain are beyond UR’s reach, and have to be addressed by national policies of employment, retention, and development in general. The UR, though, has responded to the government’s bet on technification and knowledge for development by initiating the process of technification of its libraries, creating the communication center and revising old communication structures, starting new programs of professionalization of editing, and funding new forms of dissemination. These institutional efforts, in turn, have been mirrored by faculty members’ initiatives that have resulted in a burst in new journals. All these efforts point towards a search for an increased engagement with a globalized and techno-centered world.

VIII.5. Back to the Initial Question Who Gains and Who Loses in the Process of Scholarly Dissemination?

As noted in section I.2., approaching an issue from a world system perspective requires questioning the consequences for the whole as well as the parts, of changing certain structures. In this case, the changes brought about by the development of ICT tools for academic publishing and the attempts to incorporate peripheral institutions to a global network of academic knowledge exchange, would have implications both for the peripheral and central academic communities.
ICT developments and internationalization of higher education brought about a series of costs and risks, as well as benefits for the UR and Uruguay in general. There is an inevitability in the developments that makes Uruguay, like many other countries, struggle when trying to balance gains and losses. This struggle existed not only at the national level in the form of changes to national policies regarding research, knowledge production and higher education, but also at the individual and institutional levels.

At the individual level there were those who lacked the computer skills or other resources to profit from ICT and were increasingly divorced from the global exchange. On the other hand, those individuals or groups within the UR with the necessary resources (e.g., required knowledge on language, ICT and international parameters) moved comfortably in the global academic exchange.

Still, the push to be immersed in the so-called global exchange of knowledge, which operates with parameters set in accordance to realities of the center, created heavy strains for all individuals in the periphery (as well as institutions and state resources). Such is the case, for example of the added cost of writing in a foreign language or translating work to be accepted in the center. SciELO, for example, initially offered some translation services but eventually transferred the burden to the authors (should they want their work to be read in the center). The considerable extra effort and expenses would not be worth it were there not a (perceived) benefit. Those benefits were very clear for some of the researchers working in the hard sciences: joining center-led research was the only way to carry research that needed a very specific type of machinery or technology that was not (and would not be) available locally or regionally. Yet, for others, the benefits were not nearly as clear.

At an institutional level, the attempt to be involved in the center’s stream of academic knowledge exchange without an accurate knowledge of the weaknesses of the system, risked
unquestioned validation of center’s parameters in detriment of local production. Pressure for
publishing in a center journal might distract researchers from spending time to make their
research available through media and low profile meetings with community members, spending
relatively more time and effort in center-approved formats of dissemination. This was one of the
fears expressed during interviews. While there were talks that the evaluation of a professor’s
performance would in the close future include publications in center journals, some interviewees
feared that other aspects of a professors activity that might more directly benefit the local
community or that they considered more important or relevant, would suffer.

A strong institutional policy favouring participation in global academic exchange over
local or regional exchanges, could also promote further imbalances between center and
peripheral institutions. This could happen, for example, if the university kept on providing free
access to research done in the periphery while it had to pay impossible sums for access to
research done in the center, or, as we mentioned previously, done in the periphery but published
in the center. It might also divert needed resources in the periphery to publish abroad or to access
publications from the center – the case in point was the funding provided by CSIC for authors to
publish in foreign journals that required publishing fees, while no funding was allocated to
support local journals.

For researchers and journals in the center, the same changes could be perceived as
beneficial. Accessing research from the periphery could become easier (as it is included in
databases and becomes searchable) and faster (online), in addition of being free and in English or
at least with an English abstract. It would also increase the demand for journals in the center. For
the journals in the center, the costs of accommodating a wider academic community could come
from the need to adjust editorial panels and reviewers to better respond to the differences in
writing styles and other issues discussed in sections II.2.d. and II.2.e.
ICT and the efforts to internationalize higher education had also brought about benefits for individuals and institutions in the periphery. In the case of the UR, these changes already seemed to had improved communication within the periphery and semi-periphery, strengthening regional and language-based exchange networks. It had also facilitated exchange and collaboration with researchers and institutions abroad.

The situation is perhaps even more complex at the national level. Uruguay has been increasingly subject to external and internal pressures to respond to changes in ICT, higher education, and knowledge production. These forces can at times be contradictory, as Uruguay is drawn to participate in the global exchange of academic knowledge and support the development of knowledge capital, while at the same time being in a situation that prevents it from adequately sharing and benefiting from that capital. In that respect, there has always been mixed messages. On one hand, as we have seen in section IV, there has traditionally been a strong support for building knowledge capital by minimizing barriers to higher education. But on the other hand, there have not been adequate policies or conditions to fully benefit from that capital, as denounced by interviewees and as it has been long pointed out by critics of the successive governments who, for example, decry the constant exodus of the intellectual elite. It is only recently, that some national policies have been put into place as palliatives or attempts to minimize the impact of the changes mentioned. Such is the case of policies to connect with academics abroad, incorporating them in a national database of researchers61 and through programs to include their participation in national programs of education and research.62

In the next and final section, I sum up how are the changes currently being addressed at the institutional and national levels, and indicate possible directions to further explore the

61 See http://www.anii.org.uy/sni.html
responses and solutions that are being implemented in this corner of the periphery to the present
class challenges brought about by the expansion of ICT and internationalization of higher education.

VIII.6. Contribution and Further Research: What Could and Should be Done?

This study allowed me to determine the current state of scholarly publishing practices in a
Latin American public university –the Universidad de la República, in Uruguay–, particularly in
the fields of social sciences and humanities, thereby filling a gap in knowledge in that particular
area. It also examined the current and potential role of ICT in supporting scholarly publishing in
that context, and based on that, established the requirements for sustainable scholarly
publications in the UR as an example of scholarly production in the periphery.

At the moment, there is a lack of adequate ICT skills to fully benefit from the
possibilities that the new technologies provide. Despite the various measures taken recently by
the government (and university) to bridge that gap, it could take another decade or more to close
the gap. For the particular case studied here, open source software for online publishing is but the
first step in facilitating the work of editors and researchers. These programs would need to be, in
addition, highly intuitive with step by step instructions and no or minimal installation (i.e.,
facebook, skype), so that even those people possessing very basic ICT skills, no time or
resources for training, and no servers, could make use of it.

Another goal of this study was to provide a more complete picture of the whole process
of dissemination of scholarly knowledge, rather than the particular aspects, which are generally
studied separately – e.g., sociologists of science studying the context in which primary data are
produced, or data archivists studying how data are captured, managed, and preserved. Borgman
noted the need for such longitudinal approaches: “Little research has explored the continuum
from primary to secondary sources, much less the entire life cycle from data generation through
the preservation of the scholarly products that set those data in context” (Borgman, 2007:9-10). As we have seen, having a view across the different steps of the process allowed to identify the areas in the process of dissemination of scholarly knowledge that needed special attention and to point out at the gaps or weakest links in that process. Here, distribution presented the most obvious problem. 63 Previous steps, though experiencing difficulty and putting an unnecessary burden on individuals, were still being carried with relative success.

Better use of ICT for distribution would improve the circulation and reach of Uruguayan scholarship and integrate Uruguayan research into the local and regional knowledge exchange in ways that build local research capacities and cultures. 64 It could also place Uruguayan scholarly publications in a far better position to contribute to the work of local governments and organizations, and to reach other scholars, students, professionals, teachers, policymakers, and the public in general. It would also help achieve one of the goals of the reform to make the UR relevant to society and to create bridges between UR and the wider community.

Another need identified in this study was the lack of an institutional framework of support for the research being done. The creation of a common institutional database and search engine that unified UR’s production would facilitate the organization, management of and access to UR’s scholarly production. For example, once UR libraries undergo the process of unification and modernization, they could play a role in managing and maintaining collections through databases, and serve as link between researchers, editors and other users.

As older structures related to the organization and dissemination of scholarly knowledge in the UR are currently under review, and technologization is in the process of being

63 As for the problem of future conservation, an issue of utmost concern if we take into account the fast obsolescence of electronic formats, it was for the most part not even considered. This issue is not receiving adequate attention in the center either, according to Borgman (2007).

64 This need to strengthen regional research cultures in the periphery is consistent with critiques identified already decades ago by Weagley (in Ross, 1970) and most recently by the authors of world anthropologies, as I previously mentioned in section VIII.3.b. The possibilities afforded by ICT could come to help strengthen research culture in the region.
implemented, it is a good time to evaluate future possibilities based on current information and plan with a long-term view in mind. This local re-evaluation time also coincides with efforts at making evaluations at a world-wide level:

This is an opportune moment to examine the nature of scholarship in the digital age. Enough experience exists to identify both the opportunities and the threats arising from changes in the technology and policy associated with distributed access to information. General plans are in place for building a technical framework to support information-intensive, data-intensive, distributed, multidisciplinary research and learning. New social and legal frameworks to facilitate scholarship are being constructed in response to these opportunities and threats. (Borgman, 2007:261-2)

I hope the results will serve to inform university policies, related organizations and programs, as well as the design of relevant training materials for researchers, technical and editorial staff. As part of a research assistantship, I collaborated with staff of the library of CLACSO, the International Network for the Availability of Scholarly Publications (INASP) and the Public Knowledge Project (PKP) to organize workshops that provide training to Latin American scholars, editors, and librarians to make better use of ICT in the dissemination of scholarly research. The workshop carried at the UR on OJS (what knowledge) did generate positive responses and interest for more training (how to knowledge). These partnerships were expected to continue and the research results of this study could help tailor workshop materials to the needs of the participants.

Where do we go from here? The developments that were taking place in the UR and Uruguay in general are expected to rapidly change many of the aspects studied here, and at the same could facilitate the possibilities to follow-up on some of them. With new technologization and the new institute to control information on researchers (ANII) it will become much easier to compile accurate data on how much do scholars produce, what type of format they produce in, where do they chose to publish, or which formats do they favour. As for structural changes in the
institution, it would be interesting to see whether it has helped to foster collaboration, for example, between the new communications unit, CSIC, and the unified libraries.

In a couple of years it would be interesting to follow-up about the existing publications, specially the new ones, to see if ICT have actually increased the possibilities for survival and indexing, and consequently increased distribution. Also in regard to periodical publications, the study could be extended to include all publications coming from the UR, as well as other scholarly periodical publications coming from private institutions of higher education, research centers, universities and professional associations. A comparative study could analyze, for example, who writes for them, who evaluates, and who consumes them, to see the level of integration between scholars from different centers and how the scholarly communication system operates at a national level. In addition, the longitudinal study could be extended further to the reader: who uses the published material, and even beyond academics, how is it used by media, governmental authorities, or educators. The lack of information on that respect was another gap mentioned by one editor.

Taking a broader view –and more ambitious– it would be interesting to see what an alternative university would look like in Uruguay, and whether it is actually possible to bridge the abyss.
REFERENCES


Flowerdew, J. (2001). Attitudes of journal editors to nonnative speaker contributions. TESOL Quarterly, 35(1), 121-150


APPENDICES

Appendix A  Interview Guidelines

The aspects explored during the interviews were determined by the interviewees’ profile and position within the UR, specially in the case of administrative staff members. The general guidelines, though, were as follows:

A.1.  Researchers

• What was the interviewee’s role in the UR?
• What strategies did researchers use to disseminate research results?
• What were the major challenges that researchers faced in disseminating written products?
• What knowledge did researchers posses of online resources available to them? Which level of computer skills did they possess?
• What were the social, cultural, and economic factors affecting the use of these systems?
• What changes have been and are taking place in relation to the dissemination of printed communications in the UR?

A.2.  Editors and Publishers

• What was the interviewee’s role in the process of editing / publishing?
• What goals or objectives of publishing a journal or scholarly works?
• Which was the history of the journal?
• Which resources were available to publish that journal or scholarly works (funding available, knowledge, staff)?
• How was technology being used to edit and publish journals and other scholarly works?
• What changes have been and are taking place in relation to the dissemination of printed communications in the UR?
• Which challenges and possibilities for the future did they see?

A.3. Librarians

• What was the interviewee’s role in the library system?

• Which resources were available in the libraries (knowledge, staff, collections, infrastructure)?

• Which challenges did the librarians face when providing services?

• Which types of services did they provide in relation to UR’s publications and dissemination of scholarly knowledge?

• Which technology was available in the libraries for staff and users?

• Which changes were taking place at the libraries?
Appendix B  Interviewees’ Data

Table 1. Interviewees’ Data by Type of Activity (N=44)

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Faculty</th>
<th>Researcher</th>
<th>Editor</th>
<th>Librarian</th>
<th>Other admin</th>
<th>Student</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>-</td>
<td>26</td>
<td>9</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>Researcher</td>
<td>26</td>
<td>-</td>
<td>10</td>
<td>0</td>
<td>9</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>Editors</td>
<td>9</td>
<td>10</td>
<td>-</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Librarian</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Other admin</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>-</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Student</td>
<td>9</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 2. Interviewees’ Data by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female (N=22)</th>
<th>Male (N=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Researcher</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Editors</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Librarian</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Other admin</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Student</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

65 Most interviewees performed activities under various capacities, for example, one interviewee could held a contract for a few hours as a faculty member (with research activities included or not), another contract to do administrative work, and at the same time be a student. So, participants could have more than one role.
### Appendix C  Institutionalization of Science and Technology in Uruguay

<table>
<thead>
<tr>
<th>Event</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universidad de la República (UR)</td>
<td>1849</td>
</tr>
<tr>
<td>School of Medicine (UR)</td>
<td>1875</td>
</tr>
<tr>
<td>School of Engineering (UR)</td>
<td>1888</td>
</tr>
<tr>
<td>National Institute of Agricultural Research (INIA - 1989)</td>
<td>1914</td>
</tr>
<tr>
<td>Biological Research Institute Clemente Estable (IIBCE)</td>
<td>1927</td>
</tr>
<tr>
<td>School of Chemistry (UR)</td>
<td>1929</td>
</tr>
<tr>
<td>Mathematics and Statistics Institute (UR)</td>
<td>1942</td>
</tr>
<tr>
<td>National Council of Scientific and Technological Research (CONICYT)</td>
<td>1961</td>
</tr>
<tr>
<td>Technological Laboratory of Uruguay (LATU)</td>
<td>1969</td>
</tr>
<tr>
<td>Basic Sciences Development Program (PEDECIBA)</td>
<td>1986</td>
</tr>
<tr>
<td>Uruguayan Chamber of Software (today CUTI)</td>
<td>1989</td>
</tr>
<tr>
<td>School of Sciences (UR)</td>
<td>1991</td>
</tr>
<tr>
<td>Sectorial Commission of Scientific Research (CSIC, UR)</td>
<td>1991</td>
</tr>
<tr>
<td>Project IDB-CONICYT</td>
<td>1991</td>
</tr>
<tr>
<td>Scientific and Technological Research Fund Clemente Estable</td>
<td>1994</td>
</tr>
<tr>
<td>National Researchers’ Fund</td>
<td>1998</td>
</tr>
<tr>
<td>Project IDB-CONICYT (PDT- Technological Development Program)</td>
<td>2000</td>
</tr>
<tr>
<td>Reorganization of CONICYT and the National Office of Innovation,</td>
<td></td>
</tr>
<tr>
<td>Science, and Technology (DINACYT)</td>
<td>2001</td>
</tr>
<tr>
<td>Ministry Cabinet of Innovation (GMI)</td>
<td>2005</td>
</tr>
<tr>
<td>National Office of Research and Innovation (ANII)</td>
<td>2005</td>
</tr>
<tr>
<td>Office for the Development of Government of Electronic Management and</td>
<td></td>
</tr>
<tr>
<td>the Information and Knowledge Society (ALESIC)</td>
<td>2006</td>
</tr>
<tr>
<td>National System of Researchers (SNI)</td>
<td>2007</td>
</tr>
</tbody>
</table>

---

66 Adapted from Martinez (1997).
Appendix D  Organization Chart of the Universidad de la República

Figure 1. Organization Chart of the Universidad de la República
Appendix E  Data on Libraries of the Universidad de la República

E.1  Collections and Users

Table 3. Collections by Types

<table>
<thead>
<tr>
<th>Area / Type</th>
<th>Books</th>
<th>Periodicals</th>
<th>Undergrad theses</th>
<th>Graduate theses</th>
<th>Other theses</th>
<th>Special material</th>
<th>CD-ROM bases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian Sciences</td>
<td>71,908</td>
<td>2,625</td>
<td>6,761</td>
<td>172</td>
<td>45</td>
<td>276</td>
<td>1</td>
</tr>
<tr>
<td>Sciences &amp; Technology</td>
<td>156,966</td>
<td>4,986</td>
<td>1,476</td>
<td>740</td>
<td>1,657</td>
<td>621</td>
<td>15</td>
</tr>
<tr>
<td>Social Sciences &amp; Humanities</td>
<td>707,530</td>
<td>8,543</td>
<td>4,174</td>
<td>21</td>
<td>46</td>
<td>643</td>
<td>4</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>58,935</td>
<td>4,368</td>
<td>911</td>
<td>5,974</td>
<td>237</td>
<td>195</td>
<td>2</td>
</tr>
<tr>
<td>Arts</td>
<td>12,088</td>
<td>212</td>
<td>427</td>
<td>-</td>
<td>-</td>
<td>122,784</td>
<td>-</td>
</tr>
<tr>
<td>Central Offices</td>
<td>1,160</td>
<td>70</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>70</td>
<td>3</td>
</tr>
<tr>
<td>Rectorado</td>
<td>1,200</td>
<td>32</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northern Region</td>
<td>11,378</td>
<td>80</td>
<td>11</td>
<td>1</td>
<td>-</td>
<td>121</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,021,165</strong></td>
<td><strong>20,916</strong></td>
<td><strong>13,760</strong></td>
<td><strong>6,908</strong></td>
<td><strong>1,985</strong></td>
<td><strong>124,710</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

Table 4. Total Number of Users

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>(97%)</td>
<td>68,116</td>
</tr>
<tr>
<td>Professors / Researchers</td>
<td>(66.4%)</td>
<td>4,979</td>
</tr>
<tr>
<td>Alumni</td>
<td></td>
<td>8,384</td>
</tr>
<tr>
<td>Interlibrary and others</td>
<td></td>
<td>1,229</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>82,708</strong></td>
</tr>
</tbody>
</table>

E.2  Automatization and ICT

Table 5. Informatic Infrastructure

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal use</td>
<td>82</td>
</tr>
<tr>
<td>Users</td>
<td>39</td>
</tr>
<tr>
<td>Shared</td>
<td>96</td>
</tr>
<tr>
<td><strong>Total of computers</strong></td>
<td><strong>217</strong></td>
</tr>
</tbody>
</table>

67 Sources: Dirección General de Planeamiento (2006, 2007), Seroubián (2004), interviews, and online and internal documents of the UR provided by informant.
Table 6. Automated Activities

<table>
<thead>
<tr>
<th>Process</th>
<th>Automatized</th>
<th>Not automatized</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>21</td>
<td>8</td>
<td>70</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>18</td>
<td>11</td>
<td>60</td>
</tr>
<tr>
<td>Book cataloguing</td>
<td>27</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Journal cataloguing</td>
<td>16</td>
<td>13</td>
<td>53</td>
</tr>
<tr>
<td>Special materials cataloguing</td>
<td>19</td>
<td>9</td>
<td>63</td>
</tr>
<tr>
<td>Document exchange</td>
<td>11</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td>User alert</td>
<td>7</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Loan</td>
<td>20</td>
<td>9</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 7. Automation by Type of Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>1,113,104</td>
<td>32</td>
</tr>
<tr>
<td>Periodical publications</td>
<td>20,408</td>
<td>49</td>
</tr>
<tr>
<td>Theses (undergrad)</td>
<td>13,625</td>
<td>38</td>
</tr>
<tr>
<td>Theses (grad)</td>
<td>6,892</td>
<td>53</td>
</tr>
<tr>
<td>Other theses</td>
<td>1,916</td>
<td>60</td>
</tr>
<tr>
<td>Special materials</td>
<td>124,521</td>
<td>71</td>
</tr>
<tr>
<td>Other</td>
<td>29,333</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 8. Access Through Internet

<table>
<thead>
<tr>
<th>Service</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Services that offer consultation through internet</td>
<td>22</td>
</tr>
<tr>
<td>Services that DO NOT offer consultation through internet</td>
<td>8</td>
</tr>
<tr>
<td>Use university’s server (SeCIU)</td>
<td>20</td>
</tr>
<tr>
<td>Use own server</td>
<td>2</td>
</tr>
<tr>
<td>Total of databases available on internet</td>
<td>51</td>
</tr>
<tr>
<td>Total of services with website</td>
<td>20</td>
</tr>
</tbody>
</table>

E.3 Personnel and Salaries

Table 9. Personnel Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarians</td>
<td>125</td>
</tr>
<tr>
<td>Assistants (scholarship)</td>
<td>55</td>
</tr>
<tr>
<td>Apprentices (library school)</td>
<td>24</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>34</td>
</tr>
<tr>
<td>Informatic staff</td>
<td>3</td>
</tr>
<tr>
<td>Informatic apprenticeship</td>
<td>1</td>
</tr>
<tr>
<td>Administrative apprenticeship</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>255</strong></td>
</tr>
</tbody>
</table>

Table 10. Monthly Salaries for 2008

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bibliotecologist (senior)</td>
<td>700 CAD</td>
</tr>
<tr>
<td>Bibliotecologist (junior)</td>
<td>375 CAD</td>
</tr>
<tr>
<td>Intern</td>
<td>210 CAD</td>
</tr>
</tbody>
</table>
## Appendix F  Journals in the Universidad de la República

### Table 11. List of Journals in the Universidad de la República

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Online</td>
<td>Y/N</td>
<td>Y</td>
<td>N</td>
<td>Planning</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Full-text</td>
<td>Y</td>
<td>Y</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Format</td>
<td>html/pdf</td>
<td>pdf</td>
<td>n/a</td>
<td>n/a</td>
<td>pdf</td>
<td>pdf</td>
<td>pdf</td>
<td>pdf</td>
</tr>
<tr>
<td>Frequency</td>
<td>(2/year)</td>
<td>1/2/year</td>
<td>1-2/year</td>
<td>1/2/year</td>
<td>1/year</td>
<td>1/year</td>
<td>1/year</td>
<td>1/year-2years</td>
</tr>
<tr>
<td>Nr issues to date</td>
<td>38</td>
<td>10</td>
<td>(1)</td>
<td>(2)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Peer-reviewed</td>
<td>(N)</td>
<td>n/i</td>
<td>Y, intnl</td>
<td>(N)</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>(Y)</td>
</tr>
<tr>
<td>Editorial board</td>
<td>Y, internal</td>
<td>Y, internal</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>Y, intnl</td>
<td>N</td>
</tr>
<tr>
<td>Indexed</td>
<td>library UR latexindex</td>
<td>library UR</td>
<td>Planning</td>
<td>N</td>
<td>FHCE processing</td>
<td>library UR</td>
<td>library UR</td>
<td>Unesco library</td>
</tr>
<tr>
<td>Languages accepted</td>
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<td>Sp</td>
<td>Sp, Eng, Port, Fr</td>
<td>Sp</td>
<td>Sp, Engl, (other)</td>
<td>Sp</td>
<td>Sp, Port, Engl</td>
<td>Sp</td>
</tr>
<tr>
<td>Abstract</td>
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<td>no</td>
<td>Y</td>
<td>n/i</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Abstract in other language</td>
<td>(N)</td>
<td>No</td>
<td>Port, Eng, Fr</td>
<td>n/i</td>
<td>Engl</td>
<td>Engl</td>
<td>N</td>
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<td>Keyword</td>
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<td>n/i</td>
<td>S</td>
<td>S</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Bibliography</td>
<td>(N)</td>
<td>Yes</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Author info</td>
<td>(N)</td>
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<td>n/i</td>
<td>n/i</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Contact info</td>
<td>Y</td>
<td>Yes</td>
<td>n/i</td>
<td>n/i</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Parameter authors</td>
<td>N</td>
<td>no</td>
<td>Y</td>
<td>n/i</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Cost</td>
<td>free</td>
<td>free</td>
<td>$</td>
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68 Includes all journals in Social Sciences, Arts and Humanities, and Health Sciences that were closer to Social Sciences and Humanities
69 N – no, Y – yes; S – some, sometimes; n/i – no information; n/a – not applicable; (information in parenthesis) – contradictory information or not able to verify
70 “Encuentros Latinoamericanos” and “Encuentros Uruguayos” originally came out as one printed journal called “Encuentros” edited by two research institutes, year in, year out, since 1992. After 10 issues and due to increased printing costs, they started two distinct online journals in 2007 and 2008 respectively.
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\(^{71}\) 1999, 2002, 2003, 2005 (XVIII, no.22)
### F.1 Journal Websites

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Appendix G  Certificate of Approval of the Behavioural Research Ethics Board

The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR:  INSTITUTION / DEPARTMENT:  UBC BREB NUMBER:
John M. Willinsky  UBC/Education/Language and Literacy Education  H07-02056

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:

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N/A

Other locations where the research will be conducted:
University de la República (National University in Uruguay) and any other location the interviewees chose (e.g., their office, library, coffee shop, etc.)

CO-INVESTIGATOR(S):
N/A

SPONSORING AGENCIES:
N/A

PROJECT TITLE:
Use of Information and Communication Technology for the Dissemination of Scholarly-Produced Knowledge in Public Universities in Latin America: The case of Social Sciences and Humanities in Uruguay.

CERTIFICATE EXPIRY DATE: September 17, 2008

DATE APPROVED: September 17, 2007

DOCUMENTS INCLUDED IN THIS APPROVAL:

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The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:

[Signature]

Page 1 of 1