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POLITICAL ECONOMY OF SMART CITIES AND THE HUMAN RIGHTS: FROM CORPORATIVE TECHNOCRACY TO SENSIBILITY

ECONOMIA POLÍTICA DAS CIDADES INTELIGENTES E OS DIREITOS HUMANOS: DA TECNOCRACIA CORPORATIVA À SENSIBILIDADE

MATEUS DE OLIVEIRA FORNASIER

Pós-Doutorado em Direito e Teoria pela University of Westminster (Reino Unido). Doutor pela Universidade do Vale do Rio dos Sinos (UNISINOS). Professor do Programa de Pós-Graduação Stricto Sensu (Mestrado e Doutorado) em Direito da Universidade Regional do Noroeste do Estado do Rio Grande do Sul (UNIJUI).

ABSTRACT

Objectives: This research presents a critique of smart cities, to conceive a technological city opposed to the corporate colonization of digital networks, to algorithmic governmentality and to surveillance capitalism.

Methodology: literature review with qualitative approach and dialectical procedure.

Results: We conclude that the role of participatory citizen should be resumed through the (re)appropriation of information and communication technologies, creating a city sensitive to social differences**.**

Contributions: The article proposes that, even though the Internet brings the promise of broadening the means of access to political participation, the reality points to a scenario permeated by the exploitation of personal data and the reduction of the citizen's questioning role to a mere consumer.

Keywords: smart city; sensitive city; human rights; participation; technology.

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RESUMO

Objetivos: *Esta pesquisa apresenta uma crítica às cidades inteligentes, para se conceber uma cidade tecnológica oposta à colonização corporativa das redes digitais, à governamentalidade algorítmica e ao capitalismo de vigilância.*

Metodologia: *revisão bibliográfica com abordagem qualitativa e procedimento dialético.*

Resultados: *Conclui-se que o papel de cidadão participativo deve ser retomado por meio da (re)apropriação das tecnologias da informação e comunicação, criando uma cidade sensível às diferenças sociais.*

Contribuições: *O artigo propõe que, por mais que a internet traga a promessa de ampliação dos meios de acesso à participação política, a realidade aponta para um cenário permeado pela exploração dos dados pessoais e pela redução do papel questionador do cidadão, tornado mero consumidor.*

Palavras-chave: *cidade inteligente; cidade sensível; direitos humanos; participação; tecnologia.*

1 INTRODUCTION

New Technologies of Information and Communication (NICTs) bring new ways of political participation within – but the reality of the political economy of the information society also suggests serious democratic setbacks. On the one hand the possibilities of e-democracy brought about by new forms of instantaneous and complex communication, increasingly accessible; on the other hand, asymmetry and structural informational inequality, dataveillance and behavioral surplus value may be classified as dangerous consequence of the establishment of big technology companies (from now on called *big techs*) as controllers of massive amounts of personal data.

In this sense, it is questioned, as a research problem, what is the relationship between new information technologies and the possibilities and setbacks for the means of direct and participatory democracy? The hypothesis that permeates the

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research is that the right to the city means a critique of the totality of societies and restricted forms of participation policy.

Based on these premises, our main objective is to criticize aspects of smart cities and propose alternatives through the collective appropriation of technologies. For this, we will seek to address the following specific objectives: (I) to understand the informational political economy, guided by the new relationships between citizens and big techs, resulting in new processes of appropriation of networks that end up affecting social relations (such as work and consumption) rising new mechanisms of value production from the point of view of political economy, mainly in the field of digital data, in which people's behavior ends up becoming a valuable asset on platforms; (II) to carry out a critique of participation in smart cities, understanding the scenario of its promises; (III) to analyze the right to the city and spatial justice renewed by previous criticisms, appropriate to the context of smart cities, as a production of difference and ruptures with the capitalist continuum through the popular appropriation of technologies, and not by repulsing them.

Finally, the research will be conducted according to the dialectical procedure method, with a qualitative approach and a literature review research technique.

2 THE POLITICAL ECONOMY OF INFORMATION

The critique of political economy is the radical critique of the fundamentals of an era, considering them as being historically specific, fruit of an era, which is why smart cities need to be seen according to the political economy that sustains them – the promises of a data-driven informational economy, capable of solving urban problems by promoting the interests of the big techs, more than a criticism based on its consequences – such as the violation of privacy and its technocratic tendencies – but also based on the social, economic and historical conditions that provide such violence.

Smart cities, as much touted as a solution to urban contradictions, carry a wide range of contradictions within, being the main ones summarized by Kitchin (2015): (I)

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the promise of smart cities; (II) its damages to society. The promises (I) can be listed as: (a) the smart economy based on entrepreneurship and innovation; (b) smart governance based on digital democracy, cooperation, participation and accountability; (c) smart mobility; (d) smart environmentalism promoting sustainability; (e) intelligent life, which promotes quality of life, safety and well-being; (f) smart, more informed, inclusive, empowered and creative people. However, such promises are emptied or contradict by their damage to society (II), listed as: (a) commodification of the city, which causes monopolization of digital platforms as solutions to urban problems; (b) although technologies are commonly considered objective, non-ideological, supposedly scientific, they only exist as part of a system of ideas, techniques and context, revealing biases (prejudices) of their developers; (c) technocracy ends up replacing democratic politics, through supposedly technical solutions – which turn out to be also ideological and political, therefore; (d) smart cities turn out to be vehicles for imposing a ideological agenda of privatization of the city, rewarding corporate governance; (e) such a technocracy makes cities vulnerable by transforming simple issues into complex systems; (f) technologies publicized as bases for the smart city are not emancipatory, as they only promote an algorithmic governmentality, and do not allow citizens to get involved in decisions that outline city government guidelines; (g) such technologies further reinforce social and spatial inequalities rather than reconfigure them.

The rise of Big Data inaugurates the data-driven phase of informational capitalism, which manifests itself in diverse sectors, mainly economic, political and ideological. Economically speaking, everything becomes privatized, including personal and behavioral data, as well as communication. Politically, an industrial surveillance complex emerges, building a scenario in the political economy that ultimately nurtures an ideology that affirmates that surveillance is beneficial to all, promoting a culture of control, fear, competition, and individualization (FUCHS, 2019, pp. 57-58). This reality is called “surveillance capitalism” (ZUBOFF, 2019), when she identifies the mechanism for extracting value from collected and systematized personal and behavioral data — mainly on platforms controlled by large technology and communication companies such as Microsoft, Apple, Google, Amazon, Facebook, Tencent and Alibaba.

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According to Zuboff (2019), the logic and operation of surveillance capitalism can be summarized into four main themes: (I) the logics — the ability of digital platforms to transform interactions (commercial or otherwise) with users into more gross-valuable to be traded with its real customers, which are the advertising advertisers on such platforms. Therefore, it is a logic of creation and a high value from a substrate (data) at first sight undervalued, as this (meta)data was considered disposable when platforms (Google, Facebook, etc.), but whose attainment has become, quite recently, an objective of deep and aggressive vigilance, and the mechanisms for this, developed by technological corporations, are now understood as important assets; (II) the means of production — subsumed in the technical capacity to promote AI-based machines capable of processing and mining such data in ways that make them valuable. Therefore, it is computational power that imposes a technological division between corporations and society, and only these corporations are able to manage and profit from the data produced by people; (III) the products – the massiveness of extracted behavioral data makes possible the predictive identification of behaviors, which are valuable in reducing the risks of the activity of those who hold the information; (IV) the market – a new future data market emerges, offering knowledge as a disputed asset, capable of promoting strategic probabilistic information.

The means of production of surveillance capitalism is the technical domain of digital platforms, that is, the private appropriation of technologies for extracting and processing personal data produced by users, which are thus transformed into valuable assets. In this transformation process, the concentration of knowledge generates an unprecedented concentration of power, understood as an unauthorized privatization of the division of learning in society (ZUBOFF, 2019, pp. 204-205). The big techs' monopoly of networks is a colonization of digital communication promoted by the global political economy, based on a systemic inequality that will persist as long as networks are accessed through these platforms (DAHLBERG, 2011, pp. 94). For Fuchs FUCHS, 2019, pp. 58-59), the algorithmic control of surveillance capitalism imposes a form of world (like a “large shopping mall”), forming humans colonized by commercial logic, conditioning their behavior to be exclusively consumers. The intermediation through these digital systems, which constitutes platform capitalism, is a characteristic of this

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monopoly, which expands in the trend of transforming everything into digitally mediated services — what has been called the process of “uberization” of everything.

In informational capitalism, knowledge producers constitute an exploited class according to Fuchs (2010) and this presupposes different types of workers — industrial, government, students and researchers — and also those whose immaterial labor contributes to social reproduction — such as housewives and service providers. Even goods produced in the Internet through sharing and free communication between users – whether data on behavior, opinions, applications or developed techniques – are appropriated by the Capital, intensifying what can be called “colonization of networks”.

Data capture, by its turn, occurs through: (I) its naturalization through the widespread acceptance of data extraction, which are always available to Capital, as natural resources to be explored, legitimized by the ideological structure of algorithmic governmentality; (II) modes of extraction — the rise of social networks has made personal data increasingly available and ready for extraction, as well as the expansion of data-driven services, thus transforming behaviors and choices (both personal and joint) into data and also the way in which social relations have enabled individuals themselves to track their own movements through extraction mechanisms such as data sent by users to the platforms, related to their use, whether data related to purchases, mobility, opinions or preferences (COULDRY; MEJIAS, 2018, pp. 4-10).

Feenberg (2017, pp. 87) exposes a critique of the opponents or naive promoters of the internet who are based on essentialist views of technology – and considers it absolutely reprehensible or the necessary structure for the construction of a global political Agora – being that this space, in reality, is shaped according to the struggles between certain groups interested in its corporate part, strictly relative to its economic value and public use, disputing the design of the technical system. Corporate colonization of networks is, at the same time, the condition for the establishment of surveillance mechanisms, data and labor exploitation, and its consequence, creating a vicious circle of appropriation of networks – and it makes their democratized use even more distant.

A new culture of surveillance, unprecedented in its invasion potential and

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strength, is being thus developing, and one of its main characteristics is the participation of people in regulating their own surveillance, which can be understood as constituents of “imaginary of surveillance” — socially shared understandings, such as fear, that justify surveillance practices — and “surveillance practices” — activities that involve both the condition of being watched and the subjects' involvement in watching — which intersect and occur simultaneously (LYON, 2018, pp. 151); however, more than a governmental mechanism, surveillance is currently a large industry, directly linked to powerful corporations. This ubiquity of surveillance makes Zuboff (2018, pp. 44-46) indicate the overcoming of the totalitarian symbol of *big brother* by the *big other*, precisely because there is no longer the centralized power of mass society, but an inescapable surveillance that occurs with the compliance of people, who believe they receive the right to use the platforms in exchange for their data, and who multiply their flows, asserting means of control and freeing up the ubiquitous implementation of more surveillance practices (TELES, 2018, pp. 438).

This power invades people's behavior, the core of private life, under financial and/or ideological interests, as a “stimulus vortex” or nudges based on behavioral psychology, which replaced the centralization of power with stimuli based on rewards and punishments inferred in behavior. Thus, a social and political technology that governs behavior emerges, which Augusto (2020, pp. 267) calls “monitoring device”.

The economic exploitation of this culture of surveillance and algorithmic governmentality is the extraction of behavioral surplus value, which occurs with a process of consented surrender by users of the practices of their daily life – through mechanisms created by the social structure of the surveillance culture – based on mechanisms of digital platforms that convert such information into data. In smart cities, the potential for extracting added value is intensified, given that they support the production of behavioral data in all urban practices: in the use of mobility mechanisms, in the distribution of electricity, among others.

Differently from the added value when it is considered a direct product of salaried work, due to this whole culture of surveillance, a new added value appears, applied to digital work, which is essentially unpaid and captured in the production of data, especially in social networks, being such work rewarded only with supposed

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improvements in platform services (DANTAS, 2014, pp. 105-106). Digital work is explored under the influence of three elements (FUCHS, 2014, pp. 58): (I) coercion – as users are ideologically coerced to use platforms to communicate and socially relate; (II) alienation – as only corporations(and not any user) own the platforms and are the only ones capable of producing profit; (III) expropriation – the value (labor time) of the data commodity is transformed into money appropriated by corporations. Therefore, constant surveillance is crucial in the data commodification process, and the longer the time dedicated by users on the platforms, the greater the amount of data produced.

3 ON PARTICIPATION IN SMART CITIES

Although smart cities have some potential to increase citizen participation — mainly due to the enlargement of the number of possibilities of information and communication provided by the technologies they are based on — they end up being demonstrated in a “post-political” way of predicting feedback, negotiations and creation in an instrumental way, not political, therefore — even if they encourage the citizen to look for solutions to practical problems linked to their applications and their development. In this sense, citizens are never induced to challenge the political foundations and rationalities involved in urban politics.

This false expansion of participation is a response by interested corporations to the critiques of technocracy and the instrumentalism of smart cities, promising a citizen-centric management that is not truly articulated (CARDULLO; KITCHIN, 2018, pp. 1). All this foments a democratic crisis that Zuboff (2019, pp. 535) incites as a “coup d'état from above”, carried out by big techs, in which the digital future occurs at the expense of the human future, which this moment of capitalism uses to hide the answers to questions about “who knows”, “who decides” or “who decides who decides”.

Such a corporate control over data — under which algorithmic governance is exercised — exposes the need for regulation and control over the functioning of algorithms, because of their automated decisions — while considering them neutral or

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a force inevitable is to abdicate responsibility for them (O'NEIL, 2016, pp. 179). That is why Woodcock and Graham (2020, pp. 116) expose the need for the informational economy to transform itself due to its contradictions, being necessary to give it: (I) transparency – promoting clarified and understandable versions about the functioning of platforms digital; (II) accountability – with the expansion of social responsibility of organizations that hold such a technological power, understanding the relevant and negative impact they cause on urban life; (III) power to workers – with the promotion of the strength of association among workers through visibility and integration through appropriate union tools; and (IV) democratic ownership of platforms — with the expansion of the use of independent digital tools, linked to workers, avoiding the colonization of platforms through their exploratory mediation of all services.

Digital exclusion, from a democratic point of view, consists on what Norris (2001, pp. 4) calls “democratic divide”, as a result of which differentiates between those who do and those who do not use digital structures to promote engagement, mobilizations and participation in public life. And this differentiation can cause inequalities in access to digital infrastructure in a marked way, even in the context of informational capitalism, and it does not show signs of reduction, considering that it is not enough to provide an inclusion of access infrastructure: it must have high quality, in order not to fall into a deep asymmetry among those included, based on the technical capacity to participate – both knowledge about the systems and foreign languages are understood here (SILVEIRA, 2008, pp. 55), which is something aggravated in the Brazilian context, where inequality is still profound in terms of access to basic infrastructure such as sanitation, energy or drinking water, making the promise of smart cities something dubious, worthy only of certain pockets of wealth or strategic localities – which depend on the decision of digital corporations to promote access aiming to its exploitation.

The generalization of the use of technologies goes through the expansion of access, but the digital inclusion process is highly problematic and contradictory, not including people in the digital democratization processes, but promoting their access only to hierarchical and cybercultural power, promoting global production networks to the field of private life through media saturation — an excess of communication that

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circulates signs through goods — and a computerization of everyday life — as intense mediation of daily life by computerized equipment (CAZELOTO, 2007, pp. 43). The inclusion that actually takes place is market-oriented, which understands "citizenship" as "user-centered" applications, which ignore social, economic, political and technical conditions, especially in a society divided into classes, channeling the agency of these users into habits consumption only (MARIEN; PRODNIK, 2014, pp. 39-44).

Zuboff (2019, pp. 40) divides capitalist modernity into two moments, being the first one related to industrialization and the ways through which it promoted a process of “individualization” of workers, now understood as consumers, able to exercise choices and decide accordingly to their demands, repressing expressions of individuality in the name of mass consumption — a moment that the author illustrates as a milestone of Ford's mass production — while the second modernity produces another individual, more connected to Google and Facebook, in which individuality it seems to be everything, an ideology of psychological sovereignty where consumer habits become the main expression of personality. And surveillance capitalism fills the gaps in that expression, promoting a ubiquitous use of digital services and social networks — but, in fact, it's about people's lives being transformed, expropriated and reused as a form of social control. Fuchs (2011, pp. 97) identifies these individualization processes as being completely identified with relations detrimental to the public sphere, transforming political agendas and life itself into processes that pay attention only to private spheres. In this situation, the citizen ends up restricted to his/her ability to be a user, nothing more than a consumer, of digital platforms that mediate life, and not a participant in their democratic regulation.

Even if new information and communication technologies promote greater capacities for political expression, corporate interests end up taking these tools to the other side – something that Morozov (2018) announces as the "death of politics" precisely because of the alleged calculability exercised by platforms, and endless cycles of data exploration would be able to transcend politics, making debates and deliberations unnecessary in a scenario where machines are capable of making supposedly better decisions than humans. Citizens, here, are clients, mere tester of the urban services provided by the systems, left only with the succinct task of

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evaluation of the services offered to them (approval, disapproval, or simple notes), which produces data that will be entered as a goal of efficiency of the platform.

The expectation about the democratic possibilities of the internet has been broken, something that can be understood as a phenomenon of competitiveness against cooperation (FUCHS, 2018, pp. 225), an imposition of the corporate ideology that colonizes networks, and this alleged opening of networks promoted by technology is limited and part of a process of concentration of power through which the public sector is converted into a provider of economic support for transnational corporations, thus affirming the privatization of social benefits and the socialization of its eventual losses (SIERRA-CABALLERO, 2020, pp. 213).

What the participatory mechanisms of smart cities promote is nothing more than inclusion as consumers within a data-driven economy — something Wiig (2016) calls the empty rhetoric of the smart city, which promises true digital inclusion and only delivers the commodification of city – and this empties the field of politics and appropriates proposals for solving urban problems under the cloak of ideological paradigms of efficiency, innovation and security, and also imposes a digital technocracy that makes believe it is possible to deal with political issues through technology and give up deliberation, considering the supposed slowness of democratic processes inefficient when compared to the instantaneous calculations of intelligent machines (ALVES, 2018, pp. 232). The rationality of this depoliticized and statistical automation of decisions is indifferent to the determining causes of the contexts where it is located and ideologically oriented to annihilate contingencies, although it is presented as a neutral technological infrastructure and a "natural" step towards the future (ROUVROY, 2011, pp. 123).

Digital platforms have the practical ability to blur the line between contents related to citizenship and to consumers (BARNS, 2020, pp. 37) — in other words, the mediation of all services by the platforms, ending up meeting trends in commodification, considering that all users end up being customers with the transformation of products into services. Citizens are seen as consumers, who are mere producers of data for extraction, conditioned to live within accepted limits of behavior rather than holding possibilities to promote transgressions, resistance and

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opposition to norms (CALZADA, 2021, pp. 50), thus becoming the smart city a device for calibrating and capturing the gestures and knowledge produced by the subject-company in the space of flexible accumulation of neoliberal capitalism (MASSONETTO; BACHUR; CARVALHO, 2020, pp. 609).

No matter how much social auditability is promoted by digital platforms: they end up being mere tools of formal transparency of algorithms, not a truly verifiable accountability, since it does not have a critical audience that could actively behave to the decisions made by the machines, taking into account that the transformation of the citizen into a consumer conforms them to express a passive consensus and an authorization (or surrendering) to the practices of the platforms (KEMPER; KOLKMAN, 2018, pp. 2092-2093).

In fact, even knowledge about the functioning of systems or consensus about platforms tends to be an empty or absent exercise (KITCHIN, 2016, pp. 9), due to the everyday nature of platforms and data production. Still, under the aspect of technological expertise required to understand algorithmic management processes, communities of interested professionals end up forming who guide and centralize an authoritative voice over the systems, and not a group sharing knowledge, beliefs and practices that guide a particular vision about the urban problems, repressing the necessary opening for a true participatory harvest (KITCHIN et al., 2019, pp. 206-207).

4 SENSIBLE CITIS AND HUMAN RIGHTS: THE OVERCOMING OF SMART CITIES SEEN FROM THE CARTOGRAPHIES OF CRITICISM TO POLITICAL ECONOMY

When reflecting on the process of transition to socialism under the legacy of marxist thought, Feenberg (2002, pp. 149) points out three processes: (I) the socialization of the means of production allied to the replacement of market planning on the allocation of capital, in order to cause the disappearance of the market; (II) the radical democratization of society through the end of economic, social and political inequalities which are characteristic of class society; and (III) a new pattern of technological development that overcomes the material and immaterial division of

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labor, which characteristic of capitalism. Therefore, his vision requires an appropriation of technologies, which must be democratized, in opposition to the private control of the technological means of production. This aspect is relevant for thinking about the role of technology in a transformed world, as it is essential to move away from a "technological determinism" that makes us believe that technologies have an autonomous logic that does not need to be explained in reference to social processes (including the political ones), in favor of the development of a perspective that recognizes the operationalization of technologies according to the history of each era (FEENBERG, 2017, pp. 77-78).

In the perception that the real-time city of the informational space is a reality, it is necessary to think about urban concepts that can deal with the emergence of new actors and social forms of making the city. For these reasons, it is necessary to reorient the idea of the smart city to something more centered on human participation. This is the example given by the Sensible City Laboratory of the Massachusetts Institute of Technology (MIT), led by urban planner Carlo Ratti. This group critically addresses the technocratic conception of smart cities and the management of the Big Data, considering the need to reposition the power of making the city to people, thus creating citizens as smart as the cities in where they live. It is a perspective that thinks urbanism in an ascending (“bottom-up”) way, seeking to overcome therefore the regimes of new technologies imposed by the city-company, centralized and descendingly (“top-down”) imposed (RATTI; CLAUDEL, 2016, pp. 19). This perspective seeks to achieve urban optimization combined with humanization, in which systems and citizens really interact.

This society that incorporates machine technology with human capacity has brought theoretical conceptions that call it "cyborg society" or "cyborg citizenship", an evolution of a characteristic that has long been present in humanity, of extrinsic appropriation of technique and tools. With the growing presence of technology occupying a central role in life, it is necessary to embrace the skillful task of rebuilding the boundaries of everyday life, in partial connection with others, in communication with all parties (HARAWAY, 2000, pp. 98-99). This inseparable relationship between human beings and technology presupposes what can be called a “post-human” condition, precisely because there is a pattern of co-evolution between two bodies, the

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real (biopsychosocial) one and the virtual one. There is an integrated circuit that includes human and non-human components, which moves towards a general convergence, to the point of being indistinguishable (SANTAELLA, 2007). Because they also consider this a condition of no return, urban planners in sensitive cities yearn for a new cyborg, capable of working in network with machines and empowering individualities through the lenses of others (RATTI; CLAUDEL, 2016, pp. 36).

This radical integration between digital systems and urban planning must imply the redirection of technology and built environments, and architecture must also be like an extension of the body – a "living" architecture. The purpose of this is to provide active environments where there is creation in networks, based on the dynamics of bodies, which must be fully vibrant and alive even if the buildings are no longer voluptuous and shocking (as they are under the aegis) (RATTI; CLAUDEL, 2016, pp. 44).

Three points are essential to rethink the city in the paradigm shift from smart cities to sensible cities: (I) mobility; (II) energy; and (III) knowledge. The great technological apparatus that allows the management of public services in real time, at a distance and with lower costs, managed under a platform based on common-doing, may mean the emergence of a data-driven digital city, but sensitive to its practices. Sensitive cities, here, serve as a model to point out an adequate urban design for the new world, but which understands that this new city will not exist as a result only of the urban design, arising from the transformation of society that (re)appropriates technologies democratizing them.

The paradigm shift from smart cities to sensitive cities, as indicated by their interaction with the political economy of this time, will not occur, however, only as a product of the will of urban planners and politicians – and here a criticism of Sensible City Laboratory is sustained precisely because the general conditions of society that provide smart cities has a technocratic, undemocratic and exploratory format of personal data, being derived from a specific economic trend, the data-driven economy – that is, the smart city is a product of its history and, therefore, the sensible city also needs to be so.

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It will only be possible through processes that change the structure of production in urban space. In other words, it is necessary to transform society and everyday life, being essential: (I) the (re)appropriation of technologies, through democratic and collective ownership through common making, to finally use them properly and with effectively transparent objectives; and (II) a conception of the right to the city and spatial justice based on the emergence of new forms of life, of interaction for the production of urban space, allowing the formation of radical differences not mediated by capitalism – truly nomadic thinking for the orientation of Human Rights from everyday life, from below, that is, that such rights are mediated and mediators of spatial relations.

4.1 (RE)APPROPRIATION OF SPACES BY TECHNOPOLITICS

More than an unprecedented way of conceiving space, an innovation in urban thinking, the policy of this new city, which surpasses the smart city, needs to be based on an urban technopolitics capable of rehabilitating the capacity to know, govern and imagine the city (KARVONEN, 2020, 419-420), moving it away from the majority paradigm of smart cities, which imposes specific and inaccessible knowledge to citizens, governed in a technocratic way and with insignificant instruments of participation, and in which the collective imagination is restricted to the possibilities of solving problems based on urban indicators available on the platforms. This technology, according to Sierra (2018, pp. 985), resides in technological appropriation and social organization, realizing how digital culture allows a multiplicity of new practices, forms of non-corporate mediation and self-organization, opposing the models of reference of the social reproduction of capitalism – this participatory communication here serves the logic of multiplicity and social autonomy.

The (re)appropriation of technologies that produce urban space becomes the possibility of using them for transparent and democratic purposes, resisting and freeing people from the technological colonization by Big Techs, assuming, by the citizens, a role of responsibility for the applications and infrastructure of urban management platforms, giving up the presence of organizations that promise to sell well-being. It is

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the search for “digital sovereignty” (BRIA; MOROZOV, 2019, pp. 79), which is the ability of citizens to participate in decisions about the use of technological infrastructure in their city, a capability necessary for effective democratization of society and urban management, as the corporate smart city has objectives incompatible with substantial social participation in the production of urban space, to the point of requiring sufficient informational opacity and asymmetry to ensure its exploitation of behavioral added-value and fostering competitiveness between cities as the only means of development.

In the aspect of urban management, this (re)appropriation of space and technologies means overcoming the technocratic master planning imposed by the hegemony of smart cities, in the name of an emerging planning done from the bottom-up (CALZADA; COBO, 2015, pp. 33-34). Practices linked to the so-called “hack the city” invest in the alternative use of technologies, socially appropriated in practices not offered or intended by the programmers of hegemonic platforms, but as a means of effectively producing community co-creation of spaces (AVRAM, 2019, pp. 132 -134), even under a scenario where urban development is determined by forces such as the market and bureaucracy, the appropriation of digital tools serving active involvement through the radicalization of democratic practices (DORK; MONTEYNE, 2011, p. 7).

It is the opportunity to build a city of the "do it yourself" type, but not precarious, under the domain of technological infrastructure – that is learning to seek to take control of technologies as hackers do, but more than that for the personal consumerist interest, as a tool to seek deep social change, thus being denied the smart city offered by the market (TOWNSEND, 2013, pp. 166).

At this point, “hacking the city” means expanding public spaces by connecting citizens in real time to private spaces for society to comment, plan, think and create. Hacker value is essential for urban intervention, and the latter is essential for building a sensitive city.

This is a democratic logic based on valuing the commons, based on direct political participation on anything put in common (DARDOT; LAVAL, 2017, pp. 599). The collective appropriation of the digital infrastructure is essential for a society that produces commons — in communication, nature, social assistance, health, education, knowledge, arts, culture, food and housing — given that the logic of the market – which

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is of merchandise, competition and business – results in fundamental inequalities of access to such commons, and it is therefore necessary to produce technologies guided by the common – common property media, which constitute common spaces of communication and political debate — as a result of the struggle against colonization and commodification of life (FUCHS, 2014, pp. 62-63).

4.2 THE RIGHT TO THE CITY AS A PRODUCTION OF DIFFERENCE AND SPATIAL JUSTICE AS AN ARCHETYPE FOR THE REORIENTATION OF HUMAN RIGHTS

The right to the city is, in fact, a right to difference through the appropriation of the city and information, deeply critical to the notion of difference under capitalist abstraction, which transforms differences into mere reductive particularities — a completely predictable difference (LEFEBVRE, 1970). The unpredictable difference is the completely polysemic process of true difference (MOREIRA, 1999), a dialectical difference alien to the production of difference in the capitalist urban space, which is based on processes of segregation and the production of inequality. Lefebvre's proposal is to maximize difference, an unreified difference that is formed in creative moments, such as the party and community democracy, being a humanism of differentiations. The production of differential space allows the space experienced by people to remove the city from the space conceived by the technicians, overcoming the exclusionary and oppressive logic of capitalist urbanism, becoming appropriated by the population, which starts to build and manage the city, not merely consuming goods and services anymore (CALGARO; HERMANY; SILVA, 2020, pp. 2044).

Urban practice, or the way people live the city, becomes essential to conceive it, paying attention to the production of difference, to creative acts of rupture of the capitalist continuum, to emerging agencies that project transformed lives, both as resistance and as a project for a new daily life. Common-making is a practice of producing difference that explores gaps and fissures, which, in turn, are caused by and influence practices, such as emancipatory possibilities created in everyday life (TONUCCI FILHO; CRUZ, 2019, pp. 500).

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The production of this difference, in the context of digitized cities in their form of data-driven urbanism, requires agencies between technologies and people, forming cyborg corporeality, which escape from determinations of hegemonic technological production in the name of in-between moments, fleeing from dualisms in the which society has instrumentalized bodies, such as race, gender, politics, human/non-human — living in a constant heresy of meanings, building discursive machines that encourage splitting with violent ontological continuums, making bodies ungovernable. Practices such as that of techno-activist collectives form a technopolitical arrangement that proposes “thinking with machines” (PARRA, 2018, pp. 343), experiences that take place with technologies, forming new political compositions. And these experiences range from hacktivism — the manifestation and political interaction under the technical domain of programming and digital instruments — to the crowd — which went through a “technopolitical turn” (SANCHO, 2018, pp. 368), making the use of digital tools for political representation and insurrections, even making specific practices developed at the level of hacktivism every day.

These new forms of claiming and political identity also presuppose new agendas, ethical foundations of this hacker production that demands new rights, such as digital sovereignty, the promotion of open data and digital education – being these the foundations for a rupture in the ontological continuum of smart cities for a sensitive city.

Understanding Law as a producer and product by space, the production of difference in creative acts that promote self-management of the city and (re)appropriation of technology and (physical or digital) spaces is an essential force, composed of cartographies formed by bodies, which promotes ruptures in the ontological continuum of the capitalist city in its "intelligent" form, an effective spatial justice based on practices may emerge from this scenario, reorienting normativity at the level of urban management and citizenship – not something like social justice, built under consensus processes, dialogue, negotiations, but a product of bodily affections, an inherent result of the production of difference (PHILIPPOPOULOS-MIHALOPOULOS, 2015, pp. 174).

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This difference where spatial justice emerges occurs in repetition, as a contingency — an active force that differentiates things — being space the foundation for the emergence of Law, but which only occurs through the movement of escape from Space and Law. It is the withdrawal, through the creative act that produces difference, which makes a certain withdrawal of the immanent violence of these forms under capitalism capable of returning to a reoriented reality. Although they represent a condition of mundaneness (PHILIPPOPOULOS-MIHALOPOULOS, 2011, pp. 46), of repetition of life, these practices have the capability to produce original subjectivities, which Guattari and Rolnik (1996, pp. 45) call “daring to single out”.

Under the analysis of spatial justice, Human Rights, as an international normative system, are not a form of rupture, of removal from the lawscape – on the contrary, they stabilize in atmospheres with their own ontologies and characterized by closure – in which the only option to rupture is itself controlled, that is, through an operation it controls, not being adept at producing multiple singularities that even space makes available. The atmosphere (of Human Rights) is a large set of practices and experiences, but it is reduced to calculability and security, conditioning even the affections of the bodies that form it into blind figures who live under atmospheric principles – that is, they are legally and politically manipulated, although they seek to present themselves as spontaneous (PHILIPPOPOULOS-MIHALOPOULOS, 2015, pp. 137).

It is necessary to go the other way to promote sensitive cities for spatial justice, promote the counter-intuitive movement of withdrawal, with which, from Space and Law, space justice can emerge, escaping from the atmosphere of the international system, forming “Human Rights” from below — that's why Philippopoulos-Mihalopoulos (2019, pp. 491) points to the need to produce a “lesser Law”, formed by the insistent, continuous and tireless process of production of ruptures, forming cartographies of difference, reorienting Law and Space in the emergence of spatial justice, a subversion of the dominant reality by producing subjectivities capable of collapsing capitalistic subjectivity (GUATTARI; ROLNIK, 1996, pp. 30). And this is a critique of Human Rights also present in Lefebvre's Marxist conception of the right to the city, which, by recognizing the structural inequality of the capitalist political

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economy, understands the Human Rights system as an irreconcilable contradiction, in which its claim to universalization is nothing more than legal ideology, since society is divided into classes with opposing interests – being necessary, to overcome this division, the (re)appropriation of politics, the city and technologies, in the name of a society that produces substantial differences.

The practices of (re)appropriation of urban management technologies form ruptures in the continuum of the hegemonic smart city, a continuum that is nothing more than a deepening of the production of the urban space of capitalism, under the guise of the transformations that have occurred in the political economy that allow the economic valuation of personal data. A "hacker" ethics represents values and principles that directly oppose the private appropriation of information and communication technologies expressed in a tremendous colonization of networks by big techs while exploring a ubiquitous behavior surveillance culture, being movements in favor of popular appropriation of technologies, the radicalization of participation, the co-creation of urban planning, representing true lines of flight from the capitalist ontology dominated by the exploration of everyday life and the most diverse oppressions — and from there, a spatial justice based on the best use can emerge, in repetition. technologies according to the collective use of urban commons, whether physical, digital or the cyborg in-between.

Thus, post-humanism and the new materialism associated with the notion of spatial justice lend, in critical appropriation, mechanisms for the realization of a renewed right to the city, updated for smart cities, which requires the appropriation of urban management in the name of self-management and the appropriation of technologies – thus promoting the revolution in management and everyday life (CARLOS, 2017, pp. 56) within the scope of smart cities – so that a right to difference can emerge, the production of a truly differential space.

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5 CONCLUSION

It is possible to conclude that smart cities do not feature advances in the realization of a human right to participation — on the contrary, they generally include citizens in highly depoliticized contexts. Furthermore, it was revealed that a structural inequality is the foundation of smart cities – the informational asymmetry that deeply divides users and big techs – and it has direct effects on democratic processes, because however much NICTs allow for the advancement of communication and information instruments, the political inclusion developed in this way, in reality, proves to be deficient, considering that the line that separates decisions taken by citizens from consumer decisions becomes blurred (in a “gray zone”), increasingly tenuous and diffuse due to ideological foundations, being the only inclusion promoted to individuals the access to consumption platforms in the role of customers.

The idea according to which smart cities may be considered the solution to problems of political inclusion — that is, the implementation of the right to participate in urban management — does not resist the contradiction presented by an antithesis that tests the quality of such a participation, since the tendency of a technocratic and alienated management of the city, in which citizens do not know when and why the urban management algorithms make decisions, was demonstrated, and are thus led to believe that algorithmic decisions are the best.

In the first part of the research it was observed that the effective critique of the smart city needs to be aimed to its informational political economy — more than a critique of its consequences, such as the violation of personal privacy and the unavoidably anti-democratic technocratic tendency — and should expose the structure that provides conditions for the mechanism of exploitation of people and allows the expansion of smart city projects led by digital corporations.

Its second part leaded to notice that supposedly open and democratic digital spaces of smart cities become platforms in which the use of digital technologies involves surrendering to the most varied forms of power of big techs, revealing a profound informational asymmetry by computational power, in which users only access available services meanwhile platforms regulate practices and behaviors through an

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algorithmic governmentality — a means of control exercised with the consent of users, who need or are led to use the services of these platforms.

And its final part has shown that the (re)appropriation of technologies is necessary – that is, the destitution of power and the overthrow of informational asymmetry between citizens and corporations – so that their use for the production of a differential space and ruptures where spatial justice can emerge, paying attention to already existing practices such as cartographies of difference, assemblages that produce ruptures in capitalist society, initiatives linked to hacker ethics – in which there is a tireless opposite stance towards the technical domain of large corporations, and in which the need for popular mastery of knowledge and technological development is recognized.

Reappropriation constitutes a human right to radicalized participation, based on the appropriation of technologies and the self-management of their development, which can only emerge outside the atmospheres of State Law or International Human Rights norms, but as a result of minor and singular repeated practices and everyday conflicts.

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