

**RESEARCH IN HIGHER EDUCATION FROM THE PERSPECTIVE OF
NUSSBAUM AND OF MCTIC ORDINANCE N. 1.122/2020**

***A PESQUISA NA EDUCAÇÃO SUPERIOR NA PERSPECTIVA DE NUSSBAUM E DA
PORTARIA MCTIC N. 1.122/2020***

***INVESTIGACIÓN EN EDUCACIÓN SUPERIOR EN LA PERSPECTIVA DE
NUSSBAUM Y LA ORDENANZA MCTIC N. 1.122/2020***

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ABSTRACT: The world notations regarding research in higher education suggest an ever greater reduction in funding for the areas of the humanities. Considering this background, the essay is aligned, in the investigation of research in higher education from Nussbaum (2014, 2015) and the MCTIC Ordinance n. 1,122. For this purpose, the research aims to analyze, how this phenomenon compromises the humanities sciences and production and critical / reflective knowledge, while adopt research, development and innovation projects focused on technology areas as priorities. The research is exploratory, analytical, hermeneutic and with documentary data collection. With such an analysis, it is proved from Nussbaum, that the perspective of humanistic research is not included in the ordinance, which confirms the worldwide trend of investment in applied research, the contempt for both research and humanist training and the strong tendency of funding for research that contributes to economic profitability.

KEYWORDS: Research. Humanities. MCTIC ordinance n. 1.122. Innovation.

RESUMO: Os apontamentos mundiais com relação à pesquisa na educação superior sugerem uma redução cada vez maior de financiamento para as áreas das humanidades. Considerando esse pano de fundo, o ensaio se alinha na investigação da pesquisa na educação superior a partir de Nussbaum (2014, 2015) e da Portaria MCTIC n. 1.122. A investigação tem por objetivo analisar como este fenômeno compromete as humanidades e a produção de um saber crítico/reflexivo, ao adotar como prioritários os projetos de pesquisa, desenvolvimento e inovação voltados para as áreas de tecnologias. A pesquisa é exploratória, analítica, hermenêutica e com coleta de dados documental. Com tal análise se comprova, a partir de Nussbaum, que a perspectiva da pesquisa humanista não está contemplada na referida portaria, o que confirma tendência mundial de investimento em pesquisas aplicadas,

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o desprezo tanto pela pesquisa quanto pela formação humanista e a forte tendência de financiamento para pesquisas que contribuem para a rentabilidade econômica.

PALAVRAS-CHAVE: *Pesquisa. Humanidades. Portaria MCTIC n. 1.122/2020. Inovação.*

RESUMEN: *Las notas mundiales sobre la investigación en educación superior apuntan a una reducción cada vez mayor de la financiación de las áreas de humanidades. Teniendo en cuenta estos antecedentes, el ensayo se alinea, en la investigación de educación superior de Nussbaum (2014, 2015) y la Ordenanza MCTIC n. 1.122. Para ello, la investigación tiene como objetivo analizar, cómo este fenómeno compromete las humanidades y la producción y el conocimiento crítico / reflexivo, adoptando como prioritarios proyectos de investigación, desarrollo e innovación centrados en áreas tecnológicas. La investigación es exploratoria, analítica, hermenéutica y con recogida de datos documental. Con tal análisis, se comprueba desde Nussbaum, que la perspectiva de la investigación humanística no está incluida en dicha ordenanza, lo que confirma la tendencia mundial de inversión en investigación aplicada, el desprecio tanto por la investigación como por la formación humanista y la fuerte tendencia de financiación para investigación que contribuya a la rentabilidad económica.*

PALABRAS CLAVE: *Investigación. Humanidades. Ordenanza 1.122 MCTIC. Innovación.*

Introduction

From the conception that the world of production is entering the fourth revolution, the field of power (the State) and the research and post-graduation funding agencies publish edicts that prioritize the so-called natural sciences, creators of technologies, inventions and material innovations, in contempt of the humanities, with the purpose of obtaining competitive advantages in the world of commodity production (AZEVEDO; OLIVEIRA; CATANI, 2016, p. 786).

The authors' epigraph adequately situates the research problem. It is notorious knowledge that recent discussions and deliberations by State agencies point to investment in areas of applied research that "supposedly" generate financial returns. This maxim is linked to the neoliberal ideologies that have invaded like a wave education at all levels, from initial education to graduate programs. One can still add to this reality the fact that the effects of this idea quickly materialized, and that other manifestations will occur quickly, making it necessary to reflect on how to adapt to this reality, mitigating or confronting it. The neoliberal practices introduced in research have contributed, according to Santos (2010, p. 200), to an organization of research agendas based on the demands of technological development, science as a productive force, international competitiveness and scientific productivity gains in the economic field. The highly popular concepts and discourses of the "knowledge society" and or "knowledge economy" put pressure for educational policies, and consequently higher

education, to transform (ALMEIDA; BATISTELA, 2001) research into functionalist and adopt commercial criteria.

The economization of educational principles puts pressure on universities and their actors to adopt practices that compromise the educational environment from a pedagogical perspective. One of the situations arising from this scenario is brought in the following terms:

In summary, the world dynamics demanding more innovation and knowledge appropriable by the business culture finds the university institution and its researchers thirsty for resources, actors fragile for negotiation and eager to overcome the financial crisis by generating their own revenues, namely through partnerships with capital, especially industrial capital, without greater scruples. Thus, the commodification of knowledge has led to new types of relationships in academia based on a managerial conception that assimilates the principles, parameters, and features of economic organizations. But what is worse is that the very insufficiency of criticism of this reality gains ground among teachers and the production/transmission of knowledge is not properly evaluated and questioned, cooling the critical potential that the university has (MANCEBO; MAUÉS; CHAVES, 2006, p. 51).

Thus, a framework is configured where the adoption of these typically neoliberal criteria and values as guiding criteria for higher education and research transforms the university ethos previously defined as autonomy, criticality and the common good into an ethos based on profitability, quantitative productivism and competitiveness. It is in this context that the investigative problem is located, materialized in the following questions: what is the space of the humanities within this scenario? What are the formative consequences of the curtailment of investments in research in the humanities? What is the understanding of research in MCTIC Ordinance n. 1,122 in relation to research in the humanities?

The investigative questions are the guiding thread to situate the condition of research in higher education, its organization and how they treat the humanities. The object is to point out the problems and consequences of the low investment in the humanities research areas based on Nussbaum (2014; 2015). The discussion will be permeated by the Ordinance MCTIC n. 1.122, articulated to the problems raised by Nussbaum concerning the sources of funding for the humanities and its resulting problems. The research is analytical with a hermeneutic method. Data collection is carried out by means of the documental technique⁴. The research universe is the works of Nussbaum (2014; 2015) and the MCTIC Ordinance n.

⁴ According to Nardi and Santos (2003), documentary research is characterized by the analytical, descriptive or explanatory treatment of documents, photos, newspaper reports, company reports, statistical tables and informative documents filed in public offices, churches, hospitals, unions, and so on.

1,122. It is, therefore, an exploratory study as to the objectives, and bibliographic and documentary, centered on the analytical-hermeneutic method, as to the technical procedures.

In order to clarify the investigative problem and its conclusions, the essay is organized in three parts. In the first part, Martha Nussbaum's (2014; 2015) concepts concerning the formative problems arising from the diminution of the humanities in higher education curricula are addressed. The main thread is based on the three pillars of democratic citizenship: critical thinking, universal citizenship, and imaginative capacity. The three pillars are anchored in skills four and six. In the second part, we will work on the meaning of research in the MCTIC Ordinance n. 1.122 and how the humanities are treated, as well as we will quickly punctuate the repudiation notes released by graduate programs. Finally, we seek to understand the process of the rise of the capitalist regime of knowledge and its impacts on the financing and management of higher education in Brazil. The privatization of knowledge and the changes imposed on academic culture are critically analyzed from the perspective of the human development paradigm, advocated by the philosophical-pedagogical proposal of Martha Nussbaum.

Diagnosis of higher education in terms of research

Higher education in recent decades has been guided by educational policies founded on principles of quantitative productivism, economicism and the search for "practical" results linked to the production mode of flexible accumulation. For Santos (2010), higher education is forced to adopt practices and demands of the business world and orient its institutional structure to technological development, to the expansion of science as a productive force that generates economic gains and inserts itself in the international competitiveness of economies with a view to productivity gains. In the same vein, Almeida and Batistela (2011) consider that the adoption of these productivist prerogatives in higher education makes teaching and research functionalist and defined by commercial criteria. The organizing ethos of teaching and research is guided by productivism, economicism, speed, leaning and flexibility, which naturally, in its course, pressures higher education to discard, eliminate and exclude everything that can compromise its effectiveness and dynamism for the world of global competitiveness.

In the same analysis, Nussbaum (2015, p. 4) denounces that "obsessed with GDP, countries - and their education systems - are recklessly discarding skills that are indispensable to keeping democracy alive. If this trend continues, according to the author, countries will

soon be producing generations of profit-making machines, instead of upright, critical, and reflective citizens who can understand social processes and oppose injustices. One of the highlighted aspects of this sickening process of democracy is in education. For Nussbaum (2015), both in high school and in higher education, the humanities and the arts are being eliminated. One of the arguments made by public administrators and some politicians is that the humanities and arts are useless ornaments, in a context in which nations need to eliminate all useless elements in order to remain competitive in the global economy.

Based on the considerations presented, higher education in its organization is now spending efforts to prioritize professional technical education over broad cultural education⁵. One of the first steps, according to Dalbosco (2015), is to consider that this process is part of the globalization of the economy, which imposes a way of life based on the maximization of profit and economic efficiency. Thus, driven by the logic of the global market, Dalbosco (2015, p. 128), defines that "global education assumes the idea that to maintain competitiveness in the market, and in turn, to be able to train competitive professionals, it needs to dispense with the humanities. In this scenario, the humanities are considered unnecessary and, therefore, should be eliminated or reduced from the formative field (teaching) and the research field. With the hegemony of technical training and research oriented to the economy of knowledge, the humanities are weakened and their research characteristics and procedures are constantly questioned

It is important to mention at this point that the approach is obviously not meant to deny the importance of a professional, technically and scientifically qualified education for the development of the country. It is a consensus that the solutions to innumerable problems that plague society pass eminently through the progress of science and technology. To deny the importance of a good professional education is to assume a retrograde, outdated and childish position, since it would not recognize that technical-scientific progress is a possible solution, although, as Dalbosco (2015) would say, always partial, to many social problems. The fact is that the overvaluation of the areas linked to the promotion of economic development cannot mean the "suffocation" of the humanities. A good or broad education is the balance between the various conditions and knowledge necessary for the integral development of the human being. This formative ideal has been sought since the Greeks through Paideia and expanded (although with its differences) with the concept of *Bildung*.

⁵ To understand the meaning of broad training, we suggest the essay: "Higher education and the challenges of training for democratic citizenship" (2015), authored by Cláudio Almir Dalbosco and published in the journal *Avaliação*.

Therefore, when dealing with the contemporary conditions of higher education we are not employing a crusade between professional training and humanistic training, but, on the contrary, pointing out that any kind of unbalanced training could lead to perverse conditions for collective coexistence.

It is in this context of global trends that the pedagogy of competence gains strength and is inserted in the educational curricula, reducing human formation to the development of skills and competencies for the labor market and neglecting a critical and open formation to social dilemmas. It is these aspects that motivate Nussbaum (2015) to deal with education within her theory of capabilities. For the author, a higher education based on the lightness of training and the reduction of the humanities tends to lead to a disqualified training that does not add much to the democratic experience. For Nussbaum (2015, p. 3), this formative condition will lead to "a crisis that, in the long run, will probably be much more damaging to the future of democratic governments: a global crisis of education. In other words, Nussbaum shows that any society that intends to be democratic and consolidate a global ethical coexistence needs to invest in human formation guided by ethical values of respect and recognition of the other.

The author's point is that sustaining democratic structures, both in their institutional form and in the ethical living of democratic precepts, requires a humanistic education based on three pillars: critical thinking, universal citizenship, and narrative imagination. The three pillars are an integral part of his theory of justice based on the ten capabilities. Education is addressed, above all, in capabilities four and six. In capacity four - sense, imagination and thinking, Nussbaum (2013) posits that every human being should be able to use the senses, imagine, think and reason - and to do "truly human" things in a way that is informed and cultivated by an adequate education that can guarantee freedom of expression on an artistic, political or religious level. Capacity six, Nussbaum (2013) defines as practical reason. According to the author, practical reason denotes that each being is able to form a conception of good for himself and to critically reflect on the planning of his own life. Both capacities are the result of formative cultivation marked by the right to access human and artistic formative experiences. Higher education, by meeting the demands of a market-oriented training, abandons both capabilities, training a part of the new generations to be financially successful, but unprepared for democratic coexistence. The formation for democratic living is permeated by an education founded on critical thinking, universal citizenship, and narrative imagination.

This abandonment has at least two important consequences for this discussion: the first, by immediate reasoning, is the loss of critical, humanistic, and ethical capacity in the

formation of the individual; the second, which lies in a contradiction, is that these qualities, dispensed with at this time, are demanded by the market society, since the ability to relate to others and the competence to make decisions, within a professional perspective, depend, at least in part, on them.

Nussbaum's (2014, p. 77) theoretical and epistemological grounding of critical thinking skills looks to Socrates for what might be called an examined life, that is, "a life that does not accept the authority of any belief merely because that belief has been inherited via tradition or because, by force of habit, it has become a commonplace thing." Critical thinking is particularly decisive for citizenship, especially in complex and diverse societies that must necessarily deal with the presence of different people belonging to different ethnicities, groups, classes, and religions. It is in this perspective of critical and self-critical thinking that Nussbaum (2014, p. 79) considers "each person to be responsible for his or her own reasoning and to be able to exchange ideas with others in the rational atmosphere of mutual respect, which is fundamental for the peaceful resolution of disagreements [...]". For the consolidation of this democratic attitude for citizenship, it is fundamentally necessary that this capacity be developed primarily through education.

The capacity for universal citizenship is described by Nussbaum (2014) as an ability to understand oneself as a universal citizen that transcends one's deterministic conditions of group or region. According to Nussbaum (2014, p. 79), "to see oneself not only as a citizen who is part of a particular group or region, but as human beings one meets, connected to all others by bonds of recognition." The researcher Dalbosco (2015, p. 135), imbued with the provocations launched by Nussbaum (2014), addresses the following question: "How can one become cosmopolitan, a citizen of the world, without breaking with the provincial and prejudiced vision? In seeking the answer, one comes to the conclusion that increasingly, in a world marked by globalization and interconnectivity, it is required that actions are taken at an intercontinental level and that future generations are trained for cosmopolitan living. For this type of education, Nussbaum (2014) proposes a multiculturalist education that suits an experience for pluralist democracy. With this, continues the author, it is essential that students know the histories and experience knowledge of different cultures in their religious, political, ethnic, social, economic, gender, etc. manifestations.

The third capacity is referred to by Nussbaum (2014) as narrative imagination. Linked to the other two capacities, the narrative imagination expresses the ability to put oneself in the other's place, in an exercise of otherness. Nussbaum (2014, p. 81) defines it as "the ability to be able to think about what it will be like to be in someone else's situation, to intelligently

evaluate their story, and to be able to understand the feelings, desires, and hopes of someone who might be in that situation." In this sense, Dalbosco (2015, p. 138) draws attention to the fact that "it is through narrative imagination that the feeling of compassion towards the other is awakened." However, like the other pillars of democratic citizenship, it also needs to be formed/educated. The best strategy for this training, according to Nussbaum (2014), is through the arts and literature.

The three capabilities understood as pillars for a democratic and citizen formation are threatened by the diminishing presence of the humanities and arts in the curricula in view of the progressive increase in the offer of a formative education for the "emerging" demands of global capital. As Nussbaum warns: "There is a widespread tendency to rip all humanistic elements out of curricula to replace them with memorization pedagogy" (NUSSBAUM, 2015, p. 177). This implies, according to Dalbosco (2015), the option for a specific model of rationality that influences the choice of both teaching content and learning methods. It is considered that this formative process (based on the logic of capital, entrepreneurship, flexibility, innovation, pedagogy of skills, competitiveness, etc.) applies from child training to graduate training.

Higher education is markedly characterized by teaching and research. In the field of teaching, Nussbaum (2014) has already described the condition of the humanities and arts and how they are eliminated from educational curricula, their causes, motives and consequences for democracy. In the field of research, the same phenomenon occurs when one perceives a valorization of areas integrated to economic development in contrast to the decrease of investments in humanities areas. For Nussbaum (2015, p. 123), when observing this condition, one realizes that "the humanities are considered largely superfluous, it seems right to reduce their size and, as far as some departments are concerned, eliminate them altogether.

In this dynamic, both teaching and research are structured and thought of under the prerogative of their contributions to economic profitability. In this vein, how to justify research on Plato (in his formative-pedagogical conditions) or on immigration and its social impacts? According to Nussbaum (2015), research starts to pursue the ideal of applicability and "utility". A good example is the issue of ethics, which is now treated as business ethics or professional ethics, no longer being reflected upon from philosophical theories and their contemporary dilemmas. How, for example, within the logic of competitiveness, could one receive public or private funding to conduct research in philosophy or pedagogy?

In the pure models of education for economic development, it is difficult to find assumptions and norms that protect and value research related to the field of humanities

sciences and arts. The central core for Nussbaum (2015) is that the models of education and, by this bias, involving public or private funding of research, are moving ever closer to the model of economic growth, without regard for their unsuitability to the objects of democracy or their social and collective relevance. Imbued with this educational model, neither the state, nor private enterprise, nor higher education institutions are concerned about investing in research in areas that are not potential for technological and economic development.

The watchword for research, according to Nussbaum (2015, p. 129), "[...] is impact, and by impact the government means, above all, economic impact. In the field of impact, research in the humanities is treated in two ways: a) being excluded or reduced from research edicts or; b) having to modify its methods, objectives, and language to fit the organizational forms of applied research. To the extent that competitiveness and impact are adopted in research, the humanities and arts, according to Nussbaum (2015, p. 134), "are formulated as technical skills that have to be analyzed through quantitative multiple-choice tests, and the creative and critical skills that lie at their core are generally left aside. Research in the humanities is declining - from a position that was already in deficit.

The medium and long-term consequences of the decline of the humanities in the areas of teaching and research is the threat, among other things, of the sickening of democracy. An education model, for Nussbaum (2015, p. 143), based "[...] primarily on the profitability of the global market magnifies the deficiencies, creating a greedy stupidity that endangers the very existence of democracy, and that certainly prevents the creation of a satisfactory world culture." Taking Nussbaum's notes as a reflective condition of analysis throughout the essay, we will deal with the issue of humanities in the MCTIC ordinance n. 1.122.

MCTIC Ordinance N. 1.122 and the condition of research in the humanities

Ordinance 1,122/2020, issued by the Ministry of Science, Technology, Innovation and Communications (MCTIC), is composed of 10 articles, and its main purpose is to determine which areas of knowledge are, from the government's (and not the State's, since it is an ordinance and not a law) perspective, the most important to receive investment and attention from the Union, especially with regard to the resources provided for the Union's Multi-Year Plan (PPA), in the 2020-2023 timeframe.

The text of the document practically boils down to naming what these areas are, grouped into five categories, namely: Area of Strategic Technologies; Enabling; Production;

for Sustainable Development; for Quality of Life. Each category, in turn, comprises subdivisions, all linked to its major axis.

The impact of this document on education can be perceived in two moments: the first, which is in article eight, paragraph one, whose full transcription is as follows:

§ 1 The Financier of Studies and Projects (FINEP) and the National Council for Scientific and Technological Development (CNPq) shall promote the necessary adjustments and adaptations in their respective financing and development lines to incorporate in their programs and actions the priorities established in this Ordinance (BRAZIL, 2020)

The text imposes on agencies with a close relationship with education, such as CNPq and FINEP, to prioritize their resources to the areas defined by the decree, excluding from their priorities those sectors linked to the human sciences. This in a scenario of resources already lower than the investments made in recent years.

The second moment is the third clause itself, which precedes the paragraph mentioned above. This part of the document, more generalist, ensures that the actions emanating from the MCTIC are respected by the other ministries and entities that promote public policies and funding:

III - promote the interlocution with actors from other public policies that have an interface with science, technology and innovation actions in the sectors of the areas defined as priorities in arts. 3 to 7, in order to align priorities, strategies and actions, with a view to strengthening public governance (BRAZIL, 2020).

Thus, it is characterized as an administrative and strategic option the distancing of the humanities as an important sector to be considered in terms of investment. This attitude is not a fact isolated to this ministry, but rather a component part of a perspective contemplated by the government as a whole, especially the Ministry of Education, which has repeatedly expressed the view that the humanities are not essential contributions to society. As an example, one of these public statements:

"All the universities that we have, the money doesn't come from the earth, it comes from taxes. When we buy bread, gasoline for our motorcycles, cell phones, we pay taxes. And this tax is used to pay the teacher's salary, the technician's salary, scholarships, food, all of this. I, as a Brazilian, want more doctors, more nurses, more engineers, more dentists. I don't want more sociologists, anthropologists, more philosophers with my money," said the Minister of Education, in a video published by the "*Direita Raiz*" profile, on Twitter (REZENDE, 2020).

This narrow and diminutive vision, in line with neoliberal thinking, shared by the MCTIC, understands that public resources cannot be allocated to the training of researchers, students, or teachers in the humanities, because they consider the capacities and competencies defined by Nussbaum to be unnecessary and non-productive for the country's development. In this way, they will end up extinguishing or, in a more optimistic view, surviving based on private interests, or on the individual's ability to provide for oneself autonomously, but will disappear when it comes to the interests of the State. In both cases - extinction or precarious survival -, it is fair to think that in a society increasingly lacking in reflections stemming from studies in the human sciences, the consequences of this loss will be perceived by few, precisely because of the deficiencies caused in educational training.

Faced with such a catastrophic scenario for the humanities and the arts in the field of teaching and research, it was to be expected that a reaction from entities and institutions would materialize soon afterwards, manifesting notes of repudiation and criticism of the document. In fact, the reaction of the scientific community, particularly of the entities more directly linked to the social sciences, was not long in coming. This is the case of the University of Brasilia (UnB), which released a note expressing great concern about Ordinance 1.122/2020. For the UnB (2020), among the serious consequences of the act is a reduction in the already scarce resources for research in the country, especially for the areas of Humanities and Linguistics, Literature and Arts, excluded from the five areas of technologies focused on by the ordinance. It is also worth mentioning the Joint Manifesto of the National Association of Directors of Federal Institutions of Higher Education (Andifes) and the National Forum of Pro-Rectors of Research and Graduate Studies (Foprop), which calls for the revocation of CAPES Administrative Rule no. 34, of March 9, 2020, and the suspension of MCTIC Administrative Rule no. 1,122, of March 19, 2020.

Based on these questions, the Ministry tried to balance the process by issuing a second document, Portaria n. 1.329, which includes "basic research, humanities and social sciences" as a priority area for resource allocation. However, this decree does not reassure those who are concerned about the exclusion of the humanities, because the full text of the paragraph, transcribed below, does not allow for the equal participation of the Humanities and the Arts with the other areas to be guaranteed: "Sole Paragraph. Basic research, humanities, and social science projects that contribute to the development of the areas defined in items I to V of the caput are also considered priority, in view of their essential and transversal characteristics. In other words, by placing as a conditionality the contribution to the areas in items I to V, it makes the participation of the Humanities and the Arts subjective, because it is easily

noticeable that any projects from these areas can be discarded, alleging a "non-contribution", or put another way, the text pretends to stimulate the humanities area as well, but in fact it conditions and imprisons it in the linkage with the other areas.

In this regard, the document is the result of a global trend, in which the educational elements assume the idea that to maintain international competitiveness they need to train professionals aligned with the skills and competencies dictated by the productive demands of the market. As Dalbosco (2015) points out, the practice of dismissing the humanities from education and research has become routine, but, on the other hand, the growth of technological education is emphasized. The pursuit of economic outcomes, which is the evident concern expressed in the ordinance, echoes the words of Nussbaum (2015, p. 187), that "in the face of pressure to reduce spending, we exclude precisely those parts of every educational enterprise that are fundamental to conserving the health of our society" (NUSSBAUM, 2015, p. 187). Ordinance 1.122 materializes a neoliberal project that weakens the formation for democratic life and puts research in the Humanities and Arts on the back burner. Such document and its intentions can be allocated to a structural scenario, whose manifestations already found echoes in the last decades, but that, in face of the country's political reality in recent years, has provided fuel on a large scale to accelerate the process. It is now time to analyze the process of the rise of the capitalist regime of knowledge in Brazil, confronting it with Martha Nussbaum's philosophical-educational proposal.

The privatization of higher education and the new Brazilian university: trends, limits and formative challenges.

Privatist and economist policies, implemented in line with structural adjustment reforms, projected globally, have encouraged the retraction of the state with regard to higher education funding, the diversification of funding sources for public universities, and the rise of the knowledge capitalist regime (BRUNNER *et al.*, 2019). The process of "capitalist reterritorialization" (GUATTARI; ROLNIK, 1996) in the field of higher education prioritizes the production of market-oriented knowledge and economic growth. The capitalization of higher education and academic production comprises an intense process of privatization and/or commercialization of knowledge and reallocation of public resources, with emphasis on research that serves the overall competitiveness of the economy. Research universities are determined, through a conservative and mercantile political-ideological matrix, to produce directly profitable knowledge in symbiosis with the business community - the so-called raw material knowledge. According to Silva Junior (2017, p. 129), "this is knowledge ready to be transformed into high-tech products, new production processes and services and is related to the possibility of immediate profits in the economic sphere."

The knowledge-based economy advocates the adaptation of scientific research to market interests and the formation of entrepreneurial universities. The capitalist rationality postulates the construction and materialization of policies based on the architecture of innovation and the transfer of technology to the productive sector. The principle of innovation is responsible for reducing the gap between science and technology and strengthening the links between research universities and productive and commercial activity. Ordinance n. 1,122/2020, designed by the government of Jair Messias Bolsonaro, is linked to a set of policies aimed at the privatization of knowledge and the instrumentalization of scientific research for the market, among them: the V National Postgraduate Plan (PNPG/2011-2020) and the New Framework for Science, Technology and Innovation - Constitutional Amendment n. 85/2015, Law n. 13,243/2016 and Decree n. 9283/2018 (BRAZIL, 2018). The university-company bond, oxygenated by the production of raw material knowledge, epistemologically committed to technological innovation, comprises one of the main mechanisms proclaimed by the neoliberal capitalist rationality to increase the industrial productivity and the economic competitiveness of the country. Scientific production aimed at technological innovation and the formation of pro-market "human capital" designed to meet corporate and hegemonic desires became the key to economic growth and social development (LAVAL, 2015).

The opening of the public university structure to the market and the redirection of state investments around the production of directly profitable knowledge is due, above all, to the political and economic pressures exerted since the 1990s by international organizations, such as the Organization for Economic Cooperation and Development (OECD) and the World Bank. The World Bank document (1995) entitled *La Enseñanza Superior: las perspectivas de la experiencia*, directed developing countries to diversify the sources of funding for public universities - including the expansion of research contracts with industry - and to redefine the functions of government in order to expand the presence of the private/business sector in the field of higher education. Allied to this proposal, the document entitled *Educación Superior en los Países en Desarrollo: Peligros y Promesas* (2000), states that the university has as its main task the development of research and the valorization of areas of knowledge and disciplines that provide advances in the scientific and technological field, whose priorities and products must be defined and materialized through the interaction between higher education institutions and industry (WORLD BANK, 2000, p. 92). OECD countries have been directed to prioritize funding for research focused on technological innovation to enable a "new production revolution" and to "address major global challenges such as climate change and threats to health and resource sufficiency" (OECD, 2018, p. 47).

The "Americanization" of educational policies and the expansion of the mercantile culture in the field of higher education comprise a broad process of subjection of Latin American universities, including Brazilian universities, to the business management principle of the New American University. The political technologies of privatization (endogenous and exogenous) of higher education, materialized in line with the orientations of hegemonic international organizations, intensify the competitiveness among research institutions in the search for financial resources (public and private) and motivate the acceleration and/or adaptation of academic production to the interests of capital to obtain better positions in national and international university rankings. The evaluation and funding policies of higher education in Brazil, embodied around marketable results, have encouraged the formation and expansion of the New Brazilian University (LAVAL, 2015; SILVA JÚNIOR, 2017). This model of university is constituted from sophisticated mechanisms of privatization and commodification of higher education, materialized with the aim of reducing and/or rationalizing/optimizing public resources and meet political, economic and business interests. The principles of efficiency, performance, and productivity, imported from the toyotism/neoliberal rationality, have blurred the boundary between public and private in Brazilian higher education.

Market demands on educational policies and the rise of the capitalist knowledge/learning regime, projected in defense of economic growth, tend to supplant the model of "open science" and knowledge as a public good. Education for profit and the market-oriented science model neglect humanities disciplines and research projects in favor of an essentially scientific and technological education. The introduction of economic discourse into the field of education threatens the production of disinterested knowledge and the foundations of classical liberal education, which underpin the formation and enhancement of democratic societies. The political technologies of privatization aim, at all costs, to bend education to the demands of the labor market, profitability, and performance (LARROQUE, 2019; LAVAL, 2015). The precursors of neoliberalism at a global level, with the support of conservative politicians and public administrators sympathetic to the values and desires of the financial elite, proclaim the reduction of resources for the production of supposedly unnecessary knowledge and the political and financial prioritization of areas of knowledge and research projects aimed at innovation, in order to increase the competitiveness of companies and national states in the global market. This submission of education to business, whose reforms have encouraged the production of raw knowledge and the splintering of the humanities, has led to the emergence of a global crisis of education; a crisis that directly affects the pillars of democracy and stifles the values of pluralism (NUSSBAUM, 2015).

By supplanting the humanistic aspects of science, education for profit cancels out the possibilities of forming critical and reflective citizens susceptible to democratic respect and equality. The educational reforms and the political technologies of privatization, projected by international organizations and internalized by public administrators, thirsty for wealth and subject to the business subjectivity (productivist and competitive), discard, in an imprudent way, a set of skills that are essential for the maintenance and improvement of democracy. According to Nussbaum (2015, p. 4), if this process of commodification of education continues, "all countries will soon be producing generations of profit-making machines, rather than producing upstanding citizens who can think for themselves, critique tradition, and understand the meaning of the sufferings and achievements of others. That is what the future of democracy depends on. Economic development, contrary to the narratives defended by capitalist rationality, does not provide, by itself, the reduction of social and economic inequality, of environmental impacts, and of violence against human diversity and the plurality of ideas. Describes Nussbaum (2015, p. 15), "producing economic growth does not mean producing democracy. Nor does it mean creating a healthy, participatory, and educated population in which opportunities for a good life are within the reach of all social classes."

Democracy will be able to remain stable if its citizens are properly educated. Beyond training good technicians and ensuring the process of technological innovation, a living and vigilant democracy requires the formation of educated and understanding citizens who are able to genuinely care about the lives of others, act with empathy and respect toward historically marginalized cultures and groups, and recognize that all people have equal rights. The human development model, committed to democracy and the welfare of the population, emphasizes the development of the ability to reason critically and appropriately about political issues, projects, and actors, to express dissenting opinions, and to perceive oneself as part of a complex world, in order to transcend personal and local interests, the values imposed by the commodity culture, and the limits imposed by conservatism (political, religious, cultural). Education needs to enable the development of "educated minds that can reason critically about alternatives and imagine an ambitious goal-preferably one that includes not only personal or even national wealth, but also includes human dignity and democratic debate" (NUSSBAUM, 2015, p. 138).

Final considerations

By analyzing the educational reforms and the process of capitalist reterritorialization in the field of Brazilian higher education in the light of Nussbaum's philosophical-educational proposal, it is possible to state that Ordinance 1.122/2020 represents a political proposal from the government that is characterized by prioritizing the neoliberal criteria of quantitative productivism, economicism, and disregard for the humanities. The consequences are demotivation for the formation of qualified professionals (teachers, lawyers, artists, musicians, sociologists, philosophers, psychologists, historians, anthropologists, political scientists, among others), or even prevent research that is fundamental for the democratic improvement of Brazilian society. Ordinance 1.122/2020 is presented as segregating, imposing, authoritarian, and an attack on the humanities. It is no exaggeration to say that the federal government's contempt for the humanities is a reflection of a political structure that intends to erase the "fingerprints" of democracy in Brazil, especially through the formation of a pro-market subjectivity, subordinated to the nebulous principles of meritocracy, productivism, private efficiency, and profitability. The capitalist regime of knowledge/learning, in an accelerated process of reterritorialization in Brazil, emphasizes the privatization of knowledge, the decrease of public funding, the diversification of funding

sources for research universities, and the opening of educational institutions to the educational market.

The capitalization of education and knowledge serves the interests of the political, economic, and business elite, and proposes satisfactory responses to commodity culture, but underlies the formation of critical and ethical citizens. According to Nussbaum (2015), we are going after the goods that protect, satisfy, and comfort us-what Tagore called material "coverage." However, we seem to be forgetting the soul, what it means for the mind to open the soul and connect the person with the world in rich, subtle, and complex ways. The formation of citizens capable of feeling a more inclusive compassion and of acting in an empathetic and reflexive way toward the difficulties and challenges that emerge from plural and complex societies depends on a model of education committed to global knowledge, the human sciences, the arts, and Socratic self-criticism. The paradigm of human development, consistent with the formation of ethical and democratic citizens, comprises, above all, two formative purposes that, in turn, reinforce each other, namely: a) the formation of critical and rational thinking, driven through the practice of philosophical debate; b) and the development of "democratic emotions," especially from literary fiction - both refined with the help of the arts (LARROQUE, 2019, p. 44). Criticality and empathy are elements that, when worked together, put in check the corporate subjectivity and the pro-market behaviors, focused on profit and human exploitation.

The humanities sciences represent the space where it is possible, through dialogue, to present and counterpose models of society, of individual conduct, of management of the educational structure itself: weakening this space, depriving it of resources, instigating public opinion against its valorization, all this belongs to a perspective of dismantling criticality and of a commodification of knowledge.

Production, research, teaching - in short, the space that the humanities and the arts occupy and will occupy in the future is directly related to the administrative acts of the Brazilian State, as well as to society's positioning, both in its general aspect and in the segments more aligned to education. The principles described by Nussbaum, although not restricted to the national case, are quite fragile at this historical moment.

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