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Technological Developments and Capitalist Subsumption: *The New Information Technologies in the Construction of the Capitalist Individual*

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I. Introduction

ongoing incorporation information technologies into the social form of individual communication and organizational devices has represented significant transformations in the concrete forms of capitalist relations: platform capitalism, algorithmic capitalism, cognitive capitalism, communicative capitalism, data capitalism, digital capitalism, informational capitalism, surveillance capitalism, virtual capitalism, digital feudalism, technofeudalism, information feudalism, and neo-feudalism. Despite being repetitive, this list is illustrative of both the attempts to capture the essence of these transformations and the indication of a regressive social rupture towards a past of expropriation rather than innovation. However, instead of advocating for new concepts or the centrality of specific characteristics, this article aims to take a step back, that is, to analyze how current processes of intensifying capitalist relations have been obscured by the media-driven appearance of new technologies.

The insertion of information and communication technologies (ICT) into the dynamics of capital cannot be reduced to an alleged natural and inevitable trajectory of technological development. A "new technoeconomic paradigm" is imposed within the contradictory

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relationship of subsuming social being to the abstract reality of capital, where material gains are not the final objectives of these new rearrangements but the concrete means for reproducing this sociability. The social need for the production of surplus-value necessarily involves competition driven by productivity increases. This implies a phenomenological inversion, where a false appearance of spontaneous productivity growth is created, with growth appearing as the ultimate goal instead of the reproduction of this specific sociability based on exploitation.

The increase in social inequalities, exploitation, and expropriation, far from being understood as the essence to be reproduced, becomes an excrescence that can be regulated or governed by states. The harmful outcomes of information technologies, as emphasized by many recent analyses, are not accidental byproducts of increased productivity and innovation but are part of the technological trajectory determined by the contradictory class struggle of subsuming labor to capitalist relations.

Within the framework of the crisis in the reproduction of capitalist relations in the 1970s, changes were imposed on the 'world of labor' aimed at internalizing the forms of discipline and constituting social being as a capitalist individual (Han. 2015: Dardot; Laval, 2016; Boltanski; Chiapello, 2020). Instead of the growing rupture between alienation and material gains for the formalized working class of Fordist-Keynesianism (Holloway, 1996), from the 1980s onward, this externalized alienation in the forms of control and discipline of the so-called Fordist world is rapidly replaced by the internalization of the logic of constituting 'capitalist individuals.' The working-class struggle against oppression and segregation in the 1960s and 1970s is replaced by the endogenization of capitalist competition within the very constitution of social being, where workers and even the 'reserve army of labor' come to see themselves as entrepreneurs of their own selves, with the key difference being that their assets are their labor power instead of capital.

The realization of this internalization of capitalist reification in the constitution of social being imposes a greater blurring of the lines between working for others and working for oneself. For this endogenization of capitalist controls and discipline to occur, there must be

a collective real illusion that one is working for oneself, or at least that the fulfillment of this work is embedded in a trajectory of personal evolution. The distinction between work for generating surplus-value and mere activity for self-fulfillment becomes increasingly diffuse and inseparable.

In turn, the constitution of this new concrete form of capitalist relations does not emerge as a mere accident of the random appearance technologies. These new technological standards are imposed by the dynamics of the struggle for social constitution. The expansion of digital platforms, algorithmic organizations, the Internet of Things, etc., are not random outcomes of technical innovations in pursuit of economic growth; rather, they are concrete determinations of the recent processes of the real subsumption of labor to the reproduction of capital. From social media to digital platforms, a social diffuser work, what constitutes consumption, entertainment is created, erasing clear divisions of what constitutes us socially and the norms that guide our choices and worldviews.

The appearance of this intensification of control over human activity through value relations, therefore, manifests exactly through its opposite, through its false image of capitalist individual self-fulfillment. It is no coincidence that current theories on digital technologies emphasize a trend towards the decline in value generation in favor of expropriation, bringing today's society closer to the old feudal regime of surplus extraction. Large technology and financial companies, with their monopolistic and rent-seeking structures, are seen as a parasitic force extracting value instead of reproducing its expansion. The argument defended in this paper goes in the opposite direction, showing how this feudal image is merely a false appearance of the current form of capitalist sociability. The worsening distribution in favor of large financial and technological monopolies cannot be understood at the reduced level of capital sectors. On the contrary, to understand the real movement of reproduction of this sociability, it is necessary to begin with the increase in exploitation at the level of total social capital generation.

To analyze the arguments presented in this introduction, this article is divided into three additional sections, followed by the conclusion. The first section will discuss the relationship of real subsumption within the materialist tradition, to understand technological development as a product of class struggle for the formation of capitalist sociability. The second section will analyze the concrete forms of this subsumption in the current phase of capitalism, implying the current forms of exploitation and domination over human activities. Finally, in the last section before the conclusion, it will be demonstrated how these current forms of subsumption generate false appearances of a hypothetical trend

toward a rupture with a society based on value production.

II. Capitalist Technological Development as a Social Form of Subsumption

The current stage of development of capitalist productive forces, commonly referred to as "platform capitalism," perpetuates the idea of a post-industrial economy, often tied to optimistic views about technology and its new possibilities for development. Analyzing these new technologies from the perspective of the totality of social relations allows us to understand technical changes within the process of society's formation, not as an external element with autonomous logic (Peláez; Holloway, 1990). To do this, it is necessary to understand the characteristics of production and capitalist sociability in the reproduction of its totality.

Specifically capitalist labor is constituted by the alienation of the worker, who, as a free individual, is separated from the material conditions necessary to carry out that labor (Marx, 1994, 411). Consequently, this worker becomes dependent on selling their labor power, which is consumed in capitalist production to generate surplus value for the buyer. In this way, the sale and purchase of labor power become "a socially necessary form of labor for capitalist production" (Marx, 1994). Thus, although this purchase of labor power does not directly enter into production, it constitutes a fundamental part of the totality of the labor relationship.

In selling their labor power to generate surplus value, the worker alienates this capacity, handing control of it to the buyer. This alienation of labor does not occur through direct personal relations of domination and dependence, but rather emerges from social differences that are assumed in economic roles. In the act of alienation through the sale of labor power, the specificity of the capitalist relationship is established, with its forms of domination and dependence indirectly shaped by economic compulsion. Therefore, "although the sale and purchase of labour capacity . . . is a process which precedes the direct production process, and is separate from and independent of it, it forms the absolute foundation for the capitalist production process" (Marx, 1994, 413; emphasis original).

Despite this alienation, as the absolute foundation of capitalist production, it also impacts the process, as labor is now commanded by the buyer. Marx referred to this as the formal subsumption of labor to capital. "The labor process is subsumed under capital (it is its own process), and the capitalist enters into it as a director, a conductor; for him, it is simultaneously, immediately, a process of exploitation of labor by capital. This is what I call the formal subsumption of

labor to capital" (Marx, 1994, p. 424). The labor power purchased by the capitalist becomes directed and commanded solely by them, rendering the worker passive in relation to their own capacity. Thus, viewed in isolation, the worker may use the means of production in the labor process, but from the capitalist perspective, it is the worker who is utilized by the means of production to generate surplus value.

This process of domination over labor to constitute capitalist sociability as a separation of the worker from their direct social realization is further analyzed by Marx in terms of its reproduction dynamic, which he calls real subsumption. While formal subsumption pertains to the process of absolute surplus value creation, real subsumption refers to the creation of relative surplus value, achieved through increasing labor productivity. Real subsumption of labor into capitalist relations involves a continuous transformation of production processes, both materially and socially, to make them more suited to extracting surplus value. With the process of "real subsumption of labour under capital there takes place a complete [and a constant, continuous, and repeated] revolution in the mode of production itself, in the productivity of labour and in the relation between capitalist and worker" (Marx, 1994, 439).

Marx describes how this happens when discussing the transition from formal to real subsumption of the labor process to capital. However, in the first volume of 'Capital', the concept of labor subsumption was not fully developed (Arthur, 2009; Murray, 2004, 2009). This category is better elaborated in some of Marx's manuscripts from 1863-1867, known as the 'Unpublished Sixth Chapter', specifically in the section 'Results of the Immediate Production Process' (Marx, 1994). Although it did not make it into the final version of 'Capital' Volume 1¹, it is highly important in clarifying the logical processes of transforming concrete labor under capitalist domination (Arthur, 2009).

In 'Capital' (1990), Marx discusses more directly how formal subsumption occurs with gradual changes in existing labor processes, restricted to obtaining absolute surplus value, while real subsumption involves a complete transformation of the nature of labor, enabling the development of relative surplus value. This development of social labor forces allows the application of science and machinery to immediate production on a large scale, as there is a total revolution in the method of work, continuously seeking productivity gains. The development of the productive power of socialized labor no longer appears to belong to the worker: capital finds its ideal form, with the individual

worker appearing as an accessory, in which technological advancement is external to them; concrete labor is socially reduced to abstract labor (Rubin, 1978).

Once the worker has alienated their labor power, it is controlled and commanded solely with the interest of producing surplus value. This drives the constant incorporation of new techniques and innovations aimed at increasing productivity and the intensity of labor. Therefore, the incorporation of new technologies is not to meet needs or "to replace labour power where this is lacking, but rather in order to reduce massively available labour power to its necessary measure" (Marx 1993, 702). The control of labor power, understood in real subsumption, thus aims to adapt concrete forms of labor to the concrete interests and needs of surplus value generation, not to material wealth or concrete social needs.

The need for surplus value expansion is determined by the specific conditions of the capitalist relations in which they are embedded. As Marx argues. "this alteration of production's material shape forms the basis for the development of the capital-relation, which in its adequate shape therefore corresponds to a specific level of development of the productive powers of labour" (Marx 1994, 439). Thus, the concrete form of labor is continuously transformed toward generating surplus value. Therefore, these transformations brought about by real subsumption do not occur randomly but within the contradictory struggle to establish controls and domination over labor to generate surplus value. This leads to "a dynamic of increasing intertwinement between scientific activity and productive activity" (Paula; Cerqueira; Albuquerque, 2002, p. 831), with the application of science and scientific development being guided by its applicability in production, particularly in terms of control over labor for the production of surplus value.

This process of transforming the form of labor through the incorporation of new techniques and technologies cannot be viewed in isolation from the process of constituting the capitalist relationship of worker alienation. Formal subsumption of labor to capital, through the alienation of productive capacity, precedes real subsumption, which involves incorporating new production techniques. This, in turn, reproduces capitalist alienation and domination on new, concrete bases. Therefore, the incorporation of new technologies into labor control should not be understood solely as a means to increase surveillance or productivity but as a way to reproduce the capitalist relationship itself, i.e., the separation of the worker from the means of production.

Together, the process of real subsumption of labor and the contradictory tendency inherent in the capitalist need for expansion allow us to consider typically capitalist technological development and its historical expressions. It is impossible to separate

¹ Within Marxist literature, there is significant debate about why Marx discarded the chapter from publication in Volume 1, likely intending to use it as a transition to Volume 2. For a comprehensive discussion on the reasons and different interpretations, see: Murray (2009).

technology from the specific social forms of its purposes, especially when its use in the production process is conditioned by fundamental factors. The incorporation of new technologies is an essential driver of new productive investments, integrated into the competitive logic for participation in social surplus value.

New technologies not only revitalize the reproduction of capitalist relations in the pursuit of capital valorization but also play a key role in new forms of control and domination. The very subsumption of labor becomes increasingly mediated by these technologies. From the factory worker who becomes an operational manager of sophisticated machines to service workers constantly available through new forms of communication, new technologies have become a central space of social intermediation.

These technologies cannot be understood as random elements chosen by the "invisible forces" of the market. They may appear invisible in their social "appearance," but as Marx has shown, these forces are far from non-existent; they are, in fact, forms of capital's antagonistic contradiction over labor. Technological determinism is a false appearance that technical development acquires under capitalism, as widely debated within the tradition of critical theory (Adorno; Horkheimer, 2006 [1944]).

In a society where the totality of social relations is mediated by the value relationship between commodities, reason becomes instrumentalized, taking on the false appearance of having its own logic within a technical rationality (Horkheimer, 1973). Far from being an autonomous structure with its particular development logic, technology must be understood as a source of power stemming from a social construction, as it shapes, for instance, urbanization patterns, innovation selection, and individual experiences in the spheres of consumption, employment, and citizenship (Feenberg, 2002).

The development of new technologies is thus embedded in the growing subsumption of humanity to capitalist relations. Technology, therefore, is part of the struggle for social constitution. "Technology neither shapes nor is shaped by society. 'Shaping' suggests an external relationship, whereas the relationship between society and technology is not external. As part of society, technology embodies all the contradictions of social development" (Peláez; Holloway, 1990, 142). Therefore, technical forms must be understood within the historical process of social reproduction, as a moment for the concrete realization of society.

The new technological standards are part of the struggle for the constitution of the capitalist worker, which has its specificity in each historical moment. The way the worker is separated from their social universality as a commodity is not fixed, having particularities within each historical phase of capital. Therefore, it is essential to understand the development and incorporation of

technology within this historical framework of capitalist class formation.

III. Real Subsumption and Individualized Information Technologies

With the crisis of the Fordist-Keynesian model in the 1970s, as widely reiterated in the literature, flexible forms of production and labor relations began to consolidate (Harvey, 1992). Instead of direct controls and discipline imposed on workers by companies and the State, there emerged a trend toward self-imposed regulation of capitalist labor by the individual (Han, 2015; Laval; Dardot, 2016; Chiapello; Boltanski, 2020).

Fordist production, for part of the population², was based on the relationship between a high degree of alienation at work and growing consumption after work: dissatisfaction was transformed into demand and regulated by the State through wage contracts mediated by unions, welfare states, and fiscal expansion. With the "crisis of Fordism-Keynesianism," there was not merely a crisis in economic theory or the practice of economic policy: these were manifestations of a crisis in the relationship between capital and labor, a crisis in the specific pattern of containing labor's power" (Holloway, 1996, 59).

The high costs of the postwar period to ensure capitalist social relations dissipated with the normalization of the "individual as a company unto themselves." The Fordist employment model, with institutional stability and guaranteed wage growth, was dismantled in favor of new competition mechanisms, demanding the notion of constant "self-improvement" or "self-skilling" of the working class. The rationalization of desire and effort became central in shaping the 'capitalist individual' through personal entrepreneurship.

In this neoliberal society⁴, the individual becomes their own agent, responsible for their own

² It is important to emphasize that the capitalist form known as the Fordist accumulation model, widely supported by developmentalist approaches, was limited to only part of the population, particularly in the periphery or the 'Global South.' In addition to the lower wage growth and more limited welfare state, inequality was also much greater, with this stability and material gains benefiting only certain regions and sectors of society.

³ "The main innovation of neoliberal technology precisely consists in directly connecting the way a person 'is governed from without' to the way that 'he governs himself from withim. [...] In the new world of the 'developing society', individuals must no longer regard themselves as workers, but as enterprises that sell a servisse in the market" (Dardot; Laval, 2010, p. 4-5).

⁴ Although this particular mode of subjectivity reaches its highest level of development only in the neoliberal moment, it is important to keep in mind how it has already constituted itself as a power of capitalist society since its modern inception. The normalization of the individual, which transforms with the explosion of its financialized forms, was already present as a trend long before Reagan and Thatcher came to power (Sotiropoulos et al., 2013). The individual as a business, with the state as the form of Vitalpolitik (politics of life not for life), was already present in discussions of German ordoliberalism that were critical of the Weimar Republic (see: Bonefeld, 2012). As Bonefeld

training and discipline necessary to produce surplus value. The externalized discipline of the postwar period, marked by the family and respect for certain codes and institutions mediated by the State, gave way to rampant competition, with each individual acting as the manager of their own 'assets.' In these new labor relations, individuals are expected to work for companies as if they were working for themselves, seemingly abolishing any sense of alienation and even the distance between workers and the companies employing them.

The constitution of these new forms of subsumption and labor, of course, is realized through new technological standards. The way labor is now commanded, subsumed, within the logic of capital increasingly depends on a process of internalizing this command within the social being in the form of the capitalist individual. Real subsumption (discussed in the previous section) in its concrete neoliberal form is not limited to the imposition of more machines to strip workers of autonomy. Current forms of subsumption are based on a kind of internalization of control, where the worker represents capitalist discipline by seeing themselves as a company. Instead of autonomy being stripped by machinery (Braverman, 1977), the worker, now an entrepreneur of their labor power, sees their activities increasingly individualized, as these now represent an intention to generate surplus value.

This internalization process of subsumption directly depends on the establishment of new techniques and technologies. It is no coincidence that from the 1980s onward, the main technical innovations centered on microelectronics and information and communication technologies (ICTs). The diffusion of ICTs enabled not only the formation of global value and finance chains from the 1980s, as widely studied and analyzed⁵, but also the individualization of information and communication in the daily constitution of the social being. Although less discussed than the formation of global production and information networks, ICTs, through their individualized forms, directly implicate new modes of subsumption within the neoliberal phase of capitalism.

Through microelectronics and individual information devices (computers, cell phones, and all forms of digital wearables), the global rise of the internet gains an individualized form within the capital network system (Bolaño, 2016). The individualized development

trajectory of ICTs is not random but is intrinsically linked to the contradictions of social development, where the internalization of capitalist discipline in the 'capitalist individual' is at play. Social networks, digital platforms, and algorithmic analyses are not dissociated from the production of surplus value through social alienation; rather, they enable the imposition of capital's logic in its formation, commodifying "social relations, including the most intimate ones, interpersonal communication, the symbolic reproduction of the lifeworld, and the most disinterested cultural production. This represents not the end of the cultural industry but its generalization" (Bolaño, 2016, p. 14).

The development of ICTs, in their individualized networked forms⁶, also facilitates the commodification of culture, communication, and information at the level of personal and private relationships. Social networks, messaging apps, and digital platforms—constructed as major mechanisms for generating and capturing data (Zuboff, 2021: Srnicek, 2017: Fuchs, 2016)mediate social relations through the logic of value and are controlled by large international corporations/ monopolies.

Communication, access to culture, and information, with the advent of individualized ICTs, are mediated by the abstract equation of value, where each of these social relations becomes a commodity, capable of being commercialized as data. In other words, these relations not only become commodities, but this transformation becomes part of the constitution of the 'capitalist individual'; communication, cultural expression, and obtaining knowledge and information are also mediated by the abstract relationship of value. The acquisition of culture via social networks and digital platforms does not merely transform culture into a commodity but also subjects us to the logic of capital in its neoliberal form within this process.

By the late 1960s, the cultural industry (Adorno, 2009) and the society of the spectacle (Debord, 2007) were already fully developed, and in the early 21st century, this reification and subsumption process takes on new forms or specificities. The transformation of culture into a commodity, as driven by major communication monopolies (radio, television, and cinema), was crucial for constituting the worker in the Fordist era (Bolaño, 2000). The externalized control and discipline imposed on the worker were completed with the postwar cultural industry.

The cultural industry of the postwar period was not limited to the commodification of culture and

⁽²⁰¹²⁾ presents, the main theorists of ordoliberalism advocated for a strong state in the sense of enabling social coordination through market logic, where the worker could acquire available funds to become a "small capitalist." Therefore, it is also important to highlight that this internalization of social control does not imply a reduction in the state's role, as it becomes even more predominant in ensuring this expansion of competition in the formation of the 'capitalist individual.'

⁵ A systematization of global value chains can be found in: Milberg; Winkler (2013) and Quentin; Campling (2017). For a critical systematization of financialization, see: Sotiropoulos, Lapatsioras (2013).

⁶ It is necessary to emphasize that the existing form of communication and information technologies is not natural. Their constitution as individual devices controlled by large monopolies seeking profit through advertising is not something intrinsic to the trajectory of knowledge and technique evolution; it may only be intrinsic to the development of capitalist technique imposed as a form of alienation and reification of the social being.

information but also externalized itself as a separate constitution of the social being, reifying it in class formation. The imposition of capitalist discipline in the constitution of labor during the Fordist phase went through this cultural externalization, where the first stage of historical alienation—"a reduction of 'being' to 'having'"—had its subsequent reduction of 'having' to 'appearing' in the spectacle (Jappe, 1999, p. 6). In the later neoliberal phase, through individualized ICTs, a kind of "self-spectacle" society emerges, where the cultural industry, previously an external disciplining agent, is internalized in our daily relations through social networks, platforms, and digital apps.

The experience of life, increasingly fragmented across digital spheres and with the disappearance of the notion of society, finds its reunification in the spectacle (Debord, 2007), but now in a self-spectacle, where we internalize our own commodification through our images. The moment of false social unification in the images of the spectacle now constitutes itself through our own images. The domination and control of capital's logic in this self-spectacle society tend to occur increasingly within us.

Within these social forms of value imposition, mechanisms of real subsumption are not limited to new forms of control over intellectual labor (Sohn-Retel, 1995). It is as if the perfection of intellect subsumption unfolds into a new stage of the reification of the social being, encompassing, in terms of subsumption, both intellectual and manual labor, as subsumption occurs within the very contradiction of class formation. This internalization of the cultural industry in the figure of the self-spectacle of social networks and digital platforms operates within the framework of intellectual labor subsumption (Bolaño, 2002), but it also encompasses other labor relations in their entirety.

Subsumption through new information and communication technologies, therefore, is not limited to intellectual work or those of higher technical complexity. Manual, standardized, and so-called routine tasks are also deeply re-signified within this new logic of value imposition, as widely debated with the universalization of digital platforms for the contracting of everyday tasks⁷. Intellectual work is subsumed to capital's logic, but so too is manual labor in new forms, as they merge in the contradictory struggle of forming the capitalist worker. Thus, not only is labor subsumed to the logic of capital, but the apparent sociological distinctions become much more diffuse, as do productive and unproductive work distinctions, becoming more indeterminate. When the worker constitutes themselves as an entrepreneur, who

is middle class, who is a laborer, and who is part of the reserve army?8

The constitution of this worker as an "entrepreneur of oneself" depends on the intensification and expansion of market competition mechanisms into every sphere of this social being's life. It is within this framework that the trend of so-called precarious jobs grows, with modalities of "zero-hour," "Uberized," "freelanced," "intermittent," and "flexible" contracts, where the worker, believing they are their own entrepreneur, remains permanently available (Antunes, 2018), being paid only for the hours worked and able to accumulate a large number of different jobs. The active worker, within these new labor relations, routinely faces social pressure exerted by the reserve army of labor (Colombini, 2020).

What is argued here, therefore, is not merely an increase in the reserve army of labor (especially in the Global South) due to so-called neoliberal processes of globalization and the formation of global value chains⁹ (Carcanholo; Amaral, 2008; Foster et al., 2011; Basu 2013; Munch, 2013; Patnaik, 2019), but also changes in its concrete social form. It is not just that the reserve army of labor, in precarious and informal forms, has grown; as a social relation, it also becomes more internalized within the so-called active forms of labor¹⁰.

With the consolidation of these new forms of work, the working class, in its broadest sense, composed of both the active workforce and the reserve army of labor, assumes a more fluid configuration, where distinctions between active labor and the reserve army become blurred. In the concrete context of contemporary capitalism, Marx's classic categories, such as the stagnant and floating industrial reserve army, become institutionalized and mimic active labor standards. Within these new forms of labor, with the worker as an entrepreneur of themselves, it becomes increasingly unclear who is an active worker and who is part of the reserve.

⁷ The literature on the implications of digital labor platforms is quite rich and extensive; for a systematization of the debate, see: (Abilio, 2020; Colombini, 2023).

⁸The sociological confusions surrounding the formation of contemporary classes, such as the supposed emergence of a "new middle class," are not merely a result of ignorance, as they stem from the very false appearances of neoliberal capitalism.

⁹The constitution of global value chains within the framework of globalization, along with the incorporation of new technologies, has promoted a significant expansion of the global relative surplus population. This has occurred both by greatly increasing labor productivity and by geographically restructuring production, thereby incorporating large populations into the capitalist reserve army (Foster et al., 2011).

¹⁰ A considerable portion of the more critical literature on precarization provides a solid characterization and description of these changes. Many of these works extrapolate elements from activities carried out by digital platforms to understand the reality of labor in contemporary capitalism. In these critical readings, categories such as uberization (Abilio, 2020; Antunes, Filguerias, 2020; Pochmann, 2016), ondemand or just-in-time labor (De Stefano, 2016), platformization of work (Van Doorn, 2017; Casilli, Posada, 2019; Grohemann, 2020), and platform capitalism (Srnicek, 2017) are prominent.

It is no coincidence that the majority of conceptualizations of current forms of capitalism highlight this merging of new digital technologies with new work morphologies, such as Uberization (Abilio, 2020; Antunes, Filguerias, 2020; Pochmann, 2016), on-demand or just-in-time work (De Stefano, 2016), the platformization of labor (Van Doorn, 2017; Casilli, Posada, 2019; Grohemann, 2020), and platform capitalism (Srnicek, 2017). The development trajectory of ICTs takes place alongside the historical forms of subsumption and concrete labor, contradictory framework of the struggle for the constitution of capitalist sociability. However, reproducing this dynamics of sociability phenomenologically manifest through the abstract form of value, which constitutes the false fetishized appearance of structures with their own internal logics.

IV. THE APPEARANCE OF NEOLIBERAL Subsumption as a Feudal Fetish

The historical forms of capitalism must be analyzed from the contradictory totality of the struggle for social constitution (Clarke, 1992), with the premise of demystifying the categorical reifications of capitalism. As evidenced in the previous section, in the current forms of labor mediated by new digital technologies, there is greater obscurity regarding the distinction between value-generating activities, as well as difficulty in differentiating the labor activity itself. This opacity of contemporary labor forms imposes, however, phenomenal appearances that may make sense at first glance but do not hold up under the analysis of the social formation in its entirety. In recent years, the thesis of a supposed trend toward social regression into new feudal forms of society, where the predominance of income expropriation would replace value production based on productivity growth, has gained traction in the debate on the influence of digital technologies on capitalism. As will be analyzed in this section, this techno-feudal trend is nothing more than a false fetishized appearance of contemporary forms of subsumption of capitalist labor.

The theses of a feudal regression in contemporary digital society, in addition to gaining significant space in international debates, also draw attention for the wide range of approaches or theoretical perspectives defending them, from authors linked to liberal (or right-wing) positions to those from critical (leftwing) perspectives, which have dominated discussion. Here, we will briefly contextualize the main nuances between these theses before critically analyzing them.

The more liberal strands of this debate, generally speaking and within their theoretical tradition, understand this feudal regression through current policies that degrade the potential of capitalism. Joel Kotkin (2020), a veteran conservative urbanist, argues in his recent book 'The Coming of Neo-Feudalism' that a new era mirroring the structures and inequalities of medieval feudalism is emerging due to the enormous power of big tech companies and the imposition of their "woke"11 policies, which create large social clusters alongside a decline in traditional middle classes.

Despite the popularity of these conservative liberal theses of 'neo' or 'techno' feudalism, as seen in works by Weyl and Posner (2018), the analytical debate is more relevant within the 'left'. It is striking how several 'media darlings' of the Western left have courted the 'feudalist thesis,' including Yanis Varoufakis (2021), Mariana Mazzucato (2019), Jodi Dean (2020), Wolfgang Streeck (2016), Michael Hudson (2012), Robert Brenner (2021), Sighard Neckel (2014), and Cedric Durand $(2020)^{12}$.

Among the various left-wing theses regarding a return to feudalism, a common point is their shared critique of neoliberalism's effects, almost as if the harmful outcomes of neoliberal capitalism resemble constituent elements of feudal society. Hudson (2012), Christophers (2020), Brenner (2021), Varoufakis (2021), and Mazzucato (2019), despite differing on causes, explicitly argue that the current capitalist system's characteristics of: i) prolonged stagnation; ii) politically redistribution driven wealth upwards; iii) conspicuous consumption by elites combined with the growing misery of the masses, resemble feudal traits. In equating neoliberalism with feudalism, there is a romanticized error in attempting to conceptualize (or believe) that capitalism is a welfare society characterized by constant material growth and productivity along with state-guaranteed distribution. It becomes evident that, in the centuries-long history of capitalism, the post-war and Cold War decades of growth and improved distribution, even for some sectors of the global population, are the exception.

Contrary to these more anecdotal readings of political discourse, the work of French economist Cedric Durand (2020) has stood out as the most serious research supporting the formation of a new feudal logic in contemporary society. Before analyzing Durand's (2020) main arguments on techno-feudalism, it is important to contextualize two complementary elements that underpin this reading. The first is Durand's intellectual trajectory, having achieved great success

 $^{^{\}rm 11}$ The term "woke," an English expression that literally translates to "awake," has been widely used by conservatives in the U.S. to refer derogatorily to progressive groups and policies that are conscious of social injustices and identity issues.

¹² This extensive list can also include the authors of cognitive capitalism theories (Vercellone, 2013; Fumagalli, et al. 2019), who argue that there is a current crisis in the social relationship of value, given that the contemporary economy is based on cognitive or immaterial labor. For a critical analysis of cognitive capitalism theories, see: Colombini (2023).

with his book 'Finance Capital' (2014), which already defended the predominance of parasitic (or expropriative) tendencies in contemporary financial capitalism, aligning with classical financialization theories (Chesnais, 1996; Lapavitsas, 2013; etc.) and other proponents of the neo-feudal thesis (Hudson, 2012; Christophers, 2020).

The second relevant element for contextualizing Durand's (2020) thesis, and more important for the analysis conducted here, is the debate over whether digital labor is or is not a producer of value. There are two very clear lines in this debate that have been at odds in analyzing contemporary capitalism. The first line argues that various forms of activities in the digital world do generate value (Andrejevic, 2014; Brown, 2014; Coté; Pybus, 2007; Fuchs, 2017; Greene; Joseph, 2015; Terranova, 2000), even if they are not remunerated by large multinational conglomerates. In this case, it is as if all the value generated transforms into surplus value, with workers being unpaid online users, whether posting content or generating data sold to advertising agencies. In contrast, the second line consists of researchers who argue that the majority of these digital activities, in fact, do not generate value but rather rents as forms of expropriation of already constituted value (Christophers, 2020; Fine, 2019; Mazzucato, 2019; Rigi; Prey, 2015; Sadowski, 2020; Srnicek, 2017).

Broadly speaking, these interpretations assert the existence of three main rent mechanisms in the contemporary digital economy: intellectual property rents, advertising rents, and infrastructure rents (Srnicek, 2017). In this view, instead of being a source of digital value, data are, in fact, a means to capture rents. Data would thus be a kind of valuable 'raw material' enabling, for example, the creation of personalized advertising spaces, the production of new proprietary goods and services (such as a search engine), and the optimization of existing goods and services (such as cloud provisioning). Instead of viewing digital data as the result of exploitation (Fuchs, 2017), these authors understand them as a necessary input for the appropriation of already-produced value (Srnicek, 2017).

Durand (2020), with his widely discussed techno-feudalism thesis, incorporates this second perspective, going further to argue that a new social structure built around these digital rents brings us closer to feudalism. "The rise of digital," argues Durand, "fuels a gigantic rent economy," in which "the control of information and knowledge, that is, intellectual monopolization, has become the most powerful means of value capture" (Durand, 2020, p. 153). Thus, Durand concludes (2020, p. 174), "investment is no longer oriented toward the development of productive forces, but toward predatory forces," thereby transforming into a techno-feudal society.

The first critique that must be made is about the generalization of digital activities, with a

misunderstanding of their sources of revenue and value, as analyzed by Prado (2022). Digital companies, as argued in the previous section, do indeed bring new specificities to capitalism, but without breaking with the logic of value—quite the contrary. A large part of the companies analyzed in techno-feudal theses rely on advertising, where they extract user data, organize it, and use it to target ads. Thus, they generate a service, which is sold as a commodity, from which they profit (Prado, 2022, p. 8). Information platforms (like One Drive, Dropbox, etc.) evidently produce storage capacity, a commodity, again constituting a value relation. Finally, there are also large platforms for labor contracting (Uber, iFood, etc.), which undoubtedly introduce new social forms of work but are far from breaking with the relation of production and value exploitation.

In the digital world, there are expropriative activities, but also value-producing activities, both directly and indirectly, as discussed in the previous section on mechanisms of subsumption. The entire apparatus of digital and informational networks involves numerous forms of wealth production, with a significant portion producing value, though, of course, an important part involves the extraction of rents and interest. However, the very formation of these networks of rents, patents, and monopolies is not at odds with value production. In large measure, they are necessary for the expansion of the capitalist form of the 'digital world.' To produce digital value relations, where human activities are alienated from their social totality, the existence of these rent, property, and monopoly networks is essential. Just as the enclosures imposed private land ownership, many of these patents and monopolies enable the existence of digital commodities.

The approaches that emphasize parasitic, expropriative, and dispossessive trends in contemporary society commit the fallacy of analyzing the part as if it were the whole. Obviously, there are ongoing movements of dispossession and expropriation within capitalism. Primitive accumulation, as the direct use of force and violence to extract wealth, is not merely a historical phenomenon but also a permanent feature of capitalist accumulation (Bonefeld, 2011). Large digital companies, like major financial conglomerates, undoubtedly derive much of their profits from expropriation mechanisms. However, the expropriation of surplus value generated in the industrial sector by digital companies or the financial sector¹³ does not necessarily imply that the exploitation of surplus value within the overall relationship of social capital is decreasing. Part of the industrial surplus value can flow

¹³ The critique of the readings on parasitism within the digital sector should also be expanded to the financial sector, although this is beyond the scope of this work. For a thorough critical analysis, see: Sotiropoulos, Milos, and Lapatsioras (2013).

into digital and financial sectors, which, in turn, leads to intensified production and exploitation of value across the total system.

The constitution of value must be analyzed in its totality, not as "a mere aggregation or simple composition of individual capitals. (...) Social capital encompasses particular capitals as moments of a whole in a permanent process of reproduction" (Prado, 2014, p. 22). Value generation does not occur in a specific sector of production, as it is the expression of a social relation that is constituted precisely through the equivalence of all sectors. Although companies linked to new information technologies appropriate part of the surplus value produced in other sectors, they enable the reproduction of capitalist sociability in even more intensified forms of exploitation.

The existence of these digital informational networks in large corporate monopolies enables the creation of new mechanisms of subsumption and the constitution of the working classes. As analyzed in the previous section, the concrete realization of this process is expressed through a contradictory movement in which workers gain greater autonomy in performing their activities, which, in turn, is channeled into producing more value. The worker, constituted as an entrepreneur of the self, no longer requires an external agent to impose capitalist discipline, which implies more hybrid and diffuse forms of labor. This opacity characteristic of neoliberal capitalist labor is even more pronounced in digital activities. It is no coincidence, but rather a social construction fetishized, that techno-feudal theses rely on digital company monopolies without considering the new specific forms of value production and exploitation.

The exorbitant profits and revenues of the digital sectors certainly expropriate part of the value produced in other sectors, just as finance does. However, this movement is not opposed to value production; on the contrary, the current constitution of the logic of social valuation depends on digital and financialized relationships. The appearance of dissociation between sectors, as if they had independent logics of value generation—where one merely extracts from the other—is part of the very fetish of domination in contemporary capitalism.

Value is not produced separately, much less independently by individuals, even if they are entrepreneurs of themselves or agents of the digital world. Within these appearances of contemporary capitalism, the societal ills-massive inequality and stagnation—are seen merely as regulatory misalignments regarding financial digital and monopolies. This reinforces the belief that individuals in today's society are autonomous value producers. The problem, it would seem, is only the forms of expropriation, as if the forms of production themselves were no longer sources of exploitation. Understanding contemporary capitalism as merely a technology of

expropriation is to believe that we autonomously produce value, like entrepreneurs of our own capital.

V. Conclusion

To understand technical changes in a social context, it is necessary to analyze capitalist production and sociability as a whole. Capitalist labor alienates the worker from the material conditions of their labor, making them dependent on selling their labor capacity to generate surplus value for the buyer. The incorporation of new technologies aims to increase productivity and labor intensity, not to meet social needs but to generate surplus value. Thus, technology embodies all the contradictions of social development and also plays a role in the formation of social classes. Understanding technology as part of the struggle for social constitution allows us to comprehend its role in the reproduction of capitalist relations and the alienation of workers from the means of production. Therefore, the analysis of new technologies must consider the historical and social context to reveal the contradictions inherent in capitalist development.

The crisis of the Fordist-Kevnesian model in the 1970s led to the emergence of flexible forms of production and labor relations. In this new paradigm, the normativity of capitalist labor becomes internalized within the individual, who begins to see themselves as a "business of the self." This shift from external control to individual self-discipline coincides with the adoption of new information and communication technologies, promoting the individualization of labor and social activities. The diffusion of ICTs facilitated the creation of global value chains and an increasing commodification of social, cultural, and informational relations. In the neoliberal context, culture and communication become commodities, mediated by large monopolies and digital platforms, reinforcing the logic of capital. This transformation affects both intellectual and manual labor, making the distinctions between different classes of workers more fluid and undefined. The "uberization" and other forms of precarious labor exemplify the growing trend of competitiveness and precariousness in the labor market. Thus, the contemporary worker, perceiving themselves as an entrepreneur, faces a reality where the separation between active labor and the reserve army becomes increasingly indistinct, reflecting the inherent contradictions of modern capitalist sociability.

The analysis of the historical forms of capitalism, based on the struggle for social constitution, reveals the complexity of value-generating activities, especially in forms of labor mediated by new digital technologies. The theses of "techno-feudalism," which suggest a social regression to new feudal forms, reflect a fetishized appearance of the contemporary forms of subsumption of capitalist labor. Approaches that identify

a parasitic trend in the contemporary digital society commit the fallacy of analyzing the part as if it were the whole. The existence of digital networks and corporate monopolies, far from breaking with the logic of value, intensifies the exploitation and reproduction of capitalist Thus, the production of value contemporary capitalism must be viewed in its totality, incorporating the new specific forms of production and exploitation brought about by digital technologies.

BIBLIOGRAPHY

- 1. ABÍLIO, Ludmila. Uberização: A Era Do Trabalhador Just in Time. Estudos Avançados 34 (98), p. 111-
- 2. ADORNO, Theodor; HORKHEIMER, Max. Dialética do Esclarecimento. Rio de Janeiro: Editora Zahar, 2006 [1944].
- ADORNO, Theodor W. Dialética Negativa. Editora Zahar, 2009.
- Andrejevic, M. Surveillance in the Big Data Era. In: PIMPLE, K. D. (ed.), Emerging Pervasive Information Communication Technologies, Springer and Netherlands, 55-69, 2014.
- ANTUNES, Ricardo. Privilégio da Servidão. São Paulo: Boitempo, 2018.
- ARTHUR, Cris. The Possessive Spirit of Capital: Subsumption, Inversion, Contradiction. BELLOFIORE, R.; FINESHI, R. (Orgs.) Re-reading Marx: New Perspectives after the Critical Edition, 148-162. New York: Palgrave Macmillan, 2009.
- 7. BASU, Deepankar. The reserve army of labor in the Postwar U.S. Economy. Science & Society, 2, p. 179-201, 2013.
- BOLAÑO, César. Indústria Cultura, Informação e Capitalismo. São Paulo: HUCITEC, 2000.
- BOLAÑO, César. Trabalho intelectual, comunicação e capitalismo. A re-configuração do fator subjetivo na atual reestruturação produtiva. Revista da Sociedade Brasileira de Economia Política, Rio de Janeiro, n. 11, p. 53-78, 2002.
- 10. BOLAÑO, César. Organização em rede, capital e a regulação mercantil do elo social: para a crítica da economia política da internet e da indústria cultural. Liinc em Revista, v.12, n.1, p. 6-16, 2016.
- 11. BOLTANSKI, Luc and CHIAPELLO, Eve. O novo espírito do capitalismo. WMF Martins Fontes, 2009.
- 12. BONEFELD, Werner. German Neoliberalism and the Idea of a Social Market Economy: Free Economy and the Strong State. Jornal of Social Science, 8 (1), p. 139-171, 2012.
- 13. BONEFELD, Werner. Primitive Accumulation and Accumulation: Social Capitalist Notes on Constitution and Expropriation. Science & Society, n. 3, p. 379-399, 2011.

- 14. BRAVERMAN, H. Trabalho e capital monopolista: a degradação do trabalho no século XX. Rio de Janeiro: Zahar, 1977.
- 15. BRENNER, Robert. From Capitalism to Feudalism? Predation, Decline and the Transformation of us Politics. University of Massachusetts Amherst Political Economy, 27 April, 2021.
- 16. BROWN, B. Will Work For Free: The Biopolitics of Unwaged Digital Labour. TripleC: Communication, Capitalism & Critique, v. 12, n. 2, p. 694–712, 2014.
- 17. CARCANHOLO, Marcelo; AMARAL, Acumulação capitalista e exército industrial de reserva: conteúdo da superexploração do trabalho nas economias dependentes. Revista de Economia, 34, 2008, p. 163-181.
- 18. CASILLI. Antonio: POSADA, Julian. The Platformization of Labor and Society. In: Mark Graham & William H. Dutton, Society and the Internet - How Networks of Information and Communication are Changing Our Lives, Oxford University Press, p.293-306, 2019.
- 19. CLARKE, Simon. The global accumulation of capital and the periodization of the capitalist state form. In: BONEFELD, W.; GUNN, R.; PSYCHOPEDIS, K. (Orgs.), Open Marxism - Volume I. London: Pluto Press, 1992.
- 20. CHESNAIS, François. CHESNAIS, François. A mundialização do capital. São Paulo: Xamã, 1996.
- 21. CHRISTOPHERS, Brett. Rentier Capitalism: Who Owns the Economy, and Who Pays for It? London, Verso, 2020.
- 22. COTÉ, M.; PYBUS. Learning to Immaterial Labour 2.0. Ephemera, v. 7, n. 1, p. 88-106, 2007.
- 23. DARDOT, Pierre; LAVAL, Cristian. Néolibéralisme et subjectivation capitaliste. Cités, n. 41, p. 35-50, 2010.
- 24. DEAN, Jodi. Communism or Neo-Feudalism?', New Political Science, vol. 42, n. 1, February, 2020.
- 25. DEBORD, Guy. A sociedade do espetáculo. Contraponto, 2007.
- 26. DE STEFANO, V. The rise of the "just-in-time workforce": on-demand work, crowdwork and labour protection in the "gig-economy". International Labor Office, Inclusive Labour Markets, Labour Relations and Working Conditions Branch, Conditions of work and employment series, Geneva, n. 71, 2016.
- 27. DURANT, Cedric. Techo-féodalisme: Critique de l'économie numérique. Parir, Zones, 2020.
- 28. DURAND, Cedric. Fictitious Capital: How Finance Is Appropriating Our Future. Verso, 2014.
- 29. FEENBERG, Andrew. Transforming Technology: a critical theory revisited. Oxford University Press, 2002.

- 30. FILGUEIRAS, Vitor; ANTUNES, Ricardo. Plataformas digitais, uberização do trabalho e regulação no capitalismo contemporâneo. Contracampo, 39 (1), abr-jul, p. 27-43, 2020.
- 31. FINE, Ben. Marx's Rent Theory Revisited? Landed Property, Nature and Value. Economy and Society, v. 48, n. 3, p. 1–12, 2019.
- 32. FOSTER, John Bellamy; McCHESNEY, Robert; JONNA, Jamil. The global reserve army of labor and the new imperialism. Monthly Review, 63 (6), 1, p. 1-31, 2011.
- 33. FUCHS, Christian. Reading marx in the information age. New York, London: Routledge, 2016.
- 34. FUMAGALLI, Andrea; GIULIANI, Alfonso; LUCARELLI, Stefano, VERCELLONE, Carlo. Cognitive Capitalism, Welfare and Labour. New York, Routledge, 2019
- 35. GREENE, D. M.; D. JOSEPH. The Digital Spatial Fix, TripleC: Communication, Capitalism & Critique, v.13, n. 2, p. 223–47, 2015.
- 36. GROHEMANN, R. Plataformização do trabalho: entre a datificação, a financeirização e a racionalidade neoliberal. Revista Eptic, 22 (1), p. 106–122, 2020.
- 37. HAN, Byung-Chul. Sociedade do Cansaço. Petrópolis, Editora Vozes, 2015.
- 38. HARVEY, D. Condição pós-moderna: uma pesquisa sobre as origens da mudança cultural. São Paulo, Edições Loyola, 1992.
- 39. HOLLOWAY, John. The abyss opens: the rise and fall of keynesianism. In: BONEFELD, Werner & HOLLOWAY, John (eds). Global Capital, National State and the Politics of Money. Londres, McMillan Press, 1996.
- 40. HORKHEIMER, Max. Crítica de la razón instrumental. Trad. V. A. Murena; D. J. Vogelmann. Buenos Aires: Sur, 1973.
- 41. HUDSON, Michael. The Road to Debt Deflation, Debt Peonage, and Neofeudalism. Levy Economics Institute, Working Paper, n. 708, 2012.
- 42. JAPPE, Anselm. Guy Debord. Berkeley: University of California Press, 1999.
- 43. KOTKIN, Joel. The Coming of Neo-Feudalism: A Warning to the Global Middle Class. Encounter Books, 2020.
- 44. LAPAVITSAS, Costas. The financialization of capitalism: 'Profiting without producing'. City, v. 17, n. 6, p. 792-805, 2013.
- 45. MARX, Karl. Results of the Direct Production Process. In Marx and Engels Collected Works, vol. 34, 355–471. London: Lawrence & Wishart, 1994.
- 46. MARX, Karl. Grundrisse: Foundations of the Critique of Political Economy. London: Penguin Books, 1993.
- 47. MARX, Karl. Capital: A Critique of Political Economy. London: Penguin Books, 1990.

- MAZZUCATO, M. Preventing Digital Feudalism. Project Syndicat. Available at: https://www.projectsyndicate.org/commentary/platform-economy-digit al-feudalism-by-mariana-mazzucato-2019-10, 2 Oct, 2019.
- MILBERG, William; WINKLER, Deborah.
 Outsourcing Economics: Global Value Chains in Capitalist Development. Cambridge: Cambridge University Press. 2013.
- 50. MUNCK, Ronaldo. The precariat: A view from the South. Third World Quarterly, 34 (5), p. 747–62, 2013.
- 51. MURRAY, Patrick. The Social and Material Transformation of Production by Capital: Formal and Real Subsumption in Capital, Volume I. In: BELLOFIORE, R,; TAYLOR, N. (Orgs.) The Constitution of Capital: Essays on Volume I of Marx's Capital, p. 243–273. New York: Palgrave Macmillan, 2004.
- 52. MURRAY, Patrick. The Place of 'The Results of the Immediate Production Process in Capital'. In: BELLOFIORE, R.; FINESHI, R. (Orgs.) Re-reading Marx: New Perspectives after the Critical Edition, 163–177. New York: Palgrave Macmillan, 2009.
- 53. NECKEL, Sighard. The refeudalization of modern capitalism. Journal of Sociology, v. 56, n. 3, p. 472–486, 2020.
- 54. PATNAIK, Prabhat. Contemporary Capitalism and the World of Work. Agrarian South: Journal of Political Economy, 8(1–2), 2019, p. 303–316.
- 55. PAULA, João Antônio De; CERQUEIRA, Hugo E. A. da Gama; ALBUQUERQUE, Eduardo da Motta e. Ciência e tecnologia na dinâmica capitalista: a elaboração neo-schumpeteriana e a teoria do capital Palavras-chave. Ensaios FEE, v. 23, n. 2, p. 825–844, 2002.
- 56. PELÁEZ, Eloina; HOLLOWAY, John. Learning to bow: Post-Fordism and technological determinism. Science as Culture, v. 1, n. 8, p. 15–26, 1990.
- 57. POCHMANN, M. Terceirização, competitividade e uberização do trabalho no Brasil. In: Precarização e terceirização: faces da mesma realidade (eds.); TEIXEIRA, M.O.; ANDRADE, H.R; COELHO, E.; (eds. São Paulo: Sindicato dos químicos, 2016.
- 58. POSNER, Eric; WEYL, Glen. Radical Markets: Uprooting Capitalism and Democracy for a Just Society. Princeton University Press, 2018.
- PRADO, Eleutério. Crítica da desrazão neofeudal. Outras palavras, 2022. Acessado em: https://outras palavras.net/pos-capitalismo/critica-da-desrazao-ne ofeudal/"https://outraspalavras.net/pos-capitalismo/ critica-da-desrazao-neofeudal/
- 60. PRADO, Eleutério. Exame Crítico da teoria da financeirização. Crítica Marxista, n.39, p. 13-34, 2014
- 61. QUENTIN, David; CAMPLING, Liam (2017). Global inequality chains: integrating mechanisms of value

- distribution into analyses of global production. Global Networks, v. 18, n.1, 33-56, 2017.
- 62. SADOWSKI, J. The Internet of Landlords: Digital Platforms and New Mechanisms of Rentier Capitalism. Antipode, v. 52, n. 2, p. 562-80, 2020.
- 63. SRNICEK, Nick. Platform Capitalism. Cambridge: Policy Press, 2017.
- 64. SOTIROUPOLOS, D. P.; MILIOS, J.; LAPATSIORAS, S. A Political Economy of Contemporary Capitalism and its Crisis. New York: Routledge, 2013.
- 65. STREECK, Wolfgang. How Will Capitalism End? Essays on a Failing System. London and New York, Verso, 2016.
- 66. RIGI, J.; PREY, R. Value, Rent, and the Political Economy of Social Media. The Information Society, v. 31, n. 5, p. 392-406, 2015.
- 67. TERRANOVA, T. Free Labor: Producing Culture for the Digital Economy, Social Text, v. 18, n. 2, p. 33-58, 2000.
- 68. VAN DOORN, N. Platform Labor: On the Gendered and Racialized Exploitation of Low-Income Service Work in the 'On-Demand' Economy. Information, Communication & Society, v. 20, n.6, p. 898-914,
- 69. VAROUFAKIS, Y. Techno-feudalism is taking over. Project Syndicate. Available at: https://www.projectsyndicate.org/commentary/techno-feudalism-replaci ng-market-capitalism-by-yanis-varoufakis-2021-06? barrier=accesspaylog, 28 Jun, 2021.
- 70. VERCELLONE, Carlo. The Becoming Rent of Profit? The New Articulation of Wage, Rent and Profit. Knowledge Cultures, v. 1, n. 2, p. 194-207, 2013.
- 71. ZUBOFF, S. A era do Capitalismo de Vigilância. Rio de Janeiro, Editoria Intrínseca, 2021.