Abstract

Brazilian universities, like the educational system in a great deal of Latin American countries, are experiencing a significant process of transition. They are facing several challenges posed by new education policy settings, mainly in higher education, on the one hand and by social and economic changes on the other. The modern university, as a more recent phenomenon linked to science, also appeared. Born in medieval Europe, transformed in modernity, and expanded worldwide, modern university today seeks a new face capable of accounting for globalization without losing its identity and its ethos of generating, diffusing and guarding knowledge, of the place where this very knowledge may be overcome. Our discussion will be based on theoreticians such as Freire (1996), Bobbio(1987), Carnoy(1997) to show that it is necessary to analyze these issues from many points of view. Studies and research about the Brazilian educational agenda developed by local policy makers, consultants and advisers reveal a process in which international institutions and the process of Bologna play a central role. Procedural method is the comparative one, since we are comparing the European reality with that of emerging countries, especially Brazil, in relation to overcoming borders in higher Education. We also analyse the relationship between knowledge production and professional formation.

Key words: democracy, globalization, university, innovation, research.

Democracy (...) is a way of life, characterized, above all, by a great deal of transitional state of consciousness in man’s behavior. This transitional state does neither appear nor develop unless under certain conditions through which man is prompted to debate and examine his common problems (Freire, 1991:80).

Introduction

According to Bobbio (1987) democracy is closer to a dynamic process than to a static situation. Its essence is change, to conform itself to society needs. Despotism, however, wants to prevent change and maintain a situation which no longer meets the majority’s wishes, which aims at keeping privileges or imposing ideas. Despite the fact democracy lies in an individualistic conception of society, it caters for everyone’s rights with equity. Although democracy is the government of the majority, it defends the respect toward minorities’ rights. Therefore, individual and group freedom must be established in a Constitution, the founding document of that State. The issue of rights leads to a reflection on power, since both present a multiplicity of forces; only power may strengthen rights, but those should limit power through a set of laws foreseeing who should make collective decisions.
as well as how to do so. In a democratic regime, the government lawfully acts (or should do so) according to everyone’s well-being.

In a democratic State of Law, governments must implement public policies that meet the population’s wishes. This, however, is not simple since if everybody knows the ways, few know how to reach them. The path toward plenty and happiness has been pursued by human beings throughout history. This is why religion, philosophy, social organizations and science have arisen. That is why, also, modern university, as a more recent phenomenon linked to science, also appeared. Born in medieval Europe, transformed in modernity, and expanded worldwide, modern university today seeks a new face capable of accounting for globalization without losing its identity and its ethos of generating, diffusing and guarding knowledge, of the place where this very knowledge may be overcome.

If globalization is a current process, the same may not be said of the worldwide economy. The latter established itself in the 16th century, the period known as the Great Navigations or Commercial Revolution. The economy globalization depends on the recent technological infrastructure which generated global communication and information networks, including the Internet, enabling companies to expand worldwide and capital, production and even company management to become global.

Carnoy (2006) states the two pillars of globalization are information and innovation, both based on knowledge. If, on the one hand, knowledge in fundamental for globalization, on the other hand, its transmission has been deeply affected by globalization. The need for education has become much more intense and urgent. The demand for higher levels of education has resulted from the changes in production, which started using intensive knowledge for its production processes.

In previous studies (Lucchesi, 2005, p. 233), we had affirmed “globalization has not meant only a higher speed of the financial capital, production, people and service international circulation, but also generated an acceleration of knowledge production, divulging and exchange” for if the scientific knowledge international exchange already took place since Ancient times and during the Middle Ages, it has intensified since Modernity. Post-modern globalization has not changed this model, but rather has both accelerated and intensified it to the extent of “generating changes in the scientific knowledge production process”, mainly “due to the possibility of bridging distances”, thus forming world networks of researchers.

Carnoy (2006) also states that the demand for higher levels of Education and the better income obtained by them “raise the demand for university Education.” As a consequence, governments attempt at enlarging the offer of higher Education and also, naturally, the number of high school graduates ready to enter higher Education. It must be emphasized this hierarchical model, divided into grades, with pre-requisites to pass from a grade to another in a bureaucratic way is recent although the division of learning into elementary, middle school and high school comes from the Roman Empire, when higher Education included Rhetoric, Philosophy, Law, etc. This does not mean it is unchangeable; rather, it is given as such and public policies are geared toward them. The most important concept in this scenario is that of lifelong learning, where Education is no longer thought of as a period of life, but rather as something to take place throughout life. New offers and reforms will soon come to meet social demands. The university is a social institution created and maintained by society to serve it; adapting to historical time is one of the most difficult tasks, but it is crucial for its maintenance. Post-modernity brings (or may bring) other demands to be thought of by policy makers.

The economic demand for higher Education leads populations to pressure governments to enlarge offer and access to higher Education. Afterall, they have culturally assimilated the “diploma” as something fundamental to obtaining social status and professional room in post-modern times, as conceived by the model inherited from the Industrial Era. The expansion of the free public university faces limits in the State budget. Due to this, in several cases, increasing the offer of places by means of the authorization of higher Education private institutions has been sought. Brazil had already gone through this sort of expansion in the 1970’s, when many isolated colleges appeared without any interest in research and knowledge production, thus believing higher Education could consist of repeating the knowledge produced by universities, mainly the public ones and most traditional ones, the latter generally confessional. Today, this model is worn-out, for diplomas are not enough; it is necessary for professional formation to enable knowledge generation in the workplace.
We are, thus, seeking both the expansion of State-maintained public universities and the growth and strengthening of those institutions which, according to Paulo Freire, although not public in the sense of state-owned, have “public spirit.” (Lucchesi, 2006)

Both the French and the German models adopt the free public university as a prevailing model. Those predominate in those countries and are considered to be the norm, while the private institution is an exception. This takes place at all educational levels. According to Freire, the university does not need to be public (in the sense of being state-owned), as long as it has “public spirit.” Higher Education significantly differs from other service sectors because, due to its public character, in it traditionally coexist a high degree of governmental participation in its offer, private financing and commercial activities. (Lucchesi, 2006:104, translation by author)

University and Knowledge Production

Freire (1996:14) states that “there is no research without learning, nor learning without research.” The quest for knowledge and its communication through learning are inseparable and mutually motivating activities. This quest for knowledge characterizes itself as research because it demands method and critical posture, thus differing from popular, empirical, non-systematic knowledge.

Nóvoa refers to Boli and Ramirez (1986) when affirming that Education, as well as science, technology and political theory, are transnational phenomena. “That is to say that what Education is (its ontology), the way it is organized, its structure and the reasons for its value (its legitimacy) are characteristics essentially defined in culture and world economic system levels, rather than within States as nations. This idea belongs to the concept of world system approach, used by the Standfort university team.

In reality, there is a two-fold relationship between school and State since, according to Popkewitz (apud Nóvoa, 2000:128 In: Nóvoa; Schriewer, eds, 2000:5), this relationship plays a fundamental role in the production of “systems of government.” The school builds, among other things, the “national imaginary”, the “cosmopolitan identities” which interfere in the world of politics, economy and culture. Even though in the last decades, especially in Brazil, the university has suffered losses in the state protection historically granted and has been launched in the market’s wild laws, it remains a priceless social being, a public asset. In this direction, one may notice a shift in the public policies for higher Education, which, in Brazil, must be credited not only to the changes in government, but also to the pressure and demands from society. (Lucchesi, 2005:101)

As previously stated (2005:101), producing and divulging knowledge is a university social function. It is part of the university mission to apply this knowledge for the benefit of all. When it conducts research, for instance, on the relationships among man, natural environment and the economy in the regions of environmental protection, the university is rendering service to the local community and all mankind, therefore fulfilling its role of universality, since it is universitas.

It can only be called universitas (universality) if it produces and divulges knowledge. The university bears a social role. It acts in society not only by divulging the knowledge it produces, but also by applying it for the benefit of all. An example is the use of technology in Education to enhance performance in the public school. Due to this, the university has always received State protection. However, in the last decades, it has been losing this support and being launched in the market with its wild laws. (Lucchesi, 2005, p.101, translation by author)

Methodology of Research

This study aims at deepening the analysis of two basic issues we have addressed in our research since the 1990’s: the fundamental role of higher Education as knowledge producer, in the same way it was knowledge sharer in modernity, and the importance of overcoming barriers between countries in the production and diffusion of knowledge. Because it is a dialectic move-
ment, we have chosen to use this method for our analysis. Rather, educational policies are largely situated in sociocultural settings and heavily contextualized in specific domains. Our discussion will be based on theoreticians such as Freire (1996), Bobbio (1987), Carnoy (1997) to show that it is necessary to analyze these issues from many points of view. Studies and research about the Brazilian educational agenda developed by local policy makers, consultants and advisers reveal a process in which international institutions and the process of Bologna play a central role. Procedural method is the comparative one, since we are comparing the European reality with that of emerging countries, especially Brazil, in relation to overcoming borders in higher Education. We also analyse the relationship between knowledge production and professional formation. This analysis leads to the understanding it is no longer appropriate to discuss whether all universities must work on research and knowledge production. This has already been proven through the demands from work and production organization in the globalized world. Now, it is appropriate to search how a higher Education institution may produce knowledge compatible with its resources, oftentimes scarce, adequate to the needs of the community it belongs to, and at the same time, inserted in the great knowledge global network.

**Knowledge Production and Complexity in the Globalized World**

If knowledge is international, systems of learning have gained differing aspects in each national State and have solidified according to the needs they have aimed at meeting. Thus, in Napoleon’s France, isolated institutions played the role universities could not play. However, ours is a different time. National borders no longer bear the same meaning (in this sense, the European Community is a reality opening new horizons to the whole world). Therefore, systems of higher Education must be re-created so as to be adapted to the globalized world. Such adaptation is a current challenge.

France, for instance, has recently changed its annual system of university courses into a semester one, aiming at harmonizing with the rest of Europe (Jourde in: Jourde, 2007:99). Nevertheless, globalization does not only reach Europe. In South America there is the urgent need for integrating higher Education with both neighboring and more distant countries.

This issue becomes even more crucial in emerging countries, especially in their needy regions. When addressing this issue, Dagnino (2007:A3), Professor at the Scientific and Technological Policy Department in the State University of Campinas located in the State of Sao Paulo, Brazil, affirms there is “the rightist” and the “leftist” research in the Brazilian university; while the former is geared to the demands from the market, the latter is interested in the needs of the lowest social classes. From this perspective this discussion on the research lines most adequate to each Brazilian university is not further conducted; however, it is worth mentioning what the author of this study considers to be an advance: in the proposals of public policies for the Brazilian university, the relevance and need to carry out research are no longer questioned. This university’s essential vocation is unquestionable. It has been perceived that in emerging countries it is not possible to import knowledge from more advanced cultural centers, simply because the knowledge we need for our specific problems may only be produced where they take place. This does not mean isolation. On the contrary, it implies integration and exchange, a creative reception of what comes from advanced centers and the development of specific techniques for each subject of study.

Let’s take the Amazon region as an example. There is no available knowledge in any research center in the world capable of being immediately applied so as to preserve nature and make the region economically viable. It is absolutely fundamental that this knowledge be locally created from the direct observation of the environment’s specific conditions as well as taking the knowledge stemming from other research centers which have studied similar issues. Producing scientific knowledge and rendering it international are not innovations from our present times. They arose in 16th century Europe with Modern Science; however, with today’s networks of knowledge, they have reached a different speed and enable the simultaneous contact among researchers from very distant locations. A more intense production of scientific knowledge stems from this permanent exchange, a production both local or specific and global. Where may these knowledge producing poles be located if not in places where there is higher Education? Some countries already have
high percentages of company investment in research, but it must be remembered such investment only takes place once the seed has germinated. It is not up to the business world to explore new sources or establish new theories. This is the role of the university and the academic world, to essentially generate and divulge knowledge.

During its 59th annual meeting, held in the first half of July, 2007, in Belém, capital of the state of Pará, Brazil, the Brazilian Society for the Progress of Science (SBPC), brought as its main theme the Amazon regions, thus defending the need to form ten thousand PhD holders for the region. The event, the largest scientific event in Latin America, challenged the Graduate Studies National System to form ten thousand PhD holders for a region which, nowadays, only has about 2,500 PhD holders. “SBPC’s president, Ennio Candotti, believes the goal may be met in six or seven years. The new SBPC’s president, Marco Antônio Raupp, promises to prioritize the region.” Both have proposed “joint political actions, more intense and permanent governmental initiatives for the areas of Science, Technology and Innovation, thus aiming at meeting this goal and others from the area.” It must be said that, when accepting such challenge, the new SBPC president, Marco Antônio Raupp, justified its relevance stating that “Science has a universal character; therefore, the knowledge on the Amazon region is fundamental for all.”

The example of the Amazon region allows us to also mention the importance of integrating disciplines in complex knowledge originating from the studied object rather than the limited scope of each science. Biology, Social Studies, Geography, Economics, Politics, Medical Science and, of course, Education are involved in this theme, not to mention so many other fields of knowledge related to such complex and relevant local and global issue.

According to Tourinán Lopez (2004), when reacting against globalization, the bonds among the closest and smallest communities are strengthened, thus generating “glocalization”, which allows the maintenance of peoples’ identities through culture. In this context, higher Education institutions in general that refuse to produce knowledge adapted to the specific needs of the community they belong to tend to disappear, for the mere transmission of already-systematized knowledge may be done through faster and more efficient means than through presential learning. Therefore, the Brazilian university has been undergoing an accelerated process of change.

Higher Education, Knowledge Production and Professional Formation

The conflict between forming higher Education professionals adequate to the demands from the work market and producing innovative knowledge through research has been synthesized in the higher Education needs today, needs that ask for permanent research and innovation. Thus, we can no longer talk about learning without research although the opposite is true in companies rather than universities. Perhaps we have now gotten at an ideosyncrasy of the scientific knowledge produced by universities: this knowledge does not need to stem from a foreseen use. The student’s professional formation period, together with his permanent re-formation, is a moment when the economy immediacy is temporarily interrupted for free thinking to take place; this is how great ideas have arose in the last centuries. Even more important than a less intense pressure in relation to deadlines (this pressure appears in universities, however different from the need for immediate response in companies) is the possibility of interaction with other researchers; in fact, research groups tend to result in much more than the addition of the production from each of the parties involved, thus aiming at the totality of the knowledge on a certain studied object.

In developing countries many issues are posed regarding the paths university research must take. If, on the one hand, there is the need to produce technology and innovation, on the other hand the search for solutions to the specific problems of each nation and region must not be dropped, especially the problems related to education, health and the social integration of marginalized classes. For these issues there are no ready formulae, and the study of the paths taken by other nations may serve as an example to be analysed, rather than imitated.

Shortening the distance from the developed countries implies both developing high-level knowledge and overcoming internal distances between those that live and those that merely survive. We could say the Brazilian university and its research should listen to both the demands from the “right” (Chaimovich,2007: A-2) toward an integration with productive sectors, and
the warnings from the “left”, which requests the search for the formation of a critical spirit and social consciousness capable of coming up with actions to reduce alarming social differences. (Dagnino, 2007: A-3).

An issue standing out in this context is the formation of qualified professionals, or, if possible, highly-qualified ones, to attract investment in high technology and even develop our own knowledge in this area. The dispute between professional formation and research as central mission in higher Education is, from our point of view, a mistaken issue, since it is not possible to form a good professional in an environment distant from research. Today, forming a professional is not a complete action, but rather a complex and continuous process of systematizing knowledge theoretically acquired, together with professional experience and technological innovation.

Due to an acceleration in scientific and technological innovation, the professional is never “formed”, but rather finds himself in constant “formation.” Preparing this professional for the permanent openness to learning is the search for a “balance in the movement” that many call “continuing education”, but the author of this study prefers to consider it permanent research. Since higher Education may only bear research as both basis and source, it is not possible to consider a post-higher Education without research. In other words, we defend the idea research practice must underlie undergraduate courses and be the basis of graduate programs. This second aspect has already been implemented in the higher Education structure in Brazil, mainly by students looking for these courses. If according to Gaston Pineau (Ciret, n/d: from the Internet), most students only perceive the importance of research when, already in the job market, they seek going up in their careers, there would be a minority Pineau calls “exception-researchers” because “they already begin (...) attempting to put together as much as possible the received formation with their expectations and they are being attracted to individual and self-taught learning formulae.”

One of the reasons for that to take place lies in the lack of research during the professional’s formation, for, according to Pineau, there is “a gigantic distance between school learning and the learning required by professional practice.”

In relation to this matter, we affirmed during the last years of the 20th century: “in a moment when society is undergoing crisis and employment is at risk, there is the need for a great number of higher Education graduates to be able to become subjects of their own education; higher Education must also take a formative role.” (Lucchesi, 1999: 25)

Since no one is definitely “formed”, the learning process must continue throughout life, especially during the professional one. If, according to the paradigm we have adopted, research is the basis of learning, the research centers specialized in certain fields of knowledge should be chosen to offer learning stemming from their own research. This way, learning would be distributed worldwide from the knowledge production in each institution, region and country. Development and choice of research fields would arise from the local needs and the possibilities offered by geographic location, by research groups’ interests, and even by the studying tradition in given areas. This would lead to an excellence in specific research and learning centers. In the case of emerging countries, there could be, for instance, Tropical Medicine research centers in the Amazon region and Africa.

This proposal is coherent with the objectives of the Erasmus program, “which seeks to underscore quality and reinforce the European dimension of higher Education,” besides promoting “transnational cooperation among universities, fostering European mobility and incentivizing both transparency and the complete academic recognition of studies and qualifications in the entire European Community.” (www.unl.pt/erasmus)

The process of Bologna has provided European students with the possibility of exchange programs in universities located in several countries through the Socrates program, which enables mobility, and the Erasmus Mundis program, which aims at facilitating students’ traveling by means of offering courses and scholarship fundings for foreigners. The common objective between those programs is, through universities, to form European citizens for a strong and sovereign Europe, a continent to be unified through culture, a phenomenon already present through its common currency, the euro.

Not only European Community members belong to these programs. Out of 31 countries participating in them, besides the 27 members of the European Community, there are 3 European
countries that do not belong to that group (Iceland, Liechtenstein and Norway) besides Turkey. In this moment, there are isolated attempts for South American countries to be included in this exchange program. (www.unl.pt/erasmus)

The innovation we are proposing for the future of emerging countries would be similar to what Europeans have been doing within the European Community: that subjects may be taken in other countries' institutions. Already in June, 1999, the Declaration of Bologna, ratified by 29 countries, proposed diplomas to be common to several universities and to follow the same quality criteria. As a consequence, in France, for instance, the Ministry of Education suggested three themes for educational reforms: “educational quality”, “student mobility” and “new technology.” (Barbereau In: Abensour, 2007:54-55).

In Europe these objectives have already come true through the Socrates/Erasmus action, which “finances and promotes student and teacher mobility, launches joint study programs or intensive courses, the pan-European thematic networks, among other measures aiming at the development of a European dimension in higher Education.” The European Higher Education Area in a global context informs: “We are pleased that in many parts of the world, the Bologna reforms have created considerable interest and stimulated discussion between European and international partners on a range of issues. These include the recognition of qualifications, the benefits of cooperation based upon partnership, mutual trust and understanding, and the underlying values of the Bologna Process. Moreover, we acknowledge that efforts have been made in some countries in other parts of the world to bring their higher education systems more closely into line with the Bologna framework.” (London Communiqué: Bologna Process, www.dfes.gov.uk)

Brazil is still taking its initial steps in this sense. What we have clearly sought, through actions from research financing organizations, is the international exchange program of professors/researchers and students/researchers. However, taking into account the fact that the Bologna reform has stimulated exchange and collaboration also between Europe and other international partners, we believe this may soon happen.

We know integration is a difficult process since change meets resistance, especially when what existed before had been solidified in its historical time. Kathleen Barbereau (In Abensour et al., 2007:45-46), in a meaningful chapter called “The End of National Education?”, affirms that the influence from globalized economy in Education would compare to the end of the republican model for France.

**Final Thoughts**

This brief study has applied the dialectic-critic approach, for we have analysed conflict and conflict overcoming through synthesis, that is, pure dialectics. As research data collection we have used only bibliographical research. We may underscore as a provisional conclusion that the innovations brought by the Process of Bologna and other joint documents from the European Community have sprung nationalistic reactions toward preserving traditional models regarded as unchangeable. In fact, it is more difficult to change what has been consolidated than models recently implemented. Thus, whereas Brazil has been suffering from a permanent reform fever and moments of uncertainty regarding paths to be proposed for our young university (the first Brazilian university was consolidated about 90 years ago), Europe has been facing resistance from those possessing the rich traditions of a 13th century university, oftentimes a model for our own universities. We hope collaboration is useful and enriching for both Brazil and Europe.

For Brazilian researchers, eager for innovation, the lesson to be learned is that tradition is a richness to be preserved. For developed countries, the suggestion they allow themselves to be contaminated by the innovating energy from the New World remains.
References


(2003). (Universidade, política e pesquisa [University, policies and research]. São Paulo: Memnon, ed.


Advised by Eliana Branco Malanga,
University of São Paulo, Brazil

Martha Abrahão Saad Lucchesi Researcher at the University’s Research Unit on Higher Education, Unit Public Policies, (NUPPs) University of São Paulo, Brazil, South America.
Phone: +55 11 3088 4242.
E-mail: mgrlucchesi@uol.com.br