


Human capital and modernization project of the Colombian university system, second half of the 20th century

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Abstract

The aim of this article is to analyze the influence of neoliberalism over the consolidation of the model of the university in Colombia, from a project of a professionalizing university to a model focused on the formation of human capital. In order to achieve said purpose, the Sistema de Educación Superior required the creation of three institutions: ICETEX, ASCUN and Fondo Universitario Nacional. The policies of the university brought together the concerns of the different assessments carried out by international communities, in which it was determined that science and technology would be the fundamental pillars of the university project. The present study was conducted from the point of view of the social history of education with a decolonial perspective, with the aim of analyzing the main threads of global power, embodied in educational practices. The above allowed for an understanding of how the influence of neoliberalism over the new conception of the university led to the transformation of the social and economic model, in order for it to become a way of being and of producing subjectivities.

Keywords: university, governmentality, human capital, modernization, capitalism.



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Capital humano y proyecto de modernización del sistema universitario colombiano, segunda mitad del siglo XX

Resumen

El objetivo de este artículo es analizar cómo influyó el neoliberalismo en la consolidación del modelo de universidad colombiana, desde un proyecto de universidad profesionalizante a un modelo centrado en la formación de capital humano. Para lograr dicho propósito se creó el Sistema de Educación Superior, materializado en tres instituciones: ICETEX, ASCUN y Fondo Universitario Nacional. Las políticas para la universidad recogieron las inquietudes de los diversos diagnósticos de comunidades internacionales en los que se determinó que la Ciencia y la Tecnología serían los pilares fundamentales del proyecto universitario. El estudio se realizó desde la historia social de la educación con una perspectiva decolonial, a fin de analizar los hilos conductores del poder global, materializados en prácticas educativas; esto nos permitió comprender cómo la influencia del neoliberalismo en la nueva concepción de universidad llevó a trasladar el modelo social y económico, para convertirse en una manera de ser y de producir subjetividades.

Palabras clave: universidad, gubernamentalidad, capital humano, modernización, capitalismo, neoliberalismo

O capital humano e o projecto de modernização do sistema universitário colombiano, segunda metade do século XX

Resumo

O objectivo deste artigo é analisar como o neoliberalismo influenciou a consolidação do modelo universitário colombiano, desde um projecto universitário profissionalizante até um modelo centrado na formação do capital humano. Para atingir este objectivo, foi criado o Sistema de Ensino Superior, materializado em três instituições: ICETEX, ASCUN e Fundo Universitário Nacional. As políticas para a universidade retomaram as preocupações dos vários diagnósticos das comunidades internacionais nos quais se determinou que a Ciência e a Tecnologia seriam os pilares fundamentais do projecto universitário. O estudo foi realizada a partir da história social da educação com uma perspectiva descolonial, a fim de analisar os fios do poder global, materializados nas práticas educativas; isto permitiu-nos compreender como a influência do neoliberalismo na nova concepção da universidade levou à transferência do modelo social e económico, para se tornar uma forma de ser e de produzir subjetividades.

Palavras-chave: universidade, governabilidade, capital humano, modernização, capitalismo

The geopolitical, economic and technological changes derived from the Second World War had a considerable impact on the conception of the world and of society. Thus, new ways of controlling the society were designed in accordance with the new dynamics of the market, in which education became a global project with the objective of transforming the reality of the individual in order to respond to the new logic of the market. In effect, education became a subtle way of producing subjectivities in order to respond to its dynamics. Following the recommendations of the international missions, it was necessary to modernize the university. For that reason, the university was the object of a radical and structural transformation, not with a cultural perspective that responded to the interests of the elites, but with the aim of making it productive so the society could acquire the conditions necessary to be in harmony with the dominant economic model. In this sense, the text focuses on analyzing how the economic model, derived from the Second World War, influenced the transformation of the university.

After the crisis caused by the Second World War, it was necessary to reconstruct the world in a physical and structural order, focusing more on the political, economic and social contexts¹. In this way, the reconfiguration of a new world order took place in accordance with the new needs and demands of capitalism in its most recent phase. The establishment of the new global order as a preparation for a new phase of the strengthening of market capitalism was carried out under premises such as development, modernization and democratization. As from the second half of the 20th century, “third world” societies were compelled to privilege private capital, to create an environment conducive to the development of capitalism, and to control nationalism, communist surges and leftist unions of workers and farmers (Espinel, 2016, p. 18). Simultaneously, supranational institutions were created, which acted as the regulating organizations of the states and issued directives for their articulation in the emerging global scene.

These new organizations aided and guided the reorganization of the globalized world, which required certain, more or less homogenous, regularities, harmonies, universal codes and environments, for the free circulation of goods and the proper functioning of the model, now, of an international scope. For this, and with the intention of regulating different aspects of the societies, entities like the following were created: the World Bank (1944), the International Monetary Fund- IMF (1944), the United Nations (1945), UNICEF (1946), the World Health Organization-WHO (1948), the Organization for Economic Cooperation and Development - OECD³ (1960), among others. Most of these international organizations are part of, and came

1 The work of Arturo Escobar (1996), *La invención del tercer mundo*, offers elements of analysis with respect to this. And the article titled *Educación para el desarrollo? El sofisma de la modernización y el desarrollo dentro de los diseños globales* (Espinel Bernal, 2015) approaches some issues in relation with the discourses of development and modernization. “Thus, development is a discourse historically produced and from specific sectors and, in addition, with set purposes: maintaining and strengthening the current global order within the reconstruction process posterior to the Second World War, situating the different regions and nations in specific places within the global system of the market. There is the segmentation and differentiation between “developed” and “developing” countries, or “first world” and “third world countries” with their respective functions and conditions assigned within the globalized production system.” (Espinel Bernal, 2015, p. 343). Some other ideas can be found in Espinel (2013) and in Caicedo & Espinel (2018).

2 A denomination given by the developed countries, which were proclaimed and situated in the world geopolitical panorama as the “first world” societies, within that logic and by their own definition.

3 The OECD, for example, would replace the Organization for European Economic Cooperation (OEEC) in 1958 once Spain

into being within, the core of the United Nations (UN), which positioned itself as a global government with the aim of establishing and guaranteeing peace in the new world scenario. In fact, in the Charter of the United Nations⁴, its main purpose is established as “to maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace” (UN, 1945).

The contemporary world and the redefinition of the modern states respond to these guidelines and, at the same time, are derived from the projects of globalization. The Latin American region and Colombia itself are not strangers to this, given that their dynamics, problems, the nature of their institutions, and the functioning of their organizations respond to those same codes and regulations of the global order. Within such re-engineering, which began in the second half of the 20th century, lies education. However, it does not appear as a simple element or accessory; education is placed as a strategic factor within the conversion. It is interesting that said centrality is not an exclusive and spontaneous matter of contemporary societies, but it appears to be a common thread in occidental societies, at least as from their modern phase.

In fact, the interest of this text is in analyzing how the Colombian educational system modernized in order to respond to said market dynamics, in which the university stopped being perceived as a cultural good into becoming a project for the formation of human capital; where the members of the society, according to their qualifications, must respond to the developments and dynamics of production and the market (Pulido & Acuña, 2014). The article has been structured in three parts. The first part is a reflection on the educational system derived from the neoliberal model, in which subjectivity is potentialized in the sense that the individual has to be competitive in order to respond to the new economic dynamics. The second part presents a characterization of the concept of human capital, in which knowledge must respond to the economic system. The third part refers to the modernization of the university in Colombia, where it is intended to implement policies of science and technology in order to respond to the world panorama. This article intends to introduce the reader to a reflective dynamic regarding the subtle ways in which the economic system transforms social realities, through the modernization of the university.

Reflections on capitalism and the university education system

In the last few decades, capitalism has entered into a financial, technological and cultural revolution which has promoted new practices and ways of accumulating capital. This new type of capitalism has been referred to in many different ways: post-industrial society, post-capitalist society, post-modern era, control society, cognitive capitalism and, even, from other

and some non-European countries like the United States and Canada decided to join the select group, the purpose of which would be to foment the liberalization of capital. “The Organisation for European Economic Co-operation; (OEEC) came into being on 16 April 1948. It emerged from the Marshall Plan and the Conference of Sixteen (Conference for European Economic Co-operation), which sought to establish a permanent organisation to continue work on a joint recovery programme and in particular to supervise the distribution of aid.” (Retrieved from the official site of OECD <http://www.oecd.org/general/organisationforeuropeaneconomicco-operation.htm>) The OEEC was created with the aim of reorganizing the economy, distributing the loans and capital provided through the Marshall Plan for the reconstruction of Europe. In 1960 the OECD was formed, positioning itself as a forum of greater worldwide influence in the economic, political, environmental and educational spheres.

4 Signed on 26th June, 1945, in San Francisco, United States.

fields, learning society (Noguera, 2012). Indeed, one of its most widespread manifestations coincides with the fact that, broadly speaking, it is identified with neoliberalism, which has gone from being a social action and economic model to becoming a way of being and of producing subjectivities.

First of all, as shown by Daniel Cohen, there is the transition from a society based on production and goods to a society conceived and managed based on “services”. The sale of services displaces the former centrality of the labor force, in the same way as the market displaces the centrality of mass production, a characteristic of the societies derived from the expansion of the European industrial revolution. Following Cohen (2007, p. 13), this can be translated into that “the material worked by man is [from now on] man himself”, overcoming the feudal relationship -colonial in the American territory- with the land, as well as the transformation of raw materials in the big factories of the 19th century and the beginning of the 20th. Material production cedes to the power of immaterial production and, with it, the possibility of an enterprise without workers, of a worker who makes an entrepreneur of himself, and of ways of working that are deterritorialized and timeless, flexible and permanent. There is a virtualization of spatialities, subjectivities and products, as well as a virtualization of the exchange currency under the financial expansion into every aspect of life. Neoliberalism, as a contemporary “lifestyle”, makes the subject into a businessperson and reconfigures the forms of governance over life.

Along with a society with service characteristics, where the individual is the object and subject of consumption, as well as that of transaction, there appears another characteristic no less important: the centrality of knowledge and information, to the extent of lending its name to the information or knowledge society. In this panorama, education and, within it, the university, becomes the object of a radical and structural transformation; for, after constituting itself, for centuries and throughout the West, as a cultural good exclusive to some social classes, it mutates into an economic good for individuals and, from there, for the society in general. The universalization of education and the democratization of knowledge are linked to a form of investment between the economy and politics in the sense that, for a long time, the creation of wealth was a matter that concerned the state and was the object of political regulation. In contrast, in recent times, the relationship seems to have been given a twist where it is the economy which leads and orders the social, cultural, and political world.

The report presented by Philip Coombs (1915-2006) in 1967, commissioned by UNESCO, diagnoses a certain anachronism or time lag in education, in relation to the demands of the global market and the economic dynamics at stake. It is presented as a magnificent emergent surface of the transfiguration that has been traced within education. In this way, “The World Crisis in Education”, the title given by Coombs (1978) to his report on global education in the 1960s, is quite explicit regarding its form and intentionality; a crisis that, by definition, demands the taking of measures and making necessary adjustments. This would be the road to a structural reform and the reorientation of national educational systems around the world. In other words, this reference to the crisis in an analysis of a global scale supposes, claims and legitimizes the articulation of local educational systems with global policies and guidelines.

In this vein, education is identified, progressively, as a fundamental economic factor in the reactivation and growth of local and regional economies. This transforms the improvement of the education systems and the formation of what is called “human capital”, into a strategic investment within the new open international accord in the post-war period (Schultz, 1968; Becker, 1983). Knowledge, education, and, along with them, research, would become preponderant factors for competitiveness in the context of the global market of the 1970s, the predominant rationales of planning, quantification and control were incorporated into the educational system based on terms like performance, productive capacity, quality, innovation, efficiency and competitiveness.

In this way, the changes and transformations brought about by the new capitalism, which was consolidated throughout the second half of the 20th century, set forth profound revisions concerning the relationship between knowledge and the university, as an embodiment of the society and higher education (Pulido, 2016). The contemporary university and, in particular for this study, the university in Colombia, met with deep confusion in its endeavour; it is contradictory and paradoxical at the same time, as, for many sectors, the university is trapped in the mechanism of management, competences, abilities, performances, and the resolution of immediate and productive problems, for which it would be pertinent and necessary to go back to more academic postures, where knowledge, the seeking of truth, objectivity and discipline predominate⁵. This suggests a tension between, on the one hand, the universal spirit of the university, the core of diversity, debate, autonomy and the construction of the bases of society; and, on the other, the social and economic function of the university, more concerned with prosperity, growth and economic strengthening, as the foundation of the state apparatus, competitiveness within the global market, as well as the articulation of the student with the productive world. For this reason, the study of a concept such as “Human Capital” allows for an understanding of many of the practices that the university privileges today, the history of its implementation in Latin America and particularly in Colombia.

In effect, the contemporary man is someone who invests in himself in order to reach higher levels of competitiveness in the era of the market. He applies to himself, according to Sloterdijk (2012), a series of anthropotechnic exercises that transform him into an entrepreneur of the self. In this sense, the problem to be traced revolves around the educational practices which are expressions of the neoliberal governmentality, where government will be exerted based on and over desires and interests. Having said that, some concerns emerge about the university of the 21st century: what type of university are we talking about? How does the shift towards human capital, the entrepreneur of the self and immaterial production impact the architecture and the function of the contemporary university? What type of educational and knowledge circulation practices are developed within human capital universities? How is the human capital doctrine applied over a person’s life in order to govern it? To what extent are the configuration of making an entrepreneur of the self, the competitiveness discourse and the concept of education as an investment linked with the contemporary forms of neoliberal governmentality?

5 Some of the ideas that we comment on here have been developed in depth by Pulido (2016).

Human capital and education

Human capital, as a concept, emerged once economists started to pay attention to education for its economic value, and not for its cultural and social value. At the time, education was based on theories and economic models. Theodore W. Schultz (1968), in a text from the 1960s titled *The Economic Value of Education* pointed out this growing interest which was increasing in the economic and political environments, and not in the field of educators and pedagogues, in a clear development of education by means that were alien to it. The American economist considered that “increase in the required abilities of people and advances in useful knowledge hold the key to future economic productivity and to its contribution to human wellbeing” (Schultz, 1985, p. 9). To this extent, Schultz affirmed that productivity would increase due to factors, different from capital itself, which suggests a transformation in the ways of production as well as in the conception of work, the worker and the product to be commercialized.

Schultz, who had carried out several investigations regarding the expanding relationship between capital and labor, focused on tracking the growing number of people who invested considerable amounts of money in themselves and, in particular, in their training as human agents. Thus, Schultz also claimed that “the decisive factors of production in improving the welfare of poor people are not space, energy and cropland; the decisive factor is the improvement in population quality and the intelligent evolution of humanity” (Schultz, 1985, p. 13). He identified education as an important source of the production and accumulation of capital.

In this way, after a thorough analysis of the relationship between the economy and education, Schultz set forth that the latter -education- had to be, not only an investment in the contemporary human being and for the improvement in population quality, but that its effects would assume the form of capital; perhaps, one of the most valuable and profitable types of capital in current times.

[...] education becomes to be a part of the person receiving it. I shall refer to it as human capital. Since it becomes an integral part of a person, it cannot be bought, or sold, or treated as property under our institutions. Nevertheless, it is a form of capital if it renders a productive service of value to the economy (Schultz, 1968, p. 2)

According to Schultz, the economic value of education does not lie in what, historically, education used to offer, that is to say, in cultural transmission, the incorporation of new generations into valid social codes or socialization processes. On the contrary, from the economic perspective, which views education as a problem, education becomes valuable due to the economic returns and the production dynamization it implies. In this way, with these characteristics, education enters the arena of public policies and the measurement of performance tables as a core element, within the economic policy of each country.

Therefore, human capital is something that is formed, produced and shaped through the education systems, training and the global guidelines on educational policy. Education then becomes an economic factor but, also, a scenario of subjectivity and government strategy, now, at a global scale. The investment in human capital deployed by the school and university

apparatus, as shown by Schultz's (1968) investigations as from the 1960s, have caused the rates of the economic growth of nations to be superior in those places where such investment has taken place.

In conclusion, Schultz corroborated that the emphasis of the economy should not be put on the overrated value of land, but rather on the formation of human capital, the consequent improvement of population quality and the investigation into the creation of the new capital: information and knowledge. Certainly, in the midst of the recent economy "an integral part of the modernization of the economies of high and low-income countries is the decline in the economic importance of farmland and the rise in that of human capital: skills and knowledge" (Schultz, 1968, p. 170). Education, more than an issue of social and accumulated cultural status within the symbolic network that enveloped the first half of the 20th century, would be directly linked to the productive sector, becoming a potent engine of the national and global economy during the last part of the century. This would explain the focus of some educational models on the development of certain skills -with the hope of becoming "successful"-, in accordance with the current productive phase. As a matter of fact, the growing specialization of production models and forms of labor, along with technological advancements, would demand a greater specialization of the productive agents, and it is education that should supply those skills. The equation, then, becomes simpler: the more economic and technological growth, the greater the need for education and, consequently, the higher the levels of specialization. In the last few decades, this has led to a growing demand for training and constant updating.

Returning to Theodore Schultz, land would not be the most determinant factor of the rates of poverty but instead, within economic policy, that factor would be the human agent. Owning land is not enough, it is necessary to know what to do with it. For this reason, investing in the improvement of population quality has a significant influence on the increase in the economic and welfare perspectives of the poorer sectors of society. Moreover, with an improvement in the living conditions of these populations there would inevitably be an economic growth of the nation in general: "[...] childcare, home and work and experience, the acquisition of information and skills through schooling and in other ways consisting primarily of investment in health and schooling, can improve population quality" (Schultz, 1985, p. 18).

For his part, Gary Becker (1930-2014), Schultz's disciple, was one of the most important scholars on "human capital" and had the virtue of systematizing it and organizing it into a theoretical corpus. One of his first works is titled *Human Capital*⁶ (Becker, 1964). Becker finished his studies in economics at the University of Chicago, with professors such as Milton Friedman and Alfred Schultz, and was one of the first in proposing the controversial notion of human capital, according to which the volume of knowledge, the level of dexterity and the quality of training determine the degree of the productivity of enterprises and economic institutions. Therefore, the productive performance of the worker is directly influenced by the education received, the body of knowledge acquired (in and out of the company), and the development of the talents necessary to carry out specific activities. From there began what is currently known as the "theory of human capital" and that, for Becker (1983), is similar to physical capital. Precisely, this concept of "physical capital" permits its accumulation as it

6 Published for the first time in 1964 in New York, by the University of Columbia.

becomes tangible, measurable, controllable and exchangeable through investment, profitability and forms of transaction. Human capital entered the sphere of supply and demand becoming one of the determining factors in the economic growth of companies as well as nations. And, simultaneously, from these studies, education would position itself as the fundamental factor in the production and improvement of human capital, which is qualifiable and, mainly, cumulative.

This systematization, as well as Becker's new conception of human capital in terms of investment, supports that it has direct repercussions on monetary and imputed income through the increase in the characteristics, the experience and the resources incorporated in the individual; that is, an accumulation of aspects which help the worker to improve his productivity. Additionally, they avoid that companies invest in the training of their employees when they access the labor market, as the initial instruction should be the individual's responsibility. If the company wants to augment its profits, they should provide training programmes and permanent updating, given the accelerated pace of technological advancements, the diversification of the productive sectors and the opening of new markets.

For Becker, the investment in human capital not only refers to formal education, the diverse levels of the education system, its qualifications and honorary distinctions, it also implies the care of the family from the first years of life: care, health, basic skills, and social possibilities. Following this idea, the actions of family life are geared towards guaranteeing personal success in adult life. Certainly, in recent times, the care of the parents and contemporary upbringing focuses on emotional and relational aspects, such as self-confidence, self-esteem, conviction, socialization abilities, emotional self-regulation, and even the resilience to overcome frustration and failure. In consequence, the formation of human capital should go beyond the educational apparatus, as had been previously expressed by Schultz, "the improvement of physical and psychological health is considered a type of investment in human capital in the sense that it contributes to the fact that the individual achieves better returns. Emotional stability is decisive in determining an individual's retribution" (Albano and Salas, 2007, p. 170). The development of capabilities goes hand-in-hand with their capitalization in the different scenarios of private and social life the and the control of emotions.

Also, Becker discovered that the company offers training as an extra in the exercise of work, so training is not only derived from external instruction (Becker, 1964; 1983). The workers that are suitable and that have a greater biological and cultural disposition will be able to accumulate human capital by performing their duties in the company. This means that those who have better conditions and skills to learn will rise and achieve higher levels of capital accumulation, human, cultural and symbolic, as well as material. The key is the disposition and the capacity to learn, to then make a profit from it through different and subtle ways of acquiring capital. That is the origin of the demand for skills such as learning how to learn, life-long learning and the focus on learning more than on teaching within the school apparatus. As a consequence, the levels of inequality and exclusion will rise, in accordance with the world of competition, which gained ground with the statements of Herbert Spencer (1820-1903) and so-called social Darwinism (Dardot and Laval, 2013, p. 45-46). Revisiting the issue of

the factory as a daily space in the formation of human agents, the experience gained at work becomes a cumulative and profitable capital for the worker and the company alike.

For Becker, the focus of training on “human capital” is directly related with the studies regarding income distribution. “Inequality in income distribution is positively correlated with inequality in education and other forms of learning” (Becker, 1983, p. 28). In this way, education in the form of schooling, but above all in the possibility of learning quickly, makes the greater accumulation of knowledge possible (Pulido, 2016, p. 65). For this reason, it is not a coincidence that schools and universities have progressively adopted models centered on the development of abilities and competences, oriented towards the optimization of the processes of knowledge acquisition within the logic of human capital. The aim of contemporary education and the preparation for the labor market will revolve around the formation of flexible subjects, who are malleable enough to quickly adapt to scenarios of constant change and who are sensitive to the rhythms of the current world. It can be affirmed that the economic value of education is held at the level of the cognitive, affective, emotional and social structures which allow the worker to operate successfully with the codes and dynamics of a society that moves ever faster, is hyper-connected and hyper-consumerist.

Another key element within the shift explored by Becker is consumption. The person that is a subject of human capital is prepared to quickly consume information, data, languages and trends and must, at the same time, have the dexterity to process information as fast as possible, in order to make appropriate decisions. This capacity to react and the speed with which tasks are done, endows the subject with better conditions compared to others. In this way, reaction speed and having the necessary cognitive, intuitive and emotional tools, as well as the material and technological, constitute a fundamental value within the ruthless world of competition. It is qualification, actualization and the preparedness for what is new that will determine the level of compensation and their performance.

Together with the centrality of consumerism, reconfigured as a value in itself and linked to productivity, Becker mentions aptitude: a certain disposition in the subjects which makes them more capable and, therefore, better equipped for the voracity of social and economic life. The survival of the most skilful and suitable, which reminds us, once again, of Darwinist theories and their adaptation to the socio-economic world were anticipated by the Spencerism⁷ of the 19th century; an attitude that can be nurtured, shaped and modeled based on social, cultural and educational mechanisms, which seems to distance it from biological determinism. Conversely, it evidences the capacity of the subject to build, produce and forge an entrepreneur of the self; aptitudes that, in addition, not only can be created and shaped, but also accumulated. This transforms the attitudes and capabilities of people into important capital of the human agent and education into a mechanism of social selection (an analogy with Darwin’s natural selection), economic dynamization and return maximization.

Education, in another time imagined as an emancipating right and situation, progressively, under its commodification, transforms into an instrument of accumulation and, therefore, into

⁷ Laval claims: “although Spencer’s biological evolutionism will seem old-fashioned to some neoliberals, to the extent that they will often «forget» to mention it, only to reject it, it left, however, a deep mark on the ulterior course of the liberal doctrine” (Laval & Dardot, 2013, p. 44).

a means of marginalization, deepening the social gap and voluntary subjugation. It relates to the contemporary forms of government in the form of entrepreneurship, training, innovation, human capital and indebtedness (Lazzarato, 2011) while the education and training of said aptitudes for competence are transferred to the responsibility of the individual: individualism, competitiveness and segregation.

Modernization of the university in Colombia

A look to the past can help us shed some light on the issue. The transformations in the mid-20th century in the whole of Latin American society were fostered by the theory of modernization and the discourse of development (Agudelo, 1969). They were initially put forward by international organizations which launched policies that were intended to transform production in Latin America, through the formation of individuals who responded to the dynamics of global development. The policies for the university gathered the concerns of the diverse diagnostics carried out world-wide, in which it was determined that science and technology would be the fundamental pillars of the university project. In the case of Colombia, the proposals of three international organizations were taken up: the *Alianza para el Progreso* (Alliance for progress) through the declaration of Punta del Este and its subsequent guidelines; UNESCO through the mission of Atcon (1966) and the main document *La universidad latinoamericana. Clave para un enfoque conjunto del desarrollo coordinado social, económico y educativo en América Latina*⁸ (The Latin American university. Key to a joint approach for the coordinated social, economic and educational development in Latin America); and, finally, the *Instituto Latinoamericano para la Planificación Económica y Social* (Institute for Economic and Social Planning - ILPES, by its acronym in Spanish) dependent on the ECLAC (Economic Commission for Latin America and the Caribbean), with the document *Filosofía, educación y desarrollo* (Philosophy, education and development) by Medina (1967). The analysis perspectives of said reports are within the field of sociology and economics, as specific disciplines from which the educational phenomenon is diagnosed and projected. The reports of international organizations suggested a reform of the universities from which a substantial change in the mission of the university was derived. At the same time, the professional perspective, characteristic of the mid-20th century, was transformed into a university for development, which is still the case in the early 21st century.

The university of development reproduces the North American model of the university expressed in the Atcon plan. This model was used as the foundation for the *Plan Básico de Educación Superior* - Basic Plan of Higher Education (ICFES, 1970) and made explicit in its administrative and academic organization. This means that, from the 1960s, it is unquestionable that there was an integration of the educational process with development plans. It recreates the idea that the extent of advancement and growth of a country in social and economic aspects is directly related to educational development, through the structure of its educational institutions. It adopts the postulates of management as the axis of the construction of realities. Likewise, said development plans manage to intervene in the forms of teaching, in the contracting process as well as in training and the reproduction of the hegemonic model. Lastly,

⁸ Published in Spanish in 1961.

they have an influence on the reinvention of the concept of university autonomy with respect to the project of state, that is, they install a discursive perspective that could be linked with the systematic process of privatization and insertion in the neoliberal forms of governmentality, which the contemporary society adopts.

The Colombian university, from its creation, has passed through diverse models of organization. The review of these types of proposals permits the observation of how the university, regardless of the leaning of the governments and even of public policies, has been a university created for the useful, technical and technological knowledge which each historical moment has required. The formation of professionals has included a wide range of professions in harmony with the needs of each historical-economic phase of the country: from the preparation of lawyers and priests to engineers, economists, educational psychologists and administrators, to give some examples. This perspective is consolidated in the second half of the 20th century with emphasis on the modernizing processes of management and development in order to project the university and the subject of human capital.

Thus, the university of development had a transcendental role in the second half of the 20th century in Colombia; it became an articulator of the relationships between the knowledge, statements, and practices of science and technology. In this way, the national and international perspectives trust in education and, above all, that provided by the university, the economic and social development of the nation. Those statements are communicated, mainly, through the international organizations created at the end of the Second World War and the following years. For the Latin American case, there are key influences that determine many of the decisions and actions regarding the university (Pulido, 2018). In the framework of this analysis, three of said institutions were selected. The Organization of American States (OAS), which, through the Alliance for Progress, achieved an American consensus to elaborate 10-year plans in Education, Science and Technology, with the intention of containing communism and producing in these countries a form of technical cooperation, regional progress and the consolidation of specific knowledge with the illusion of leading them towards development, emulating the American style of industrial capitalism.

UNESCO produced its diagnosis of the university, known as the Atcon report, which became the guide for the educational reform of the university through, in the Colombian case, the *Plan Básico de Educación Superior* (ICFES, 1970). This report has two functions: on the one hand, it makes a diagnosis in which the situation of the university and its agents is portrayed; and produces directions and lines of action, which were mostly incorporated in the following three decades. The Atcon report became the guide of the regional governments in order to carry out the transformations of the university in Latin America. At the same time, several Inter-American meetings were held by the Alliance for Progress, with the aim of achieving consensus among the countries that integrate the OAS regarding the educational processes oriented towards the labor market, innovation and the forms of productive work that were deployed by the emerging neoliberalism.

In this sense, in Colombia, the crystallization process of the educational reform began, from the expansion of literacy programs and the reorganization of primary education, which was made extensive nationwide; that is, schools were built, teachers were appointed in order to

encourage almost total coverage and, also, the system intervened, opening new educational possibilities: pre-schools, adult education and other manifestations that complemented this strategy. The effort made by the Colombian government should have concluded with a university reform as a substantial aspect of the processes of modernization, which were depicted in the document mentioned⁹.

The economic and social missions were strategies for the control of knowledge and practices deployed by the United States in order to maintain Latin American countries under its domination. Said missions produced appraisals and guidelines of the institutions and the programs that the state should adopt in relation to the society. Hence, the Atcon report, as well as the Rockefeller report, had that intentionality and were taken as the basis of the discourse on modernization in Colombia and Latin America. This means that the Atcon report emerged as a precursor and the Rockefeller report appeared as that which collected the experiences of a decade of attempts to implement and develop this intervention policy.

The third influence is the ECLAC (Gurrieri, 1982), through ILPES, which, having its roots in Latin America, fostered and consolidated development as an investment in Latin American sociology. It also produced several statements regarding the importance of the university with respect to development, and it placed itself in an expository axis with the other multilateral organizations of control. The realities described legitimized the modernization of the university and motivated the Colombian government to produce regulations with a view towards achieving the reform.

Modernizing institutions of the university in Colombia

With regard to the reforms suggested by the international organizations, the Colombian government designed a system of Higher Education, for which it created the *Fondo Universitario Nacional* (National University Fund - FUN, by its acronym in Spanish), the *Asociación Colombiana de Universidades* (Colombian Association of Universities - ASCUN, by its acronym in Spanish) and the *Instituto Colombiano de Especialización Técnica en el Exterior* (Colombian Institute of Technical Specialization Abroad - ICETEX, by its acronym in Spanish). In addition, the government designed a set of regulations which included adjustments to the developments of the university, a profound transformation of its function, scope and the goals that it was supposed to achieve in the Colombian society. This reformist wave started with the elaboration of the Basic Plan of Higher Education, the constitutional reform of 1968 and the creation of institutions such as the *Instituto Colombiano de Fomento a la Educación Superior* (Colombian Institute for the Promotion of Higher Education - ICFES, by its acronym in Spanish), *Consejo Nacional de Ciencia y Tecnología* (National Council of Science and Technology), and the *Fondo Colombiano de Investigaciones Científicas y Proyectos Especiales* “Francisco José de Caldas” (Colombian Fund for Scientific Research and Special Projects - COLCIENCIAS, by its acronym in Spanish). This set of reforms was directly advised by the American government and various American scientific and educational organizations. Several characteristics of the American university model were established in private and

⁹ Published by ICFES in 1970.

public Colombian universities and this also paved the way for conceiving of a university for technology and innovation.

The *Plan Básico de Educación Superior* became the first systematic organization of the new Colombian university model. It presents a balance and a compilation of what, to a certain extent, the university practices in Colombia were. It includes the history of higher education institutions in Colombia as from 1580, when Universidad Santo Tomás was founded, up to the foundation of the Universidad de Córdoba in 1966 (ICFES, 1970), making a detailed description of the moments when the courses of study, the schools and the universities emerged. This diagnostic strategy produces a comparison and reference of universities, the status of their development and the administrative and academic flaws that should be solved through modernization and development. Likewise, the Basic Plan of Higher Education includes the general guidelines for the modernization of the university in Colombia, taking into account the recommendations which appear in the Atcon report and those of international organizations. The aspects that were highlighted were: the creation of a system of university higher education of a public nature and with a coordination of actions with the private sectors; two types of institutions were defined: universities and university institutes, with their own norms to foster and maintain their quality, which would have a minimum set of norms for accreditation, certification and approval, in order to guarantee their level of quality. In the plan, mechanisms to regulate qualifications were also established; norms and procedures were constituted so as to create new institutions. As a mechanism to regulate the level of quality, the *Servicio Nacional de Pruebas* (National Examinations Service) was created; although founded in 1965, it was reactivated later on and given new functions to filter the entrance of students into the university system (ICFES, 1970, p. 9). The financing of higher education was anticipated and, finally, academic credits became the unit of measurement of the academic progress of the students.

Aside from the structural reform of the university, through the Basic Plan of Higher Education, its modernization was carried out through three fundamental routes, connected with institutions which coexisted with the university, which mobilized, boosted and ended up forcing the university to adopt their logic. These governmental entities led the university to opt for modernization in a conscious and self-regulated way, with decisions already made in other phases. The three veins of modernization were: loans and the financing of studies in Colombia and abroad, the exchange of teachers and knowledge, and the training of the faculty and administrative staff at universities. These functions were assumed by ICETEX (1975) and had a direct impact on the universities and the way they worked. The second path to modernization was the constitution of an educational system through the FUN, ASCUN and, afterwards, ICFES. The third route was related to investigation through the *Fondo Colombiano de Investigaciones Científicas y Proyectos Especiales*, which preceded COLCIENCIAS. The *Plan Básico de Educación Superior* became the articulating axis of these proposals of modernization. Although by the 1960s, some institutions like ICETEX, FUN and ASCUN already existed, the basic plan rekindled them and considered them to be an important part of its functioning. However, it has to be clarified that the basic plan did not contemplate the creation of COLCIENCIAS and ICFES.

In relation to research as a route towards modernization, although the creation of an

institute was not considered, it was formed due to certain conditions, needs, and agreements that perceived that investigation could be a means of fomenting knowledge and generating innovation and development. ICETEX appeared as a possibility for the financing of specialization studies abroad, geared towards students with a good academic performance and low economic resources, as the country was lacking specialists, professors and technicians. Afterwards, because of the pressure of the students, the institution started to finance some undergraduate studies in the country.

This specialization movement achieved two things: on the one hand, professionalization, and on the other, that specialists returned to the universities and local companies bringing know-how from abroad, mainly from the United States and some European countries. This is a clear example of colonization through science, technology and the scientific developments of the time. Given that Colombia did not produce either science or technology, the model of the place where the student was trained was adopted. Universities did not transform because of the higher education model or because of the issuing of norms, they did so due to the actions of specialized professionals who returned to the country and reproduced the practices and experiences acquired during their training.

ICETEX financed or gave loans to carry out studies in Colombia. It also financed the studies of professors and administrative staff from universities through scholarships, exchanges and internships. The Colombian state realized that the private model, which forms and encourages the accumulation of human capital, worked, and which afterwards would work in national and public institutions. Substantial aspects of the contemporary neoliberal system are derived from this, expressed in the model of human capital in which the person invests in himself, asks for a loan to carry out his qualification and specialization process, uses his future work and time as a guarantee, returns to the country and, once on Colombian soil, gives back what was loaned to him with his work.

It is a perfect model for the state as it does not require a major investment. As a consequence, it is an economical model and, moreover, it is a model through which people travel, invest in themselves and acquire qualifications. Therefore, not only did it change the flow of innovative knowledge that came from abroad, but also the way in which the university was financed. This means that, in tune with this modernization model, the university in Colombia has never been public nor free. The state realizes that the level of savings is 100% through this efficient education model: the financing granted is no longer exclusively for the specialization of national human capital through studies abroad, but also for financing programs extended to the level of undergraduate education at a local level. This reveals that Colombian students never had free public education; on the contrary, one way or the other, they always had to invest in their own education with loans that had to be repaid to ICETEX once they graduated so that this organization, at the same time, had more resources for new loans and indebtedments for other population groups which would seek qualifications and competitiveness. In this way, the model is decidedly private and focuses on human capital, that is to say, on the investment of the individual in himself. The modernization of the university through financing was consolidated in the 1960s while Colombian higher education institutions demonstrated practices related to

financing and constantly reproduced the cultural and economic model in the process of being implemented.

Research would appear as a core tenet and, thus, COLCIENCIAS would become the third route towards the modernization of the university in Colombia in the second half of the 20th century (MEN, 1967). It is one of the elements with the greatest influence on the investment in the contemporary university. The university would be the channel of circulation and control of the new scientific and technological discourse. For this reason, its participation would play a decisive role in the new political forms and expressions approaching technology and science. The participation of the *Consejo Nacional de Ciencia y Tecnología* and COLCIENCIAS, first as a fund and then as an institute, would be to intervene in the delivery network of science and technology policies. The university would be the formative bridge for the competence of researchers and professors in science and technology, with the purpose of achieving greater participation in international settings. Secondly, the transformation of the curricula based on the needs of the country regarding economic and social development was the purpose of the innovation and application of knowledge, better known as R+D development. On a third plane, we find the consolidation of relations and fusions with the business sectors of agriculture, mining and the manufacturing industry, in particular. This way of thinking about research is present in the way universities started to organize, finance and carry out their research practices. It is possible to affirm that research into science and technology by political means transformed the university as well as it turned it into a slave to research, that is, of a particular way of perceiving and using it. Knowledge is replaced by research, mainly instrumental and innovative which, apart from tying itself to the profitability rates of the university activities, ends up strengthening the global circuits of capital expansion; cognitive, in this case.

Some final thoughts

In this educational design, knowledge, by extension, is given a high economic value. The most valuable tool that the contemporary neoliberal subject possesses is no longer their strength to work but their intelligence: a productive brain. The capacity to produce knowledge, information and immaterial goods are their most important asset. This explains, by way of example, the shift of criticism and its grandiloquent recurrence in innovative educational models. It is not related to the critical emancipating thought that was spoken of decades ago, that of knowledge committed to social transformation and the establishment of fairer and more decent living conditions for all sectors of society. Perhaps, that is what matters the least. It is criticism understood as an ability: a dexterity that is possible to train and become accustomed to, with the aim of establishing specific relationships with knowledge.

Furthermore, the relationship with tradition, theories and systems of thought that is demanded by the society of knowledge becomes distant from the reproduction and fidelity that were so dear to the previous forms of education, in order to concentrate on the possibility of constructing new information and producing knowledge. In this structural framework, the critical aspect, so yearned for and repeated by the recent educational models, responds to the interest in acquiring capabilities to search for, locate and interpret information, as well as abilities to weave postures and approaches regarding the information acquired and, clearly,

the ability to generate new information and alternatives of interpretation; the consumption and production of information; the production and consumption of knowledge; a gentle way to allude to the cognitive capital that the educational institutions, the university practices and research itself are headed towards.

By the same token, a transition is perceived from teaching to competency, in this sense, an individual does not attend school to learn and acquire knowledge, but to acquire abilities and become competent. It is a private challenge; a task of personal responsibility. For this, along with critical thinking, autonomy regains relevance. Acquiring competences seems to be the occupation of the student of today: competences and abilities that, later on, can be offered within the logic of the supply and demand of the market, and even, within the classroom of the school system. In this lies the most recent trend of human capital formation focused on competences, abilities and capabilities: capital which is cumulative, sellable and exchangeable for other goods and services. These competences start to acquire a growing value in the marketplace and coincide with the learning society, learning how to learn and intellectual work. A qualification and competitiveness that, for the entrepreneur of the self in the neoliberal setting, means the validity and circulation of oneself in the networks of the global market: subject and object of consumption; production and commercial exchange; entrepreneur of the self and, simultaneously, goods marked with growing levels of obsolescence translated into categories, demands of updating and permanent training.

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