

RESEARCH ARTICLE

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Emergency libraries an affordable collection in pandemic times

ABSTRACT

Introduction: The new coronavirus pandemic hit institutions of memory in 2020 and 2021, promoting the partial suspension of activities in libraries. Schools and universities, after adopting Emergency Remote Teaching, were deprived of access to vital collections for their activities. **Objective:** This work contributes to the establishment of the concept of Emergency Libraries, in line with the effort to fight the pandemic, in the sense of enabling access to a collection in times of exception. **Methodology:** This is an action research in which, after the synthesis of related concepts through a review in the literature, we seek to highlight and generalize the possibilities, requirements and difficulties of actions that could characterize the implementation of an Emergency Library, seeking support in the empirical results of projects promoted at the State University of Londrina, during the pandemic. **Results:** The experiments suggest the following recommendations for the implementation of an Emergency Library: the adoption of digital materiality and its technical reproducibility as an implementation standard; the use of open licenses and works in the public domain as a priority in the constitution of collections; the care with the dependence on hegemonic digital platforms and the search for an objective legal mechanism that allows the digitization, storage and distribution of legacy content under restrictive copyrights. **Conclusion:** The exception regime, which closed libraries during the pandemic period, may also open possibilities for the circulation of their collections, giving rise to and enhancing their own reason for being. Emergency Libraries can offer an alternative affirmative response to the restrictions and scarcity that characterized the fight against the pandemic.

KEYWORDS

Emergency libraries. COVID-19 pandemic. Copyright law. Open licenses.

Bibliotecas Emergenciais por um acervo acessível nos tempos de pandemia

RESUMO

Introdução: A pandemia do novo coronavírus atingiu as instituições de memória nos anos de 2020 e 2021, promovendo a suspensão parcial das atividades nas bibliotecas. As escolas e universidades, após a adoção do Ensino Remoto Emergencial, foram privadas do acesso a acervos vitais para suas atividades. **Objetivo:** Este trabalho colabora para o estabelecimento do conceito de Bibliotecas Emergenciais, consonantes com o esforço de enfrentamento da pandemia, no sentido de viabilizar o acesso a um acervo em tempos de exceção. **Metodologia:** Trata-se de uma pesquisa-ação em que após a síntese de conceitos relacionados por revisão na literatura, procuramos evidenciar e generalizar as possibilidades, exigências e dificuldades de ações que poderiam caracterizar a implementação de uma Biblioteca Emergencial, buscando subsídios nos resultados empíricos de projetos

promovidos na Universidade Estadual de Londrina, durante a pandemia. **Resultados:** Os experimentos sugerem as seguintes recomendações para a implementação de uma Biblioteca Emergencial: a adoção da materialidade digital e sua reprodutibilidade técnica como padrão de implementação; o uso de licenças abertas e obras em domínio público como prioridade na constituição dos acervos; o cuidado com a dependência às plataformas digitais hegemônicas e a busca por um mecanismo jurídico objetivo, que permita a digitalização, armazenamento e distribuição de conteúdo legado sob direitos autorais restritivos. **Conclusão:** O regime de exceção, que fechou as bibliotecas no período de pandemia, pode também abrir possibilidades de circulação de seus acervos, ensejando e potencializando sua própria razão de ser. As Bibliotecas Emergenciais podem oferecer uma resposta afirmativa alternativa às restrições e à escassez, que caracterizaram o enfrentamento à pandemia.

PALAVRAS-CHAVE

Bibliotecas emergenciais. Pandemia COVID-19. Lei de direitos autorais. Licenças abertas.



JITA: IM. Open data

1 INTRODUCTION

The COVID-19 (Sars-CoV-2) pandemic, which had global effects in the years 2020 and 2021, when we wrote this article, and resulted in a total of more than four million and five hundred thousand victims until the moment¹, was a milestone in pandemic events worldwide. In general, the World Health Organization (WHO) classifies the spread of a disease according to its incidence and dissemination capacity, with pandemics occurring in multiple regions and territories, with a high contagion capacity, while epidemics remain territorially restricted².

Several pandemics have marked the last century, such as the Spanish flu (1918-1919, with more than 50 million deaths), the Asian flu (1957-1958, with 1.1 million deaths), and the Hong Kong flu (1968-1970, with one million deaths). Other localized incidences, therefore epidemic, are also noteworthy: SARS (2002-2003, with 774 deaths), avian flu (2003-2004, with 460 deaths), H1N1 (2009-2010, with 500 thousand deaths), Ebola (2013-2016, with 11,300 deaths), and HIV, considered a global epidemic (1981 to date, with more than 34 million deaths)³.

However, given the technology and communication conditions of the second decade of the 21st century, to date no other pandemic has had a global media reach nor has it promoted massive technological adoption like the new coronavirus pandemic. Authors such as Schwarcz⁴ highlight that the very historical notion of understanding the 21st century began with the COVID-19 pandemic.

This highlight can be understood in the sense of the realization of intuitions and warnings by several authors since the second half of the 20th century, such as the transition notices of organization, production, and control models present in the concepts of post-industrial society (BELL, 1999), the third wave (TOFFLER, 1995), knowledge society (BÖHME; STEHR, 1986), information society (SCHAFF, 1995), control society (DELEUZE, 1992), burnout society (HAN, 2015), sharing economy (RIFKIN, 2014), industry 4.0 (SCHWAB, 2016), platform capitalism (SRNICEK; DE SUTTER, 2017), surveillance society (ZUBOFF, 2018), and many others.

In different ways, all these concepts suggest paradigmatic changes that can be synthesized, with Caetano (2016), in the summarized scope of this study as an effective application of knowledge, technology, and communication as preponderant factors in production relations: decentralization and globalization of value chains, intensive use of technologies as a competitive differential for companies, intensification of transnational capital in the dilution of the nation-State sovereignty, end of formal jobs, precariousness of labor

¹ According to the World Health Organization in: *Coronavirus disease (COVID-19) – World Health Organization*. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>. Accessed on: October 17, 2021.

² More details at: Epidemic, Endemic, Pandemic: What are the Differences? | Columbia Public Health. Available at: <https://www.publichealth.columbia.edu/public-health-now/news/epidemic-endemic-pandemic-what-are-differences>. Accessed on: October 17, 2021.

³ More details at: *Epidemias deste século foram menos mortais que as do século 20; saiba quais foram*. Estado de Minas. Available at: https://www.em.com.br/app/noticia/internacional/2020/04/11/interna_internacional,1137658/epidemias-deste-seculo-foram-menos-mortais-que-as-do-seculo-20-saiba.shtml. Accessed on: February 20, 2021.

⁴ See the interview: “O século 21 começa nesta pandemia”, diz Lilia Schwarcz. CNN Brazil. Available at: <https://www.cnnbrasil.com.br/nacional/2020/07/05/o-seculo-21-comeca-nesta-pandemia-analisa-a-historiadora-lilia-schwarcz>. Accessed on: February 16, 2021.

relations, the advent of surveillance on apparently free subjects but subjected to the hegemonic platforms of consolidation, mining and sale of informational assets in the corporate world, in addition to the exclusion of the population without technological literacy from production relations.

The point we need to highlight in this brief discussion is that all sorts of practices, visions, and concepts, experimentally refined in universities and in technical discussions in technological industries, seem to have taken place in a globalized reality after the COVID-19 pandemic, imposing objective practical effects on institutions in their modern appearances: in companies, with remote work; in schools, with emergency education; and in memory institutions, such as libraries, archives and museums, in their efforts to reinvent and participate in the fight against the pandemic.

At the crossroads in which this study and the role of higher education in Brazil are presented, we chose to collaborate on the development of the concepts necessary to respond to efforts in fighting the new coronavirus pandemic with a library. We believe that not to adopt measures that can overcome limited access to collections compromises university education more than we can measure at this time. University libraries, as vital institutions for scientific work, are invited to provide new services that imply a broader institutional engagement in exceptional times, involving professors, students, and departments. According to the initial and fundamental idea, this study intends to approach the concept of “Emergency Library”.

The interference status in this pandemic emergency situation characterizes this study as an action research, in which knowledge production is articulated with an intention to change and improve a process within its context (SEVERINO, 2000 p.120). Authors such as Tripp (2005) suggest four phases in the action research cycle, continuously interspersing research and action poles: planning a practical improvement, acting to implement the planned improvement, monitoring and describing the effects of the action, and evaluating the results of the action. These phases were continuously implemented in the execution of two projects at the State University of Londrina, the Common Library (CL), a university extension project that has been conducted at the Department of Information Science (DIC) since 2013, and the Emergency History Library (EHL), held at the Department of History (DH) as an initiative to respond to the pandemic period in the 2020 academic year.

The implementation of these projects evoked the understanding of the relationship between actors, political contexts, technological scenarios, and institutional practices, which, after being described, analyzed and implemented, synthesized the computation of the generalized recommendations that conclude this study, aiming to collaborate on similar initiatives in other fields of knowledge in response to the present and future emergencies.

The next sections will bring a summarized explanatory table to contextualize the issues addressed, present the projects results, and conclude the recommendations for the implementation of Emergency Libraries.

2 SOVEREIGNTY AND EMERGENCY

The concept of sovereignty is established according to the constitution of the modern State itself and concerns a unitary, concise, and final power formally established, as summarized by Liziero (2017), gaining autonomy and control over a territory, a population, and a recognizable bureaucracy. As the processes of globalization, rationalization, and formalization of international relations stood out in the 20th century, the concept of sovereignty lost part of its autonomy by imposing rules forged in other bureaucracies on a nation-State that,

if not collated, prevent the nation from participating in international value production circuits. This diluted autonomy of the nation-State power in favor of transnational organizations transforms contemporary sovereignty into a global force correlation exercise.

By observing Agamben (2004), sovereignty is understood as the very condition of establishing a regime of exception over a territory, i.e., legally suspending individual rights and freedoms, aiming at the maintenance of sovereign power in the name of social order. Using his words, the exception would be “the originary structure in which law refers to life and includes it in itself by suspending it” (AGAMBEN, 2009, p. 12). In the Brazilian Constitution, these legal mechanisms would be constitutionally formalized in the following provisions: state of siege, state of defense, public calamity, and state of emergency⁵. During the COVID-19 pandemic, the state of public calamity was evoked by the federal government through a monocratic decision of the Superior Court (STF), providing for article 167 of the Federal Constitution, which releases compulsory loans, opening the possibility of changing the limit of the public expenditure ceiling⁶. Restrictive measures regarding the prerogatives of isolation, quarantine, interdiction of movement, public services, and essential activities came from state and municipal decrees⁷, as per the STF decision regarding autonomy and concurrent competencies⁸.

As is often the case in history, wars, plagues, and natural disasters have become the reasons for triggering the suppression of individual guarantees. The novel coronavirus pandemic has become the most current, emblematic, and visible example for the current generation of exercising sovereign power to subtract individual rights justified by scientific narratives given by global organizations, even without consensus in the academic community, still corroborating Agamben (2020). Therefore, the concept of “emergency”, as understood here, is characterized by the practice of the state of exception, when the sovereign power shows its principle capable of changing individual guarantees and the circuits of a territory.

The concept of emergency focuses on social actors, schools, businesses, churches, and libraries. Social actors responded to the effects of the state of emergency in different ways. Schools and universities, for example, have started Emergency Remote Learning programs in which face-to-face courses already implemented were adapted to digital information and communication technologies (ICTs), differently from Distance Learning (DL), which have institutional preparation and a changed teaching scale, methodology, and logistics (APPENZELLER *et al.*, 2020). Positive and negative effects, and mistakes and successes of this adaptation will probably be discussed by the academic communities in the coming decades.

Libraries, in turn, which are closely linked to school and university life, presented much more conservative actions, limiting themselves to integrating social media into routine activities, implementing digital repositories of dissertations and theses, and assimilating message systems to their services. In general, unfortunately, they closed their doors, preventing

⁵ See details at *Estados de exceção e o covid-19: Estado de sítio, estado de defesa,...* - Migalhas. Available at: <https://migalhas.uol.com.br/coluna/constituicao-na-escola/322829/estados-de-excecao-e-o-covid-19--estado-de-sitio--estado-de-defesa--calamidade-publica-e-estado-de-emergencia>. Accessed on: March 3, 2021.

⁶ See details at: *STF, Jurisdição constitucional da exceção, democracia e coronavirus*. Consultor Jurídico. Available at: <https://www.conjur.com.br/2020-mar-30/stf-jurisducao-constitucional-excecao-democracia-coronavirus>. Accessed on: March 3, 2021.

⁷ Decrees prohibiting the inhabitants of a state or city from leaving home reached more than 20% of the Brazilian population. See details at: Covid-19: quase 47 milhões de brasileiros estão sob toque de recolher. *BBC News Brasil*, Available at: <https://www.bbc.com/portuguese/brasil-56205089>. Accessed on: February 26, 2021.

⁸ See details at: <http://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=441447&ori=1>

the presence of users and access to the collection (TANUS; SÁNCHEZ-TARRAGO, 2020). Access to the collections remains one of the fundamental attributes of the library, let us remember, with Targino (2010), the relevance of the five laws given by Ranganathan⁹, continuously evoked to highlight the institution's tradition as a dynamic actor in society, promoting inclusion, universal access, and social justice.

In the next sections, we will focus our attention on highlighting the explicit or implicit dilemmas found in libraries that mitigated their responses to society in times of pandemic. The concept of Emergency Library, evoked below, intends to collaborate on facing these issues, suggesting a field for the establishment of this clash.

3 THE LIBRARY AS AN APPARATUS IN TRANSITION

One of the fundamental concepts of Foucault's vocabulary is the concept of apparatus. Following the path of Agamben (2009), it locates concerns related to the relationship between heterogeneous things, which schematize and subject the living around historical forces and places to exercise power. Based on this concept, Foucault asks how arrangements between the actors who exercise power over the living make objects visible or not in their context. The point to be highlighted in this study is that apparatuses historically affect bodies, disciplining them and organizing their possible actions in advance, in schemes that are not always formal in terms of action and ways of life. The apparatuses would aggregate the participation of actors, technologies, legal forms, and modes of subjectivation to achieve functions and establish information regimes, a concept operated by Frohmann (2006), who investigates these relationships, both in organizational terms and in living bodies.

Following Foucault's path with Frohmann (2006), memory institutions would be privileged places to understand such information regimes, as they would bring to light the fundamental conceptual ingredients of Foucault's vocabulary: the exercise of power, discipline, forms of subjectivation, orderings, classifications, memory etc. (FOUCAULT; MUCHAIL, 2007).

The library, given its constant presence in the history of written civilization, even though it aggregates different functionalities, modes of operation, and relationships between actors, can – albeit surprisingly – be identified over the course of documented time (BATTLES, 2015). This incredible return of the library prompts the investigation of conceptual conditions of this repetition, its sameness. After all, what would return: the difference or the repetition, as Deleuze would ask; or like Freud, waiting for the insistence of what had been repressed; or Nietzsche's return, eternal, tragic and implacable, as a beloved and accepted destiny? Different ways of thinking about repetition, invitations for research beyond the scope of this study.

This question will be provisionally answered with Foucault: the apparatus returns, in the sense of waiting for the reappearance of a rearrangement, of what it is contemporarily called a systemic aggregate – between actors, technologies, legal forms, and docile, disciplined

⁹ The “Five Laws of Library Science” were established in 1928 by the Indian author Shiyali Ramamrita Ranganathan and can be summarized as:

1. Books are for use.
2. Every reader his book.
3. Every book its reader.
4. Save the time of the reader.
5. Library is a growing organism.

subjects, ready to work. Even though at different historical moments, in different materialities, with different relationships between the parties, the same imbricated adherence to the civilization of writing returns to the people of books, as Muslims called the Christians, dependent on the absence and timelessness of their dynamic god, invoked by the classification mechanisms of memory (MILES, 1996).

The advent of the contemporary machine as the hegemonic operator of today's society, beyond a solitary technical advance, implies the establishment of a ubiquitous apparatus based on universal concepts and forged in the western world: energy, electricity, information, universal computing (LÉVY, 1995). The western style, its universalization, abstraction, and structurality of its technique, even though deeply criticized within its own intellectual life, asking for explanations about the universals themselves, as done by poststructuralists (WILLIAMS, 2005), gained evidence difficult to be contested when noticing, at the beginning of the post-pandemic period, a globalized world unified by a digital meta-platform, connected and master of social life, subordinating human affairs like no other before (DESAI, 2020).

The hegemony of digital materiality, i.e., the very subjection of objects, processes, and representations to the same globalizing apparatus, implies the unification of human, semantic, cultural, and biological differences in the same set of technical structural operations, translations, and legal relationships, while different actors find a common operating protocol thought by Braman (2004) as a global information regime.

The current hegemonic materiality, which highlights the technical reproducibility properties of digital objects, their ontological indifference between the original and the copy, their infinite replicability, which unifies differences in the same alphabet that thinks, using Lanham's (2006) term, it changes the usual economic circuits into other materialities. If economy is based on a translation of the scarcity of objects (ROBBINS, 1932), in the digital world it does not exist, since objects are not scarce, but replicate themselves, infinite times, without making any difference in the process. Therefore, to maintain the viability of economic circuits, scarcity must be produced in other instances (FRANKLIN, 2020).

This fundamental characteristic of digital objects, their materiality, and the apparatus that produces them in the surroundings evidences a first attribute suggested to the Emergency Library: being digital, i.e., infinitely replicating its objects, without changing their identity or producing scarcity. This fundamental characteristic of digital materiality, however, soon collapses economic circuits based on traditional – let us say – materialities, in which scarcity, i.e., the degradation between original and copy and the different identity between peers, is a fundamental ontological component in the economic circuit of objects. By exploring the reprographic characteristics of digital objects as an attribute of an Emergency Library, we will immediately run into huge obstacles. In the next sections, we will briefly evoke these obstacles and encourage actions to overcome them as the experimental results suggest.

4 FROM UNIVERSAL MACHINE TO PLATFORM CAPITALISM

The first obstacle to the infinite reproduction of digital objects is access to their circulation apparatus. In a country with extreme social inequality such as Brazil, it is a fact that not everyone has access to a personal computer, laptop, or tablet. However, this reality is not confirmed in the access to cell phones, which already reaches more than 99% of the population (IBGE, 2020). Also, the price of portable flash memory apparatuses, the popular flash drives, has significantly dropped, in addition to the exponentially increased storage capacity (COUGHLIN, 2020). It should be noted that the personal computing possibility is not limited

to the processing power of personal computers, their speed, or access to large communication structures, such as cell phone operators, but also includes data storage capacity, which are inclusion factors that should be considered.

If internet access is far from being universalized today, access to digital objects is more viable, since its materiality is hegemonic, leading us to the following paradoxical situation: participation in the great network, which enables the massive distribution of digital objects, depends on the mediation of large intensive structures in technical knowledge and capital, which makes libraries and other memory institutions dependent on these actors, the Big Techs, which, given their characteristics of large logistical scale, tend to monopolize their markets of action, increasing their surveillance and control power over their users' actions¹⁰.

Platforms are integrators of relationships between actors of a specific domain activity. Srnicek and De Sutter (2017) define platform capitalism as the current scenario in which the main value production mechanism occurs in the process of capturing, storing, analyzing, and selling the information of a community of users, their activities, relationships, and production agencies. The Big Techs' monopoly, which characterizes life in social networks, media distribution, and digital cloud environments, certainly has a great appeal in reducing the costs of access to technologies, their operation, and accessibility. However, it charges a high price in the institutions' loss of data autonomy in the sense of exposing sensitive data to the possibility of the state of exception of other sovereigns. Not only because we, ordinary citizens, are exposed to the surveillance capacity of the Big Techs (ZUBOFF, 2018), which is already expected upon agreeing to the terms of use of their free products and services, but also for being vulnerable to a breach of contract between the parties in case of a state of exception, as the sovereign is supposed to be in power.

Thus, it is important to emphasize that the privileged control that platforms exercise over their users seeking commercial advantages is surpassed, by far, by the sovereign power that, in a state of exception, can break the contract between Big Techs and their users, integrating the data obtained from different private platforms, promoting a consolidated aggregate of sensitive information, which can be used in cases of criminal investigation, terrorism, and health emergencies: a capacity for surveillance and suppression of individual freedoms unprecedented in human history, revitalizing the care with 20th century totalitarian dystopia (PESSOA, 2020).

This state of permanent surveillance and vulnerability to the state of exception of a sovereign global power, which tends to become universal as the great global technological actors promote, over the next few years, full global access to the internet¹¹, is the exact opposite of the freedom always claimed by memory institutions, such as libraries, archives, and museums. This leads us to the second point regarding Emergency Libraries: the concern with proprietary platforms, as they can control content circulation from the analytical processes of

¹⁰ As an illustration of the concentrated power of large technology companies during the pandemic, see: *Com lucro recorde em 2020, quarteto de big techs vale um terço do PIB dos EUA*. CNN Brazil. Available at: <https://www.cnnbrasil.com.br/business/2021/02/05/com-lucro-recorde-em-2020-quarteto-de-big-techs-vale-um-terco-do-pib-dos-eua>. Accessed on: February 5, 2021.

¹¹ Currently, internet satellite connection is already provided by a small number of companies, mainly in rural areas or in areas where neither broadband nor cellular network is available. However, since 2022, other players such as Starlink, the Kuiper project, and OneWeb have promised to enter this market, expanding the global provision of internet access through low-orbit satellite networks, offering faster and cheaper connections. More details at: *Musk e Bezos se atacam por projetos de internet via satélite*. Available at: <https://olhardigital.com.br/2021/01/27/noticias/elon-musk-e-jeff-bezos-se-atacam-por-projetos-de-internet-via-satelite/>. Accessed on: February 24, 2021.

data mining on the semantic content of information flow, such as the ideological sense of communications^{12,13} (WANG, 2018). Therefore, Emergency Libraries should, as much as possible, remain platform agnostic¹⁴.

4.1 Platforms and property rights

As we have seen, controlling the flow of objects, in terms of the fundamental presence of scarcity, enables economic circuits that allow the establishment of memory devices, of which we highlight the Library, promoting relationships between actors, legal schemes, and technical apparatuses. The hegemonic digital materiality of contemporary life temporarily challenges the library's modern apparatus by making its most prized objects – books – infinitely replicable, cheap, and transmissible, introducing a strange, foreign, and frankly uncomfortable element of technical reproducibility: a short circuit in the apparatus flow (FRANKLIN, 2020).

These existential, so to speak, ontological questions about the technical reproducibility of objects persist in the historicity of memory apparatuses and were shaped into the life of the modern library from the effusion of some fundamental concepts such as author, authorship, and reprographic rights of the works. These modern issues established the environment of the current library apparatus, relating entities such as publishers, works, licensing forms, moral rights, property rights, acquisition processes, loans, returns, users – as an extension of the modern citizen, among others (CHARTIER, 1994).

All these elements were systematically related and formally described by a set of copyright laws, which relied on the bureaucracy of the modern State to regulate the circulation of objects and guarantee property rights. Copyright laws, whose detailed explanation exceeds the scope of this study, must be understood here as a legal operator compatible with the technical reproducibility of the material objects regulated by it. The Foucault-inspired concept of information regime reconciles the legal aspect of copyright law and the concept of ownership and technical reproduction with the library apparatus itself (GONZÁLEZ DE GÓMEZ, 2019).

Of these concepts, laws, and technical objects that compose the modern library apparatus, perhaps the most affected by digital transformation¹⁵ is the reprographic law. Thus,

¹² See an example of content removal for ideological reasons at: *Livro de acadêmico questionando movimento transgênero é banido da Amazon*. Senso Incomum. Available at: <https://sensoincomum.org/2021/02/25/livro-de-academico-questionando-movimento-transgenero-e-banido-da-amazon/>. Accessed on: February 27, 2021.

¹³ Examples of interference and breach of contract for ideological reasons have occurred at the time this study was being written, both in the private sector and in the expulsion of the Parler conservative social network (<https://parler.com>) from the AWS cloud (<https://aws.amazon.com/>), and at the state level, when China bars the use of the ClubHouse social network. More details at: *Why Amazon's Move to Drop Parler Is a Big Deal for the Future of the Internet*. Time. Available at: <https://time.com/5929888/amazon-parler-aws/>. Accessed on: February 24, 2021; and *China barra o uso do Clubhouse, aplicativo de áudio que é sensação no mundo*. CNN Brazil. Available at: <https://www.cnnbrasil.com.br/business/2021/02/08/china-barra-o-uso-do-clubhouse-aplicativo-de-audio-que-e-sensacao-no-mundo>. Accessed on: February 8, 2021.

¹⁴ Platform agnostic is a term defined by the Techopedia as: A concept that refers to the design attributes and philosophies of software products. A platform agnostic product runs equally well across more than one platform. At: *What is Platform Agnostic? - Definition from Techopedia*. Techopedia.com. Available at: <http://www.techopedia.com/definition/23666/platform-agnostic>. Accessed on: February 27, 2021.

¹⁵ Here, the term “digital transformation” is understood with the synthesis by Pacheco, Santos and Wahrhaftig (2020) as a series of technological, organizational, and social changes resulting from the adoption of digital technologies as a hegemonic mode of sociability in contemporary life.

as one of the property rights attributes of the Copyright Law (CAETANO, 2016), it suffers from the ontological change of its preferential object of control, starting to have other technical reproducibility attributes such as its extreme vulgarization, cheapening, precision, and fidelity.

In the modern form, printing exclusivity is granted by the sovereign power in a manner compatible with the rarity of its replication means, making the surveillance of its small number possible by a central power. Thus, in modern times, the library apparatus gained internal consistency, articulating its dynamics to generate stability among the actors involved. Production, circulation, control, and consumption met, in modernity, in a harmonious flow of maintenance, and the role of the library to mediate knowledge to the common citizen remained stable.

We know, however, that the history of the library is turbulent and that its persistence within civilization is surprising and admirable (BATTLES, 2015). Contemporary hegemonic digital materiality also strongly affects the library apparatus, changing its modern stability as it does not harmonize the restricted capacity of material replication of its objects with the viability of centralized control by sovereign power. The production of uncontrollable digital copies, so to speak, short-circuits the modern library apparatus.

The growing capacity for duplicating technical objects, particularly books, since the beginning of the 20th century, with mimeographs¹⁶, passing through photocopiers after the 1960s, until the undifferentiated replications of current digital objects, is operated under the same legal apparatus: by the reprographic rights guaranteed by law 9,610 (BRASIL, 1998). However, the abovementioned law has no positive answer about the percentage of a work that can or cannot be copied without the property rights being infringed, nor a clear vision of what would be the fair use of digital copies¹⁷, leaving only the legal security of the public domain – the works whose property rights cease to apply 70 years after the author's death, making their circulation free (BUAINAIN *et al.*, 2011).

If the library had a certain apparatus stability during the 20th century, in its second half, the nascent computer industry was the first to realize the potential of digital objects as a factor for making new economic circuits and new business models. While a significant part of computer entrepreneurs followed the path of intellectual property as a cornerstone for the production of economic circuits, making software systems scarce products licensed by commercial transactions, other creators understood the unrestricted technical reproducibility of digital objects as the motor of a system distribution in which the scarcity needed to implement a business model would be in the form of maintenance and consulting services (ANDERSON, 2009).

Open licenses such as the GNU General Public License (GPL)¹⁸, the ones that allow the copying, execution, change, and distribution of the products, thus became a fundamental legal security apparatus for this industry.

With the success of the open software industry in the last decades of the 20th century, the consolidation of the technical reproducibility of digital objects as a force in business models based on maintenance and consulting services implied the creation of new legal security

¹⁶ Details at: *Como o mimeógrafo influenciou movimentos culturais - Revista Galileu | Desenvolvimento*. Available at: <https://revistagalileu.globo.com/Caminhos-para-o-futuro/Desenvolvimento/noticia/2016/08/ha-140-anos-thomas-edison-recebia-patent-do-mimeografo.html>. Accessed on: March 3, 2021.

¹⁷ More details at: *A violação dos Direitos Autorais pela extração de cópias de livros - Migalhas*. Available at: <https://migalhas.uol.com.br/depeso/176850/a-violacao-dos-direitos-autorais-pela-extracao-de-copias-de-livros>. Accessed on: March 3, 2021.

¹⁸ See details of the GNU General Public License at: <https://www.gnu.org/licenses/licenses.html#GPL>

apparatuses.

The Creative Commons, therefore, was conceived in the 2000s as a legal apparatus to make copyright compatible with digital transformation, in which freedoms regarding copying, changes, distribution, and commercialization are granted or not by the creators, being directly enunciated in their artifacts, warning users about their rights without the need for intermediaries (BRANCO; BRITTO, 2013). This legal security has strengthened the movement for Open Educational Resources (OER), which promotes the use of free circulation and distribution pedagogical content (HENRIQUES, 2017). If the OER movement was still little known two decades ago, it is currently part of most educational public policies and includes several initiatives¹⁹.

With the strengthening of the internet structure at the beginning of the 21st century, its internalization, increased speed, and popularization, the idea of a free flow of content and interaction gained strength and developed from Web 2.0, which was made possible by the emergence of cloud services, the platforms. We cannot forget, however, that the tension between the modern and the contemporary apparatuses remained unresolved, since, if the hegemony of the digital information regime prevailed as a contemporary form of circulation of objects, the issue of their property rights, highlighting the reprographic rights, remained the same – the modern one regulated by the old copyright law.

Digitized objects have changed from a modern to a contemporary information regime, now infinitely replicable, accurate, and ubiquitous, and remain under a proprietary license that does not base its business model on the constant flow of its objects, controlled by global and ubiquitous platforms, but on the fixity of location, not on the services and waves of permanent debt enjoyment, but on the guarantee of property rights. This means that the vast majority of books published in the 20th century are under restrictive copyright and cannot be freely distributed if digitized.

The expanded ability to digitize texts and ontologically change their materiality without changing the legal apparatus that gives them reprographic norms, gave rise to an inherently illegal collection of digitized pirated books.

Clandestine digital libraries – shadow libraries (KARAGANIS, 2018) – are collections that have accumulated in recent decades, despite the copyright laws, and that become public, or not, in certain contexts. The biggest one, the Library Genesis (LibGen)²⁰, with more than 1.2 million titles, is the result of the accumulation of several pirated collections, stored for decades in places not completely determined, decentralized and synchronized in Russia, Amsterdam, the United States etc.²¹ Several attempts to block its servers came from national sovereigns, such as the United Kingdom, France, and the United States, without, however, being able to locate the source of their distribution.

In Brazil, some timid initiatives stand out in Brazilian Portuguese. The website *Livro de Humanas* was the first to make its final collection of 2,322 books available on public internet. After being closed, in 2012, due to a lawsuit filed by the Brazilian Association of Reprographic Rights (ABDR)²², other initiatives stood out, but without affronting the sovereign power,

¹⁹ To exemplify this set of initiatives in Brazil, see the open education initiative project. Available at: <https://aberta.org.br/>. Accessed on: March 3, 2021.

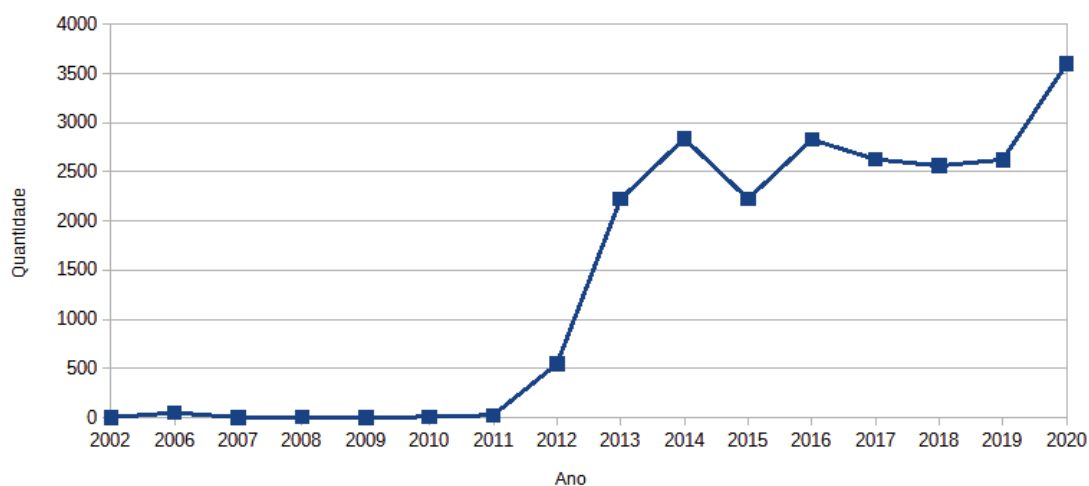
²⁰ See: <http://libgen.is>

²¹ See the full list at: <http://vertsuisants.fr/index.php?article4/where-scihub-libgen-server-down#sol4>

²² See: <http://www.abdr.org.br/site>

keeping their servers away from national jurisdiction, such as the website *Le Livros*²³ (MIZUKAMI; REIA, 2018), which apparently is in Portugal. Others continue to inhabit the invisibility of the deep web, in small, closed groups on mobile social networks, or even dark web directories (anonymous and encrypted network). The Anonymous Library, for example, is a collection of humanities with more than 25,000 titles that is inaccessible to the public web, being maintained by the curatorship of private thematic communities in private groups on social networks but storing and indexing their digitized books using the TOR network²⁴ (FRANKLIN, 2019). Figure 1 shows that the growing use of social networks, as well as the increased use of broadband in metropolises since 2012, have increased the exchange of pirated books in private discursive communities, highlighting that in 2020, the year of the pandemic in which physical libraries were closed, these numbers grew even more (FRANKLIN, 2020).

Figure 1. Number of texts per year in the Anonymous Library.



Source: Adapted and updated from Franklin (2019).

If the library, as an apparatus, is in a period of historical transition, like many times before, and currently has excruciating points to be resolved, including the technical reproducibility of its preferential objects – the books – and its reprographic rights, made possible by the ubiquity of global control platforms, so our question about its state of emergency must include the following integrated elements: (a) digital objects in its technical reproducibility; (b) copyright laws, highlighting the issue of reprographic rights and of books in the public domain; (c) open licenses that enable free distribution models; and (d) global platforms that can authoritatively control the flow of digital objects on the internet.

²³ See: <https://lelivros.love>

²⁴ The technology that currently exerts the most influence on the implementation of a secrecy and anonymity mechanism is the TOR network, derived from a project called The Onion Router, which aims to generate an anonymous network capable of carrying out common operations on the *Internet*, preserving its users' identity (anonymity), the content of their messages (secrecy), and the autonomy of their operations with hidden services (obscurity). The TOR project is financed by a group of civil and governmental entities but had the support of the US Naval Research Laboratory at the beginning, in the 1990s, with the purpose of protecting American intelligence communication (DINGLEDINE MATHEWSON; SYVERSON 2004). After the demilitarization of its development, in the 2000s, its technology started to be used as a civil rights protection in dictatorial countries and by non-governmental entities that support the transparency of institutions, such as the Wikileaks, which preserves the anonymity of their sources using the TOR network.

In the next sections, we will describe both experimental initiatives implemented at the State University of Londrina, whose results indicate some possibilities, difficulties, and challenges to the establishment of Emergency Libraries.

5 THE COMMON LIBRARY PROJECT²⁵

The CL is an extension project conducted at the State University of Londrina (UEL) that aims to increase the digital collection of school libraries in search of universal access and in line with the efforts enacted by law No. 12,244 of May 24, 2010, and the Castilho Law No. 13.696, of July 12, 2018, which proposes a legal framework to promote books, reading, and libraries in Brazil.

Thus, we sought OER (works in the public domain or under the Creative Commons license) and integrated them into an open library management system. The works are on the local computer, so internet access is not necessary to use the library, which can be accessed even by the students' cell phones and tablets, in its internal wireless network, avoiding the control of dominant platforms.

The project consists of four continuous tasks: Collection, in which we programmatically search for open licensed or public licensed digital materials and store them in our directory; Curatorship, in which we select part of the collected material, extract relevant information from them, and make it available in flash drives integrated to an information retrieval system – the search engines; Cataloging, in which information professionals catalog the resources of all search engines, generating a single database integrated with a library management system – BibLivres; and Distribution, in which we propose the practical use of this technology as a pedagogical tool in courses at the DIC at UEL.

| 13

6 PRELIMINARY RESULTS

Collection: The complete project directory currently has more than 190,000 open digital objects in 4.42TB of data, containing approximately: 55,000 texts (125 GB); 33,600 videos (4.7 TB); 3,500 audios (24 GB); and 98,600 images (102 GB).

Curatorship: The second task of the project foresees the extraction of metadata and categories from digital objects for their eventual classification, indexation, and retrieval. Using programmatic techniques to extract named entities and collaborative classify documents, we produce search engines. Search engines are systems for retrieving selected files, combining a criterion of relevance and space use on the apparatus, seeking to offer the greatest number of important files in the smallest possible space.

These systems were designed to be the easiest to distribute, copy, and use, without the need to install any computer software besides the browser, normally already available in different operating systems²⁶. They need neither a database, nor a web server, file manager, or

²⁵ A constantly updated version of the project description can be found on its website: <http://bc.precog.com.br/>

²⁶ The searchers use DataTables technology (<https://datatables.net>), an open source Javascript library capable of streamlining the search in HTML tables to which we add the metadata of the files to be found. Javascript

content manager, as they need to be very cheap and have very low maintenance cost to avoid dependence on the current dominant platforms. Here are the search engines compiled so far:

CL-TEXT: From the texts downloaded during the collection phase, we selected some to compose an initial collection (classical and scientific), making sure that they fit on an 8 GB flash drive²⁷. CL-CLIPART: The clip art finder provides nearly 15,000 images to illustrate schoolwork, presentations, and publications in order to streamline teachers' and students' tasks²⁸. CL-VIDMIN: The CL video browser gathers more than 500 open educational videos, occupying a space of less than 8 GB²⁹. CL-CORDEL: Cordel literature leaflets were compiled and made available in public domain³⁰. CL-AUDIO: It is a compilation of 700 categorized audio files that fit on an 8 GB flash drive³¹.

The search engines were distributed to more than 220 public school teachers around the UEL as part of the activities related to the pedagogical practices of the Information Science course³². The results obtained show that it is possible to distribute digital content, even to environments without internet access, relatively cheaply and regardless of hegemonic platforms, through the use of open license and public domain digital content.

When analyzing the project's text directory and distributing the 55,000 digital objects into their respective groups by year of metadata updating, we noticed the massive presence of public domain files in peaks in the years 2008 and 2017 due to government initiatives such as the Domínio Público website³³ and the Brasiliana Guita e José Mindlin library³⁴ (Figure 2). However, if we analyze this same distribution using a filter for open licenses such as the Creative Commons, we will find an incremental trend from the year 2017 (Figure 3), showing an organic growth trend regardless of government initiatives. This implies the use of open licenses in the business model of university publishers such as Edusp³⁵, the UFSC publisher³⁶, and SciELO Books³⁷, among many others, and even commercial publishers such as Editora FI³⁸. In a movement very similar to the software industry in the 1980s, the technical reproducibility of digital objects is now included in global value production chains, suggesting a similar path for the library to become a service, management, and preservation provider of an uninterrupted informational flow, instead of maintaining and guarding the ownership of books. If the software industry took nearly four decades to assimilate open licenses as a hegemonic force in its dynamics³⁹, the transition from the library to an open content platform should be

technology is a programming language interpreted in real time that is part of the World Wide Web standards, being present, therefore, in the vast majority of browsers.

²⁷ See a CL-text demo at: <http://www.precog.com.br/bc-texto>.

²⁸ See a CL-clipart demo at: <http://www.precog.com.br/bc-clipart>.

²⁹ See a CL-vidmin demo at: <http://www.precog.com.br/bc-vidmin>.

³⁰ Example at: <http://www.precog.com.br/bc-cordel/>.

³¹ Example at: <http://precog.com.br/bc-audio/>.

³² For more details, see the project website at: <http://bc.precog.com.br/>.

³³ See details at: <http://www.dominiopublico.gov.br>

³⁴ See details at: <https://www.bbm.usp.br/pt-br>

³⁵ See details of the USP Open Books Portal at: <http://www.livrosabertos.sibi.usp.br/portaldelivrosUSP>

³⁶ See details about the UFSC publisher open access initiative at: <https://editora.ufsc.br/estante-aberta>

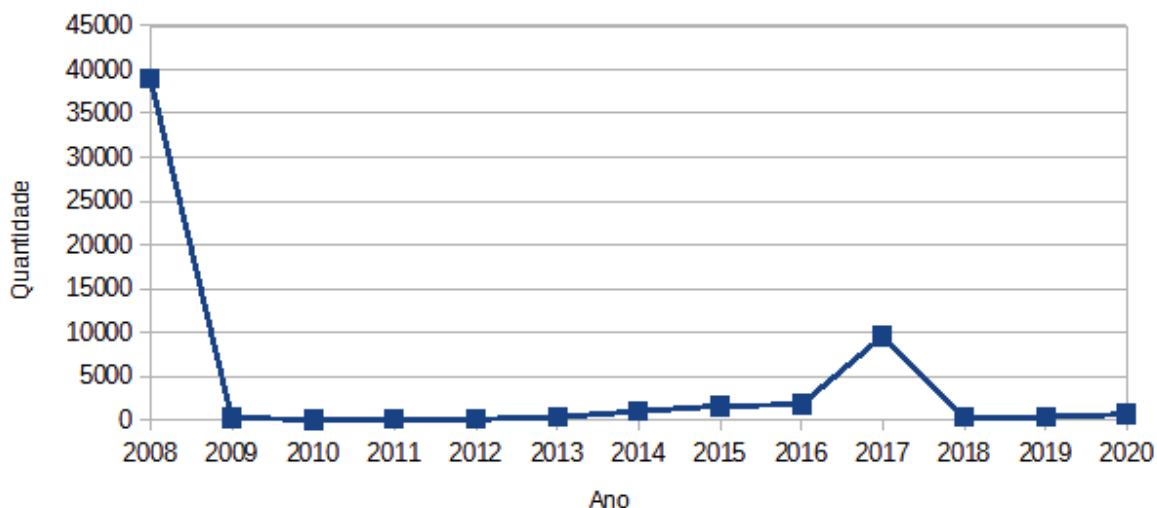
³⁷ See details about the SciELO Books at: <http://books.scielo.org>

³⁸ See details about Editora FI at: <https://www.editorafi.org>

³⁹ See the CNBC report: *The Rise Of Open-Source Software*. [s.l.: s.n.], 2019. Available at: <https://www.youtube.com/watch?v=SpeDK1TPbew>. Accessed on: February 17, 2021.

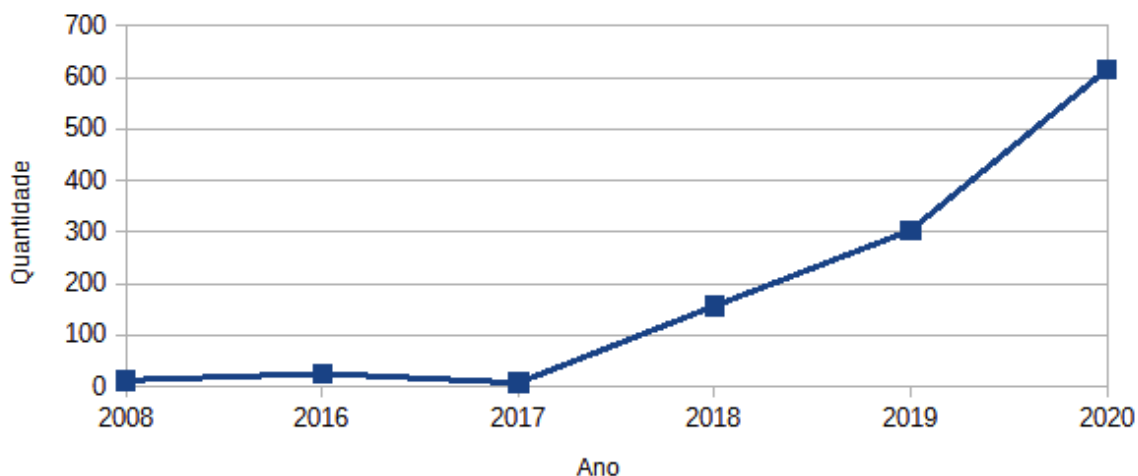
similar. The requirement for an Emergency Library must, therefore, objectively incorporate these trends, which are already expanding.

Figure 2. Number of texts per year in the CL.



Source: Research results (2021).

Figure 3. Number of Creative Commons texts per year in the CL.



Source: Research results (2021).

6.1 The Digital History (Emergency) Library

If the preliminary results of the CL project suggest that the combination of digital materiality, open licenses, and platform agnosticism can increase schools’ and teachers’ collections, promoting access to OER even in areas without internet, the pandemic of the novel coronavirus presented a related challenge: how to guarantee the students’ access to the collection of university libraries during the quarantine period considering possible precarious conditions?

The digital EHL project seeks to respond to these challenges in a far-from-ideal pandemic and restrictive scenario, which, in order to be understood, needs to start from the

events that marked the concern with the incorporation of technology into the activities developed at the UEL DH. So, let us take a look at this brief summary.

In 2013, the undergraduate History committee at UEL changed the curriculum in compliance with the requirements of the Ministry of Education, through which Teaching Topics courses were created, being linked to the traditional Ancient and Medieval, Modern and Contemporary, and Brazilian and American History courses. More than offering the courses according to the ministry guidelines, an execution plan was created, through which a common axis around the theme of teaching identity and practices aimed at exploring historiographic sources in the classroom was implemented. In the following years, teaching experiences were developed in the course of Teaching Topics in Modern History aimed at the use and study of new information and communication technologies, including the awareness of/about OER already in initial teacher training.

As of 2015, we moved from analyzing resources produced by others (DURAN; AMIEL; COSTA, 2018) to preparing our own resources (DURAN; MOLINA, 2016). It is worth remembering, however, that in an opinion poll conducted with students from the 2015 class via Google Forms, most highlighted the importance of Information and Communication Technologies (ICT) for teachers (56.3%) and the scarcity of its approach in the undergraduate program they attended (64.6%) (DURAN, 2016).

The pressure for the implementation of new educational apparatuses was, therefore, centripetal and centrifugal. A study of the freshmen's profile promoted by the UEL Dean for Undergraduate Studies, in 2015, showed that 73.42% of the freshmen in History had technical-professional training as objective. This technical training also seemed to be sought on the world wide web, since 97.47% of newcomers used it to keep themselves informed and 72.22% used it in their free time (DURAN; RODRIGUES, 2020).

Thus, in 2018, with the configuration of a new curriculum, driven by the new Common National Curriculum Base (BNCC), the Undergraduate Course in History at the State University of Londrina was included in the margin for offering up to 20% of the workload for distance and/or blended learning modality. In 2019, through the TECHIS teaching project, registered at the university under number 762, the History department sought to develop a discussion group on the use of new technologies using a Moodle environment created with the support of the Distance Education Center/UEL (NEAD/UEL). Despite these efforts, few professors (less than five directly involved in training from a department of 30 professors) used some technology in part of their courses at the beginning of 2020.

After the first month of quarantine, professors and students started studying the conditions for returning to activities. These studies included a series of surveys on the health of the community, in addition to the technological conditions and demands to resume classes (DURAN; RODRIGUES, 2020). On the one hand, there was institutional pressure for a return. On the other hand, the students indicated that they were unable to return because they did not have enough equipment or internet capacity for classes – in addition to stressing unsettling mental conditions.

The challenge for the commission that was developing a strategic and emergency plan to continue the activities offered by the UEL DH was to create cyberinfrastructure, providing technological infrastructure and users' training at zero cost – because the budget was zero – and in the shortest time possible.

A plan was conceived, discussed, and presented to the academic community in 30 days. Over the following 45 days, we made a digital curatorship available to conduct cultural-academic activities and, in 60 days, we restarted classes, with homogeneity, isonomy, and stable cyberinfrastructure already available to students. This involved the review of 26 course programs and the creation of 26 Moodle classrooms; the curatorship of 250 hours of cultural

and educational activities on the network and the offer of a broad monitoring notice to fulfill Cultural Curricular Activities (CCAs); the offer of 60 hours in its own extension project (to fulfill the supervised internship workload); the development of an introductory module to DL and remote learning as part of the 2.0 Reception Week, with ten hours of lives; and the creation and production of 20 hours of radio lectures and the development of the EHL, with 32 GB of content (texts, radio programs, lesson plans, introductory module, and open access books).

Our pedagogical strategy was to align all courses to the same methodological procedure: all courses would be offered in just 20% of the workload, through four Moodle forums, with a controlled number of digitized texts. This alignment allowed offline and online students to be served with the required isonomy, within a range of sustainable data package usage for most students, which is, the smallest data package available on the market for cell phones.

Obviously, we had a 5%-10% margin of error: the Education department had severe difficulties with the Moodle platform; some students missed the deadline for requesting the tablets offered by the university; the EHL took other 20 days to reach all offline students, and six of the 18 students did not respond if they had received the material or not; the CCAs curatorship was not widely used by the students and one of the radio programs broadcast could not be used due to technical limitations.

Two fronts were developed to meet the demand for greater timetable flexibility to offer the courses. This demand is justified, on the part of our students, both due to psychological issues and to the new reality of the Brazilian labor market during the pandemic. Which were the fronts? 1) To maintain spoken contact with students, ensuring low cost, flexible schedules, and quality of services, we created the radio program “A peroba”, broadcast on Saturdays on Rádio UEL, which was also converted into mp3 for offline access on cell phones – considering that not all of our students have computers and that the university itself provided tablets for them. 2) To ensure that all our offline, i.e., without access to the network, or online students, i.e., with network access lower than the smallest monthly data package, would have the course materials, we created the EHL.

Thus, the EHL project was created during the COVID-19 pandemic period in the following scenario: the UEL Library System reorganized its functioning to provide scheduled book loans. However, a considerable part of History students attested, in surveys conducted by the Dean for Planning (PROPLAN), Dean for Undergraduate Studies (PROGRAD) and the DH, that they would not have access to the UEL library during the pandemic because they lived in other cities and could not use public intercity transport in order to, very prudently, protect themselves from COVID-19.

Nevertheless, UEL students had at their disposal only 6,000 volumes of digital books, offered by the Central Library/UEL. Most of these works refer to Final Course Works, not representing the set of books necessary to maintain the teaching quality of the History course. For this reason, we are looking for a way to meet the demand for course readings by offering them a more robust library in digital and physical media (flash drives), as needed by university History students.

The cyberinfrastructure outlined in the History course was initially named as “Benjamin Franklin”, patriarch of American freedom, and created to serve online and offline students based on two models or supports: 1) The OER directory – a result of the Common Library project – and 2) the EHL.

In the first model, the student finds more than 190,000 digital objects in 4.4 TB of data from the Common Library project. The second model, the EHL, includes guidelines and texts for each course, the radio programs created to meet the demand for lectures, and four practical

instruction materials for students⁴⁰, in addition to the programs of the 26 courses offered by the DH⁴¹. This systematization demanded: a) the creation of a common drive for the DH, b) to request all professors to digitize their texts, creating indexers for each of them and posting the texts on the drive.

In the folder “Instructions on the UEL History course”, the student accesses four newsletters about the digital library itself, the radio programs, the class schedule, and how to contact the department in times of pandemic. The radio programs total 12 hours of content and were broadcast by Rádio UEL every Saturday at 1 pm, licensed under the Creative Commons “Attribution-Share Alike 4.0 International” and being also available on MixCloud: <https://www.mixcloud.com/TECHIS/>.

The other folders contained the EHL itself. The “works” folder contained the pdf. files of texts and course programs. This folder alone had 340 files or text units. As for pdf. file selection, it was necessary to present, even if in general terms, some of the national and international guidelines on copyright to professors, pointing out the difference between Copyright and Creative Commons. Professors committed to post only materials that did not exceed 30% of the works (with reference to page numbers in the same works) or that had been published with an open license. The presentation of the license modalities and the partition logic of the EHL took place during virtual departmental meetings and, at the end of August 2020, to improve the second version of the EHL, an extensive workshop was held within the scope of the 762 TECHIS project.

Obviously, an accurate review of these contents was necessary, which resulted in the discovery of materials not meeting the established criteria. The indication of the existence of these materials generated a whole departmental discussion about the veracity of the risks and implications of transferring institutional data and research materials to the so-called Big Techs. The difficult development of this dialog in a politicized and also technological manner shows the lack of preparation of the Brazilian academia for the internationalization of its productions and interactions.

The “css”, “js”, and “about” folders contain the tools that allow the “searcher” to execute the demand. In the “index.html” file, the student accesses the interface of our search engine, as shown in Figure 4.

Figure 4. EHL/Emergency Library search engine interface.

⁴⁰ Using a common tool, the Forum, which, as mentioned above, was implemented because, although many professors already had a sophisticated knowledge on technology, most had never entered the Moodle environment or created digital learning spaces before, the offer equalized in order not to expose any colleagues nor fail to meet the demand for students’ isonomy.

⁴¹ Given the delay of students in answering the Community Welfare Service (SEBEC) and DH questionnaires about their conditions for continuing the course, in July 2020 we still had no knowledge of the exact number and names of the offline students to better serve them with this apparatus. Therefore, the History faculty agreed to restrict their materials to an average of 2 GB per course, as well as to limit to textual material, as this would yield many more classes and imply less data consumption than videos and related materials. Under these conditions, we set up a material with all the History references that totaled 32 GB, and we guided the professors to reuse materials in their future activities. It should be noted that some professors exceeded the limit and others did not reach half of it, denoting the disparity in the domain of technological tools in the department, one of the main concerns in the design of the 762 TECHIS project, whose isonomy principle served students, but it also extended to professors.

The screenshot shows a web browser window with the address bar containing a file path. Below the address bar, there are navigation buttons for 'Apps', 'YouTube', 'Maps', 'Notícias', 'Grants', and 'Publicações - Obs...'. A menu bar includes 'Ciência', 'Moderna', 'Medieval', 'Clássica', 'Política', 'Arte', 'Memória', and 'Disciplina...'. The main heading is 'Biblioteca Emergencial de História'. Below the heading, there is a search bar with '10' results per page and a search input field. The table below lists search results with columns: Responsável, Código, Disciplina, Textos, palavras-chave, and Nome do arquivo.

Responsável	Código	Disciplina	Textos	palavras-chave	Nome do arquivo
ALFREDO DOS SANTOS OLIVA	1HIS760	Teoria da História II	Programa de Curso	1HIS760; Teoria da História II; Alfredo; programa	00_Teoria da história II (2020.1) Adaptado.pdf
ALFREDO DOS SANTOS OLIVA	1HIS760	Teoria da História II	Lista de leituras	1HIS760; Teoria da História II; Alfredo; leituras	00_Lista de leituras.pdf
ALFREDO DOS SANTOS OLIVA	1HIS760	Teoria da História II	PEIRANO, M. A favor da etnografia. Disponível em: . Acesso em: 16 de Outubro de 2018.	1HIS760; Teoria da História II; Alfredo	01_A favor da etnografia.pdf
ALFREDO DOS SANTOS OLIVA	1HIS760	Teoria da História II	PEIRANO, M. Etnografia não é método. Disponível em: . Acesso em: 16 de Outubro de 2018	1HIS760; Teoria da História II; Alfredo	02_Etnografia não é método.pdf
ALFREDO DOS SANTOS OLIVA	1HIS760	Teoria da História II	PEIRANO, M. Etnografia, ou a teoria vivida. Disponível em: . Acesso em: 16 de Outubro de 2018	1HIS760; Teoria da História II; Alfredo	03_Etnografia ou a teoria vivida.pdf
ALFREDO			GEERTZ, C. O saber local: novos ensaios em...	1HIS760; Teoria	

Source: Research results (2021).

To find the metadata of the courses in the library using our search engine (in the flash drive), the student can search for the names of the professors or courses or text keywords (present in the course program). Thus, if the student is looking for “Modern History” texts in the course taught by Professor Maria Renata, these keywords (Modern History and Maria Renata) will be enough to find what they are looking for.

The EHL was available in two forms for the 360 enrolled students: a) in the form of a link to a shared drive on the network (GDrive), and b) in the form of a flash drive for the students who were demonstrably offline. In the first form, the material ran for only 30 days. Difficulties with the link, since many students did not realize that the GDrive access was conditioned to the use of institutional email, and the lack of an adequate copydesk service, since the same five professors involved in the project were also involved in numerous other activities, generated an inability to meet all student and institutional demands at that time, leading to the suspension of this modality. In the second form, the material was widely used for offline students not only to distribute the material to colleagues and use them themselves, but also to fulfill the commitment not to “leave any student behind”.

Although the second form of EHL use was limited, since we distributed only 18 flash drives, this action was extremely costly for those involved. It included a first contact with all students in the course by email to verify their access to the network. Then, telephone contact, not always successful at first, with around 40% of students. It also involved the registration of part of these students in the emergency equipment supply plans offered by the university and confirmation of their addresses for sending the flash drives.

At the same time, a campaign to collect flash drives was conducted by the professors and the university social service bodies – it should be noted that the delivery of tablets was scheduled for a later time and the students demanded equal care for all enrolled. Finally, the flash drives were recorded manually and sent via university mail bag. All of these activities were conducted by the department professors, in a Herculean effort to include all students on the same boat. The joy of serving everyone, however, is rewarding.

Thus, what this project offered was a customized, low-cost, easy-to-transit library, which was designed at a time of uncertainty about the duration of the pandemic and about the cyberinfrastructure that would be available for professors and on- and offline students during this period. Therefore, the justification for this project is to offer access to the bibliography necessary for the course in a clear, customized and low cost/data consumption manner during the pandemic. We also understand that it serves both offline and online students – since its data consumption is infinitely smaller than that of repeated Moodle entries and it can be strategically downloaded at a public internet hotspot for offline use – and that it is important that more people are involved in its availability and updating. We highlight that after being available for one month in this modality (link for online students), the library had 100 hits. Outside the pandemic period, the project is still sustainable, since CL/UEL does not have enough agility to feed the available bibliography with more up-to-date resources – obviously, we understand it to be a national funding problem and not a criticism to CL/UEL. Thus, this may be a way to provide our students with controlled access (avoiding copy illegality) to open (the library also included the CL collection) and high-quality material (curated, collected, and indexed by the DH itself).

In summary, the EHL's active principle was to think of an educational tool that excelled in the open, public, and free maintenance of knowledge. To carry out technology-mediated teaching without surrendering to the silent privatization of the Big Techs. To pressure public authorities to take their role in investing in the autonomous and sovereign creation of cyberinfrastructure for knowledge, innovation, and science. To institutionally recognize the professors' work time dedicated to valuing "public" knowledge and to expand institutional investment in this type of initiative. To make students aware that the privatization promoted by DL, as they advocated in student assemblies, does not simply lie in the low quality of the offer by reducing contact with professors and university infrastructure, but fails to guarantee sustainable and sovereign cyberinfrastructure that would assure not just maintenance, but the increased quality of services provided by the public university in Brazil.

However, in October 2020, the DH was proposed to update the EHL by supplying texts, CCA curatorship, extension projects, and radio programs referring to the second stage of the courses (60% of the untaught courses). This implied its systematization/consolidation in a spreadsheet for encoding the metadata of the selected files. Although a graduate student in History was seriously involved in the project, one of the key elements for the current inertia of the project is the absence of a professor co-leadership, which would alleviate the burden of coordinating actions relevant to confronting COVID-19, and of raising awareness about the importance of the project beyond the initial awareness toward offline students, which dissipated at the end of the semester among dropout and absenteeism rates in the universities in 2020.

Also, the second EHL round, supposed to take place in October 2020, had only five professors willing to provide materials. In September, the pandemic wear and tear, the lack of empathy with technology, the pedagogical confrontations witnessed during synchronous classes, and the impact of the inverted classroom promoted by the written and silent model of study guidelines led within the scope of the 762 TECHIS project – resulting in a student accountability much greater than what professors and students were used to – led to a distancing, on the part of professors and students, from the efforts that would guarantee the "openness" of the designed model and a second EHL round.

However, this pandemic went from being short-lasting to medium, if not long-lasting, and this trend, as well as the hybridization of higher education, pushes us toward the resumption and improvement of the project – which, although caused strangeness, did not generate disgust. Nevertheless, its public presentation aims, among others, to raise the validity, challenges, and potential of projects among peers that, like this one, focused on knowledge beyond the not always encouraging conditions for their production. Furthermore, without the internal

recognition of the increased workload for preparing classes – which, in a technological scenario, triples – revising Resolution No. 92/99, which regulates the Individual Teaching Activity Planning (PLAID), it will be very difficult to maintain or develop the EHL or any other related projects.

Currently, these activities are recognized as parallel extension, innovation, or teaching projects. To face the realities exposed here, it is currently necessary that the professor has already developed research in the area. We disagree with this path, because we understand that the current situation promotes entry into the technological universe, even without reflection. In order to guarantee this time, a priori, it is essential for professors to understand the immanent need to rethink their educational practices, understanding the cyberinfrastructure generation as a *sine qua non* for their profession. Another option would be for Brazilian public university libraries to invest more in a digital collection than in material. It would be, therefore, an even more structural problem, since some studies indicate Brazil as one of the biggest consumers of digital culture, but also one of the countries that produces less original, educational, and scientific content in this scope (DURAN; RODRIGUES, 2020).

Furthermore, the historic resistance of Brazilian public universities to technology, justified by the quality of courses offered by the private sector – the leader in this type of courses – has made educational investments focus on buildings and people. People, as we have seen, continue to need training and are willing to do so, but perhaps it is time to invest in a virtual Babel, where we not only have access to knowledge, but also present our intelligence to the world.

This dialog should also incorporate the students. The Matrix digital natives may not have realized that their greatest fears – the privatization and disqualification of higher education – occur in the shadows of this environment and with their support. It was not rare for those who accused us of their fears to prefer the use of Big Techs tools. But the devil has always been in the details, hasn't he? And the growth of Fake News, especially among young people, shows us that nativity guarantees no awareness (DURAN; RODRIGUES, 2020).

In these terms, while we felt threatened by technology in our professions, we only saw our protagonism and responsibilities grow. We believe that sharing responsibilities and investing in a cyberinfrastructure that guarantees a free territory for knowledge is the demand we maintain after experiencing this first stage of the pandemic.

7 CONCLUSION AND SOME FINAL QUESTIONS

With this study, we intend to point out some characteristics of an Emergency Library to collaborate on the establishment of its concept and outline implementation possibilities, dilemmas, and difficulties. Thus, we approached the concept of emergence to that of sovereignty and exception regime in order to establish a dialog with the contemporary library, which would be an apparatus – in Foucault's sense – in transition to a global digital materiality that would imply the review of the reprographic legal mechanisms that characterize its modern appearance. We seek support for these assertions in the results of projects conducted at UEL, highlighting the CL project and the EHL, in which we used the reprographic properties of digital objects to respond to the requirements of access to the students' collection during the novel coronavirus pandemic.

The results obtained indicate some recommendations, such as: a) the use of digital materiality as a hegemonic paradigm; b) the use of open licenses and the public domain as privileged legal apparatuses; c) to maintain, as much as possible, agnostic actions regarding digital platforms, and d) to establish an objective legal security mechanism capable of

regularizing the copying of legacy digitized books – whole or excerpts – that clandestinely inhabit the deep web.

This synthesis leads us to inevitable questions, such as: if digital objects in the public domain would supply the Emergency Library of classic works and open licenses for future works, then what would be this legal apparatus, still mysterious, capable of releasing legacy works subjected to restrictive copyright laws, but which have been digitized and are monitored by the state apparatus, supposed to provide access to the modern citizen? If the works present in the library are supervised by copyright law, which already provides for an ambiguous permission to copy short excerpts – whatever this means – in old apparatuses, photocopiers of a nostalgic modernity, how can they contain or integrate the wave of pirated books already circulating on the dark web, if not by joining the hegemonic platforms of the Big Techs?

Would that be the current condition of the library: to precisely prevent the long-awaited emergence of its contemporary version? How would we admit to close libraries and change the calendar of schools and universities if the evocation of the state of emergency, public calamity, and health emergency could only prevent the movement of people? Couldn't the exception, with the same constituted sovereign power, allow the free circulation of digital objects in the name of the pandemic and of law and order? Is the state of exception just castrating and not releasing?

Reducing the library to serve groups on social networks during the pandemic, while its collection remains inaccessible, seems little, being in fact much less than its importance deserves. The Emergency Library is credible, feasible, and already being objectively built in the reprographic capabilities of the materiality of digital objects, in open licenses, in the public domain, and in the clandestine transit of pirated books in the dark areas of the internet. It is up to society and its laws to bring this apparatus to the light of public life, with an objective and liberating legislation, at the cost of “offending” the very basis of western life and its tradition.

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REFERENCES

AGAMBEN, Giorgio. **Estado de Exceção**. Homo Sacer II, 1. São Paulo: Boitempo, 2004.

AGAMBEN, Giorgio. **O que é o contemporâneo e outros ensaios**. Chapecó: Argos, 2009.

AGAMBEN, Giorgio. **Reflexões sobre a peste: ensaios em tempos de pandemia**. Tradução de Isabella Marcatti e de Luisa Rabolini. São Paulo: Boitempo Editorial, 2020.

ANDERSON, Chris. **Free: grátis: o futuro dos preços**. Rio de Janeiro: Campus, 2009.

APPENZELLER, Simone *et al.* Novos Tempos, Novos Desafios: Estratégias para Equidade de Acesso ao Ensino Remoto Emergencial. **Revista Brasileira de Educação Médica**, v. 44, supl. 1, e1552020. Available at:

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-55022020000500201&lng=en&nrm=iso. Accessed on: March 17, 2021.

BATTLES, Matthew. **Library: an unquiet history**. New York: W.W. Norton & Company, 2015.

BELL, Daniel. **The coming of post-industrial society: a venture in social forecasting**. Special anniversary ed. New York: Basic Books, 1999.

BÖHME, Gernot; STEHR, Nico (org.). **The Knowledge Society: The Growing Impact of Scientific Knowledge on Social Relations**. [s.l.]: Springer Netherlands, 1986.

BRAMAN, Sandra. The emergent global information policy regime. *In*: BRAMAN, Sandra (org.). **The Emergent Global Information Policy Regime**. London: Palgrave Macmillan UK, 2004. p. 12-38. (International Political Economy Series).

BRANCO, Sérgio; BRITTO, Walter. **O que é Creative Commons? novos modelos de direito autoral em um mundo mais criativo**. Rio de Janeiro: Editora FGV, 2013.

BRASIL. Lei nº. 9.610, de 19 de fevereiro de 1998. Altera, atualiza e consolida a legislação sobre direitos autorais e dá outras providências. Diário Oficial [da República Federativa do Brasil], Brasília, 20 fev. 1998. Available at: www.dou.gov.br/materias/do1/do1leg19980220180939_001.htm. Accessed on: March 17, 2021.

BUAINAIN, Antônio Márcio *et al.* Indústria criativa: direitos de autor e acesso à cultura. **Liinc em Revista**, v. 7, n. 2, 2011. Available at: <http://revista.ibict.br/liinc/article/view/3319>. Accessed on: March 17, 2021.

CAETANO, Miguel Afonso. **Cultura P2P**: uma análise sociológica comparativa das redes e dos sites de partilha online de músicas, filmes e livros eletrônicos em Portugal e no Brasil. 2016. 365f. Tese (Doutorado em Ciências da Comunicação) – Instituto Universitário de Lisboa - ISCTE-IUL, Escola de Sociologia e Políticas Públicas, 2016. Available at: <http://hdl.handle.net/10071/12456>. Accessed on: March 17, 2021.

CHARTIER, Roger. **A ordem dos livros**: leitores, autores e bibliotecas na Europa entre os séculos XIV e XVIII. Brasília: Editora UnB, 1994.

COUGHLIN, Tom. **Digital Storage Projections For 2020, Part 2**. Forbes, 2020. Available at: <https://www.forbes.com/sites/tomcoughlin/2019/12/23/digital-storage-projections-for-2020-part-2/>. Accessed on: March 17, 2021.

DELEUZE, Gilles. **Post-scriptum sobre as sociedades de controle**. Em: Conversações. São Paulo: Editora 34, 1992.

DESAI, Bipin C. Pandemic and big tech. *In*: SYMPOSIUM ON INTERNATIONAL DATABASE ENGINEERING & APPLICATIONS, 24., 2020, New York. **Anais [...]** New York, NY, USA: Association for Computing Machinery, 2020, p. 1-10. Available at: <https://doi.org/10.1145/3410566.3410585>. Accessed on: March 17, 2021.

DINGLELINE, Roger; MATHEWSON, Nick; SYVERSON, Paul F. **TOR**: The Second-Generation Onion Router. Naval Research Lab Washington Dc, 2004, p. 1-17. Available at: <http://www.dtic.mil/docs/citations/ADA465464>. Accessed on: March 17, 2021.

DURAN, Maria Renata da Cruz; RODRIGUES, Bruna Carolina Marino. Fake news: quem tem medo da verdade na Internet? *In*: PESQUISA sobre o uso das tecnologias de informação e comunicação nos domicílios brasileiros: TIC Domicílios 2019. São Paulo: Comitê Gestor da Internet no Brasil, 2020. Available at: https://cetic.br/media/docs/publicacoes/2/20201123121817/tic_dom_2019_livro_eletronico.pdf. Accessed on: March 17, 2021.

DURAN, M. R. C.; MOLINA, A. H. Literatura, tecnologia e inclusão de deficientes visuais no ensino de História: o que acontece quando Shakespeare vai à escola? *In*: BEGO, Amadeu M.; MOLINA, Ana Heloisa *et al.* (org.). **Prêmio Professor Rubens Murillo Marques 2016**: Experiências docentes em licenciaturas. 50. ed. São Paulo: Fundação Carlos Chagas, 2016, v. 50, p. 11-53.

DURAN, Maria Renata da Cruz. Educação Aberta: explorando materiais para o ensino de História. *In*: MOLINA, Ana Heloisa; FERREIRA, Augusto Lima (org.). **Entre textos e contextos**: caminhos do ensino de História. 1. ed. Curitiba: CRV, 2016, v. 1, p. 511-542. FOUCAULT, Michel; MUCHAIL, Salma Tannus. **As palavras e as coisas**: uma arqueologia das ciências humanas. São Paulo: Martins Fontes, 2007.

FRANKLIN, Benjamin Luiz. Bibliotecas digitais clandestinas: evidenciando a formação de comunidades discursivas na deep web. *In: ENCONTRO NACIONAL DE PESQUISA EM CIÊNCIA DA INFORMAÇÃO – ENANCIB*, 20., 2019, Florianópolis. **Anais [...]** Florianópolis: ANCIB/UFSC, 2019. Available at: <https://conferencias.ufsc.br/index.php/enancib/2019/paper/view/640>. Accessed on March 17, 2021.

FRANKLIN, Benjamin Luiz. A recusa à escassez: a universalização da biblioteca escolar e a tensão entre a materialidade digital e a Lei de Direitos Autorais. **Informação & Sociedade: Estudos**, v. 30, n. 3, p. 1-23, 2020. Available at: <https://periodicos.ufpb.br/ojs2/index.php/ies/article/view/52339>. Accessed on March 17, 2021.

FROHMANN, Bernard. O caráter social, material e público da informação na contemporaneidade. *In: ENCONTRO NACIONAL DE PESQUISA EM CIÊNCIA DA INFORMAÇÃO – ENANCIB*, 7., 2006, Marília. **Anais [...]** Marília: ANCIB/UNESP, 2006. Available at: <http://repositorios.questoesemrede.uff.br/repositorios/handle/123456789/829>. Accessed on: March 17, 2021.

GONZÁLEZ DE GÓMEZ, Maria Nélide. Reflexões sobre a genealogia dos regimes de informação. **Informação & Sociedade: Estudos**, v. 29, n. 1, 2019. Available at <https://periodicos.ufpb.br/ojs2/index.php/ies/article/view/44357>. Accessed on: March 17, 2021.

HAN, Byung Chul. **Sociedade do cansaço**. Tradução de Enio Giachini. Petrópolis: Vozes, 2015.

HENRIQUES, João. Os REA e o software livre. **REAeduca: Revista de Educação para o Século XXI**, n. 3, p. 1-8, 2017. Available at: https://repositorioaberto.uab.pt/bitstream/10400.2/6529/1/51b840_996145d414384a99ac9df1893362b7e1.pdf. Accessed on: March 17, 2021.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA - IBGE, 2020. Pesquisa Nacional por Amostra de Domicílios Contínua: Tecnologia da Informação e Comunicação. 2020. Available at: <https://www.ibge.gov.br/estatisticas/sociais/trabalho/17270-pnad-continua.html>. Accessed on: March 17, 2021.

KARAGANIS, Joe (org.). **Shadow libraries: access to knowledge in global higher education**. Cambridge, MA; Ottawa, ON: The MIT Press; International Development Research Centre, 2018.

LANHAM, Richard A. **The economics of attention: style and substance in the age of information**. Chicago: University of Chicago Press, 2006.

LÉVY, Pierre. **A máquina universo: criação, cognição e cultura informática**. Lisboa: Instituto Piaget, 1995.

LIZIERO, Leonam Baesso da Silva. **A Soberania no Estado Contemporâneo**. Porto Alegre: Editora Fi, 2017. Available at: <https://www.editorafi.org/203leonam>. Accessed on: March 17, 2021.

MILES, Jack. **God: a biography**. New York: Vintage Books, 1996.

MIZUKAMI, Pedro; REIA, Jhessica. Brazil: the copy shop and the cloud. *In*: KARAGANIS, Joe (org.). **Shadow libraries: access to knowledge in global higher education**. Cambridge, MA; Ottawa, ON: The MIT Press; International Development Research Centre, 2018.

PACHECO, Roberto Carlos dos Santos; SANTOS, Neri dos; WAHRHAFTIG, Ramiro. Transformação digital na Educação Superior: modos e impactos na universidade. **Revista NUPEM**, v. 12, n. 27, p. 94-128, 2020. Available at: <http://revistanupem.unespar.edu.br/index.php/nupem/article/view/825>. Accessed on: March 17, 2021.

PESSOA, João Pedro Seefeldt. **O efeito Orwell na sociedade em rede: cibersegurança, regime global de vigilância social e direito à privacidade no século XXI**. Porto Alegre: Editora Fi, 2020. Available at: <https://www.editorafi.org/073orwell>. Accessed on: March 17, 2021.

PESQUISA sobre o uso das tecnologias de informação e comunicação nos domicílios brasileiros: TIC Domicílios 2019. São Paulo: Comitê Gestor da Internet no Brasil, 2020. Available at: https://cetic.br/media/docs/publicacoes/2/20201123121817/tic_dom_2019_livro_eletronico.pdf. Accessed on: March 17, 2021.

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RIFKIN, Jeremy. **The zero marginal cost society: the internet of things, the collaborative commons, and the eclipse of capitalism**. New York: Palgrave Macmillan, 2014.

ROBBINS, Lionel. **An essay on the nature and significance of economic science**. Local: Macmillan, 1932.

SEVERINO, Antonio Joaquim. **Metodologia do trabalho científico**. 21a.ed. São Paulo: Cortez, 2000.

SCHAFF, Adam. **A sociedade informática: as consequências sociais da segunda revolução industrial**. São Paulo: Ed. UNESP: Brasiliense, 1995.

SCHWAB, Klaus. **A Quarta revolução industrial**. São Paulo: Edipro, 2016.

SRNICEK, Nick; DE SUTTER, Laurent. **Platform capitalism**. Cambridge, UK; Malden, MA: Polity, 2017. (Theory redux).

TANUS, Gabrielle Francinne de Souza Carvalho; SÁNCHEZ-TARRAGO, Nancy. Atuação e desafios das bibliotecas universitárias brasileiras durante a pandemia de Covid-19. **Revista Cubana de Información en Ciencias de la Salud.**, v. 31, n. 3, e1615, 2020. Available at:

<https://preprints.scielo.org/index.php/scielo/preprint/view/744/version/784>. Accessed on: March 17, 2021.

TARGINO, Maria das Graças. Ranganathan continua em cena. **Ciência da Informação**, v. 39, n. 1, p. 122-124, 2010. Available at:

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-19652010000100008&lng=en&nrm=iso. Accessed on: March 17, 2021.

TOFFLER, Alvin. **A terceira onda**. Rio de Janeiro: Record, 1995.

TRIPP, David. Pesquisa-ação: uma introdução metodológica. **Educação e Pesquisa**, v. 31, p. 443–466, 2005.

WANG, Kaiwen. A quantitative analysis method of ideological and political instructors' work based on data mining. *In*: INTERNATIONAL CONFERENCE ON INTELLIGENT TRANSPORTATION, BIG DATA SMART CITY (ICITBS), 2018, Xiamen. **Anais [...]** Xiamen: IEEE, 2018, p. 240-243. Available at: <https://ieeexplore.ieee.org/document/8332753>. Accessed on: March 17, 2021.

WILLIAMS, James. **Understanding poststructuralism**. Chesham, Bucks: Acumen Pub, 2005.

ZUBOFF, Shoshana. **The age of surveillance capitalism: the fight for a human future at the new frontier of power**. New York: PublicAffairs, 2018.

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