

THE UNIVERSITY AT A CROSSROAD

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I. THE GLOBAL UNIVERSITY

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Along its nearly thousand year history the University has represented:

- A stockpile of knowledge that the graduate would acquire to last a lifetime. Today this knowledge is in constant fluctuation and the ex-student needs to constantly update this knowledge;
- Knowledge as the specific property of students in classrooms or libraries, distributed by professors and books. Today knowledge is something that is in the air. It reaches all sorts of people in all sorts of places through all sorts of channels. The university is just one channel, and shares space with Internet, educational TV, specialized magazines, businesses, laboratories and private institutions;
- Knowledge as a sure passport for success for the graduating student. This is no longer true today due to the highly competitive professional market that requires continual updating, recycling and new training so that knowledge gained does not become obsolete, and
- Knowledge as something that serves everyone because by increasing the number of professionals, the university product became widespread. In today's world, a newly graduated professional's knowledge is basically used to serve the desires and interests of those that can pay for services, using costly equipment that doesn't allow for distribution of the knowledge.

There have been no huge structural changes in the university over the past thousand years. The role of the university has changed little. However, the reality of the world's social situation and the dynamic advances made in terms of information, knowledge and new communication and education techniques have made the need for a revolution in the concept of the university quite clear.

1. HOPE IN THE UNIVERSITY

The world experienced a huge ideological displacement in the beginning of the twenty-first century that included enormous political disassociation and massive social inequality. In the face of these upheavals, the university still represents intellectual heritage, political independence and social criticism. Thanks to this, the university is the most appropriate and prepared place to guide the future of humanity.

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The last decades of the twentieth century caused great disorientation:

- Economic activity that had been the pride of the twentieth century began to slow down;
- This economy initially increased the number of those benefiting from progress, then began to be the tool of the most brutal inequality among human beings ever seen in history;
- Political parties led by the right or left stopped creating hopes;
- Democracy that was created by city-states and that had lasted a thousand years began to crack and to become incompetent. This occurred at a time when an elected president in a small or large country has power over the entire planet and over centuries to come in terms of decisions made;
- Religions that had always represented cultural guardians began to feel ineffectual in terms of putting the brakes on the ferocious advance of individualism;
- Businesses that had previously been the creators of jobs began to be the destroyers of jobs;
- Science and technology that were the pride and joy of all of humanity for three hundred years, arrived in the twenty-first century with the enormous risk of immorality in terms of being able to manipulate life and to destroy the planet. This is especially true in terms of how science and technology are used to benefit the minority and will soon completely exclude the majority that will soon not even be considered part of humanity if we continue on this path, and
- Many ideologies have become weaker. It has become clear that socialism was incapable of building utopias, guaranteeing liberty or protecting the planet. Capitalism has been demonstrating its inherent inhumanity in the face of requirements for ecological balance and respect for the common good of human beings.

There is little hope left that a new global system of ideas will be created to re-instill hope for the possibility of an ideal world that combines the human dream of technological progress with liberty and equality. This hope included trust in politicians, religious leaders and judges that were meant to invent the means that would serve to create coalitions among human beings. However, if we examine the institutions that have survived over the past thousand years, we can allow ourselves this hope if we look at the university.

In order for the university to become an instrument of hope, however, hope must be recuperated within the university. This means understanding the university's difficulties and limitations and formulating a new proposal along with new structures and work methods. Fighting to defend the university involves fighting to transform the university.

2. THE RIGHT TIME IS NOW

Of all Brazilian accomplishments in the second half of the twentieth century, perhaps the most important was the establishment of the university, especially the public federal university. This innovation was at least as important as industrialization, a telecommunications system, a transportation network and energy infrastructure. The university is a symbol of the Brazilian nation and the Brazilian people's strength.

Initially, the university was the product of state support in the first decades of development. Over the last few decades, however, the survival and growth of the university have been the results of the university community's standing fast in the context of a country facing enormous difficulties. When state protectionism ended in Brazil and there were holes in the roads, energy rationing and stalled industrial growth that caused businesses to fail, university professors, students and employees continued to grow. There were new classes and more openings for students that researched, graduated, published and invented. The late twentieth century Brazilian university graduate was an intellectual creator as well as a militant for survival in the middle of despondency.

This is what makes optimism possible when thinking of the future.

The twenty-first century has arrived and there is a consolidated critical mass ready to move forward. They have been plundered and they are discouraged. They still have the courage to fight, although their self-esteem is low. They still have the challenge of confronting emergencies although they know that the crisis is much deeper and involves the university proposal, structure, operating methods and financing activity. Most importantly, we have arrived at the beginning of the twenty-first century with a government that is committed to education even though there are not sufficient resources to attend to the demand. Above all, we are experiencing a unique moment in history, where Brazilian society seems to have woken up to the importance of education. There is still distrust in the role of the university, however. The university seems to be a society of aristocratic academics to many people when compared with the sea of individuals with very low educational levels in Brazil.

This all demonstrates that even in spite of, or perhaps because of, all of these difficulties the right time is now.

3. THE UNIVERSITY CROSSROADS

The crisis in Brazilian universities coincides with the crisis in universities on a global level. Humanity is at a crossroads, facing a choice between:

- continuing the technical modernity that has been developed over the past two hundred years that has culminated in the brutal division between two dissimilar

groups in terms of access to science and technology. This division differentiates between human beings not only in terms of access, but almost in terms of biological characteristics, or

- an alternative ethical modernity that is capable of maintaining the similarities in the human race and guaranteeing scientific and technological progress to all.

This choice involves the university as well. Faced with this crossroads that involves a changing world, the university must choose between:

- Knowledge that previously represented accumulated capital and has become something that is fluctuating and permanently renewed or surpassed by obsolescence;
- Teaching that previously took place through direct bilateral channels between the student and the professor in defined places like the university. This teaching now occurs through other recognized methods and takes place in a way that resembles waves flying in all directions over a sea of communications, and
- Professional training that previously represented a firm place to stand in the fight for success. This training has become at best a life jacket that can be worn in a turbulent sea with waves of neo-liberalism, the technological scientific revolution and globalization.

Hope lies in the university at this crossroads. There is a demand for transformation and reinvention so that the university can provide an alternative project for civilization. Almost eight and a half centuries have passed since the creation of the university, and the university is standing in the middle of a civilization crossroads that will define the future. This will mean moving towards technical modernity with efficiency that is independent of ethics or choosing ethical modernity where technical knowledge is subordinate to ethical values. One of the most important of these values is maintaining the similarity between human beings.

The university must harmonize with this new direction in order to correct the loss of synchronicity that it suffered during the turbulent period that accompanied the change of the century.

4.THE RESOURCE CRISIS AND THE CRISIS IN THE RESOURCE

There is no question that public universities have been badly mistreated by neo-liberalism over the past few decades. Brazil is a tragic example of this situation. During this period, Brazilian public universities lost power, financial resources and professors. There was insufficient growth in order to meet the demand for openings. In 1980 there were 305,099 registered students, and in 2001 there were 502,960. The growth of private universities, on the other hand, was amazing. In 1981 the number of registered students was 850,982. In 2001 there were 2,091,529 registered students. This represents an increase of 56%.

There were 42,010 professors at public institutions in 1980, and in 2001 there were 51,765. At private universities, however, the number of professors went from 49,541 to 128,997. If we compare the growth of the two systems, we will find that while the private system grew 62%, the public system grew 19%.

Lack of resources is a crisis indicator in the universities. Brazil is not an isolated case. Many parts of the world have experienced a change in the treatment of universities. The public university has moved from a position of being protected to being abandoned. There has been tremendous growth of private universities that are financed by private resources and indirect public interests. Many times this financing is clearly related to economic interests and not to the free spirit the university should promote.

However, in an in-depth examination of the crisis, the majority of universities have become the prisoners of their own immediate necessities. They tend to treat the crisis drop by drop with leaky roofs that do not reveal that the sky is falling. The university needs to transform the resource crisis into a resource that will incorporate the largest crisis in human knowledge into the destiny of mankind.

The size of the crisis must be understood based on the historical reality that served as the basis for the birth of the university. How the university has faced previous crises must also be examined in order to create conditions for change.

5. THE LOSS OF SYNCHRONICITY

This is not the first time that the university has needed to change. However, the university has never needed to change quite so much as it does now. This is not the first time that the university has not seemed to notice the crisis. It is also not the first time that the university has had to overcome problems and reorganize in order to serve humanity.

The Brazilian university is a special place in terms of understanding the university crisis in today's world. Brazil is different from rich countries that do not suffer the same kinds of financial difficulties and that are not surrounded so closely by social exclusion. Brazil is different from poor countries where conditions for survival are all that matter and the university is just another part of poverty. Brazil is an intermediate country where riches similar to those from the best universities in the world coexist with poverty that is similar to the poorest countries in the world. Brazil is neither Europe nor Africa. Brazil is a little bit of each of these continents. Brazil represents a portrait of our planet and of contemporary civilization. It is the best indicator for us to understand the direction the world is heading in and the direction the world should take.

In Brazil, we have the great fortune of having every imaginable crisis. We also have the strength that comes with adversity. We have all types of tragedies and all of the resources to overcome them. Above all, we have the urgency that comes from knowing that we have to find solutions or we will sink. This is why the

Brazilian university, along with other universities around the world, must awaken to a crisis that goes beyond the financial crisis. The university crisis is much larger than the proposals that exist in this rapidly changing world.

Universities, at the beginning of this century, have stopped representing the cutting edge of knowledge. They have lost their ability to guarantee a successful future for their students. They are no longer centers for the distribution of knowledge and are no longer used as tools for uniting mankind. Universities float somewhere in the middle of globalization changes and they run the risk of sinking ethically if they accept a divided society.

Almost eight and a half centuries have passed since the creation of the university. Universities should understand that changes are needed on five sweeping levels:

- a) To return to the position of being the cutting edge in terms of generating knowledge;
- b) To return to being a legitimate guarantee for a student's future;
- c) To return to being a principal player in terms of distributing knowledge;
- d) To assume the ethical responsibility and commitment to a future for mankind that does not include social exclusion, and
- e) To recognize that the university is not an isolated institution, but one that makes up part of a global network.

Knowledge is surrounded: in the mosques and the universities

The university was born nearly eight and a half centuries ago because of the loss of synchronicity that occurred in medieval mosques in light of the rhythm and type of knowledge that emerged in that world. The mosques were surrounded and they were not able to attract those outside with their preoccupations and work methods. They were imprisoned in dogma and defended their faith, interpreting texts. The mosques were unable or insensitive to the fact that there was a need to incorporate the leaps that were occurring in the thoughts of the day. Many times the mosques chose to return to classic Greek thought that had been interrupted a few hundred years before.

The university emerged as a place for new freethinking that was on the cutting edge of the era. These new places were able to attract and encourage the young people that decided to dedicate themselves to activities of the spirit in a way that was different from religious spirituality.

During the following centuries, the university flourished as a true center for the generation of higher knowledge in societies. In order for this to occur, however, the university had to constantly recycle, change and adjust to the wide variety of situations that occurred around the university.

At the end of the nineteenth century research centers for inventors operated independently from universities. University professors and students often looked down at these centers. Ford, Bell and Edison were not university students. In

addition, universities did not recognize these individuals' work as having any kind of intellectual merit. The university lost speed and fell behind while technical progress and technical knowledge moved on without the university.

In the beginning of the twentieth century, however, universities had the wisdom to realize that they were turning into modern day mosques. Instead of monks, there were undergraduate students. Instead of dogma, there was debate that was restricted to the traditional classical disciplines. Instead of involvement with the world of the mass consumer, there was aristocratic snobbery that surrounded undergraduate knowledge. Soon universities began to recycle and to include technical knowledge fields like engineering and applied sciences. In the middle of the century, the university was so recycled that the technological fields had become the dominant fields in relation to the traditional areas of Philosophy, Arts and Literature. Classics had been the center of university knowledge for many years and suddenly found themselves relegated to the group of much less important departments and treated like dinosaurs in terms of concepts and interests. Classics became a thing of the past.

The beginning of the twenty-first century shows that this optimum technological knowledge is becoming tied to higher-level knowledge once again. This is preventing the free leaps of the human spirit that must move towards a libertarian future. This future needs to be aesthetically rich and ethically just as well as epistemologically efficient. It must also include a broad reach in terms of the media and must be socially legitimate and universal in scope.

University knowledge is surrounded and is falling behind, falling out of touch in relation to knowledge and the demands of the social situation that lies outside of its walls. The university is currently experiencing a problem that the mosques suffered a thousand years ago and that the university suffered only a century ago.

The loss of synchronicity

a) With the advance of knowledge - the loss of epistemological efficiency

The first loss of synchronicity in the university is found in the speed of knowledge progress in today's world. Until recently, university knowledge was something that spanned generations without undergoing many changes. Medical knowledge and scientific theories progressed so slowly that a university graduate could easily carry the instruments of knowledge they had acquired for their entire lives. A diploma was valid for at least a professional life, and many times for longer.

This situation has changed radically.

The current speed of the progress of knowledge does not allow for graduates to be prepared unless they constantly update their training. No professional could still obtain his or her diploma five years after graduation. This is true sometimes even before they graduate. Many of the things learned have already become obsolete and have been replaced by new theories, information and knowledge.

Knowledge makes such rapid progress today that specific fields reflect internal changes and new fields are constantly created.

The university has been making an effort to incorporate these changes, but it has not been able to manage. The structure of the courses, the length of doctoral programs and the constraints of individual departments are preventing that knowledge advance within the university at the same pace that knowledge advances outside the university.

This causes many people to produce knowledge outside of the university. This is a surprising phenomenon for those who remember the strength that the university had just a short time ago. In the past, few professors or researchers worked outside university walls. It was impossible for a young person to pursue cutting edge knowledge without the help and guidance of a university professor. This has changed in recent decades. A variety of fields of knowledge have developed outside the university. This has taken place within businesses that maintain their own research centers and in higher learning institutions that go by the name of corporate universities as a way of showing that they provide higher education without teaching the same thing that traditional universities do.

These para-universities exist because traditional universities did not fulfill their role. They fell behind in terms of generating knowledge and they became out of touch in terms of the type or quality of the themes they developed or taught. If traditional universities do not recognize this and change direction, they will no longer be useful. This is what happened to the mosques a thousand years ago.

The resource crisis is partly caused by government indifference and has a lot to do with the loss of synchronicity in the university. The opposite is also true, however. If universities had continued to clearly fulfill their role of being on the cutting edge of all types of knowledge, these para-universities would not be emerging and proliferating at their current speed and the State would not have stopped supporting public universities.

b) With the distribution of knowledge – the loss of media reach

When America was discovered, universities had already had decades to develop and teach new maps of the world. Today, when any new phenomenon is created or discovered, almost everyone in the world knows about it at the same time. In today's world maps are created the minutes the geography changes. This makes universities fall behind in terms of distributing knowledge.

The attentive young person that surfs the Internet, watches special programs on television and visits special chat rooms can sometimes be more knowledgeable than his or her professor is about certain types of information.

Knowledge has become urgent and simultaneous. It is urgent because of the speed involved in its creation and it is simultaneous because of the speed of its distribution. The entire world has become one huge school for those that are paying attention and behave like permanent students.

In the Socratic pre-university, the professor was the almost individual tutor of a small group of students. Even when these students met in debate rooms – Greeks, Romans, Byzantines – the number of students was restricted. The professor's loud voice had to reach them with no visible support. Centuries later, the use of the blackboard caused a revolution. For the first time, visual resources were used and allowed for more students to be reached. Even with this innovation, the student had to appear in class in order to learn. The student had to be present and look into the eyes of the teacher and see the drawings and words that the teacher used. The use of the microphone slightly increased the number of students but teaching continued to occur within the classroom in buildings that were designated as university structures.

Quite recently, modern electronic media resources have emerged allowing for distance learning. Almost all types of knowledge, especially for university adults, can be taught today without the physical presence of a teacher. The classroom is no longer a square room with walls. It is open and has an Einstein dimension in terms of time and space. A student can be anywhere and so can the professor. They can be synchronized in different times.

Some universities have been making an effort to incorporate this new reality. They still haven't managed to capture or accept the reality that the walls of any campus cover the entire world. Universities have not made a compatible leap in terms of today's technical reality so that the university can become truly without walls and connected on-line in order to distribute new knowledge to the world on a real time basis.

c) With the efficiency of the diploma – the loss of social promotion

Not too long ago, universities had the role of serving as social promoters for their students. A diploma was the passport to a secure future for any young person. This situation has changed.

Over the last two decades a university diploma has lost its usefulness. It is no longer a secure passport for success. Millions of young graduates are unemployed all over the world. This is caused by an excess of professionals and by the rapid obsolescence of what they have learned.

The university, however, has not fully incorporated this reality. Instead, the university has criticized the market instead of understanding that this reality requires new fields of knowledge and new knowledge within the older fields. Above all, speed in training and recycling students is a primary priority.

Today the university is undergoing a crisis that started in the beginning of the twentieth century, when the university refused to understand that the situation demanded more graduates from technological areas than from liberal arts areas.

d) With the excluded – the loss of the role of building a utopia

During the nineteenth century, Brazilian centers of higher education coexisted

with the slavery regime. There was little demonstration of dissatisfaction or protest, much less a fight for abolition. Most of the university community watched the absurdity of slavery without blinking and used their knowledge in Law, Economics and Engineering so that the system could function efficiently.

In the twenty-first century the Brazilian university looked on impassively and collaborated in making Brazil a divided country. The division was between those that benefited from modernity's products and those that are excluded from these benefits. Today, the university deals with poverty in the same alienated fashion that it did in the nineteenth century in relation to slavery.

The Brazilian university is merely a portrait of the global university. The same way that the Brazilian university is alienated from the poverty that surrounds it, the European university is alienated from the global tragedy.

In the twenty-first century, the century of globalization, the university lives with the tragedy of a humanity that is split into two parts. On one side there are those that are included in the technical advantages of the modern world and on the other side there are those that are excluded. The iron curtain was pulled away and the world has become divided by a curtain of gold built to some extent based on university knowledge that benefits only one of the sides of the division. The current pace of the evolution of the civilizing project will leave humanity divided into two parts that will be so different they will not even be seen as related. This will occur within the next few decades and will occur in part thanks to the work performed by those that go through the university system. Law favors the rich, Economics benefits a specific part of society and Biology can be used to create tools that can provoke mutations in human beings for the benefit of just one part of the human race, destroying the similarities among us that still exist.

The university is now concerned with technical knowledge and has left ethics behind. The university can be used as one of the tools for the construction of a global division.

Until recently, universities trained professionals that directly or indirectly promoted economic growth and an increase in social well being as well as serving as tools for distribution of wealth and social benefits.

Beginning in the 1990s, the excluding civilization model caused professionals from universities to cater exclusively to one side of society: the side of those included in social benefits. Society began to divide on an international level and two sectors became distinct in countries all over the world. One sector is made up of those that are included in the goods and services that are offered by modern technological advances. The other sector is made up of the excluded masses.

The product of scientific and technological knowledge from universities catered to the privileged minorities in other areas as well. The use and consumption of this knowledge also became restricted to these elite minorities. Universities served a specific part of society while ignoring the other.

Classes offered at universities have little to do with the masses. Economics courses look for ways of increasing wealth and rarely study overcoming poverty. Medicine courses are more concerned with protecting the rich from dying or getting old than with preventing infant mortality. Architects are interested in building mansions and buildings for the rich and almost never invent solutions for the housing problems of the poor. Nutrition courses place a lot of emphasis on how to make fat rich people thin rather than how to make thin poor people fatter.

Each field of superior education ignores the masses. This occurs through omission and through action. Society has chosen exclusion.

This situation has not occurred simply because of one situation. Another example of this reality can be found in the struggles of the university. In the 1960s the university was a revolutionary figure, seeking to improve society and build justice. Today the universities fight basically to maintain their own interests. Public university students are concerned with public financing and private university students are concerned with lower tuition and tax exemptions for graduates.

This is not the first time in Brazilian history that higher education courses illustrate alienation in relation to the poor. It was a sad moment in Brazilian history when the university made little or no contribution to the abolition of slavery in the nineteenth century. In Brazil, abolition was helped by the efforts of politicians, poets, journalists and even nobility. There were few abolition movements in the Law, Medicine, or Engineering schools of that time.

This changed in the twentieth century with the social promise that wealth benefited everyone and that wealth would increase through the distribution of a growing number of jobs. Fighting for this utopian society of riches became part of the university agenda in an effort to provide wealth to everyone. The university became a revolutionary.

The reality of the end of the twentieth century and the beginning of the twenty-first century has turned out quite differently. There are ecological limits on growth and technology has caused unemployment. Limited access to the valuable products in our modern world has shown that only a small portion of the population benefits from economic growth. The university has returned to the alienation of the nineteenth century and poor people are being treated like slaves again.

Even when the university claims to take on the problem of the excluded, it is often just a sham. University entrance exams favor the included, the rich and the middle class. The excluded do not take part in preparatory courses and do not pass entrance exams that would allow them to enter the university doors through more openings or minority quotas. The university is not concerned with changes in structure or in coursework that would benefit the excluded that do not have the means to enter the university. Universities defend reform that benefits individuals that have completed high school and are unable to pass the college entrance exam without addressing changes that would involve university commitment to improving basic education.

It is as if the university has clearly chosen one side of society and thinks of the excluded only when they are conveniently close to the university. These excluded

never include the truly excluded. It is as though benefiting a few representatives of the excluded frees the university by incorporating a few token representatives into the world of professional graduates. There is never true liberation or complete abolition of exclusion for those that do not have access to the services of these university graduate professionals.

This reality suffocates the university. University students are ashamed and deny what is really going on or demonstrate discomfort without making any effort to change the situation. That is why the university needs to recuperate ethical synchronicity with the true interests of the people.

e) With the world – Lack of incorporation in globalization

In Europe, the university was one of the first global institutions. University professionals traveled widely and exchanged information. Universities made up one of the most impressive networks of international connections in the past. However, this is no longer true in light of the current global situation. University diplomas are nationally protected, professors belong to specific universities, and libraries often do not distribute their knowledge, although they are often automatically tied to technical areas and bypass decision making processes, at times even working against administrative efforts.

Professors often mistake travelling for integration. In reality, the twenty-first century university must be integrated on a universal basis.

The twenty-first century university has not managed to understand its position in the global situation for fear of losing its specific nationality. Universities are divided on this question, feeling that they must totally deny their national specificities or defend themselves from external interference that denies today's reality of global knowledge.

6. REFOUNDING THE UNIVERSITY

Almost eight and a half centuries have passed and the university finds itself in the middle of a technological revolution in a world divided internationally. The university is in need of a revolution. There are at least seven areas that should guide this revolution.

a) The Dynamic University

The university can no longer view knowledge as something that is static, long lasting or compatible with a teacher's life span. Today knowledge is mutable the instant it is created and the university must incorporate this into the role it plays.

To accomplish this:

- A university diploma should be revalidated.

The university of the twenty-first century can not be responsible for a graduate's

knowledge just a few years after graduation. This is why a university diploma should require that students recycle their knowledge along their lifetimes.

- University should be permanent.

In reality, the university should extinguish the concept of the graduate. A university student should be permanently tied to the university, on line, getting knowledge during their entire life in order to avoid obsolescence.

- PhDs should be updated.

Degrees should be updated not only for undergraduate students, but for graduate students as well. Today doctorate students finish their theses and have a title for the rest of their lives without being required to demonstrate its validity. In the modern world this title often becomes something that demonstrates valuable work that was performed at a specific time. A degree could take on historical value in the same way that an athlete's medal does. Often this degree has little to do with updated knowledge in fields that are changing each second.

- University professors must take periodic qualification exams.

If students' undergraduate diplomas and doctorate degrees need to be updated, professors cannot secure their positions based on old qualification exams. It would be correct to require university professors to update their qualifications according to deadlines that allow them to demonstrate updates on their knowledge.

- Flexibility in length of course duration.

On the one hand, a student can never completely finish a course. On the other hand it isn't possible to define fixed periods of time to finish the basic requirements necessary to practice a profession. Twenty-first century universities can no longer have fixed lengths for courses. Students should be able to take advantage of exams and courses that define whether or not they are qualified to practice their professions. This should take place according to their abilities and the time they need to complete the requirements. With new teaching and research methods the time a professional needs to complete their studies can vary greatly. Due to new pedagogical methods and communication and computer equipment, less time is needed to complete university than was needed a few decades ago.

Some students progress are more slowly and others progress more rapidly. Not one of them needs as much time as their parents did, however. This is even truer in the case of post-graduate courses. It is simply impossible to be in synch with the advanced speed by which knowledge develops while taking years to finish a doctorate. Today, many doctorate theses are already outdated by the time the thesis is defended. There are so many information sources available for research that involve computers and international networks that a doctorate thesis takes much less time than it did before.

The current dynamic in the progress of knowledge also means that an extremely long doctorate oftentimes means an obsolete doctorate for other students in other parts of the world. It can also mean an incomplete doctorate due to the impossible task of always wanting to remain in synch with the newest knowledge in the area.

Post-graduate studies do not require as much time as they used to. The finished product simply does not improve directly with the amount of time dedicated to it.

- Bibliographic references should be included on line with books in development and authors.

The development of many books today takes longer than developing the theories that they contain. A university based on printed books is a university that has fallen behind in terms of groundbreaking knowledge. While reading and studies should take place in the classic texts of a specific area, the reading of texts that are in development must also be encouraged through permanent dialogue between students and authors.

b) Unified University

Globalization will eliminate the frontiers between universities. Universities will exchange professors and students and will also have access to all professors and all students. According to the UNESCO Annual Report of 1997, the global university has 88.2 million students and 7 million professors. Today there are thousands of universities but soon there will be only one university integrated by all modern communication methods available. There will no longer be language barriers thanks to mechanisms that are already available for automatic translation on Internet.

With this global network the idea of limiting a student to a specific course in his or her university has become antiquated and inefficient. Every student can make up his or her own course program and select professors and classes on a global level in a network that includes the whole world.

The university has become a single unit.

c) University for all

The university has become a unique entity and should be open to everyone. There is no longer any reason to require entrance exams or even a high school diploma. For those that are physically present and studying on campus, the entrance exam is a condition that is imposed because of physical space limitations and elevated tuition costs. With new teaching methods that include distance learning, the university can reach a huge number of students and accompany their progress. Students will be excluded if they cannot keep up with the coursework, not because they are unable to pass entrance exams.

The entrance process should change for those who are physically present for their courses as well. What a student memorizes in high school is not enough to ensure whether or not that student will be a good university student. The current exams do not reflect a student's capacity to capture knowledge or to deal with the great quantity of knowledge that exists in the world and change the received knowledge into something that can be re-used in new ways and in new contexts. This is why it is fundamental to accompany a student's progress during high school. It is also essential to define selection exams that demonstrate a student's ability to capture and develop knowledge instead of exams that demonstrate a student's ability to answer questions that require simply memorizing answers.

d) Open university

The twenty-first century university will not have walls or a physically defined campus. The twenty-first century university will be open to the entire planet. Classes will be transmitted over television, radios and Internet in a way that will no longer require students to be on the same campus or even in the same city as the professor. Professors will be able to maintain permanent dialogue with their students around the world.

e) Three-dimensional university

Universities that are organized by subjects that are based on categories of knowledge are incapable of responding to the demands required by the rapid changes in knowledge and by the social revolution that we are experiencing at the beginning of this century. Knowledge changes each day, new fields emerge and others retire in a world where the social situation has built a divided world. Universities have to discover a way to restructure that includes centers for researching current issues as well as the traditional departments and fields of knowledge.

There is no reason a university should not have mechanisms for linking reality to studies in the form of Study Centers for Hunger, Poverty, Energy or Youth in a way that will create intellectual connections with reality. This could occur through issues based multi-disciplinary centers like Jobs and the Environment for example.

Issues that exist in today's reality but that do not also fall within defined categories of knowledge could be explored in the twenty-first century university that must be organized in a multi-disciplinary fashion as well.

The university of the next few years has to connect students around the world in order to link aesthetic activities to ethical debate. This could be accomplished through the creation of Cultural Centers.

With departments, Issue Centers and Cultural Centers, the twenty-first century university will be three-dimensional and will train three-dimensional professionals. This will involve specialists in specific fields of knowledge that are also committed to understanding a pragmatic theme and practicing one or more activities that are linked to humanistic ways of thinking either in the arts or philosophy.

f) Systematic university

The university of the future is universally tied to all universities. However, the university of the future must also be linked to the system that creates knowledge. The university should incorporate private and public research institutions and all non-governmental organizations that are related to the creation of knowledge. Every liberal professional office and every industry that performs research should be part of the university system.

The university will serve as the family of all those involved in the task of the advancement and distribution of knowledge.

Almost eight and a half centuries have passed since the university was created. It is time to take the necessary leap in order to fulfill the role of the university in the midst of the immense riches of the twenty-first century.

g) Sustainable university

Universities should be public institutions, whether owned by the state or privately.

The university cannot die because of a shortage of public resources, nor can it refuse private resources from investors. This is why:

- The university should be financed with public resources in order to guarantee permanent sustainability in a context of social interests, above all in areas of knowledge that do not have economic returns. These include training basic education teachers and the arts and philosophy fields;

- The university should be open to the possibility of receiving resources from the private sector wishing to invest in institutions whether they are private or state owned, and

- State and private institutions should be structured in a way that will serve public interests without becoming prisoners of the corporate interests of students, professors or employees. In the same fashion, private universities should be private in terms of physical installations, but the academic community should control academic organization. University owners can remain owners in terms of patrimony, but deans should be selected based on academic merit.

II. THE BRAZILIAN UNIVERSITY

The Brazilian university was the last to emerge in Latin America. Ironically, with the aim of awarding a title of Doctor Honoris Causa to King Leopold of Belgium, during his visit to Brazil in 1922. If it hadn't been for that visit and the innocent vanity of a monarch or the whim of one of his courtesans, the Brazilian university would have taken another 10 or 20 years to exist¹.

This goes to show the capacity the Brazilian elite has for obscurity and servility.

One hundred years after independence and thirty-three years after the founding of the Republic, there was still no university in Brazil. It was created to attend to the needs of a European King.

We have never quite freed ourselves from this original sin.

Between 1922 and 1934, the University of Brazil and of King Leopold, in Rio de Janeiro, was the sole and precarious university institution, although there were a number of higher education courses in the country.

The first large university in Brazil emerged in 1934. This university did not emerge because of a Belgian King and was not tied to servile Brazilian politicians. The University of São Paulo began through the efforts of Brazilian intellectuals that were linked to French intellectuals. Brazil began to look inwards instead of outwards. Servile politicians began to be replaced by academic intellectuals although they continued dependent on the exterior. They were not servile anymore, yet they were strongly influenced by the exterior.

Between 1935 and 1964, the Brazilian university grew, but it did so without strength or the leap that Brazil required. During this period, the number of students went from 27,501 in 1935 to 282,653 in 1970. The number of professors went from 3,898 to 49,451 in 1980. Among these, however, only a few had post-graduate degrees.

In the early 60s, Darcy Ribeiro and Anísio Teixeira created a new idea for the university in the new Brazilian capital, Brasília. This experiment was interrupted by the military takeover of 1964.

In 1964, the Brazilian university was destroyed and also founded in a paradoxical twist of fate. It was destroyed by the forced retirement of hundreds of professors who were exiled or expelled. Many students were even killed during the fall of liberty that took place during the military takeover. At the same time, the university was founded under a modern re-structuring that was based for the first time on an effort to nationally integrate the university system. This included widely available financial resources and support for construction and equipment. Above all, this process included training young students on a massive level by

1. It should be noted that the current Federal University of Parana had been planned for ten years as the University of Brazil, currently the Federal University of Rio de Janeiro. From the point of view of explicit development on a national level, the first university began in Rio de Janeiro in 1922, thanks to King Leopold.

providing scholarships to study abroad in masters and doctorate programs in foreign universities.

This possibility was consolidated in 1968 in the reform performed by the military government with American assistance. This was not the servility of 1922, nor was it the intellectual cooperation that had occurred in 1934. The reform was not orchestrated by French intellectuals, but by American involvement sponsored by the military dictatorship's authority.

The modern Brazilian university was the product of the military regime and North American technocracy. This sponsorship and protection allowed the Brazilian university to make an enormous leap in terms of quantity and quality between the years 1964 and 1985. This was probably the greatest leap to occur in the area anywhere in the world. It was as if we wanted to make up for 500 years we had lost. There was an admirable increase in the number of institutions and also in the number of students and professors. This was especially true in relation to professors with post-graduate degrees (masters and doctors). In 1985, there were 37,629 professors who had masters and doctors degrees in Brazil.

Beginning in 1985, the reinstatement of democracy brought back liberty. This included the right to choose university directors and direct elections for deans. It also brought about a strong restriction in financial resources, however, and the public power of the public university was abandoned. In 2003, the federal universities in Brazil find themselves nearly bankrupt. These twenty years have seen every advance, victory, improvement or growth come from the result of a long hard fight against political powers on the part of professors, students and employees. This has taken place through over three hundred strike days in the school years of 1985 and 2002. Without these strikes the federal universities might have already closed or been abandoned. Yet the consequences of these strikes have been extreme exhaustion. They demoralized the universities in terms of public opinion and ripped the social fabric that existed between the students, professors and employees.

This same period brought about a change in the Brazilian university profile. Universities went from being primarily public institutions to being primarily private ones. This can be seen in the surprising growth of the private sector and in the unexpected internal focus of the State university in terms of defending its own interests in order to survive. The university has become a private entity in two ways. The first is that private universities have predominated in terms of total numbers of students. The second is that the public universities have lost their national social project.

The Brazilian university went private because of a vicious cycle. There was a lack of public resources to support universities. This caused the deterioration of installations, equipment and salaries. Then came strikes in order to remedy this situation. These strikes caused an increase in private universities that then caused an increase in discontent and demoralization that culminated in the lack of a

national project. This occurred in a country that moved from development concepts to neo-liberalism, from protectionist policies to openness, from uncontrolled inflation that financed public spending to rigid control of public spending by international agencies. When this equation is added to the lack of a national vision of the future, everything contributes to a huge crisis in the Brazilian university. In addition, the previously mentioned international university crisis also contributes to the predicament.

Along with the positive fact that the public university's numbers have increased along with their almost heroic capacity for enduring, the beginning of the twenty-first century shows that university quality can be criticized. There is strong corporate activity and an unfortunate lack of academic motivation. There are strong alienating interests in the population as well as a huge identity crisis in institutions around the world. At the same time, the institution is receiving a spirit of eagerness to study from Brazilian young people graduating from high school in a way that has never been seen before.

This is the portrait of a situation that is at once adverse and stimulating. Growth is needed in order for Brazil and Brazilian universities to begin a new century with a government that is committed to political policies that will make the university an important part of the world. This requires:

- attending to the emergency requirements of a heroic, yet abandoned institution;
- organizing a university system that finds itself in chaos owing to uncontrolled growth of the private sector and shrinking of the public sector, and
- refounding the university according to the demands of the historical moment mankind is experiencing.

1. REORGANIZATION OF THE BRAZILIAN UNIVERSITY SYSTEM

Over the past few years, the Brazilian university underwent rapid and surprising growth, especially in private institutions.

	Number	
	1985	2001
Universities and Higher Learning Institutions:		
Public	233	183
Private	626	1,208
Total	859	1,391
Students:		
Public	556,680	939,225
Private	810,929	2,091,529
Total	1,367,609	3,030,754

	Number	
	1985	2001
Professors:		
Public	64,449.....	90,950
Private	49,010.....	128,997
Total	113,459.....	219,947

Uncontrolled growth demands immediate reorganization. This is different from handling emergencies and should be performed above all in the public universities. Reorganization applies to the entire Brazilian university system.

The Brazilian University System

Despite the creation of a Federal Brazilian university system that began in 1968 and was reinstated in 1985 through the establishment of equality standards and the creation of a common evaluation system, the Brazilian university is still not yet a system. A set of norms must be formulated in order to regulate this system. This must include all public and private universities and must incorporate every agency that is part of the production system of higher learning. This includes research institutions, businesses, hospitals and public ministries in addition to higher level professional training institutions.

The Brazilian university system should act to guarantee autonomy for every agency, but should also create a harmonious working group that is able to function with synergy and avoid the disperse quality of the present situation.

Regulating transfers

In a global world like ours where each university is a part of a universal total, the Brazilian university still has no inter-communication in terms of student transfers. Currently, there is discussion of the possibility of a student taking courses in different universities simultaneously. However, it is still difficult for a student to change universities. This is not because of the college entrance exam. It is because of incompatibility in curricula.

Increasing the number of spaces

Despite the increase in the number of spaces in Brazilian universities, there is still a very small number in light of the existing demand. The Brazilian university has to increase the number of spaces over the next ten years in a way that would at least double the number of students. In order to do this, additional resources are required in addition to changing teaching methods in a way that will increasingly adopt distance education systems.

Racial quotas and public schools

In a country where half of the population is of African descent, there is no moral justification for the existence of a white elite. The abandonment of public basic education in Brazil and the fact that few youths graduate from high school are the main factors responsible for this reality: by excluding the poor from secondary education, society excludes mainly blacks. The solution to the immorality posed by the white stain on the Brazilian elite is to invest massively in the universalization and in the improvement of basic education. Until this is done, however, the university must help change the shameful situation in the country, where most people are black but hardly any black students attend college. Because it serves as a springboard into the elite, the university is responsible for the moral deviation that has taken place in the Brazilian society over the past one hundred and fifteen years since slavery was abolished. This is why there can be nothing more appropriate than increasing the number of black students.

This will not make the university more just from a social point of view since only middle and upper class blacks will benefit from it. Nevertheless, it will turn the university into an institution that will help change the whiteness of the Brazilian elite. In order for racial quotas to play a social role as well as a racial role, only black youths who attend a public school all through high school should have access to the benefit. This, however, does not mean that the poor will benefit from these quotas since in Brazil they rarely finish the 8th grade and hardly ever graduate from high school. Nevertheless, there will be social gains for the lower middle class.

Creation of new funding sources

The Brazilian university is currently undergoing a serious financial crisis: public universities can not count on support from the government and private universities are faced with high default rates and students who can hardly afford to make tuition payments.

Brazil can not let go of the commitment to provide free education at all levels, including higher education. The fact that seventy-five percent of all students attending college go to a private university can not be ignored, and the country can not depend on traditional governmental budget to fund the remaining twenty-five percent that attend public institutions. If this path continues to be followed, the public university will become a mere appendage to the Brazilian university. If registration rates are kept up in terms of the number of students that register in private and public universities, in ten years only ten percent of all students going to college will be attending public institutions. This scenario will not be a positive one for the future of Brazil and for science and technology in the country.

Brazilian universities need sources to ensure that they operate without crises, without the need for going on strikes. Their principles should be based on

democracy, efficiency and ethics. This should be true both in relation to funding sources and to the use of resources. These principles should be put into practice and all possible sources must be taken into consideration, both public and private. This includes resources from the national treasury and specific contributions from special funds or from permanent funds. This is how state universities in the State of São Paulo are currently financed.

Evaluation of all institutions

The establishment of an evaluation system was one of the steps taken by Brazilian universities. However, this system is still imperfect and incomplete, as it has been for the past few years. The reorganization of Brazilian universities will demand that a new evaluation system be created, one that makes it possible to do more than just rank universities as if they were taking part in a competition. The purpose of this evaluation system should be to point out the qualities and weaknesses of universities and to make it possible for them to improve and play the role society expects of them.

The increase in the number of educational establishments can not be considered negative. The greater the number of schools at all educational levels, the better. This is true as long as these establishments are institutions that can truly attend to the need of society for university-level knowledge. They should also attend to the need for social inclusion of students in the country and city where they are located. This has not occurred with all of the new private educational institutions that have been established in the past few years, however.

It is an obligation of the public sector to prevent businesspeople from falsely selling diplomas as sure passports for success. It is important for the whole system that universities be evaluated and that their positive results as well as their negative aspects be shown. This is especially important for the universities themselves and for the students that attend them. Students must know the real value of the diplomas they receive in exchange for the payment of their tuition fee, and society has a right to know the kind of professional university graduates can be.

The government wants to coordinate the evaluation of all universities together with the sector itself. The government believes that the evaluation of the potential of each institution is in everyone's best interest. This evaluation should be public and information regarding it should be made widely available. It should also be participatory in the sense that the community should be heard. In addition, it should be corrective in order to improve the institution and the system, and it should be comprehensive rather than limited to the evaluation of only a few aspects of the university.

Planned freedom

The state must not limit the number of establishments whose purpose is to provide educational services. However, there should be public regulation and new universities and higher-education centers should follow rules. In addition to periodical evaluations, the government is considering defining locations and fields of study for new universities and choosing new regular universities through bidding. Authorizations would be granted to the ones that could better meet the objectives of the public sector. These objectives are the following: training teachers, lowering teacher/student ratios, increasing the number of scholarships, lowering tuition fees and adopting racial quota systems.

Free universities

In addition to regular universities, the government must encourage the creation of free universities whose diplomas are not recognized by the state. The greater the number of free universities, the better for the intellectual life of the country. Without the illusion of a regular diploma, it is possible that some of these centers will end up being respected for the accomplishments of the professionals they train.

2. AUTONOMY TO CHANGE OR NOT TO CHANGE

It is necessary to discuss the role of the university at the university itself. This discussion is even more important than discussions about the crisis affecting the university.

The university has to fight to prevent small problems. It is not enough to deal with these small problems, however, without looking at the big picture.

Just as I presented what the government has considered doing in order to help the university get over its problems, I will give my own contribution to the discussion about the leaks in the dyke, as these leaks pose a threat even if the dyke is in good shape. I will do this more as a thinker who loves the university than as a minister.

The government will not demand that changes be made. The university has to be an autonomous establishment, even if this means that it will follow traditions and ignore the changes that are taking place. Autonomy means doing what seems right whether it is right or wrong. The government believes that it is worse to impose changes from the outside. Even if these changes are right, it is best to respect the old fundamental principle of autonomy.

However, it is the duty of the Ministry and especially of the Minister of Education to encourage internal discussions at the university in order to foster the changes he believes are right and should take place.

The principle of autonomy should not be ignored, but it should not be used as a shield to protect ministers who are intellectually cowardly or politically opportunistic.

Due to these two reasons, I propose the following outlines for what I believe may be the necessary reforms to the refoundation of the Brazilian university. These reforms will foster the refoundation of the university if they are adopted by universities through the discussion that needs to take place.

3. REFOUNDATION OF THE BRAZILIAN UNIVERSITY

The establishment of the university resulted from the lack of willingness to change on the part of medieval mosques. These mosques kept the same structure, the same methods and the same admission and permanency requirements although outside of their walls there was a world of new ideas and new customs to be explored. This was the reason behind the creation of the university. If mosques had changed and focused on unreligious knowledge and on the promotion of logic and science, they would have continued to be learning centers and universities would not have been created.

The Catholic Church, had it wanted to or tried to understand the messages throughout the centuries concerning its need for modernization, would have prevented the Protestant Reform, which happened in the sixteenth century. It was mainly due its insistence on the accuracy of its interpretations, on the perfection of its institutions and on the strict nature of its rituals that there was a great catechization movement and a new religion that followed the same Christian principles was created. The same may happen to the university in one way or another: it may either be replaced by other institutions which are changing it from the outside or it can transform itself. The transformation would involve broadening the scope of the university's fundamental principles through progress in higher education, establishing tools to free humanity and increasing intellectual and material riches. It would also involve broadening the horizons of equal opportunity for all individuals in society, especially youths, no matter what social class, race or gender they are or where they come from.

Throughout the past eight and a half centuries, the university has been refounded a few times. A secular institution can only survive if there is a very good reason for its existence and if it has a great deal of capacity to change and adapt to the demands of each historical moment. Armies, which have existed longer than universities and kept the commitment to defend their countries, have undergone several changes throughout history. Churches, on the other hand, tend not to adapt and to keep their dogmas intact, and this causes breakdowns and divisions. They separate through reforms so they will not be refounded.

Due to its autonomy and to the inexistence of dogmas, the university, more than any other institution, must refound itself whenever the need arises.

The last change the Brazilian university underwent took place at the end of the 60s, in the twentieth century. This change occurred due to the military regime and to American influence in the form of the Ministry of Education-USAID agreement. Since then, until the beginning of the twenty-first century:

- The military regime has ended;
- There has been no official censorship on any kind of intellectual activity;
- Brazil has become a democracy and has even elected a president who used to be a metal worker and whose party is clearly leftist;
- Universities have been reorganized into corporate segments. These segments quickly discovered how much power they have. This would have been unthinkable a few years back. They have used this power with an intensity that governments and society never thought possible;
- Deans are directly elected;
- Last century's fights for utopian ideals have disappeared or turned into tools in the hands of few militants;
- Economic growth started to destroy jobs instead of creating jobs. Fewer people started having access to some products, which became more profitable because their prices went up and not because they became cheaper and the number of consumers increased;
- For the first time in history, youths began to have a more economically difficult life than their parents;
- Youths were abandoned and became the orphans of neo-liberalism;
- Some youths started using drugs in order to fill the void caused by the lack of objectives to fight for and opportunities for personal growth, be they intellectual, economic or spiritual;
- Science went through the most groundbreaking revolution it ever has with biotechnology, genetic engineering, computer science and microelectronics;
- New fields of knowledge have been created and are constantly established in the learning world;
- Other fields become obsolete and disappear just as fast;
- Scientific truth and the efficacy of techniques last less and less time;
- The world has become globalized. Information is distributed instantly, economic power is in the hands of a few people who own the planet and products and techniques are available at the same time all over the world;
- One single undoubtful national power has become aware of its power, its role, its ambitions and its intention to police the world and to force all nations to follow its principles of political democracy and economic liberalism, and even its religious values;
- There was the fall of the Berlin Wall;
- The map of the world is being redefined;
- Intelligent weapons started being used in wars;
- The poor, especially in Africa, have been abandoned by powerful world leaders.

They rely not only on progress, but also on hope;

- All over the world and in each country, the social system recognized the reality of exclusion through separation rather than through a proposal for the redistribution of wealth;

- Customs have changed everywhere. This is true for almost everybody and certainly for all youths, especially in terms of their sexuality;

- Minorities started having their rights recognized, especially women, homosexuals, Indians and blacks;

- Culture has become universal, but cultural diversity is now seen as a right;

- Fundamentalism, religious or economic, is attained through power;

- North-Americans were defeated for the first time after a long war in Vietnam. However, they were involved in a number of short victorious wars, thus setting the world under their control;

- Local problems became universal and took on catastrophic dimensions. These problems include drug use, the power of drug dealers, terrorist weapons, the dissemination of diseases and the power of the financial sector.

Despite all this, the university has done little to change the world. All of the changes above occurred after the last reform of the university took place in Brazil.

The Brazilian university has remained basically the same in relation to its fundamental aspects.

Number of spaces and admission requirements

The Lula administration is seriously committed to the goal of universal secondary education for all youths in Brazil by 2010. Due to this, there will be a demand for more spaces at universities. Public universities, especially, will have to double the number of spaces they offer in the next five years. This will not be possible if the university entrance examination continues to be an admission tool since it works as a barrier rather than as a fair selection process. Also, this will not be accomplished by increasing the number of chairs in a building, nor will it be accomplished by lowering the level of quality that has been achieved by the university.

The path we propose is divided into four different sections:

- Considering the adoption of distance education for undergraduate students, making no distinction between the diploma these students receive and the one students who attend regular classes receive. This could be a way to increase the number of spaces without affecting the work of research-oriented professors;

- Considering the adoption of selection processes that take place in high school. This has been happening through a system developed by the University of Brasilia – UnB. This system is called Serial Evaluation Program – PAS and was adopted by the Federal University of Santa Maria, where it is being improved under the name of Higher Education Admission Program – PIES. It was also adopted by the Federal University of Paraíba, where it is called Serial Selection Process – PSS;

- The community and specialists should carefully consider giving basic subjects like math and Portuguese greater consideration since they serve as a base for the development of knowledge in all areas;
- Considering the possibility of adopting racial quota systems in order to redesign, democratize and correct race-related inequalities in terms of opportunities. This will also make public schools stronger.

Structure

In today's world, it is no longer possible for the university to be divided into departments. New fields of knowledge and commitment to the reality of society demand that a multidisciplinary approach be followed. The distribution of knowledge and humanist feelings at the university will not occur through subjects taught within the restraints of different departments.

We suggest that the university consider a change in structure along the lines of what has been done by a few universities for decades now: Issue Centers and Cultural Centers should be created.

With these Centers in addition to the Departments, the university will be a three-dimensional structure and will serve as a base for training professionals at three different levels. Knowledge will be acquired at the Department. Social and ethical commitment will be developed at the Issue Center. Aesthetic tastes will be enhanced at the Cultural Center.

Constant training and flexible length of course duration

In today's world, thirty years after the Ministry of Education-USAID reform orchestrated by the military, careers become obsolete in just a few years if professionals don't constantly update their knowledge. This is why the university must urgently consider the possibility of keeping a permanent follow-up training system that former students can use until the end of their professional lives. In the future, there will be no place for former students. All people will be students permanently, or they will not be professionals.

The path to be followed is the creation of several permanent distance education systems for students who have already graduated from the university.

With their provisional diploma, graduates receive a code to access the permanent education systems at the university. They can check for innovations in their field of knowledge, get information on recycling courses in their area of work and even decide to change fields, professions or specialties depending on the evolution of knowledge.

The university should become a permanent institution in the lives of graduates, who should continue to be students. The possibility of making the amount of time students spend on campus during their academic lives more flexible should

be considered. If students can be constantly in touch with the university, they won't have to spend as much time on campus as they do now.

With all of the modern inventions involving means of communication and pedagogical tools, it is not possible that the university still needs as much time to train a professional as it did one hundred years ago, when these careers were first created. The university can not continue to ignore the existence of new teaching methods and tools. It must seriously consider the possibility of reducing the amount of time necessary to train students. This is true, if not for all, for many of the courses offered.

Connection to society

The connection the university should have with individuals will not be made through the universalization of admissions. Only those who finish secondary education would benefit from this and it would lead to a decrease in quality. Field work, with the exception of cases in which there is a different method for each student, is not the solution either because it has turned into a form of assistencialism.

The current administration in Brazil wants to go from assistencialism to abolition. The university does not get closer to people through assistencialism. This can only be accomplished through a reform that makes it possible for the university to take the problems of society in general into account and to take part in its transformation. This could happen in the following ways:

- There should be real commitment to quality in all areas. This is true because if the country maintains a university, this university must make the country proud of the quality of its results, which come in the form of professionals and work. The objective is to make the world a more beautiful, efficient and just place;

- The curriculum for technical areas, fields of study that change the world like medicine, engineering, architecture and economy, must be altered. This is true because we need to adapt their principles to the ethics of a world that is more just, a world from which a greater number of people can benefit no matter what gender or race they are, what their income is or where they come from;

- The university should participate in political activities that involve society. This can not happen through the production of knowledge, which should not be controlled, but through several kinds of mobilization practices. Unlike the higher education centers of the nineteenth century, which turned a blind eye to the abolition of slavery and taught how to maintain it, the university of the twenty-first century is seen by the Brazilian government as one of the driving forces for the accomplishment of the Abolition of Poverty and Construction of the Republic. This objective began being pursued one hundred and fifteen years ago and was never attained due to the existence of a reactionary, aristocratic elite that despised the people of their own country and took over the university.

Funding Sources

There has been a great amount of discussion in the past few years regarding the funding problem. The debate was much less about the university and more about how to finance the university. They wanted more government resources, increases in salaries and funding. However, they did not allow increases in tuition fees and subsidies. The university in crisis needs to be discussed in depth, but the debate on financing should continue. The twenty-first century university should have clarity on who should pay for higher education and what they should receive in exchange for that.

The government has clarity on the fact that the privatization of public universities is not part of the discussion. The idea of charging tuition fees is also out of the question. In fact, the government would like higher education to be free of charge in Brazil if that were financially possible since the university experience is even more essential to the country than it is to the student. However, that is not currently possible.

Until it is, the government wants to concentrate on finding alternative sources to give scholarships to private university students and to finance academic activities at public universities. This will be done together with the academic community and will include the following actions:

- Increasing the number of students that receive scholarships from the government so they can attend private universities. This will happen through the Student Support Program, launched to broaden the scope of the Student Financing Program - FIES and guarantee that students do not need to pay for their schooling;
- Regulating alternative sources to finance public universities through total transparency on the part of the administration and through the development of democratic and autonomous decision-making processes;
- Considering the possibility of making the students of private universities into co-owners of the establishments they attend.

Priority subjects

Both Brazil and the world have changed, are changing and will continue to change in the future. If we do not realize that, many of our subject matters will soon be outdated. New ones have not yet been considered. Over the past few years we have given too much importance to annual management plans and no importance at all to ten-year academic activity plans. The university has to manage more than just resources; it has to manage learning. Awareness must be raised in relation to the risk involved in insisting on knowledge that becomes obsolete and ignoring knowledge that points towards the future. It is necessary to make learning compatible with future ethical, social, epistemological and economic needs.

Making learning public

The university reform, which occurred during the military regime, established the idea that the university belongs to the state or to its owner rather than to the country, its students or society in general. During the military regime, the state fired and arrested individuals and financed the university the way it saw fit. When democracy was established, dictators were replaced by professors and other staff members or ministers. Autonomy began to be seen as a change in ownership, from military headquarters to teachers' and staff conference rooms and minister's offices. In the twenty years during which the university has been an open space, little has been done that took the actual needs and demands of the civil society and students into consideration.

The democratization of the university brought about direct elections, but often there was little participation of the student body. This happened because of a lack of interest and because the students' capacity to participate in the selection process was underestimated. At university councils, there is little, if any, student participation. Former students never take part in the process, and neither do civil society representatives. There are rare exceptions, but they seem to be ways to fake the participation of society.

THE FACT THAT UNIVERSITY ASSETS INCREASE AT A FAST PACE, EITHER BECAUSE OF THE TUITION FEES PAID BY STUDENTS OR BECAUSE OF SUPPORT FROM THE GOVERNMENT, HAS LEAD SOCIETY AND STUDENTS, ESPECIALLY, TO CRITICIZE WHAT SHOULD BE SEEN AS A POSITIVE ASPECT: THE GROWTH OF A UNIVERSITY.

Recently, at the opening of a library at a private university, a student said, "they built this with money from our tuition fees then because of this library they will increase the tuition fees of future students." The construction of a library should be seen as a very good thing, especially when the government has not fulfilled its obligation to build bigger libraries at public universities. However, private university students often feel as disconnected from the institution they attend as society in general. There are very few exceptions to this rule.

The concept of "alma mater", the love society and especially former students feel for the university, must be created in Brazil. The way to do this is to encourage the feeling that the university belongs to everyone.

This can be achieved through the involvement of society, students and former students in the decisions that affect the university. It can also be achieved through the development of the concept that the institution belongs to society rather than to the government or to a single owner.

In the case of public universities, the way to do this is to let students and former students take part in the decisions made by the community and in its responsibilities.

The dean is the intellectual and administrative leader of the institution; he is not a representative of the state. At private universities, it is also necessary to separate the owner from the academic leader: the owner owns the building, and the dean is the coordinator of academic activities. The former buys or inherits the property, and the latter must be elected by the community.

Relationship to basic education

Even though they are a responsibility of the same Ministry, basic education and universities have a much more limited relationship than they should in a country where the situation of education is so tragic. The Brazilian university has to be a part of the learning process for Brazilian people in basic education. Its role should not be limited to its own university-level students.

The university can be a dynamic element in basic education by:

- Participating in recycling programs for teachers;
- Giving preference to teachers who are taking the university entrance examination through quota systems;
- Increasing the number of spaces in teacher licensing courses;
- Increasing the number of spaces in pedagogy courses;
- Lowering tuition fees for teachers;
- Creating specialization courses in literacy teaching for children and adults;
- In relation to all other courses like architecture, nutrition, economics, philosophy and history, considering its role in education a study matter.

Relationship with the public health system and other social sectors.

The university has an obligation to help public schools. It also has an obligation to help the public health system. Part of the curriculum of courses related to the medical field should focus on studies related to preventive and social medicine and dentistry. Civil engineering courses could contribute with technologies related to water distribution and sewage systems.

The transportation sector could focus on public transportation. All fields of knowledge can contribute. In some cases, courses in the area of communication may even leave traditional media behind and teach students communication techniques for the masses.

Social commitments that represent emergencies

In addition to fostering education as a means to create a poverty-free country, the university needs to become involved with the social commitments that represent emergencies to Brazilian society. One of these commitments is adult literacy. The goal to eradicate illiteracy in four years could be easily reached if

only three percent of all university students worked as literacy teachers. If all university students worked as literacy teachers for four years, Brazil could teach 30 times as many people how to read and write – 120 million illiterate people, or fifteen percent of all illiterate people in the world. If each university student works 8 hours a week for only one semester as a literacy teacher, it will take only twenty-four percent of all university students to eradicate illiteracy in four years. This is not too much to ask.

If we do not do this, in a few decades, when the history of the 2003 – 2006 campaign for literacy in Brazil is written, what will be said about university students is what we currently say about nineteenth-century university students: that we turned a blind eye to one of the most dramatic social problems of our time, just as they did to slavery.

Commitment to the future of the country

The world has reached a crossroads and Brazil lies at this crossroads. The future of our country is uncertain not only because of the lack of social investment and of the existence of an internal division but also because of the international scenario. The university plays a fundamental role in that it helps Brazil with the construction of its future in relation to the rest of the world. This happens through:

- The creation of the necessary scientific and technological bases to face the future;
- An understanding of international relations in a world where there is only one national power;
- An understanding of the reality of a globalized world where there is exclusion and separation;
- Help with the creation of ways to defend our sovereignty in a globalized world.

Future knowledge

In order to be a tool for the future, today's university has to define the kind of knowledge the world will need in the future. The university, together with the Coordination for the Improvement of Higher Education Personnel – CAPES, has the capability to define the types of future knowledge we should start investing so Brazil will be ready to celebrate its second century of independence. This can be done in only a few months.

Based on this definition, the university needs to move forward in relation to the redefinition of careers. This includes knowing which careers to invest more in and which to invest less in. It also includes finding out which careers will be soon outdated due to the dynamic manner in which knowledge and demands for knowledge

advance. More importantly, it includes defining which careers are permanent due to society's attachment to the fundamental values of humanism.

Globalization, regionalism and nationalization

When the last reform, which was conducted by the military, took place, Brazil had the intention of developing a national project which was independent from the rest of the world. Despite the traditional alignment with the USA, the support USAID gave to the reform and the North-American support to the ambitious graduate studies program, which was a positive change in the reality of Brazilian higher education, the development of a national project was still a dream. Today, the Brazilian university can not ignore the fact that it is part of a global project. University-level knowledge no longer fits within the borders of any country. The Brazilian university has to be a part of international knowledge. This includes its qualities and subject matters.

The university has to accomplish the goal to be global and national at the same time. It has to keep the commitments and characteristics of Brazil alive and understand the kinds of specific knowledge that the country needs.

In addition, each individual university must realize the importance of its immediate surroundings. It must become regional and, at the same time, global.

Outline of the Brazilian university system

Despite efforts on the part of the Council of Brazilian University Deans – CRUB and other organizations like the Brazilian Education Council, as well as the Law of Guidelines and Bases for National Education, our universities make up a set that lacks the clarity of an integrated system. The government will present a proposal for the creation of the Brazilian university system. The idea will be discussed with the academic community. This system will show the interrelations and the interdependence between its sectors and its interaction with the system for the development of science, technology and culture in general. It will also show the relationship between the university, the private sector and government institutions.

The Brazilian university system will make it possible to define the future of the construction of university-level knowledge in Brazil throughout the next decades of the twenty-first century.

Democratization and administrative efficiency

The government wants to propose the democratization of the relationship between the university system and society to the academic community. It also wants to propose rules for the democratization of each university. There will be

rules to be followed in terms of management, social relations and funding sources, administrative efficiency and relationships involving each unit, its students, society and the Brazilian people in general.

The university must serve all. Serving all does not mean that everybody should be admitted to college. It means making sure that the university staff serves everyone. The university has to be the elite of the professional work force at the service of the population. Because the university resists changes in its courses and structure, many of its members demagogically defend the illusion of universal admission when they should defend the universalization of the work of university professors.

III - A CONCLUSION - SEVEN PLEAS

The university is the gateway of hope in terms of understanding the crossroads we are facing in the middle of our civilization process. One road represents a united world and the other represents a socially divided world. We must form ideas for a better future that will improve mankind's situation with globalization that does not include social exclusion. I would like to conclude by making seven appeals.

An appeal to the universities in the richest countries.

This is an appeal to universities in countries with the highest per capita income. These are the so-called rich countries. The appeal is to assume globalization in practice. Please do this not only by exporting products and ideas but also by importing concerns. Do more than just develop techniques. Develop ways of making ethics an essential part of a commitment to a better world. Become familiar with the reality of African universities and the universities of poorer indebted countries. Collaborate with these universities' survival and training and collaborate in creating a world consciousness that can interrupt the barbarous march we are making towards a divided, alienated society. This division will only end up placing human beings in two tragically different camps.

An appeal to universities in emerging countries.

This is an appeal to universities in emerging countries that already have a large amount of thinkers and important centers of higher learning. Look at the poverty that surrounds you. Examine the risk you face by forming divided, alienated societies in your countries. Break the cycle of corporate claims and understand the university as part of a social network of human beings searching for a better future. Make a commitment to collaborating towards overcoming poverty. Understand that even despite the crisis, there are many universities that could use help and that are even poorer, especially in Africa.

An appeal to the universities in the poorest countries.

This is an appeal to the universities in the poorest countries, especially in Africa and some Latin-American countries. Don't give up hope. In spite of the tremendous difficulties that you face, there is still the possibility of global integration in terms of knowledge and links between universities. This process could compensate for your individual difficulties by relying on mutual cooperation.

An appeal to the professors

This is an appeal to the professors. Realize that teaching methods must incorporate the enormous possibilities of new equipment that will allow the sheer number of students to increase dramatically, independent of the countries they live in. Please accept the risk of being professors at a point in time when knowledge changes every second, demanding dedication in order to keep track of what is going on. Accept the challenge boldly and move forward to create new ways of knowing, as ephemeral as they may be.

An appeal to the young people.

This is an appeal to the young people of today. Please take on the role that has been with you throughout history. Be rebels. This is so important, especially today in a world where globally, independent of the countries you live in, you have become orphans of neo-liberalism. You are the first generation that faces a future that is less beneficial than the ones your parents looked forward to. You are the first generation where a university diploma does not mean an automatic passport to success. You are the first generation whose diploma will be obsolete long before you retire. You are the first generation where the new world has become the current world. You are the first generation that does not carry the bright flags of utopia. You are also the first generation where the young person seems to be more selfish and conservative than his or her parents are. In defending the interests of a generation, you have the right to be rebellious. Demand changes in the universities you study in, and practice the traditional generosity of young people. You have the obligation to be rebels in fighting the barbarity that is part of the socio-economic global division model. University reform will not occur without rebellious mobilization from you. You are the ones that can mobilize for revolution or reform. We are celebrating 35 years after 1968 and the taste in our mouths is of something unfinished. We are waiting for our youngest sons and daughters and grandchildren to believe that some dreams can come true.

An appeal to governments.

This is an appeal to the governments of rich and poor countries alike. Understand the urgency in recuperating your public universities. In spite of all of the current financial limitations, you cannot sacrifice the future. The future of every country depends directly on the university. Please don't let the university turn into a factory. Don't let knowledge become a marketable product. This is the practice of the technocrats in some international organizations. If you do this you will betray the noblest part of the human project.

An appeal to UNESCO

This is an appeal to UNESCO. Stay strong in your fight for culture, science and education and transform this meeting into a Permanent Forum for the Defense of Higher Education. Please defend the university and cause it to change. Make it adapt to today's reality where knowledge drifts and learning floats and there are worthless diplomas flying around and the university is far away. This appeal asks UNESCO to dedicate the year 2004 or 2005 as the Year of the University to think about how the twenty-first century university should be. In 2003, please sponsor a day when universities all over the world stop in order to reflect on their futures. Let this day be one to think about new directions for humanity. This day could allow discussion in universities on how to return to being on the cutting edge of knowledge and how to help UNESCO establish the Literacy Decade. Universities could think about ways of being tools for eradicating hunger and making basic education universally available. Universities could provide a day for discussions on constructing peace and returning to the guarantee of success for their students. They could think up ways of living with the new global and virtual teaching methods. They could imagine the university of hope, the university of the twenty-first century.

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