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Knowledge Utility: From Social Relevance to Knowledge Mobilization

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Abstract: In recent years, a more sophisticated vocabulary has emerged in the field of higher education. Categories such as *socially relevant research*; *knowledge mobilization*; *research impact*; *innovation*; and *university priorities* have appeared. At first glance, these words may appear neutral, simple and free from conflicts of interest. However, I argue that each of them requires deeper analysis, especially in relation to current scientific and university public policies, as their use has consequences and/or impacts both at the institutional level (higher education institutions) and actor-level (scholars, project managers, etc.). Therefore, by shedding light on the fact that “social relevance” of university is a commonly addressed category in documents regulating university activities, I postulate that such categories indicate a reductionist notion of “relevance” that is used haphazardly as a substitute for the ideas of meaning, mission, and the aims of a university. In order to pinpoint and discuss these new terms and categories that are used as measures of academic knowledge, the paper focuses on public university systems in Argentina and Canada. From a comparative perspective, I aim at grasping a better understanding of the changes in knowledge mobilization.

Keywords: knowledge utility; social relevance of research; knowledge mobilization; scientific policy.

La utilidad del conocimiento: de la relevancia social a la movilización del conocimiento

Resumen: En los últimos años ha emergido un vocabulario más sofisticado en el campo de la educación superior. Categorías como *investigación socialmente relevante; movilización del conocimiento; impacto de la investigación; innovación;* han aparecido en las prioridades fijadas para la universidad. A primera vista, estos términos pueden parecer neutrales, simples y libres de conflictos de intereses. Sin embargo, se argumenta aquí que cada uno de ellos requiere un análisis más profundo, especialmente en relación con las políticas públicas científicas y universitarias actuales, ya que su uso tiene consecuencias e/o impactos tanto a nivel institucional (instituciones de educación superior) como en los agentes (académicos, directores de proyectos, etc.). Por lo tanto, al arrojar luz sobre el hecho de que la “relevancia social” de la universidad es una categoría comúnmente abordada en los documentos que regulan la actividad universitaria, se afirma que tales categorías indican un concepto reduccionista de “relevancia” que es utilizado como un sustituto del sentido, la misión y los objetivos de la universidad. Con el fin de identificar y analizar estos nuevos términos y categorías utilizados como medidas de conocimiento académico, este trabajo se centra en los sistemas universitarios públicos en Argentina y Canadá. Desde una perspectiva comparativa, se pretende obtener una mejor comprensión de los cambios en la movilización del conocimiento.

Palabras-clave: utilidad del conocimiento; relevancia social de la investigación; movilización del conocimiento; política científica.

A utilidade do conhecimento: da relevância social à mobilização do conhecimento

Resumo: Nos últimos anos, surgiu um vocabulário mais sofisticado em matéria de ensino superior. Categorias e investigação socialmente relevantes; mobilização do conhecimento; impacto da investigação; inovação; têm aparecido sobre as prioridades para a universidade. À primeira vista, esses termos podem parecer neutro, simples e livre de conflitos de interesse. No entanto, argumenta-se aqui que cada um deles exige uma mais profunda, especialmente no que diz respeito à análise de políticas públicas científica e universitária atual, porque seu uso tem conseqüências e/ou impactos a nível institucional (instituições de ensino superior), como os agentes (acadêmicos, gestores de projecto, etc.) Portanto, para lançar luz sobre o fato de que a "relevância social" da universidade é uma categoria comumente abordados nos documentos que regem a actividade da universidade, afirma que tais categorias indicam um conceito reducionista de "relevância" é usado como um substituto para o sentido, a missão e os objetivos da universidade. A fim de identificar e analisar esses novos termos e categorias utilizadas como medidas de conhecimento académico, este trabalho concentra-se em sistemas universitários públicos na Argentina e no Canadá. A partir de uma perspectiva comparativa, é obter uma melhor compreensão das mudanças na mobilização do conhecimento.

Palavras-chave: utilidade do conhecimento; relevância social da investigação; mobilização do conhecimento; política científica.

Introduction¹

The terms “relevance” and/or “social relevance” are frequently used in university regulations as a response to several critiques of universities being irrelevant to society. However, these concepts still remain ambiguous. Despite many differences that could be pinpointed in academic cultures around the world, the notion of “relevance” (in research, outreach activities, etc...) is often based on similar principles that either coincide with or oppose regulations (whatever the level: international, national, regional, local, and institutional norms). In recent years, a more sophisticated vocabulary has emerged in the field of higher education. Many categories have appeared, including phrases and words such as: *socially relevant research*; *knowledge mobilization*; *research impact*; *innovation*; and *university priorities*. At first glance these words may appear neutral, simple and free from conflicts of interest. However, I argue that each of them requires deeper analysis, not only among them, but especially in relation to current scientific and university public policies, as the use of the concepts have consequences and/or impacts both at the institutional level (higher education institutions) and actor-level (scholars, project managers, etc.). For instance, *social relevance* or *knowledge mobilization* in the social sciences and humanities is related to the complicated context of increased accountability and demands on university faculty to produce more utilitarian, applied, and useful knowledge through their research.

Therefore, by shedding light on the fact that “social relevance” of university is a commonly addressed category in documents regulating university activities (laws, recommendations, etc.) but that, at the same time, is not fully defined as it is assumed to be a neutral, non-historical, self-evident and self-referential concept, I postulate that these categories indicate a reductionist notion of “relevance” that is used haphazardly as a substitute for the ideas of meaning, mission, and the aims of a university.

Depicting from the field of Comparative Education, I analyze these new terms and categories that are used as measures of academic knowledge. The research focuses on public university systems in Argentina and Canada, comparing and contrasting them in order to grasp a better understanding of the changes in knowledge mobilization. While the theoretical literature in comparative education (Arnové & Torres, 1980; Bray & Thomas, 1995, Schriewer & Holmes, 1988, among others) highlights that the leverage between obtaining a more detailed picture vis-a-vis providing a wider scope of the issues, several authors agree that comparative analysis should fulfill three objectives: 1) it should pursue scientific advancement or the systematization of knowledge; 2) it should have pragmatic aims; and, 3) it should include a global perspective (Arnové, 1980; Crossley and Watson, 2003; Farrell, 1979). Overall, comparative research in education should construct, corroborate, or verify scientific theories through generalizable hypotheses about educational systems and their interactions with the economy, and political, social, and cultural organizations. Thus, this empirical study focuses, on one hand, on information available from the protagonists about changes in scientific and university policies, and, on the other, on an analysis of the directives established by national agencies that support science and technology in each country.

The methodological strategy was qualitative and I assumed a flexible research design, which was exploratory and descriptive at an initial stage (as it is a vacancy area) and analytical, afterwards. The

¹ This research was financed by the Faculty Research Program of the International Council of Canadian Studies (2009) (Canadian case) and the National Agency for Science and Technology in Argentina (2006-2009) (Argentinean case). I co-directed the Argentinean project (University and Society: Approaching the Tensions and Complexities of the Notion of Relevance) and took over the direction from September 2007 to September 2008. Within this project, we conducted more than 60 interviews (corresponding to six public universities and policy-makers). For the purpose of this paper, I selected three universities and 20 interviews.

field work was both intensive and extensive: semi-structured interviews with directors and evaluators of research projects were conducted in Argentina (2006-2009) and Canada (2009). This strategy was complemented with the interview of university authorities, project managers and agents (policy maker, technicians) at the national agencies that support research, development and innovation (Canada: Social Sciences and Humanities Research Council, SSHRC; Argentina: National Ministry of Science, Technology and Productive Innovation, MINCyT; National Agency for the promotion of Science and Technology, ANPCyT; and National Council of Scientific and Technical Research, CONICET). The focus was settled in Social Sciences and Humanities. The research strategy was widened with the inclusion of two more sources: regulations, norms and policies and secondary data obtained from a bibliographical research so as to obtain a better understanding of universities' philosophies in both countries. In the following section I present more details about the methodological decisions.

All in all, this research was prompted by our need to deeper define the so-called "social relevance" of university. I aimed to understand the appropriate actions, approaches, and choices for research that result from such a complex scheme of regulations.

Methodology

The methodological strategy was qualitative and I assumed a flexible research design, which was exploratory and descriptive at an initial stage (as it is a vacancy area) and analytical, afterwards. I decided to compare Argentina and Canada as they share the main characteristic that higher education systems are predominantly public and immersed in an increasingly multicultural context (Llomovatte, 1996). Both countries have a large territorial extension and a population mainly composed of migrants and their descendants. They have created out their history Welfare States, that is to say, that the State plays a key role in the protection and promotion of the economic and social well-being of its citizens (health and education, especially). Their neighboring countries are powerful (the United States of America and Brazil, respectively). However, even though, by the beginning of the twentieth century, they had similar levels of growth, Argentina is a developing country with a peripheral position while Canada is a developed country, industrialized, and with a greater autonomy for conducting national policies.

Despite this main difference, I highlight comparable characteristics among scholars, especially in relation to academic cultures during the 1950s, the 1960s and the 1970s, and the changes experienced during the 1980s and the 1990s. During the 1950s and the 1960s, Canadian and Argentinean universities aimed at playing a democratizing role in Society and prompting opportunities for social and cultural development (Schugurensky & Naidorf, 2004). Universities played a key role in social mobility and they were thought to enhance democracy. Universities' democratic governance practices were offered as examples for Society. Currently, both in Argentina and Canada, education is still considered as a public good (and human right) rather than a for-profit service. In the 1990s, both countries resisted the idea of adapting university objectives to the goals of enterprise.

The multiplicity of changes allows the comparison of results and achievements by their theoretical and relational natures (Krotsch, 2001). Far from engaging in false comparisons, or even asystematic and decontextualized descriptions of educational events in the two countries, I assume that the comparative perspective recognizes that educational models are structured on particular matrices of social, cultural, economic and political conditions, which are not the only possible ones, but that they are relational. Therefore comparative analysis is useful so as to be aware of the specificity of such conditions. By approaching comparatively to our research object, I am able to

consider both the historical and temporal dimensions of educational systems; I could visualize the continuities and discontinuities of the processes under study, which, in turn, enriches the analysis. The comparative approach recognizes both the similar and dissimilar in order to clarify problematic issues, while taking into account the limits of generalizing.

I selected a sample of six universities: on the Argentinean side, University of Buenos Aires (UBA), National University of Córdoba (UNC), National University of Comahue (UNCo); on the Canadian side, University of Toronto (University of Toronto), York University (YU) and McGill University (MGU). The sample was purposive and non-probability as it was selected based on the knowledge of a population and the purpose of the study: two traditional universities from each country (regarding their importance within higher education systems) – UBA & UNC; University of Toronto & MGU – and one medium-sized, modern, and oriented toward local/territorial needs – UNCo and YU.

The methods of data collection were two-folded:

- Documentary research: (including the documents and interviews listed in Appendix A) consisted of registering, analyzing, and interpreting documents produced by the universities and funding organisms that configure scientific and university policies. To this end, I created a record for each document that included contents and bibliographic references;
- Semi-structured interviews: permit a degree of freedom that allows the interviewees to expand upon their arguments, without limiting the conversation to the answering of structured questions, as happens with surveys. However, the interviewer retains the ability to orient the interviewee in such a way to see that the interview does not lack structure and that the conversation does not veer into tangential questions unessential to the research (Marradi, Archenti & Piovani, 2007).

As a result, I analyzed documents that addressed the social relevance of universities and the development of research projects as well as social extension and transfer activities. Laws, statutes and other regulations referring to the social relevance of university were also studied, including national and institutional documents and regulations, together with relevant international regulations. The semi-structured interviews aimed to evaluate the impact of demands for more socially relevant research on research and outreach or extension projects. Interviews were made to four categories of actors: directors, evaluators, university authorities and government officials (of the agencies that support research). In Argentina, I conducted 6 interviews (two per the first three categories) per university ($6 * 3 = 18$) and I added two interviews to national government representatives. In Canada, research project managers, project evaluators, university authorities and government funding agencies officials were contacted and 17 interviews were conducted. For further detail, see Appendix B (list of interviewees) and Appendix C (questionnaire).

The data collected were analyzed by using content and discourse analysis (Stake, 1995).

Results

The results of the research shed light on understanding the influence of research priorities defined in an heteronomous way (sometimes defined by university offices in non-participatory processes) on the decisions of projects' directors, in the assessments of evaluators and on the broad definition of the "social relevance" of those projects.

As a result of the analysis, I conclude that: 1) in the process of deciding the topic of a research agenda, the criteria of academic freedom has been replaced by the notion of social relevance; 2) the orientation and assessment of a project is judged according to the relevance of its

impacts; 3) strategic grants are the governmental instruments for orienting research agendas; 4) there is a greater role of government in defining and influencing research agendas and the decline of university-defined priorities; 5) there are renewed characteristics of university priorities 6) universities have different understandings of the relevance or “innovation” and its controversial connotation; and, 7) we must consider the meaning and relevance of “social relevance” as a criteria for evaluating a university’s contribution to society.

Each question was appraised using empirical and comparative analysis. Table 1 shows the main considerations of the protagonists of these changes.

Table 1

Summary of Results

Questions- Operationalized Variables/Degree of Influence or Impact on Decisions	Canada			Argentina		
	D	E	G	D	E	G
To what extent do you know about the criteria (themes, frameworks, areas) defined by universities where you develop/evaluate research projects? Expressed in degrees.	L	M	H	L	L	H
How much does the definition of priorities influence your design/evaluation of research projects?	L	M	H	L	L	H
How does social relevance impact on the selection/valorization of the research theme? Expressed in degrees.	L	L	–	L	L	–
How do disciplinary criteria impact on the selection/valorization of the research theme? Expressed in degrees.	H	M	M	H	M	M
To what extent do you know/apply to oriented-research funding? Expressed in degrees.	L	--	-	M	M	--

Key: D: Directors of projects; E: Evaluators; G: Governmental bodies (universities and national research councils); H: High; M: Medium; L: Low

When selecting a research topic, project directors value scarcely priorities and expectations. In contrast, evaluators and managers prove to value highly disciplinary criteria. Social relevance, though recognized in some cases, is not a criterion for evaluating research projects according to project managers and/or evaluators; the priorities are less-known and less-considered by Canadian evaluators rather than evaluators in Argentina. Nevertheless, the direction of oriented research funding is more strongly felt in Canada than in Argentina.

Academic Freedom vs. Social Relevance at Universities

“Academic freedom has been misunderstood, used as an excuse for being disconnected from the outside world, and university autonomy as a way of not responding to social demands and needs.” (Russell, 1993; Fuchs, 1969)

These statements frequently appear in policy recommendations to universities, often named differently and hidden in phrases like *responsible autonomy* and *social relevance* of university work. The crucial questions presented by such statements are: What is meant by responsible autonomy and social relevance? Is there socially irrelevant research? Is there such a thing as irrelevant knowledge? Is there an irresponsible autonomy? In this section, I explore these questions.

Certainly, a varied array pressures exert on the self-determination of priorities and research agendas of universities. The heteronomous university is influenced by the market as well as government forces in many ways. Schugurensky (1994) argues that university systems are

increasingly forced to respond to both market and State imperatives. The heteronomous model is the combination of the commercial and the controlled university. The *commercial* university implies: the cultivation of private universities, customer fees, client-oriented activities and programs, a corporate rationality, and contracts with business. The *controlled* university includes conditional funding and coordination. Furthermore, the latter model: present strategic plans with financial incentives for research in certain areas, establishes university priorities according to the wishes of federal government agencies, highlights the improved mobilization of knowledge -requiring knowledge to be more useful and applicable- and requires the criteria of social relevance to improve some areas and therefore diminishing others.

During the last 30 years, government played a more significant and direct role in defining university priorities and decisions about what to study within university departments. This trend is visible in both cases, as the interviewees highlighted:

“The parliament defines priorities. The oriented grants have had an increased impact in the last years. The amount of funding is higher and the tendency is that it will be an opportunity, but not an obligation, to orient the research production to solve problems” (Program Officer Research and Dissemination Grants. Social Sciences and Humanities Research Council of Canada)

“The tendency is to define priorities within the Ministry of Science, Technology and Productive Innovation and universities, although the funding for directed research comes primarily from the former” (Secretary of Research, National University of Comahue, Argentina)

This study focused on governmental influences on university agendas and their impact on society, which is directly related to market pressures. Government impacts are measured by the recognition of regulation expressed in the documents quoted at the end of this paper. The impacts on directors and evaluators' decisions were analyzed in interviews. Government was defined as the representative of both the common good and business since the State was assumed to be an entity guaranteeing the regulation of social order as well as articulating conflicts in society; depending on the refinements and implications of its definition.

Based on the interviews with faculty, it was unclear whether or not they felt they were doing their research in a free environment. Those aware of the established priorities of different funding organisms and interests outside the university, talked about *knowledge regulation*. In Argentina and Canada alike, faculty referenced the prioritization of *innovation* as a way of knowledge regulation, where innovation did not refer to invention but rather to redirecting research to solving problems. Furthermore, few faculty members were actively against the new policies because their implications were still unclear. For example, one of the most important funding entities in Canada, SSHRC, established the funding priority of *Business* in 2009 and provided special funding and grants to the field of business rather than cutting back funding in other areas. Most of the project directors and evaluators interviewed for this study were aware of this new priority, but none of them tried to orient their research towards it, and some criticized decision of SSHRC, especially those professors from the Humanities and those with a more critical perspective.

The Program Office of Research and Dissemination Grants was contacted to grasp a better understanding of SSHRC's new priorities. The interviewee stated that SSHRC does not make such decisions because it is not an autonomous institution. Rather, all decisions about priorities or strategic plans are defined by Parliament.

In the Argentinean case, priorities were principally defined by the National Strategic Plan for Science, Technology and Productive Innovation of the Bicentenary (2006-2010): it defined areas, problems, and opportunities. Later, the settlement of priorities was also in charge of the 2012-2015

Strategic Socio-Productive Nucleus (*Núcleos socio-productivos estratégicos* or NSPEs). These documents were developed by the MINCyT.

Research Impact in Social Science and Humanities Policy

SSHRC has been under the jurisdiction of the Ministry of Industry for more than 30 years. It is one of the three councils dedicated to funding scientific research in Canada – the other two being the Canadian Institutes of Health Research (the CIHR) and the Natural Science and Engineering Research Council (the NSERC). Its main function is to promote and support university-based research. The council facilitates knowledge and collaboration across research disciplines, universities, and all sectors of society (SSHRC, Framing and Directions, 2009). Its objective is to support partnerships, interaction and knowledge sharing bypassing the benefits of research to society.

SSHRC strategic plan for 2006-2011 included three ambitious stages: quality, connection and impact. While the criteria for judging quality of research are problematic, research impact was analyzed as it is clearly connected to the new measures of social relevance for university and academic research. Impacts are considered as *benefits* to society, in quality of life, through knowledge mobilization and its practical application. In its strategic plan, SSHRC states that impact can be measured by the advantages that research provides to the entrepreneurial sphere, to people, and/or to advance knowledge. More specifically, entrepreneurial advantage (the translation of knowledge into practical applications) is seen as the way to encourage partnerships and enhance accountability. *Impact* relates to the development of knowledge mobilization, which in turn involves a partnership between researchers and research, and connects the campus and community. Defining the orientation of research programs to specific social needs is also found in program manuals and other documents consulted. However, Nutley, Walter, Davies, HTO (2007) argued that successful use of research can only occur if there is a dialogue between researchers and stakeholders. Furthermore, tensions, complexities, contexts, challenges, contradictions, and disagreements must be taken into account. It could not only be expected a convergence of those who make use of research results and those who produce them.

By paying attention to evaluation manuals, it is evident that projects with the highest scores were strongly recommended because of their originality and because they were at the forefront of their field. Their dissemination components were very good. When deepening the analysis on how dissemination was measured, poor scoring projects – i.e., those scoring below 3 in their ranking – were not poorly evaluated because of the dissemination component nor the irrelevance of the topic proposed. As some evaluators stated, they considered only originality, methodology, significant contribution to the field (and not just to society), literature review, and theoretical or conceptual framework. They do not have the tools to measure other forms of dissemination. As an evaluator pointed out during an interview, publications in certain *top* journals were sufficient evidence of the quality of the researcher and the research. According to them, the evidence of *impact* must be clear and tangible. But, the characteristic of how to improve connections to society, knowledge and social impact was still difficult to measure.

The Argentine cases studied revealed another way of prioritizing certain research areas: the calls for applications. In the periodic Calls of the National Council of Scientific and Technical Research (CONICET) it was explicitly stated that “the board shall consider the harmonious development of the various disciplines [as well as] the subject areas established by the MINCyT and Ministry of Education.”

When regards to any potential conflicts of interest in the establishment of priorities, the Minister of Science, Technology and Innovation affirmed “no one is obliged to testify against himself” (Materia Pendiente, 2008). He argued that leaving the definition of priorities to researchers

makes no sense because they will treat their own subject areas as a priority. However, no other way makes sense because researchers, in their roles as evaluators of the organisms of scientific policy or as consultants to the same, use their expertise in their field as the parameter for decision-making.

Another possibility could be developed: one in which other non-university actors could play a role in the definition of priorities. However, it would not solve the conflict of interest (inherent in any political decision) regarding important issues such as autonomy in the case of university scientific policies, or the collective practices inherent in the academy.

Strategic Grants as an Active Policy to Orient to Priorities

In Canada, Standard Research grants receive \$250,000 for a three-year period. The category of Strategic Research is divided into Research Grants and Development Grants. Strategic Grants support research on pressing social, economic and cultural issues. Researchers receive different amounts of support but no more than those offered by the Standard Research Grants. The main strategic issues are: aboriginal research, Canadian environmental issues, image, text and sound, management, business and finance, Northern communities, among others. Even though most of the project directors consulted tended to apply for Standard Research Project Grants, the priorities defined by this federal organism are intended to redirect the university agenda to focus on those issues.

Most of the researchers interviewed for this study were applying for Standard Grants that did not specify priorities. It was clear for them that the presentation and evaluation of projects changed annually, as they could observe in the evaluations forms they filled in. Even though these changes were widespread, researchers reported they did not perceive them as so. For example, questions about research impacts and consequences on the community were listed. These questions lead to three primary types of responses. Some stated the research had no relation to social impact research, while others responded that their research was useful for society through the government at the provincial or federal level or in different fields of application. A third group forced their projects to fit the real interest in useful projects or those with immediate application.

Dealing with research impacts and research payback (Buxton & Hanney, 1996; Nutley, Walter, & Davies, 2007) studied how research findings are influential, used, and have impacts beyond the confines of academia, particularly in policy making and practice (non-academic impacts). These kinds of studies have become especially important since the nineties as ways of justifying the resources spent on research, as well as to complement research funding bodies. Research impact studies may include the consideration of availability and useable research findings. However, a difficulty in evaluating these kinds of projects is the current system based in bibliometric measures, or the quantity of citations, that does not show the impact on practice. As Michael Skolnik points out, “at the heart of Publish or Perish Syndrome is the practice of evaluating quantity of publication over quality” (Skolnik, 2000, p. 15). Quantitatively measured hyper-production transforms creativity into an accommodative activity, rehashing or repeating ideas in order to line up to the expectations of the watchdogs of intellectual production. Productivity usually implies a relation between inputs and outputs. The production driven research culture (Skolnik, 2000)² loses sight of the criteria of importance, arguing that “more is better” and does not take into account externalities (socio-economic, cultural, economic, etc.). The pressure to be prolific leads to undesirable behaviors (Arthurs, 1994), like the appearance on the list of authors of people who have not made any significant contribution to research (Skolnik, 2000).

² For further issues related to competition and their effects on climate, see García de Fanelli and Mogueillansky (2010) and Naidorf and Perez Mora (2010).

Who Establishes Scientific Policies, the University or the Federal Government?

Public universities and institutions do not just float freely in the ether; they do not exist outside of or apart from government. This might sound redundant but when considering the university as a field of study, it is important to reiterate this because the university is often presented as an institution separate from the state. Keeping this in mind, and putting aside questions on the meaning of university autonomy (see: Naidorf & Martinetto, 2005), one must address the issues that arise when federal government grants exert more influence on the definition of university priorities than the university itself. Furthermore, additional complications arise when the strategies established by universities are not well communicated to their own faculty.

The interviews carried out in Canada and in Argentina with project directors and evaluators revealed that most of them did not know whether the university established research policies or if such priorities existed. Many reported they did not know whether general goals of increasing research or improving quality of research were priorities. Some of the policies identified by faculty were quite general. For example, McGill University emphasized research on public policy issues or Medicine. The University of Toronto offered special grants, such as the Jackman Humanities Institute for research, which offered different themes each year – the most recent being *Pressures on the Human*, which was deemed an important university priority. Faculty was also aware of these priorities and policies, but interviewees claimed these policies had no impact on their own research topics.

Nevertheless, the government's scientific policies seem to have a direct impact on faculty decisions about how to orient, improve, and present projects so as to be shortlisted for research grants. All the Canadian interviewees referred first to SSHRC policies before university policies. Since the most important grants are provided by SSHRC, most faculty members referred to SSHRC policies as priorities. In essence, the university has less influence than SSHRC. Messages regarding research priorities are not only expressed in the selection of strategic areas, but are evident even in the measures and methods used on SSHRC forms to record and express research achievement³. Some of the project directors interviewed referred to scientific journals as important priority-defining entities because they influence the issues on which they publish. This occurs because the owners of top journals, in different disciplines, establish their own agendas. As for the evaluation of

³ In Argentina, scientific policy guidelines are recent, especially in terms of funding for prioritized issues and socially relevant research. Scientific policy guidelines are set by MINCyT (established in 2007) and agencies within its framework, namely: CONICET (created in 1958) and ANPCyT (established in 1996). This framework has recently begun to act in a coordinated manner with shared premises. One of the programs we are currently studying is the National Bank of Technical and Social Development Projects (aka PDTS). This is a group of research projects that meet several requirements: should develop technologies associated with a strategic opportunity, or a market or societal need; should generate products and processes, prospective or proposed; must have a limited duration and clear, achievable objectives, as well as monitoring and evaluation activities so as to assess their progress, and outcomes consistent with the objectives set; should include the indication of degrees of creation or the innovation of knowledge; one or more public or private organizations should be involved as a counterpart and as a potential adopter of the result of the research (for instance, any public institution of the scientific and technological complex might fill this role); have one or more sponsoring institutions that provide financing; should be evaluated by qualified specialists according to: a) the technical and economic feasibility of the project; b) the adaptation of resources committed (staff, infrastructure and equipment, and funding); and c) progress reports on the implementation of the project if appropriate (definition taken from a document of UBA). This bank, created in 2012, benefits researchers involved in these activities, so the evaluation criteria not exclusively disciplinary. Also, PDTS could have postdoctoral fellowships, but they are not like the oriented subsidies in the Canadian case because they always require the existence of a counterpart.

journals, evaluators are sometimes asked to judge whether an article might be widely read or not because journals serve readers, and the most popular issues are the most widely read. In essence, the journal impact was measurable in terms of its current popularity. To confound the issue, some evaluators did not feel it was their job to determine the social relevance of a project because there was no numerical scale of social relevance they could use to either pass or fail a project.

University Priorities

Self-determination of priorities is one of the main characteristics of university's autonomy. Some universities have specific structures that define those priorities (usually the Senate) while others have a specialized office to link budget processes and resource allocation to the university's strategic priorities. In this section, a selected (intentional) sample of documents was studied to understand the strategies and priorities implemented by University of Toronto, McGill University and York University, in Canada, and University of Buenos Aires, National University of Comahue and National University of Córdoba, in Argentina. Moreover, the ways in which prioritized areas, issues and general goals were communicated were also studied.

York University: Finding New Ways to Communicate the Value of Research Activities

At York University, Integrated Resource Planning was examined. According to the director, it has been in operation since 2007 with the commitment to consult and engage in collegial discussion to ensure that York's objectives are achieved. Priorities at York University were established in a five year academic plan that covered 2005 to 2011 and were approved by the Senate. This plan expresses general goals: excellence in research and teaching; valuation of the special opportunities and responsibilities that arise from university's setting in a unique, dynamic, metropolitan and multi-cultural milieu; academic freedom and collegial self-governance; social justice and accessible education; equity, balance and diversity across a range of planning objectives; innovation and interdisciplinary, together with diversification of academic activities.

York University's Academic Plan (2005) suggests that the emphasis on broad priorities should not impede other processes. The document recognizes socially relevant, innovative and influential research as having research impact, and emphasizes the need to find new ways of communicating the value of research activities. It states "...in the current climate, with its increasing demand for measurement and accountability, we must develop a self-knowledge and project our accomplishments in diverse, meaningful ways" (York University Academic Plan, 2005, p. 35). York University does not express any priority areas in its plan, but acknowledges that it has achieved better performance levels in terms of grants received by SSHRC funds than those from the Natural Science and Engineering Research Council (NSERC) and other science health related grants.

Furthering York University's mission, the Integrated Resource Planning Department was created to advance its academic goals, and decision-making through the effective integration of institutional planning activities. The alignment of resources with priorities was the primary purpose. The new emphasis on adjusting priorities to resources originated from a constrained financial environment. When the interviewees were asked about the reasons for implementing such activities within the department, they admitted a close relation between the implementation of the new goals (to link actions to priorities) and the response to the demands of accountability; not only from tax-payers but also from donors.

McGill University: At the Top of University Rankings

The McGill University 2006 White Paper, entitled *Strengths and Aspirations* (2006), listed the university's main goals as being on top of the university rankings and winning more international prizes. Furthermore, recruitment of the very best minds in areas such as the neurosciences, public

policy, environment, computation and statistical modeling, nano-science and advanced materials, integrative systems, biology, languages, literatures and cultures and pain research were also sought. Though no hierarchy was prescribed, the disciplines were listed in that order.

Unlike York, McGill does not have a specialized office dedicated to integrating multi-year budgeting. Instead, the white paper served as the initiator of goals. It was “a significant change from the previous McGill practices of annual formulaic or discretionary distributions and fragmented request by Deans to a variety of central administrator resources” (McGill University, 2006, p. 2). At McGill, social relevance of research did not appear to be a main goal, or at least it was not expressed in those terms, and research impacts were measured by the number of graduates and the impact of research on the quality of life and the productivity of well-established communities. McGill’s emphasis on Public and Social Policy as well as Health and Social Policy as their emerging priorities provides a common framework to all faculty and departments. These priorities are also an expression of the self-definition of a research orientation, a common agreement on a direction, which is always a choice from many possible options orienting a university towards a common goal.

Some of the professors and evaluators interviewed at McGill said there seemed to be more interest in disciplines oriented toward the health sciences. Additionally, they felt McGill differed from universities, such as York or Toronto, because McGill specifies goals while York and Toronto do not. Cutbacks were not mentioned because none have taken place in the last ten years. However, the scholars working in Languages or Religion expressed concern for their areas because they did not appear to be a priority, while scholars from Philosophy stated they had never felt any kind of pressure to make their work more useful or applicable.

University of Toronto: Responding to Government Calls for Proposals in Priority Areas

The University of Toronto’s motto is *excellence, innovation and leadership* (University of Toronto, 2009). The research mission is “to enhance the University of Toronto’s impact in research through enabling new strategic initiatives that promote fundamental scholarship, discovery and multidisciplinary cultural, social and technological innovation” (University of Toronto, 2009). The new functions of universities are immediately observable – impact, measurable results, the inclusion of all types of research, and last but not least, the prioritization of innovation.

In 2008, the Office of the Vice-President of Research developed framework documents for every single priority area. As they express, “...these catalogues are meant to: provide a tool to understand the scope of research across every relevant discipline and all three campuses; help faculty identify areas of synergy and potential collaborators; and enable us to make prompt, targeted responses to government calls for proposals in their priority areas” (Report of Governing Council: 2009, p. 2). It shows the importance of the connection between these factors, how the government has legitimized priorities and how universities are replying to those demands, apparently with no complaints. In addition, the University of Toronto has an office dedicated to fomenting innovation – The Innovation Group (TIG) – that is one of the three pillars of the research office, alongside the Research Services Office and the Research Oversight and Compliance Office. The University of Toronto has the highest proportion of investment from Canada Foundation for Innovation and the highest proportion of grants received from the three main federal research councils (SSHRC; Canadian Institutes of Health Research, CIHR and NSERC). This shows the power of rankings as a comparison tool. The University has recognized the **heteronomous** definition of priorities during the last few years (2007 and 2008), and tried to be in harmony with them. To satisfy the demands of expertise defined by federal and provincial governments, the University of Toronto has designed and published a research and innovation catalogue for 2009 to better communicate and showcase its strengths. According to the interviewees, they have not felt pressure to redirect their research

towards priority areas established by the government or the university. In their own words, these changes have had no dramatic influence on them.

University of Buenos Aires: Inter-disciplinary Programs for Creating Priorities

Some universities, such as UBA, have developed programs that attempt to create a multidisciplinary space for knowledge production on some of the topics outlined in the Bicentennial Plan (for example, climate change and social marginalization). However, it's worth pointing out that with a "zero" budget, finding funds to undertake projects heavily depends on the capabilities of members and coordinators of research groups.

Soon after the broad and multidimensional (economic, social and political) crisis of December 2001, UBA's Science and Technical Research Projects (aka UBACyT) had a specific line called "Social Urgency UBACyT Projects", which incentivized interdisciplinary projects that responded to the consequences of such a crisis. Though this was not replicated (there was a change in the management), interdisciplinary programs have developed and continues up to current day.

National University of Comahue (UNCo)

UNCo has no explicit preference for the projects it takes on. Beyond some budgetary difficulties facing teachers, researchers and their teams (outdated material and equipment, insufficiencies, etc.), UNCo does not vet its projects for their functionality, practicality, appropriateness, or relevance. If a project meets technical requirements, the director can address the issues that are considered to be the most necessary. Thus, in this sense, UNCo respects a certain "universality" of the issues, objectives, and results sought, having to its credit many highly varied research projects

At the same time, 109 of their projects can be considered to have a direct relation to the productivity and improvement of different spheres of influence of the university. An important percentage of the university's research (almost 60%) generates knowledge for the production, use and awareness of the resources of the region to better local development; something that directly corresponds to the original ideas of building universities connected to local needs.

National University of Córdoba (UNC)

UNC's status among the traditional universities in Argentina is primarily due to its 400 years of existence (founded in 1613) and its significant scientific contributions that are recognized internationally. One of the interviewees at the university affirmed:

Within the UNC, in this decade, the changes are principally due to a better assignation of funds for R&D, coming from a better University budget overall. On top of that, the criteria or review by peers and the presence of external evaluators is maintained (Secretary of Science and Technology, Philosophy and Humanities, UNC, p. 3).

This relation has more to do with international finance organs than with external actors, although there are university companies (like the well-known hemoderivative company) and a technological park in the planning stage, that point towards more links with businesses in the future.

Innovation as a University Priority

Innovation is expressed in relation to a knowledge-based economy and is thought to produce unique value-added products via sophisticated production processes. University and business sector collaboration is a dimension highly relevant to *innovation* and reveals the category's orientation towards knowledge privatization and commodification (Naidorf, 2005). As the World Economic

forum expressed recently, *innovation* is the only *good* that does not suffer from diminishing rates of return (Hausman, Austin, & Mia, 2009).

While often used as a synonym for knowledge creation, it is important to emphasize that innovation, which is only one way of considering knowledge creation, is inherently oriented towards an economic perspective. *Innovation* is measured in the *per capita* number of registered patents per million inhabitants. Even if part of the knowledge produced by universities is economically oriented, not all of it could have a commercial use. In general terms, when asked about the purpose of scientific research at the university, or its ideal, one could agree that innovation should not be the only measure of the value of research, because if it were, research would become a diminished version of what it is.

Innovation as a measure of *relevant* research stands out as a new approach to establishing the boundaries between economically useful knowledge and other sub-types of knowledge. This hierarchic distinction and separation has widened the gap between those who have more resources to conduct research, often coming from outside the university (i.e. enterprises and the private investment), and those who work with the lean resources provided by a publicly constrained financial environment.

Social relevance of universities

Social Relevancy in Argentina

Social relevance was not recognized by directors or evaluators of projects as criteria to determine whether a research project should be positively evaluated or not in either Argentina or Canada. Nevertheless, scientific policy recommendations are used to address the social relevance of research in different ways. Some of the university authorities interviewed defined social relevance in terms of three main objectives: the capacity to solve problems, tangible and/or visible impacts, and practical applications. Most of the directors of research projects expressed social relevance as important; however, the most important consideration regarding whether or not to pursue a specific research avenue was curiosity.

Social relevance is an ambiguous term; it is a more sophisticated way of asking faculty to engage in more useful, applicable, and/or socially impactful research, more mobilized knowledge. Knowledge mobilization, from this perspective, is a way of making knowledge useful so as to increase the value of knowledge in relation to its utility. Studies about the link between research and practice are growing; as well as those about knowledge mobilization, and its impact on Canadian scientific policies in the social sciences and humanities, all of which are worth further analysis.

Relevance and pertinence were defined in policy, on paper, in Argentina for the first time in June of 2013 in the Second Paper of the Advisory Commission on the Evaluation of Scientific and Technical Personnel entitled: "Precision in the definition and incorporation of mechanisms of Technological and Social Development Projects (PDTS), and the National Bank of PDTS."

In this document *Relevance* and *Pertinence* are defined as follows (p. 1:

- a. "We understand relevance to be a strictly political concept (in its most broad definition) that qualifies a research and development project in function of the objectives or ends it aims to obtain. Relevance can refer to the adaptation of the project's objectives to public policies or strategic objectives or to the political objectives of a sector of civil society or to generalized values in the society."
- b. "We understand pertinence to be the strategy of the PDTS in terms of its capacity to solve an identified problem and adapt the hoped-for results to concrete applications in the local context."

Knowledge Mobilization in Canada: Putting Knowledge in Action

Knowledge Mobilization is a concept that was introduced in Canada around 2001-2002 by SSHRC under the leadership of Dr. Renaud, and Vice-President Pamela Wiggin. Peter Levesque held the position of Deputy Director of Knowledge Products and Mobilization from 2002 to 2006. The definition of mobilization was taken from the French term *mobilization*, or making ready for service or action. At the time, it was felt (rather than supported by evidence) that the ability to use much of what was produced in the social sciences and humanities was hindered by the conceptual and physical inaccessibility of the production of this sector. Sets of initiatives were launched with the explicit intention of improving the conditions for uptake and utilization of academic production from this sector. It was thought that never before in history had so much useful information been gathered, yet so very little used.

Considering the new tendencies in Canadian scientific policies, the emergence of *knowledge mobilization*, though not yet fully understood, appeared quite frequently in interviews with directors and evaluators of projects. In order to better understand the theory and set of test methods created for knowledge mobilization (KMb) I consulted Peter Levesque, the Director of Knowledge Mobilization Works (KMbW), a company based in Ottawa and specialized in consulting on practical enhancements of knowledge mobilization for governments, businesses, post-secondary institutions, and civil society organizations. I also attended the expositions on “knowledge mobilization” by Dr. Creso Sá’s group in the SSHRC Congress in Ottawa in the spring of 2009. Levesque engages in strategic research and conceptual explorations to enhance the incentives and infrastructure to support KmB. KmBw is an organizer of workshops and events that build the capacity of individuals and organizations to engage in KmB.⁴

Knowledge mobilization is a complex and emergent process that focuses on **making what is known ready for value-producing action**. Knowledge mobilization has arisen from an equally complex knowledge production process that has failed consistently to move the most credible evidence from practice and research into improved outcomes. It also refers to activities that create and support the conditions and culture that lead to effective (and when possible, efficient) access, implementation, utilization, and evaluation of the most credible evidence for improved outcomes from the decisions taken (Levesque, 2009). Knowledge Mobilization includes the push and pull found in the multi-directional movements of data, information, and knowledge between individuals and groups for mutual benefit (Levesque, 2009). Particular consideration is given to the best-received formats for specific audiences. It includes the mechanisms that determine current and ongoing needs, as well as the timeliness of these needs. The roles of producer and user of knowledge are interchangeable (e.g. university researchers are frequent users of other’s output; schools produce databases which are then used by university researchers). KmB actively creates linkages and exchanges between producers and users of data, information and knowledge to engage in value-added activities. It includes a more entrepreneurial perspective than is often seen in

⁴ Prior to founding KmBw, Levesque served as the Deputy-Director of Knowledge Products and Mobilization for the Social Sciences and Humanities Research Council of Canada. Drawing on seven years of work, he suggests that the issues of power and control are central - especially in an institutional setting. Having left both Federal and Provincial agencies, he now focuses his work on specific purposeful projects that consider not only the content, which is important, but argues that perhaps more important considerations are those of context, capacity, and a culture that supports the use, sharing, and co-creation of knowledge in its many forms.

disciplinary academic research; the “final report” becomes the mid-point of the discussion and includes the awareness of opportunities, partnerships, market conditions, technological supports, and concepts of innovation (Levesque, 2009).

Levesque states that the value of Knowledge Mobilization is in its ability to better explain the link between social needs and universities. In other words, it is what is in-between the knowledge and the “doing.” For him, increasing the value of knowledge implies a cultural and perspective shift. The value of knowledge, he explains, is commercially speaking, not profitable. The meaning of the term value has a utilitarian definition not just a monetary one. The Oxford Advanced Learners’ Dictionary (2001) has two entries for the word value. The first states that value *is how much something is worth in terms of money or other goods*. The second states that value *is the quality of being useful or important* (Oxford Advanced Learner’s Dictionary, 2001). Levesque highlights the difference between mobilization and dissemination with a simple example: *dissemination is like sowing seeds; they will not grow if you do not follow all the necessary steps, like raking, watering, and pest control till the harvest. Put simply, it is not enough to disseminate knowledge to have real results, you have to do more.*

Most of the Canadian faculty interviewed for this study did not differentiate the issues that Levesque highlighted. Indeed, at the SSHRC Congress in 2009 most of the audience expressed confusion as to what this new requirement for Canadian faculty implied. Nevertheless, knowledge mobilization creates a new position that can improve the relation between producers and users of knowledge and bridges the two: the *Knowledge Broker*. The Knowledge Broker works in the in-between space to reduce the gap between producers and users of knowledge and collaborates with at least two groups (researchers, policy makers, practitioners, enterprises, etc.). They are intermediaries; the existing brokers’ types are: matchmakers, translators and processors, and articulators. The first have the function of connecting researchers as producers of knowledge with its users. The second interpret and adapt the knowledge so that the latter is better understood and the third interpret research projects and work to reduce the gaps between theory and practice. Their function implies a complex, interactive, and non-linear social processes (Sá, Li, & Faubert, 2010). It is reminiscent of the criticism made by a university authority in one of the interviews when he reported that researchers are very bad at writing about the impact of their research in few words. They now may have a special person to interpret and adapt knowledge, to make it more *communicable*. The specifics of this new role, the Knowledge Broker, are still not very clear to faculty and indeed most of them have never even heard of it. Yet, this new role may enable universities to respond to the SSHRC priority of making social science and humanities research has an impact.

Discussion

This article focused on the reactions that universities and faculty members have had to the external priorities exerted by the market and/or governments. Specifically, I assessed the ways in which knowledge is conceived and defined and how policies and research agendas are set from the perspective of the university. The difficulty in measuring research impacts indicates the need to develop new indicators to redefine university-society relations, measures that go beyond quantitative ones, like citations and publications.

Dissemination is often understood as being the communication occurring in academic journals and at congresses, but *mobilization*, as scholars pointed out, is differentiated from the latter in that it makes knowledge ready for service or action. Implying more than the mere *distribution* of research results, it involves one more step in order to *mobilize* it. *Mobilization* presents us with a complex means of making knowledge more useful, proactive and applied, because utility, proactivity, and application are limiting factors in some areas of knowledge. Knowledge mobilization aims to reduce

the time to apply research results. Whether it does so or not, it provides an interesting reason for rethinking the social implications of knowledge produced by the social sciences and humanities. As one of the interviewees pointed out, the distinction lies in the differentiation between *responsiveness*, a quality that focuses on the readiness for response (that is, to outside demands), and *responsibility*, which implies an ethical perspective of general appreciation of research activities. Knowledge mobilization could be seen as only paying attention to responsiveness, and it is important to add responsibility to the equation.

The quantitative means of *value dissemination* works against the creation of new university-society links. The planned changes in universities include the elimination of some barriers including skill issues (such as being able to convey findings in plain language, or to read quantitative data results), resource issues (lack of time, access to materials), and reward systems (little push in the university to provide research relevant to educators and little push in the schools to read research) (Levin, 2011). These changes will surely affect the ways knowledge is constructed at universities: the impact would determinate what becomes relevant (or not) and/or for whom it should be produced. Also, these trends would be critical as they would act as key organizers and determinants of research agendas at universities.

Universities must find new ways to interact with social needs and arrive not only to solutions, but also to new approaches for understanding the complexity of what happens in society, explore and identify new futures. This does not mean one must wed oneself to the notion of knowledge utility. Rather, one must identify the gap between the discourse and practices of evaluations processes that have a considerable impact on the definition of research work. By acknowledging that other forms of knowledge impacts exist and that different ways of constructing them exist, universities and federal agencies have the opportunity to pursue and further this idea. They have the opportunity to comply with the key priority that real complex implications of research go beyond the rhetoric of accountability and immediate utility.

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Appendix A: Documents

Canada

Documents from SSHRC:

- Record of Research Achievement
- Instructions Manual, 2009 competition
- Standard Research Grants Program – Reader Comment Form, March 2009
- External Assessment Form
- Standard Research Grants Adjudication Process. Appendix 3
- Description of research grants. Research Grants, Strategic Research Grants, Strategic Joint Initiatives, Research Communication Grants and Special research fellowships.
- Manual for adjudication committee members, November 2008.
- Special Report, 2008.
- 30 years SSHRC. Book
- “Framing our direction”, 2009

Universities:

- Mc Gill University. Strengths and Aspirations. A White paper call to action regarding. Mc Gill University’s future.
- Mc Gill Reporter. May 14, 2009.
- The Senate of York University. University academic Plan. Academic Priorities 2005-2010.
- Integrated resource Planning. 2 circle Roadmap. Prepared by the Integrated Resource Planning Office. York University.
- Excellence Innovation Leadership. Research at the University of Toronto. Report to governing council, March 2009.
- Facts and Figures 2008. University of Toronto.

Argentina

- Conclusions of the assessment of scientific and technological activities workshop held by the National University Council (Vaquerías, 19-20 April, 2012)
- 1° Document of MINCyT’s Advisory Commission on Evaluation of Scientific and Technological Personnel: “redefining the criteria of evaluation of scientific and technological personnel” (August 15, 2012). It enunciates the so-called Technological and Social Development Projects (PDTS) and the strategic socio-productive nucleus (NSPE). 2012-2015
- 2° Document of MINCyT’s Advisory Commission on Evaluation of Scientific and Technological Personnel: “Details on the definition and mechanisms of incorporation of Technological and Social Development Projects (PDTS) into MINCyT’s National Bank of PDTS”.
- National Law of Science, Technology and Innovation N° 25.467, enacted on August 29, 2001 and promulgated on 20 September of the same year.
- National Law of Higher Education N° 24.521, enacted on July 20, 1995.

- Resolution from the Superior Council of the University of Buenos Aires, N° 5042/05.
- National Strategic Plan of Science, Technology and Innovation “Bicentennial”, corresponding to the period 2006-2010.

Appendix B: Interviewees

Interviews carried out in Canada (2009):

York University

- Evaluator and Director of research projects. Director of LaMarch Research Center. Interdisciplinary Studies of Violence. Faculty of Psychology.
- Evaluator and Director of research projects, Professor of Financial Services.
- Evaluator and Director of research projects. Professor, Law and Society Program. Faculty of Arts.
- Director of research projects. Associate Professor. Faculty of Environmental Studies.
- Interim Director, Integrated Resource Planning Office.. Division of the Vice President Finance and Administration.
- Director of research projects Professor at Dance History. Department of Dance.

University of Toronto

- Evaluator and Director of research. Director of Graduate Studies of History and Philosophy of Science and Technology.
- Professor and Associate Dean Academic Ontario Institute for Studies in Education.
- Professor and Associate Chair. Department of Curriculum Teaching and Learning. Ontario Institute for Studies in Education.
- Professor at Ontario Institute for Studies in Education. Department of Higher Education.
- Professor at Ontario Institute for Studies in Education. Department Curriculum, Teaching and Learning.

Mc Gill University

- Evaluator and Director of research projects, Sociology of work.
- Dean of Faculty of Religious Studies. Evaluator and Director of research projects. Professor at Department of Philosophy.
- Dean of Hispanic Studies. Modern Languages
- Professor at Minor Concentration Anthropology
- Professor at Art History and Communication Studies
- Professor at McGill University Business Engagement Centre

Governmental bodies

- Peter Levesque. Director of Knowledge Mobilization Works. Assessor of SSHRC
- Meaghan Harris Program Officer Research and Dissemination Grants. Social Sciences and Humanities Research Council of Canada.

Interviews carried out in Argentina (2006-2009):

National University of Comahue

- Academic Secretary for Research (university level)
- Dean of Economics and Administration Faculty
- Dean of Education Faculty
- Academic Secretary for Research (Faculty of Education)
- Evaluator of projects: Engineering area
- Evaluator of projects: Biology area

University of Buenos Aires

- Academic Secretary for Research (Faculty of Social Sciences)
- Academic Secretary for Science and Technology (Faculty of Medicine)
- Senior researcher: Biochemistry and Molecular Biology area
- Senior researcher: Physiopathogeny area
- Evaluator of projects: Natural and Exacts Sciences area
- Evaluator of projects: Medicine area

National University of Cordoba

- Secretary of Science and Technology (university level)
- Secretary of Science and Technology (Faculty of Philosophy and Humanities)
- Senior researcher: Philosophy area
- Senior researcher: Natural and Exacts Sciences area
- Evaluator of projects: Natural and Exacts Sciences area
- Evaluator of projects: Dentistry area

Governmental bodies

- President of CONICET (2008)
- National Director of Technological Entailment

Appendix C: Questionnaires

Questionnaire designed for semi-structured interviews in Argentina and Canada:

This interview was conducted as part of a research project. Its purpose was to analyze the relationship between the public university and society from the debate around the notion of the university's social relevance. All answers were treated as anonymous.

Number of Interview:

Date:

Interviewer:

Name of Director:

University:

Position:

Questionnaire:

1. What is the name of the research project being undertaken? Where is it located? What is the funding agency?
2. What is the problem of your research? What area?
3. What is the contribution of your project? You can cross-reference if necessary: What do you think is the contribution in academic terms?
4. Does your research have any impact in social terms? If so, what?
5. Did you consider the potential impact in social terms when developing or presenting the project? Do you think that these aspects are taken into account by the funding agency?
6. Does your funding body have priority areas? If NO, do you think it should? If YES, do take them into account when preparing the draft? Is your project included in them?
7. Do you intend to establish research links of some kind (articulated with public agencies, local governments or other branches of government If Yes: specify how...)
8. Has your research project links with the private sector? If Yes: specify how...
9. Have you developed other projects before? If Yes : In the same line of research ? Which university?
10. Since you have been conducting research, have you noticed any change in the acceptance criteria for University projects? What? What do you think they should be?
11. What do you think about the project evaluation process at your University?
12. Throughout the funded project, did you establish links with other research groups If Yes specify which (taking into account the national and international dimension , perhaps for a possible cross-examination)...
13. Do you incorporate your research progress into university education? (You can specify if it is incorporated in the research literature produced in education).
14. How do you disseminate the results of your research? If it is broadcast: through whom? Why the broadcast media?

Interview Questionnaire design semi-structured academic and management authorities.

This interview was conducted as part of a research project. Its purpose was to analyze the relationship between the public university and society from the debate around the notion of the university's social relevance. All answers were treated as anonymous

Number of Interview:

Date:

Interviewer:

Name of Authority:

University:

Questionnaire:

1. What is your position? Since when?
2. Have you had other academic positions? What position? What years?
3. How do you see the current state of research at this university?
4. Do you identify changes in the types of research conducted in recent times? [By type of research means: basic, experimental, applied, technological development, etc.]
5. Does the university prioritize research areas? If so go to 6 If No, go to question 10.
6. What are those priorities? What decision-making body established them? How are they implemented?
7. What are the criteria for establishing priority research areas?
8. How are priorities areas targeted to researchers?
9. In the past 15 years, were there continuities in the priority areas? If yes specify which ones. What new areas were incorporated?
10. What aspects are considered when evaluating a research project? What aspects does the university consider to be most important?
11. Do you think that in recent years the criteria for evaluation and accreditation of research projects has changed at the university? In what ways? What motivated these changes?
12. Have you had research projects rejected because the issue was not relevant to your university?
13. How do you evaluate the results of the research projects that have been accredited?
14. When is a research project relevant?
15. How does the college define social relevance from the teaching, research, extension and transfer?

About the Author

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Doctor of the University of Buenos Aires, Area Educational Sciences. Degree in Educational Sciences (UBA). Research fellow. National Council of Scientific and Technical Research (CONICET) based in the Research Institute in Educational Sciences. Coordinator of the Working Group of CLACSO “Ciencia social politizada y móvil en y para una agenda latinoamericana de investigaciones orientada a prioridades desde la universidad” (2013-2016), which includes members from Argentina, Brazil, Bolivia, Guatemala, Honduras, Mexico, Cuba and Paraguay. Director of UBACyT “La movilización del conocimiento producido por las Ciencias Sociales en universidades públicas como condición actual de producción intelectual” (2013-2016) and a PIP project funded by CONICET “Las actuales condiciones de producción intelectual y sus Impactos en la creatividad de los académicos de las universidades públicas argentinas” (2012-2014). She obtain grants from CLACSO’s scholarship program, Canada’s Faculty Research Program (International Council for Canadian Studies), UBA and CONICET. She participated in the Inter-university Framework Program for Equity and Social Cohesion Policies in Higher Education (RIAPE), funded by the European Union.

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