ARTIGO

Development of universities and academic libraries from the middle age to modernity

Desenvolvimento das universidades e bibliotecas universitárias na idade média até à modernidade

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RESUMO

O ensaio analisa a origem das universidades, suas lutas pela autonomia, organização das estruturas administrativa e curricular e relata a existência das bibliotecas ligadas às universidades, desde a Idade Média até a Modernidade. No século XIX a educação é assumida pelo Estado, criando uma cobertura legal que garante às universidades a liberdade científica e pedagógica. A biblioteca universitária teve o seu desenvolvimento ao longo dos séculos, tentando acompanhar essas mudanças. Mas, é no decorrer desse século que alguns serviços e foram surgindo os entendimentos da relação da biblioteca com a universidade. Entretanto, foi a partir da Segunda Guerra que o ensino começa a ter característica de atividade de massa, e a biblioteca universitária se torna uma parte importante na universidade. Cresce a ênfase ao acesso às coleções, há financiamento do Estado para desenvolvimento de coleções e estruturação de suas bibliotecas, dão-se início às atividades de cooperação e de automação. Estas começam a mudar a forma como são oferecidos os serviços e produtos das bibliotecas universitárias. A partir de 1970, as novas tecnologias penetram nessas áreas, e as universidades e suas bibliotecas são afetadas por tais tecnologias. Propostas de reformas surgem gerando novos desafios para estas duas instituições centenárias.

PALAVRAS-CHAVE: Biblioteca universitária. Idade Média. Modernidade.

ABSTRACT

The essay analyzes the origin of universities, their struggles for autonomy, administrative organization and curricular structure and an account of the existence of libraries linked to universities, from the Middle Age to Modernity. In the nineteenth century, education is assumed by the State and provides a legal cover to universities scientific and pedagogical freedom. The university library had its development over the centuries, trying to keep up with changes. However, it is during this century that some service and were emerging the understanding of the relationship between the university library and the university. However, it was after the Second World War, that teaching begins his walk to the mass school, and the university library becomes an important part of the university. There is a growing emphasis on access for collections, state funding for collections development and structuring of their libraries, cooperation and automation activities. These changes begin to transform the way products and services of academic libraries. From 1970, new technologies penetrate in these areas and universities and their libraries affected due to such technologies. Reform proposals emerge generating new challenges for these two centennial institutions.

KEYWORDS: Academic library. Middle Age. Modern Age.

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1 INTRODUCTION

This essay analyzes the origins of universities, their struggles for autonomy, organization of the administrative and curricular structure and presents an account of the existence of libraries linked to universities, from the Middle Ages to Modernity.

Firstly, it is important to point out that Middle Ages, according to Andery (2002), has as a temporal reference the period from the Fifth to the Fifteenth centuries. In addition, the characteristics of society then will be addressed, period during which numerous of the social and power relations are configured and places of knowledge emerge, especially the universities and, shyly, the university libraries.

In the last centuries of feudalism, notably in the thirteenth century, when universities were emerging in the West, feudal society shifted from an economy of exchange to money. There was an increase in the division of labor, greater human interdependence, the development of cities, the origin of tributes, the emergence of intellectuals, or men of knowledge of the Middle Ages (ELIAS, 1993, LE GOFF, 1995, ANDERY et al. GOODY, 2008, p 246).

According to Andery et al. (2002) and Elias (1993) there was an increase in population, characterized as one of the main catalysts in the structure shift of human relations and institutions corresponding to them. This increase in population is related to the apex of the migration movement, the intensification of commerce and the consequent growth of the cities, which gave a greater complexity to this society of the eighteenth century in relation to the society of the previous centuries.

Feudal society, according to Elias (1993), has gradually been replaced by absolutist society, one in which one of the great feudal lords - the king - seized the opportunity to control a more stable government in a region that encompassed many territories, a "State". It is owed to this absolutist society the inheritance of patterns of civilization. "In this aristocratic society... some of these injunctions and prohibitions that are still perceived are modeled, or at least prepared," (ditto, 1993, p. 18-19).

In the twelfth century, the development of cities, simultaneously to the emergence of the courts of the great feudal lords, meant an increase in the division of labor and interdependence of the people. Cities are one of the essential features of the new intellectual landscape of Western Christendom, centers of irradiation in the circulation of men, as full of ideas as of goods, places of exchange, markets and crossroads of intellectual commerce along with the new institutions that constitute a common space to all Christendom (ELIAS, 1993; LE GOFF, 1995; ANDERY *et al*, 2002; GODDY, 2008).

Born with the cities, which has constituted from the tenth and eleventh centuries in the intellectual of the Middle Ages, which becomes noticeable in the twelfth century. But there is no consensus around the emergence and the concept of intellectual. For Le Goff (1995) the Middle Age intellectuals are the new types of socio-professionals who emerge in the twelfth and thirteenth centuries, in the cities, whose profession is to write and/or teach. The men of knowledge, studied by Verger (1999), especially those of the fourteenth and fifteenth centuries, are individuals who have the right type and level of knowledge and technical skills resulting from acquired knowledge.

In a society ideologically controlled by the Church and increasingly politically framed by the secular and ecclesiastical bureaucracy, the intellectuals of the Middle Ages are, first of all, according to Le Goff (1995), faithful servants of the Church and the State.

In addition to social forms, such as cities, and the intellectuals who take on characteristics of this period, institutions such as the State also acquire contours of the period. The origin of the state is controversial. Some consider it an institution that has existed since antiquity; others consider that it began to exist in modernity. Those who consider the state as the Greek polis see more continuity than discontinuity, that is, the state has existed since that time. According to Bobbio (1987), who considers as a constitutive element of the State the administrative apparatus and the fulfillment of certain functions that only the Modern State plays, must sustain that the Greek polis is not a State, that the feudal society did not have a State.

In Bobbio's (1987) conception, it was during the Middle Ages that this juridical conception of the State was elaborated, which was not foreign to Roman political theory. Elias (1993) goes in a similar direction when he shows that the processes of transformation of the state and of centralization have found their first expression visible in the absolutist form of government whose sociogenesis occupies a decisive position in the global process of civilization.

Elias (1993) defines the state as the power to control a more stable government in a region that encompasses many territories, and argues that in the state's sociogenesis (time of absolutism) the struggle was for the centralization and control of the government, having the process of growing centralization of society been expressed for the first time in the absolutist form of government.

For Andery *et al.* (2002), another social form that had enormous influence in the Middle Ages was the Church. In addition to its economic power, it had a centrally organized and hierarchical structure that enabled it even more hegemony in the Middle Ages. In intellectual life, the Church controlled not only the conveyance of knowledge, but also its production. In this context, the production of scientific knowledge, which began to intensify in the eleventh century, was more practical than explanatory. Andery *et al.* (2002) comment

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that in regard to the explanations given to the phenomena, these are impregnated with values defended by the Church.

Elias (1993) attributes to the Middle Ages' phases and highly dynamic sectors that continue towards modern times, the stages of expansion, increasing division of labor, social transformation and revolution, improvement of the instruments of labor, even if the rhythm of the social development accelerated sharply after the Middle Ages.

This position of Elias (1993) is otherwise viewed by Goody (2008), who does not accept the medieval period in Europe as a "progressive" stage in the evaluation of the development of society, since it considers exaggeration to see feudalism as a period of progress in relation to irrigated production, the permanent cities and Eastern societies. For Elias (1993), changes in the process of civilization were not performed rationally, but by the order of the plans and impulses intertwined throughout history. These changes observed from the point of view of the dynamics of social processes show that the dynamics of interdependence move the social transformations, and maintains, in the present and in the past, the man in movement and presses it in the direction of changes in its institutions and in the global structure of its configurations.

If we consider the changes that society assumes in the social transformations (sociogenesis) of the forms of government, economy and individuals, that the construction of knowledge is related to the emergence of institutions that transmit and disseminate this knowledge, such as temples and academies in antiquity , schools, universities in the Middle Ages, we can agree with Le Goff (1995) when he states that the thirteenth century was the century of corporations and also with Elias (1993), who states that this was not a time of stagnation. However, there is another side addressed by Goody (2008) for whom, while the Middle Ages grew in manufacturing and commerce, it neglected the decline of literate cultures as well as urban society and its associated activities.

In a similar line of thought, Andery *et al.* (2002) observe that although scientific production, in what concerns practical matters has been superior to the earlier phase of the period, was rather limited in this period especially by the role that the Church played in this medieval period. There was encouragement to the production of technical innovations and incorporations of innovations that come from other peoples, such as the East.

It is from this period of the Middle Ages that can be drown from Elias (1993) the concept of network, interdependence that influenced the genesis and development of institutions and whose growth of interdependence, according to this author, influenced relatively stable institutions. These concepts of interdependence and configurations allow society to deal with a network of relationships such as conflict, engagement, power relations.

2 CREATION AND ORGANIZATION OF UNIVERSITIES IN THE MIDDLE AGE

Although it is often as obscure as other corporations, the thirteenth century is regarded as that of universities, because it is that of corporations. Universities, in Le Goff's (1995) analysis, are slowly organized through successive conquests, and their statutes sanction these conquests late.

Universities appeared in Bologna, Paris, Montpellier, and Oxford in the early years of the thirteenth century, derived from pre-existing schools and had in common being autonomous bodies of a corporate nature. To be autonomous meant, according to Verger (1999), being able to establish itself and organize freely what was the reason of being of university cooperation: teaching, programs, the length of studies, the modalities of examinations, and graduation. After Bologna and Paris, came the universities of Salamanca (1219), Naples (1224), Prague (1347), Pavia (1361), Krakow (1364), Louvain (1425) and many others.

For authors, such as Burke (2003) and Le Goff (1995), in the Middle Ages, universities focused on the transmission of knowledge, and not on its discovery. Its essential feature in the thirteenth century was to be an ecclesiastical corporation. This explains its ambiguity in society and its structure crises, for although more and more lay people were present, university students were considered clergymen and depended on ecclesiastical jurisdictions.

The university system allowed a real social ascent, which was done through the examination. University statutes regulated the organization of studies (LE GOFF, 1995). Universities know periods of administrative organization and studies of different models of growth, of very unequal importance, of influence in the formation of literate European elites, of integration to the State's new structures. They go through the creating dynamism of universities, through the weight of scholastic teaching, the high costs of the courses, their disorganization, the absence of teachers, but they also undergo a renewal of doctrines and their increasingly recognized social and political importance. In the late fifteenth century, had greater importance in its social role. Le Goff (1995) and Verger (1999) point out that, during this period, university libraries are in a very incipient stage.

In this scenario, universities have grown and organized. There were about fifteen studia generalia in 1300 and more than twenty in 1346 (VERGER, 1999). Studia generalia is the term that was also used in the Middle Ages to refer to the University. For this author, the central element of the medieval educational system was constituted, from the thirteenth century, by the universities, or, as it were, by the studia generalia.

Universities, before the fourteenth century, were born and developed without the support of external powers. From the fifteenth century, these powers took this initiative, for the papacy would not interfere as much as the secular powers, although late, would do so to secure the classical status of the studium generalia. The political will was not enough to ensure the success of the studium generalia. It was necessary to have a favorable context, either by a pre-existing school tradition or by a sufficiently strong social demand (VERGER, 1999).

Over the course of the fourteenth and fifteenth centuries the universities lost their international character, the main cause is the founding of numerous new institutions. According to Le Goff (1995), this multiplication of institutions served to erase or reduce an international recruitment of the most important and ruin the system of nations, which is so significant within universities, since it was a fundamental part of its structure.

By the 14th century, the university phenomenon was mainly Mediterranean. The southern studia generalia almost always drew inspiration from the Bolognese model, in which the students were responsible for the organization and management of the university, under the supervision of the Church, but these southern universities already had, by the content of their teaching, a strong laic collaboration. In the northern half of Europe, the situation was different. The model, according to Verger (1999), was that of the "university of masters", in which each teacher had autonomy.

Despite the findings by various authors that institutions in Islam did not have university status, Goody (2008) states that higher education has always existed, both in the West and in the East. The author argues that Islam had important religious and legal higher education institutions and that perhaps the most important is to say that these institutions were almost exclusively devoted to religious studies, whereas in Europe, although religion was initially dominant, other subjects were allowed to develop within the domains of the university.

In the process of extinction of the system of nations within the university, throughout the fourteenth and fifteenth centuries, universities were integrated to the new structures of the State. A state that claims its rights over social life and has legislative, executive and legal powers (LE GOFF, 1995).

Thus, the university favored the development of political individualism in the late Middle Ages, but it was not individualism that was fundamental in the human experience acquired at university, but the experience of university sociability, the powerful integration of the clientele that structured the whole society. Therefore, according to Verger (1999), university life was the learning of privilege, but it was also the learning of responsibility.

3 THE UNIVERSITY LIBRARY IN MIDDLE AGE AND ITS PRECARIOUS EXISTENCE

In the Middle Ages, universities and libraries integrated a set of places where the knowledge that Burke (2000, pp. 54-56) called the geography of knowledge emerged and prospered. For the author (p. 57), the monastery, the university and the hospital, and later the laboratory, the art gallery, the bookstore, the library, the amphitheater of anatomy, the office and the cafe were traditional knowledge headquarters at a micro level.

In France, Verger (1999) identified, among the first university libraries, composed of only a few dozen volumes, those of Orléans (1411), Avignon (1427), Poitiers (1446) and the Canon Medical and Law schools of Paris (1395 and 1475). It was almost exclusively at Caen that an inventory in 1515 identified a collection of 227 volumes. Other universities were more "well-endowed," such as Oxford, whose library, founded in 1412, developed mainly thanks to the donations of the Duke of Gloucester, with 280 books, between 1439 and 1447.

Ollè (1971) refers to the beginning of the Oxford University Library in the fourteenth century as a collection of books in an adjoining room at St. Mary's Church, followed by a better accommodation known as Duke Humfrey in the 15th century. Later, Thomas Boddley (1545-1613) offered the reconstruction of the library and supervised it, conceiving it as a religious instrument, since it contained Protestant and Catholic works (ESCOLAR SOBRIÑO, 1990).

In addition to private libraries with fewer books, Verger (1999) identifies university libraries as one of three types of institutional libraries of the time, as well as princely and cathedrals libraries. These libraries, according to the same author, were only exceptionally consulted by men of knowledge. They counted, first and foremost, on their little personal libraries. It was only exceptionally, and to consult some work in its original version, that they would go to one of these libraries. University libraries were "often much less important and practically did not exist before the fifteenth century" (*ibid.,* P. 114).

4 THE UNIVERSITY AND THE UNIVERSITY LIBRARY IN MODERNITY

This topic presents the scenario of modern universities and university libraries, from the 17th century until the beginning of the 21st century, with a focus on rational thought, the formation of the modern state, capitalism and the rapid and intense changes that occurred in the period between the twentieth and early twenty-first century, in relation to the role of the state, capitalism and new technologies.

The term modernity will be adopted, according to Giddens (2002, 21), who uses it to refer to "the institutions and modes of behavior established after feudalism, but which in the twentieth century have become world-wide in their impact." For the author, modernity is a way of life or organization that emerged in Europe from the seventeenth century, but especially a time in which elements of discontinuities[1] such as rhythm, scope of changes and urbanism are the elements that separate modern institutions of traditional social orders.

Giddens (2002) considers the first phase of modernism, from the seventeenth to the nineteenth century, time when there was control of social relations in the same space. And the second phase, that of late modernity or high modernity, from the twentieth century, a time when space and time are emptying, with displacement of social relations of local contexts by means of indeterminate parts of time and space. This author's conceptual approach regarding the basic characteristics of modernity serves, in this review, as a conceptual window to highlight in this study this complicated concept of modernity.

For Giddens (1991) the modern world is extremely dynamic. This dynamism, which is inherent in modern institutions, consists of three elements that allow it to be explained: a) time and space: condition of articulation of social relations over wide intervals of space-time, including global systems; B) disengagement mechanisms: which capture the displacement of the social relations of the local contexts and their rearticulating through the indeterminate parts of space-time; C) reflexivity: which differs from the reflexive monitoring of all human activity and refers to the susceptibility of most aspects of social activity and material relations.

Regarding scientific knowledge, according to the author, reflexivity "undermines the certainty of knowledge, even in the central domains of natural science. Science depends not on the inductive accumulation of proofs, but on the methodological principle of doubt" (*ibid.,* p. 26).

These basic characteristics of modern institutions, including the action of disengagement and reflexivity, show that modernity is inherently globalizing.

The globalization of social activity is, in a way, a process of developing genuinely global ties, such as those involved in the global system of nation states or the international division of labor. Globalization refers to the intersection between presence and absence, to

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[1] The discontinuities that separate modern institutions from traditional social orders are: a) the pace of change - traditional civilizations may have been more dynamic in other premodern systems, but the speed of change in modern conditions is extreme. If this is perhaps more obvious in technology, it pervades all other spheres; B) scope of change - different areas of the globe are interconnected and waves of social change cross the whole earth; C) the intrinsic nature of modern institutions - some institutions are not in previous periods, such as the political system of the nation-state; Others have misleading continuity with preexisting social orders, such as the city whose modern settlements incorporates traditional city sites. Modern urbanism is ordered according to different principles from those established by the pre-modern city in relation to the countryside in earlier periods. The author thinks that in trying to explain the nature of modern societies, has to grasp the specific characteristics of the nation-state and try to understand the question of order, of how social systems link the time and space (GIDDENS 1991, p.15 -16; 22).

the interlacing of events and social relations "at a distance" with local contextualities (*ibid.,* p. 27).

Continuing, Giddens (2002) points out that high modernity introduces risks that previous generations did not have to face. The influence of distant events on nearby ones, and on the self, becomes more and more common. Printed and electronic media play a central role. It is acknowledged, in agreement with this author, that in high modernity the influence of distant events on forthcoming ones, and on the self, becomes more and more common. A period is reached in which the consequences of modernity are becoming more radicalized and universalized than before.

In this paper will not be argued the complex discussions about concepts and limits of modernity and postmodernity. We suggest reading works by authors such as Giddens (1991), Lyotard (1985), Harvey (1989) and others.

For capitalism, the periodization of Boaventura de Sousa Santos (1994 *apud* MAGALHÃES, 2004, p. 72) will be used, dividing it so: nineteenth century - liberal capitalism; organized capitalism - the late nineteenth century to 1960; Disorganized capitalism - late 1969s and early 1970s.

5 SOCIAL, ECONOMIC AND POLITICAL CONTEXT IN MODERNITY

In the late 16th and early 17th centuries, according to Magalhães (2004), a new way of living and thinking in Europe emerged, different from that of the medieval period, when societies had organized around the supremacy of God and the Centrality of their secular representation, the Church: kings ruled societies by God's will and with the blessing of the Church and the life of society and people was governed by an engaging religious narrative.

For Abrantes (1998), Japiassú (2001) and Soares (2001) there were changes of nature images and science in the seventeenth century and Modern Science, which was constituted with the Scientific Revolution of the seventeenth century, corresponded to a process of gradual and general change in the intellectual and cultural climate of Western Europe in the middle of the sixteenth and seventeenth centuries.

The centrality of thought in this period was the reason that replaced the place God occupied in the Middle Ages (Magalhães, 2004). This change in the centrality of thought gave rise to a new conception of the God-Nature relation which, for Abrantes (1998), was a conditioning factor for the new conception of Science.

From the seventeenth century, a strong tendency towards the adoption of a mechanical image of nature was confirmed in the construction of scientific theories, particularly in the

field of physics, after the metaphors of the antiquity organism prevailed throughout the Middle Ages. The machine, according to Abrantes (1998), is a way of presenting this mechanistic program of thinking about nature.

The social thought of the eighteenth century and the first half of the nineteenth century most reflected the ideas, interests and needs of the bourgeois class and expressed, albeit in different forms and in varying degrees, three basic values of bourgeois society: freedom, individualism and equality. The notion of freedom was expressed in the ideas of the classical economists, who advocated free trade and free competition and the suspension of all restrictions on commercial and industrial activities imposed by mercantilism; The economy must be made by itself according to natural laws (ABRANTES, 1998, ANDERY *et al.,* 2002).

For Soares (2001) the scientific conception of the eighteenth century was that in which the Cartesians recognized the superiority of the Newtonian perspective and sought to incorporate experimentation, affirming a new conception of scientific truth obtained through experimental evidence.

Japiassú (2001) comments that science came to operate according to norms of a quantified rationalism and the conception of nature was conceived to obey a rational order determined by an experimental philosophy, which was reflected in other forms of knowledge. The confidence that all deposited in the new science at the end of the eighteenth century was virtually unlimited.

The nineteenth century, according to Hobsbawm (1995), was a period of material, intellectual, moral, almost uninterrupted improvement in the conditions of civilized life. At the beginning of this century, research activities began to be systematized and institutionalized and it became apparent that technical progress accelerated scientific progress. Thus, for Japiassú (2001) and Szmrecsányi (2001), this interaction between science and technology brings forth innovations that were responsible for the materialization of the Second Industrial Revolution in Europe and the United States during the last half of the nineteenth century.

The relations between science, technology and economics became visible during the nineteenth century, partly through the transformation of sciences and techniques into autonomous social activities for differentiated activities (SZMRECSÁNYI, 2001).

In the late nineteenth century, according to Andery et al. (2002), scientific knowledge was developed to create new industries and, finally, in the twentieth century, was in full development of the scientific industry. Science and production express, more and more clearly, the interrelation and the mutual influences that unite them.

The state and society in the nineteenth century were based on the values of reason, public debate, education, science and the capacity for improvement of the human condition (HOBSBAWM, 1995).

When studying the formation and development of the state, Elias (1993) shows that these spheres move and interdepend in a process that in the state struggles are fought by the power, but also shows that the emotional and rational impulses of isolated people constantly intertwine and determine the course of historical change.

Max Weber (1994) used the concept of rationalities in the evolution of history and to reach the conceptual framework of the organization of the modern state, analyzed its employees, the forms of power of public administration, the bureaucracy, the political action in this sphere, the types of domination, the standardization of the ideal types, among others. From the sociological point of view of a political association, physical coercion is the specific means of defining the state (*ibid.,* 1999).

Weber, according to Nobre (2005), dealt with the constitution of the State as a domination structure, based on bureaucratic functioning, on the submission of agents to constituted laws and, above all, on military concentration and monopolization of the right to use legitimate violence.

For Giddens (2002), the nation-state is one of the most important social forms produced by modernity. In the view of this author, the nation-state as a sociopolitical entity contrasts with most types of traditional order, because it's developed as part of a system of nation states, has specific forms of surveillance and territoriality, monopolizes effective control over the means of violence, follows a more general feature of modernity, which is the rise of the organization.

In his effort to understand the formation of the state in capitalism, Weber (1999) shows that the struggle between national states for power created greater opportunities for Western modern capitalism, and was in the rational state based on Rational Law and the bureaucracy of professionals that, in Weber's analysis, capitalism could develop (OPUSZKA, 2011).

Capitalism is seen by Giddens (2002) as one of the institutional axes of how modernity can be understood, beyond the axis of the industrialized world, as far as the generalized use of the material force and the machinery in the processes of production is concerned. The nation-state and capitalism in terms of institutional grouping have for Giddens (1991) a special meaning in the development of modernity. For this author, systematicis´ capitalist production and the nation-state, closely related, have been projected, mainly by the power they have generated, by promoting the acceleration and expansion of modern institutions.

Castells (2005) points out that the technology present in all periods of history has its differential in the twentieth century in the new technologies that, between the mid-1970s and 1990s, spread throughout the world at an extraordinary speed and with a characteristic of immediate application in the very development of the technology generated, connecting the world through information technology.

History shows that in the twentieth century the conceptions that support areas and sectors of modern society are founded on reason, relying on a system of economic and social development in the phase of organized capitalism, having a modern state structured and a technological revolution of dimensions never seen before.

As can be seen, the twentieth century was, according to Ianni (1999), characterized by wars and revolutions, coups and counter-coups, often involving north-American, English, German, French, Italian, Japanese, and other imperialist domains.

Especially in the period from 1914 to 1991, which Hobsbawn (1995) called "Brief Twentieth Century" (from World War I until the collapse of the USSR in the late 1980s and early 1990s) a period of major disasters, surprising developments and loss of direction, that the author divides in three ages: Age of catastrophe (1914 until after World War II), Golden Age (after World War II until 1970) and Age of Collapse (from 1970 until the 1990s).

In the Age of Catastrophe, there was a collapse of values in institutions of liberal civilization that had already advanced throughout the nineteenth century, such as: discontinuity of the dictatorship, commitment to governments and freely elected representative assemblies, and an already accepted set of rights and freedoms of the citizens (*ibid.,* 1995).

In the Golden Age there was a period of extraordinary economic growth and social transformation that profoundly changed human society more than any other period of comparable brevity. For Hobsbawm (1995), research and development in this period have become central to economic growth.

Still in the Golden Age there was a profound restructuring and reform of capitalism that produced a mixed economy. Most striking in this period, according to Hobsbawm (1995), was the extent to which the increase in economic development that seemed to be driven by the technological revolution produced in the transformation of people's daily lives; In the discovery of the production of complex technology and in the demand for low labor, or its replacement, caused by the emergence of new technologies.

It was the 1970s, according to Castells (2005), the probable time of the birth of the technological revolution and a dividing line in the evolution of capitalism, which will coincide with the beginning of the Age of Collapse, from 1973 to 1990, when, according to Hobsbawm, (1995), the world lost its references and entered into crisis. According to Magalhães (2004, based in Santos), 1970 marks the beginning of disorganized capitalism.

After 1974, the Keynesians (who defended the welfare state) and the neoliberals defended the State's diminishing control of issues. A transnational economy was established that weakened a large, virtually universal institution until 1945: the territorial nation-state (HOBSBAWM, 1995).

Under neoliberalism[2], the increasing and widespread dissociation between the state and civil society makes the state much more committed to everything that is transnational, and global, reducing its commitment to the concerns, demands or tendencies of civil society. For Ianni (1999), large sectors of this society are challenged to follow the market logic, and with the strength of transnational corporations, there is difficulty or unfeasibility of the negotiating capacity of the different categories of wage earners.

According to Ianni (ibid., 1999), in the twentieth century, many national negotiations had to be formulated and put into practice, and many negotiations, struggles, conflicts, frustrations and achievements were necessary, as these proposals were confronted with interests and traditions of the oligarchies committed to primary economies exporters, devoted to maintaining the agrarian-commercial model, with power structures committed to political and economic monopolies.

The Cold War between the United States and the USSR, which occurred from the postwar period until 1987 and ended at the Washington Summit, led to the bankruptcy of the foundations underlying the international structure and structures of the world's internal systems (HOBSBAWM, 1995).

For Ianni (1999), after the Cold War, from 1987 onwards, the development of capitalism and a new cycle of globalization of capitalism was intensified, which was constituted while the International Monetary Fund (IMF), the World Bank (IBRD), the World Trade Organization (WTO), and transnational corporations pressured national states to promote political, economic, and socio-cultural reforms that involved legal-political institutions designed to foster the dynamics of productive forces and capitalist production relations.

Continuing, Ianni (1999) points out that the pressures to promote state restructuring were the most diverse: privatization and deregulation of the world economy, promotion of privatization of state productive enterprises, and health, education and social security

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[2] Neoliberalism - a theory that originated in classical liberalism in the twelfth century, postulates that economic activities must be conducted by the market to maximize the well-being of society. Its adherents defend the minimum state and consider that the public policies are responsible for the crisis that crosses the societies, since they affect the social and moral economic order because it tends to disrespect the principles of freedom and individuality (AZEVEDO, 2004, p. 12). In a state with neoliberal policies, service providers, including in the education sector, are competing freely for customers because, in principle, increasing supply provides higher quality (MENEGHEL, [2002?]).

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systems. Markets were opened, social achievements were being reduced or eliminated from the slogans: market, productivity, competitiveness.

In this context, what was at stake in the restructuring of the state aimed at creating the minimum state and enacting the formation of emerging markets was the replacement of the national, capitalist or socialist project for the project of transnational capitalism, transnationalized, administered from above and outside (*ibid.,* 1999).

In the 1980s and early 1990s, the capitalist world was confronted with interwar problems that the Golden Age seemed to have eliminated: mass unemployment, severe cyclical depressions, mismatch between state revenues and expenditures, and the increasing gap between rich and poor (HOBSBAWM, 1995).

At that time, several transformations occurred: almost all Third World countries became deeply indebted, and in 1990, in Brazil, Mexico and Argentina, large international debtors, the death of the peasantry occurred, along with growth of professions that required secondary and higher education; The number of students has increased greatly; The working classes, after the 1990s, were victims of new technologies; Increased the number of women in the labor market and access to higher education; There was a cultural revolution expressed by the changes in the family, in the structures of relations between the sexes and generations (*ibid.,* 1995).

Companies around the world have responded to declining productivity and have taken new paths, such as technological innovation and organizational decentralization. For Castells (2005**,** p. 136-137) "the new information technologies were essential instruments". These technologies were already noticed before the 1940s, but only in the 1970s did they spread widely, culminating in the 1990s with the creation of network computers (*ibid*., 2005).

For Giddens (2002) the modern era faces an indisputable feature that separates it from any previous period, which is its extreme dynamism in a very fast world, both in the rhythm of social change and in the breadth and depth of this change that affects practices and modes of behavior.

At the end of the millennium, there was a technology based on advanced theories and scientific research that dominated the great economic explosion of the second half of the twentieth century (HOBSBAWM, 1995). The system of technology, according to Castells (2005) has become interactive and shared, also changing its social and organizational interactions.

Printed media and electronic communication increasingly influenced the development and expansion of modern institutions directly involved with the immense increase in mediation of the experience that these forms of mediation provided (GIDDENS, 2002).

Dupas (2001) points out that the machine is replaced by information and contact between people is mediated by the electronic screen.

It is important when observing the origins of high modernity, to also note the development increasingly interwoven of printed media and electronic communication. Modernity is inseparable from its own media, the printed texts, and then the electronic signal. Today the printed word remains at the center of modernity and its global networks, and for Giddens (2002), virtually all known languages of humanity have been printed.

Virtual images from television, film, and video present experience textures via media that are not available in the printed word. However, such as newspapers, magazines and other types of printed matter, these means are both the expression of the globalizing and disembedding tendencies of modernity, as instruments of these trends. As modalities for the reorganization of time and space, Giddens (2002) notes that the similarities between print and electronic media are more important than their differences in the constitution of institutions.

Technology, according to Dupas (2001), has become one of the components of power, lending itself to expanding participation in global markets to allow new investments in technology and to feed back the cycle of accumulation.

Castells (2005), who gives a great weight to the revolution of the new information technologies, presents the new organizational trajectories (flexible production, new methods of management, network development) that these trajectories were not automatic consequences of technological transformation, because the transformation of the organization occurred in response to the need to deal with an ever-changing operating environment. However, once started, the organizational transformation was greatly intensified by the new information technologies.

Despite the enormous advantages of these technologies there is a concern with their social impact and many scholars observe that these should be object of reflection by the society and the State. Dupas (2001) warns that technologies can serve the interests of society and be an important tool for the development of humanity, or may serve the interests of capital and accumulation and lead to harmful effects. On the other hand, Castells (2005) calls attention to the fact that technology must be taken seriously. It is necessary to locate the process of revolutionary technological transformation in the social context in which it occurs and is being shaped, because the ability or inability of society and the state in its field of technology, especially in strategic areas specific to each historical period, influences the capacity of transformation of companies.

Presented the political, economic, social and technological scenario of the modern world, especially of late modernity, as Giddens calls it, the main points of the trajectory of universities and university libraries will now be addressed.

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6 UNIVERSITIES IN MODERNITY

Meneghel (2002) points out that the concepts of Reason and State guided the debate about the re-foundation of the university after the exhaustion of the medieval model. Hortale and Mora (2004) comment that until the eighteenth century, there was an old university, which goes from the Middle Ages, with minor changes, until the end of the eighteenth century, when the ideas of the Enlightenment and the French Revolution gave rise to the modern university.

Authors such as Burke (2003) and Hortale and Mora (2004) believe that the inertia of universities continued until the early nineteenth century, when they still performed their traditional teaching function, not constituted generally as places where new ideas were developed. Intellectual wealth was not a striking feature in these institutions.

Only at the beginning of the nineteenth century was there a great change in universities with the birth of the nation-state (ibid., 2004). For Magalhães (2004) the modern nation-state assumed financially and legally the universities and guaranteed to them the scientific and pedagogical freedom with the justification that they were the bases of the progress, unlike the medieval university, of independent character, although under the protection of the Church, of the kings or cities in which they were settled. Shrewdly, Hortale and Mora (2004) point out that financially, universities depended on the resources of the properties that owned them or payment of the students.

Thus, for Magalhães (2004) the State integrated the set of organized institutions into a system that constitutes the modern matrix of higher education with the general mission of serving the Nation and the State with the specific task of producing, preserving and diffusing knowledge. The same author mentions that the decisive role in the social, political and cultural project of universities was accomplished not only through the consolidation of nation-states, but under the metanarrative of modernity, conceived as factories of knowledge and as the place where the officials who would govern the state machine were created.

In this sense, the modern narrative around the state, market or community, expressed by modern narratives of Hobbes, Locke, Adam Smith, Rousseau, etc., find their counterparts in the narratives of higher education institutions of Humboldt, Jaspers and Newman, among others who have in common their faith in man, knowledge as truth and science, and history (ibid., 2004).

To deal with the challenges of the time, Ferreira (2009) points out that the three different models or typologies for universities, which have emerged since the first half of the 19th century, have become a reference for other institutions in different countries. The first model, the French, was born in 1811 with the creation of the Napoleonic University, conceived as a state service to promote society's economic development, creating an indispensable elite for the functioning of the State. However, as Hortale and Mora (2004)

point out, there was no university autonomy, since the goals and programs were the same throughout the national territory.

The second model appeared in Germany when, in 1808, Von Humboldt instituted at the University of Berlin the Humboldt model, which considered research the basic principle of the university. The universities became centers of scientific development, financially and in their functioning controlled by the State, but with great respect for academic freedom (FERREIRA, 2009; HORTALE; MORA, 2004; MAGALHÃES, 2004).

The third model was the British of John Henry Newman, who founded the University of Dublin in 1852, and wrote *The Idea of the University*, in which he defended the university as one that understands that knowledge should be sought as an end in itself (FERREIRA, 2009; MAGALHÃES, 2004). In this paper, we present a case study of the development of the personality of students through a liberal conception of higher education.

According to Magalhães (*ibid.*, 2004), the modern configuration of the university has undergone the incorporation of the concept of reason, the consolidation of the nation-state, the political integration of institutions within the State, and its consolidation as a central instance of regulation, but in articulation with capitalism.

In the first phase of capitalism in the nineteenth century, called liberal capitalism, Magalhães (*ibid.,* 2004), based on Boaventura de Sousa, shows that the project of modernity is unbalanced by capitalism and the excesses of regulation on emancipation arise and a hypertrophy of the market in regards to the community and the state. In the second phase, from the last decades of the nineteenth century to the 1960s, called organized capitalism, the market expanded and became part of the state in the transformation that occurred at the level of the community and the state. In its third phase, the late 1969s and early 1970s until the current phase, termed as disorganized capitalism, the market is more accepted by the state as a key regulator of both economic life and social life.

Until World War II, most higher education institutions around the world were basically elite, with criticisms and strong pressures against the elitist model at the end of the second period of organized capitalism, which until then could coexist with liberal capitalism, since the universities, according to Magalhães (2004), were not seen as a central factor of socioeconomic development.

According to Ferreira (2009), from the Second World War onwards, the need to massify higher education and to articulate university activities with industries led to the creation of a new model for these institutions with the transformation of higher education systems into the system of masses[3] in the second phase of capitalism (organized capitalism - the last decades of the nineteenth century until 1960).

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[3] Magalhães (2004), using the Trow classification (1973), defined the three models of higher education as: a) elite, those that integrate 15% of the generation in the age range of 18 to 24 years; b) mass, those comprising 30

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In the 1960s, the expansion of higher education systems and the possibilities of the welfare state[4], especially in the center countries, reached their apex, and higher education systems began to be conceived as a national economic factor producing human capital, affirming the belief in the importance of education for the economic growth of a nation (MAGALHÃES, 2004; FERREIRA, 2009).

For Magalhães (2004), from this period, the most common and strongest justification for political investment in higher education was the economic importance when, in 1960, the second phase of organized capitalism ended, higher education exited from a phase of great security and identity of higher education institutions, where there was consensus about what was education, their educational, social and political goals (ibid., 2004) for a period of major changes between 1960 and 1970, the disorganized capitalism and which has been influencing higher education as presented below.

Since the 1970s there has been a decline in economic productivity and this has contributed to the stagnation and growth of public expenditure on education in developed countries, especially in higher education, in addition to factors such as the massification of education and unemployment among graduates (CONCEIÇÃO *et al.,* 1998 *apud* FERREIRA, 2009).

There has been a degradation of the regulatory processes linked to the welfare state crisis since the early 1970s in disorganized capitalism. The Fordism organizational forms were being replaced by others. Magalhães (2004) recalls that in organized capitalism the logic of the market was balanced by a relatively strong state intervention; In disorganized capitalism, the market is increasingly accepted by the state as a key regulator.

Markets have become global, production has become globalized, distribution has become easier and less expensive using of new communication technologies and the development of means of transportation, allowing the circulation of products of human resources, knowledge and information, to be done with unprecedented rapidity (ibid., 2004).

In 1980, the scenario of higher education systems is post-Fordism, disintegration and replacement of the state under capitalism and the decline of the welfare state, which is accused of inefficiency. The Fordism circle that was reconfigured in the combination of regulation and intervention by the state had a dynamism and a national scope through the

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and 40%; c) universal systems, those that comprise more than 40% of this population (MAGALHAES, 2004, p. 72-77).

[4] Welfare state, of social wellness, is a type of political and economic organization that places the state (nation) as an agent of the social and economic promoter (protector and defender) of the economy. It is up to the State of social welfare to guarantee public services and protection to the population (Wikipedia, the free encyclopedia, available at: http://en.wikipedia.org/wiki/State_of_good_social. . The welfare state, for Rosanvallon (1997, p. 20-23), should be understood as a deepening of the classic protector state that was born as a modern state.

State; The circle of post-Fordism seems to be based on the deregulation of the market and the state itself and seems to have a global dynamic and scope (*ibid.,* 2004).

Despite this disintegration-dissolution-substitution context, Nation-States are still very strong instances of social, economic and political regulation. There is an apparent combination of deregulation and state regulation, because governments still regulate, though in their discourse they still assert that they are leaving regulation to market laws (*ibid.,* 2004, p.99).

Continuing, Magalhães (2004) comments that the market seems to occupy the political center with respect to the regulation in two different levels: in a first level, it appears with the environment without which the social systems would not survive; On a second level, it appears as a rhetorical device for legitimizing certain policies. The change in state regulation naturally affects the relationship between governments and higher education.

Currently, as shown above, there is the emergence of a new model of state regulation and a new narrative foundation based on entrepreneurship. This emerging form of regulation is hybrid as if there were a combination of elements of state regulation and elements of self-regulation (*ibid.,* 2004).

Today's narrative induces a diversity of discourses on higher education, but also a discourse that assumes the central position, which is the market and entrepreneurial narrative, with the justification that entrepreneurship is the best way of dealing with mass higher education. This entrepreneurial narrative is being adopted even in countries where mass higher education has not yet arrived (*ibid.,* 2004).

There are many criticisms of the university system and discussions under the General Agreement on Trade in Services (GATS) and the World Trade Organization (WTO) in the 1990s look at education as a good or service of a commercial nature. European universities, according to Sánchez (2003 *apud* FERREIRA, 2009), are obsolete and come to be seen as an important cause of the loss of competitiveness to attract students and provide international services.

Within this perspective of competitiveness, as an economic service provider, new social roles have been demanded from universities to meet Europe's new need in the face of global hegemony (FERREIRA, 2009).

In this new relationship that is emerging between higher education institutions and the State, there are instruments of autonomy, accountability and quality assessment, whose model, at least in its political formulation, is already evident in Western Europe, Australia and even in developing countries, such as Brazil (MAGALHÃES, 2004).

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In Ferreira's view (2009), reforms emerge and the systems of higher education between 1980 and 2000 suffer in several countries a significant modification in the policies of financing, quality, evaluation, accountability and management of HEIs. Examples of this are the changes that are happening in Europe, based on the Bologna Process, and those that are also occurring in Brazil, especially since 1990.

Two decades ago, European university models were reviewed by the countries, culminating in the Bologna Process which, in Hortale and Mora's (2004) view, is possibly the greatest transformation in the history of European universities since the beginning of the 19th century.

The Bologna Process is a public meta-policy of a meta-state, begun in 1999, to build a higher education area in Europe by the year 2010, whose main objective is to increase the competitiveness of the European Higher Education System against countries and economic blocs. To Lima; Azevedo; Catani (2008), this pan-European project aims to harmonize the national university systems, to assimilate degrees, diplomas, university degrees, academic curricula and adopt programs of continuous training recognizable by all the Member States of the European Union.

In this scenario of changes in which modern narrative, state, capitalism and the market articulate with higher education, new technologies in the context of higher education, especially since 1990, have been bringing about changes, although there is no real dimension of its extension and benefits.

The new information technologies, in a more recent analysis of Santos (2008), constitute one of the decisive factors - besides the political transformation and the type of knowledge produced in the university - for the Development of the neoliberal project of trans nationalization of the higher education market.

Having this modern scenario as the stage of the political, economic, social and technological context that dominated the modern world and the universities, the following will be analyze the trajectory of university libraries from the seventeenth century until the beginning of the twenty-first century.

It is worth mentioning here that despite an extensive survey in the CAPES Portal, Google Scholar, in the UnB Library catalog, in the IBICT Theses and Dissertations Database, using the terms university libraries, history university libraries (as well as the foreign terms: bibliothèques universitaires, academics libraries, university library), in the global scenario, few documents on the macro-level history of university libraries were found.

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7 THE UNIVERSITY LIBRARIES IN MODERN TIMES

In the context of changes within the academic system, between the Renaissance and the Enlightenment, when the trends went through the redefinition of knowledge to the reformulation of institutions, for Burke (2003) there was a reclassification of their material in university libraries, part of the result of changes in the organization of universities, but also a result of the multiplication of books that followed the invention of the press.

In Europe, the best libraries from the sixteenth to the eighteenth century, Italy and France, were found in the largest cities such as Florence (with Laurenziana), Venice (with Marciana), Milan (with Ambrosiana), and, above all, Rome, with the Vatican, the library of the University of Sapienza, the Jesuit library in the Roman College and Angelica, which opened in 1614, in addition to private libraries (*Ibid.*, 2003).

According to Dain (1990, *apud* WEINER, 2005), in the United States, before the nineteenth century, libraries, with the exception of Harvard and Yale, were as mediocre and deserted as their universities.

In the seventeenth and eighteenth centuries, when researchers in mathematics and philosophy of science were concerned with the future, there were changes in the activity of the librarians and in the organization of libraries, as well as in the way of reading books. For Mckitterick (2006) these changes provoked the transformation of the bibliography, which manifested itself in libraries of scholars such as Gesner (*Pandectae*, 1548) or Possevinus (Bibliotheca Seleta, 1593), and the basis of bibliographic systems and their classification.

Burke (2003), in analyzing how the classification of academic knowledge interferes with the daily practice of European universities, observed, mainly in the fifteenth to eighteenth centuries, that the arrangement of books in university libraries was characterized as a reinforcement of the second leg of the intellectual tripod (composed of curriculum, library and encyclopedia) in the traditional system of disciplines. For this author (*ibid.,* p. 88-89), the order of the books reproduced the curriculum of the university and supported this system of classification, as the university still does, making it physical and spatial material. The surviving libraries allow the study of 'archeology of knowledge' as Foucault said, examining the physical remains of ancient classification systems. The encyclopedia, the third leg of the tripod, whose term is translated from the Greek as the "learning circle," (author's quotes) originally referred to the educational curriculum.

Despite the practical librarianship problems that appear in the standings, this is still, according to McKitterick (2006), a kind of control of the means of reading to find out what information the user searches for, and whether its foundations be philosophical, theological, or simply practical, the classification remains a procedure intended to bring readers closer to writers.

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The author (*ibid.,* 2006) points out that today, with the arrival of electronic memory, the subdivisions are in question, whether manuscript, printed, typewritten texts, or photocopies, and one can perceive a return to a concept of reading, which is not seen since the sixteenth century: a library in which manuscripts and prints, paintings and engravings, sculpture, among others, participate in the same plane of classification and complexity of human knowledge.

For Burke, user access to the first modern libraries depended on the attitudes of librarians and their team. A seventeenth-century English traveler, Richard Lassels, noted with satisfaction that Ambrosiana "opens its doors to all who come and go and allows them to read every book they desire" and that in Rome, the library of the university and that of the Augustinians was "open every day, with a courteous gentleman to give him any requested book" (BURKE, 2003, p.160).

Until the eighteenth century, according to Boden (1993), there was no standard of classification in American libraries, but in the nineteenth century, from 1876, the Dewey Decimal Classification system was adopted and, in the same year, the American Library Association was created, which contributed to the standardization and cooperation among libraries.

In the nineteenth and early twentieth centuries, American libraries developed a formal structure and became an integral part of the university's mission serving teachers and students, supporting curricula and research (WEINER, 2005).

At the beginning of the twentieth century, the emphasis that American university libraries gave to the preservation and shelter of collections for access and use to make them accessible was replaced; There was recognition of the need to offer an efficient and personalized service to the user, as well as the use of classification by subject rather than by its fixed location on the shelf. For authors, such as Hamlin (199-?), Dain (1990) and Wiegand (1996, *apud* WEINER, 2005), co-operation between libraries began being regarded as advantageous, and library funding became the responsibility of the institution to which the library was linked.

In the post-war period, with university emphasis on the teaching of factual and conceptual content, in the dependence of the student in relation to the teacher, with the consequence of programmed, discipline-oriented learning, university libraries become important resources for teaching activities, research and extension (LUZ, 1989, *apud* DUDZIAK, 2008, WEINER, 2005; DUDZIAK, 2008).

During the 1960s, the developments in computing and telecommunications revolutionized the services of university libraries. The first basic application of the technology was the wide acceptance of the photocopying machine, especially for interlibrary loans of periodical articles, rather than sending the journal itself (Dupuy, 1968; Hammond, 1981 *apud* BODEN, 1993).

For Lee (1989 *apud* BODEN, 1993) the indexing services and abstracts began to use photographic composition and printing of their products. This would mean that later the information could be used in machine-readable databases. This is one of the reasons why databases such as the Education Resources Information Center (ERIC) are available online or on compact discs since the 1960s.

In the United States the first library network was started in 1961 with the National Library of Medicine Medical Literature and Retrieval System (MEDLARS). The main development of the 1960s was the creation and deployment of the Machine Readable Cataloging (MARC) format by the Library of Congress. For Boden (1993) this set of cataloging standards was an instrument of success in cooperative cataloging networks.

To develop a computerized system that would allow Ohio State universities to share resources and reduce costs, the Ohio College Library Center, founded in 1967, began a cooperative cataloging service with 54 Ohio libraries that same year. Until 2005, the database integrated collection data from almost all the libraries in the country and some international ones (BODEN, 1993, p.13; OCLC *apud* WEINER, 2005). In the following years, OCLC has expanded, notably with the success of its Worldcat, a collective catalog that encompasses collections of thousands of libraries from more than one hundred countries.

According to Weiner (2005), technological transformations in the 1970s caused great changes in the availability and use of electronic resources and increased economic pressures on managers of university libraries led to the questioning of the role of the traditional library.

In the 1980s, the increase in prices of scientific journals favored the model of access to the informational collection, rather than its purchase, supported by electronic resources (MILLER *apud* WEINER, 2005).

In the 1980s and 1990s, according to Dudziak (2008), information and communication technologies and the need to ensure efficiency and quality required the implementation of the systemic logic that led university libraries to significant changes. It was adopted in university libraries a new logic of service and information and communication flows between these organizations, with systemic standards and services, which brought closer libraries and librarians, before distant. The emphasis placed on the collection was relocated to information access, using more and more information and communication technology systems.

According to Dudziak (2008, p. 4)

> Based on the development of information access services and user training, the
> university library has developed. The consortia of libraries emerged, dividing
> responsibilities, [...] which allowed for faster service, lower costs and better use of
> employees.

According to Cunha (2000), the library, which through the centuries was the central point of universities, with its collection of printed works, preserving the knowledge of civilization, currently has a collection in many forms: text, graphic, sound, algorithm and simulation of virtual reality, distributed in global networks, in digital representations, accessible to any individual and not only the academics.

In the twenty-first century, university libraries, following Dudziak's (2008) vision, follow the trend of hybridization of institutions and are becoming a set of resources, carrying out a range of educational and informational activities. They become an essential part of the university environment, constantly interacting with other systems.

8 FINAL THOUGHTS

As seen previously and based on Abrantes (1998), Magalhães (2004) and Soares (2001), from the late sixteenth and early seventeenth century societies in modernity center their organization around reason and science triumphs, with its method of rational and experimental investigation, and emerges a strong tendency towards a mechanical image of nature in the construction of scientific theories.

From the nineteenth century, there is a period of almost uninterrupted progress in improving living conditions. The State and society are guided by the values of reason, public debate, education, science. Scientific knowledge is developed to create new industries, the relations between science, technology and economy become visible, and theoretical and political transformations can already be observed in higher education. In the nineteenth century, the form of social economic organization and development, and, coinciding, capitalism, which is in its liberal phase, articulates with the modern matrix of higher education. For Hobsbawm (1995), Japiassú (2001), Szmrecsányi (2001) and Magalhães (2004), scientific knowledge is considered as a coherent system of knowledge and research activities begin to systematize.

The nation-state, in Weber's (1999) and Giddens' (2002) views, is one of the most important social forms produced by modernity, creating greater opportunities for modern western capitalism.

In the nineteenth century, universities appear as modern, education is taken over by the state and this means a major change in universities, because the state offers legal coverage that guarantees universities scientific and pedagogical freedom under the justification that these were the basis of progress. Models for higher education/universities inspired by the modern narratives that mark the advent of the modern university as agent of national reconstruction as pointed out by Hortale and Mora (2004), Magalhães (2004) and Ferreira (2009).

For Magalhães (2004) and Ferreira (2009), in the 1960s and 1970s, HEIs gradually began to transform into mass education and higher education systems began to be conceived as a national economic factor. There are changes in the evolutionary line of capitalism, the great technological revolution appears and the world goes into crisis, according to Hobsbawm (1995) and Castells (2005).

The technological revolution that occurred after 1973 was decisive in the increase for economic development and produced great transformations in the daily life and the form of work. The capitalist world underwent profound transformations after 1980, such as the formation of the minimal state and emerging markets, replacing the national project and towards the transnational capitalist project (HOBSBAWM 1995, IANNI 1999, CASTELLS 2005).

The HEIs, which coexisted, according to Magalhães (2004), from the last decades of the nineteenth century with the logic of organized capitalism in a nationwide dynamic, through the state, between 1960 and 1970, enter a phase of major changes, which seems to have a global dynamics and scope.

The state becomes its regulatory nature and this transformation affects the relationship between governments and higher education. The market is increasingly more accepted by the state as a regulator in economic and social life; education, in the 1990s for Magalhães (2004) and Ferreira (2009), is considered a good of a commercial nature.

In the new relationship that is emerging between higher education institutions and the State, higher education systems in many countries are undergoing changes in the policies for financing, quality, evaluation, accountability and management of, and universities are confronted with crisis such as the production of knowledge, the lack of a consensus on their functions, and the market and State pressure to subject them to productivity criteria (MAGALHÃES, 2004 and FERREIRA, 2009).

The university library, inserted in this context, has developed over the centuries, trying to keep up with the changes in the academic system, either by adapting its collection to the changes of the HEIs, using different types of bibliographic classification, or attending to users, although without broad access, and having as main reference of its paper the preservation of the knowledge through the collection that maintained.

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But it was throughout the nineteenth century that some service standards and understanding of the university library relationship were emerging. It is in this period that the state articulates with liberal capitalism and modern universities are seen as the basis for progress. The model proposals move in the direction of their role in the training of civil servants for the State, or training of researchers, or formation of the personality of the students, and university libraries are slowly being structured.

For Boden (1993), Weiner (2005) and Mckitterick (2006), university libraries that, until the beginning of the nineteenth century, maintained their traditional function of preservation without major changes in technical services, could count in the end of the century with a classification standard.

However, it was during the twentieth century, from the Second World War until approximately 1970, that in organized capitalism teaching began its journey towards mass education, that the university library became an important part of the university to contribute with their educational, research and extension goals. The emphasis on access to collections grows, there is state funding for library development and library structuring, cooperation activities are initiated, and automation activities begin to transform the way university library services and products are offered (MAGALHAES, 2004; WEINER, 2005; DUDZIAK, 2008; FERREIRA, 2009).

As of 1970, another scenario is drawn. With a decrease in economic activities, capitalism enters a phase in which the market is increasingly accepted by the state as a regulator and higher education systems are increasingly regulated by the market, which is accepted by the state that now sees higher education as an economic service. The new technologies penetrate these areas with the speed and interactivity that are characteristic of it and provide, along with the dynamics of the post-Fordism circle, a globalized dynamic. Universities and their libraries are affected by changes in this scenario and proposals for reforms are being led by the Bologna process, generating new challenges for these two century-old institutions.

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