

Platformization of the skin? Biometric tattoos, dataism, and consumer datification

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Abstract

This theoretical essay starts from the possibility of the platformization of the skin through the use of biometric tattoos to analyze the imminent risks posed by consumer wearables and their biopolitical marketing in the context of communicative capitalism. The theme is approached through a critical perspective that goes beyond the marketing rhetoric that focuses on individual improvement and self-care through consumer datification. The aim is to overcome the opacity of technological systems associated with communication and information technologies. The work discusses the consequences of biopolitical marketing associated with the consumption of wearables; for example, the formation of profiles informed by governmentality based on a belief in dataism, which fosters objective truth markets based on the capture and analysis of big data. The essay concludes that the consumption of wearables associated with the platform economy, datification, and dataism poses risks to privacy and democracy, especially in contexts such as the pandemic, in which dependence on communication and information technologies is evident.

Keywords: Platformization. Biometric tattoos. Datification. Dataism. Biopolitical marketing.

Plataformização da pele? Tatuagens biométricas, dataísmo e a datificação do consumidor

Resumo

Este ensaio teórico parte da possibilidade da plataformação da pele pelo uso de tatuagens biométricas a fim de analisar os riscos iminentes do consumo de *wearables* e de seu marketing biopolítico no contexto do capitalismo comunicativo. Aborda-se o tema sob uma perspectiva crítica que vai além da retórica de marketing que foca no aperfeiçoamento individual e no cuidado de si mediante a datificação do consumidor. Objetiva-se, com isso, superar a opacidade dos sistemas tecnológicos associados às tecnologias de comunicação e informação. Discute-se sobre os desdobramentos do marketing biopolítico ligado ao consumo de *wearables*, como a formação de perfis, informados por uma governamentalidade baseada na crença do dataísmo, que fomenta mercados de verdade objetiva com base na captação de análise de uma quantidade massiva de dados (*big data*), captados pelas plataformas e por *wearables*. Conclui-se que o consumo de *wearables* relacionados com a plataformação da economia, a datificação e o dataísmo oferece riscos à privacidade e à democracia, sobretudo em contextos como o pandêmico, no qual a dependência das tecnologias de comunicação e informação se evidencia.

Palavras-chave: Plataformização. Tatuagens biométricas. Datificação. Dataísmo. Marketing biopolítico.

¿Plataformización de la piel? Tatuajes biométricos, dataísmo y datificación del consumidor

Resumen

Este ensayo teórico parte de la posibilidad de la plataformación de la piel mediante el uso de tatuajes biométricos para analizar los riesgos inminentes del consumo de *wearables* y su marketing biopolítico en el contexto del capitalismo comunicativo. El tema se aborda desde una perspectiva crítica que va más allá de la retórica del marketing que se centra en la mejora individual y el autocuidado a través de la datificación del consumidor. El objetivo es superar la opacidad de los sistemas tecnológicos asociados a las tecnologías de la información y la comunicación. Discute las consecuencias del marketing biopolítico asociado al consumo de *wearables*, como la formación de perfiles, informados por una gubernamentalidad basada en la creencia del dataísmo, que fomenta mercados de verdad objetiva con base en la captura o análisis de una cantidad masiva de datos (*big data*), capturados por plataformas y *wearables*. Luego se concluye que el consumo de *wearables* asociados a la plataformación de la economía, datificación y dataísmo plantea riesgos para la privacidad y la democracia, especialmente en contextos como el de la pandemia, en el que la dependencia de las tecnologías de la información y la comunicación es evidente.

Palabras clave: Plataformización. Tatuajes biométricos. Datificación. Dataísmo. Marketing biopolítico.

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INTRODUCTION

In this essay our starting point is a provocation about the possibility of a platformization of the skin through the consumption of biometric tattoos, in order to discuss their likely consequences in communicative capitalism (Dean, 2008) and in platform economy (Srniczek, 2017) contexts. The questions that guide our essay are: in what context does the consumption and biopolitical marketing of wearables fit and what are the negative consequences associated with them? In order to answer these questions, we adopt a critical theoretical framework that focuses on the dark and unexpected side of the digitization of life (Trittin, Scherer, Whelan & Munro, 2019). In this way, we go beyond the marketing rhetoric based on promoting individual improvement and self-care, positioning ourselves in a different stratum of studies whose objective is to analyze new consumption behaviors that emerge in the backing of wearables (Bode & Kristensen, 2015). We circumvent the opacity of technological systems (Bridle, 2019) by analyzing issues that underlie information and communication technologies, such as dataism (Dijck, 2014), consumer datification (Lupton, 2016) and the formation of profiles that enable the anticipation of behaviors (Bruno, 2016). Thus, our work is in line with research that investigates the dark side of consumption (Cluley & Dunne, 2012) and marketing (Tadajewski, 2016). We remember that transactions in markets have positive and negative consequences, which may or may not be foreseen by the parties involved (Nason, 1998). Thus, both marketing and consumption are performative, producing effects for consumers and other agents involved in these processes and that are not always remembered by marketing operators and other consumers (Oliveira & Ayrosa, 2020).

Biometric tattoos are wearables that deserve to be investigated. Wearables are, by definition, technologies used in the body, a type of embodied computing technology (Wissinger, 2020). The market for wearables applied directly to the skin, such as biometric tattoos, is booming with an expected annual growth rate of 38.70% between 2021 and 2025 (Market Watch, 2018). In the area of healthcare, implantable and wearable devices are also in vogue, as shown by Lee et al. (2020) when analyzing multifunctional materials associated with those devices and with diversified applications. A hybrid of tattoos and wearables such as FitBit, biometric tattoos differ from other devices in their temporary character, their application directly to the skin and their aesthetic appeal. Located in the most superficial layer of the body, these tattoos interact with the layers below the skin (Fuks & Vega, 2016; Wissinger, 2020). Wearables, in general, are equipped with technology that measures and retransmits data streams according to the physical movements of the body, while always “looking” inside the body (Gidaris, 2019).

These tattoos can be used for different purposes, depending on the technology they are based on. They can monitor people and create location and behavior databases (Tribe, Whittow & Batchelor, 2014); assisting patients, athletes, military personnel and the elderly with dementia; serve as a ticket to events and even perform banking functions (Techcrunch, 2015). Among the advantages of biometric tattoos are safety and convenience for the user, as they cannot be stolen or lost, in addition to being simple to apply and use (Tribe et al., 2014). Although they serve a predetermined purpose, their potential is infinite – they could even transform the human body into a circuit board (Wilhelm, 2015), that is, a platform on which it would be viable to develop applications with the potential to integrate with other applications and systems, through programming interfaces. Biometric tattoos are platforms themselves, therefore they allow the incorporation of the consumer to a network of information and operations beyond what was initially foreseen.

Based on this information, it is reasonable to imagine a possible platformization of the skin, that is, its transformation into an infrastructure that would support design and applications (Gillespie, 2010). Like other biometric technologies, these tattoos are able to identify their consumers, as well as “to detect and draw actionable inferences about personality, intent, emotional state, social conformity, sexual orientation, and many other formerly private attributes, positing that they manifest bodily”

(Crampton, 2019, p. 55). An example is the rose-shaped tattoo that reflects changes in body temperature, turning from red to white. A circuit in the silver vine detects temperature so that the petals turn white when it exceeds the color change threshold of the thermochromic pigment (Kao, Holz, Roseway, Calvo & Schmandt, 2016).

Some data associated with these devices exceeds what is necessary to achieve their goals and improve the service provided by them, configuring a “behavioral surplus” (Zuboff, 2019). Thus, biometric tattoos can be linked to data extraction and surveillance. Although the debate over surveillance and privacy is in vogue – Sandvik (2020) analyzes the wearable Khushi Baby, part of an international aid program aimed at the global South, through the systematic monitoring of children’s data to regulate or manage their behavior – consumers are always eager for new experiences, especially those that have an aesthetic appeal (Fuks & Veiga, 2016) and that promise to optimize everyday life. But consumers are not always aware of the activities that underlie the consumption of such technologies or the practices of marketing that involve the collection, storage, analysis of data and often its marketing to third parties.

Initially in this work we talk about the modulation and resulting dividualization of the consumer, and then we go deeper into the theme of communicative capitalism and consumer datification. We then discuss the ideology of dataism and the platform economy, commenting on the possibility of the platformization of the skin and the contemporary scenario. Finally, we offer our thoughts on the broader implications of biometric tattoos and other wearables in a pandemic scenario such as the current one.

THEORETICAL FRAMEWORK

Modulation, dividualization and their unfoldings

The operation of wearables, in general, takes place in 3 stages (Monahan & Wall, 2007). First, body information is translated into data through sensors applied directly to the skin and, in the case of subcutaneous implants,¹ incorporated into the body. Subsequently, these data are transmitted over networks, which, for the authors, would position bodies as “nodes” within vast information networks. Finally, intervention in bodies would become viable through sociotechnical feedback mechanisms. Monitoring by wearables is a practice of somatic surveillance, that is, technological and invasive of the body, capable of intervening in its functions (Monahan & Wall, 2007). These tattoos act as a behavior modulation mechanism, similar to the computer imagined by Deleuze (1992), which would be able to give the position of an element in an open space at every moment. Thus, incarceration is no longer mandatory in order to exercise the necessary vigilance to capture data, it being enough for each person’s position to be detected legally or illegally, operating a universal modulation (Deleuze, 1992).

A panopticon is no longer necessary to materialize the surveillance of the disciplinary power, but this does not mean that it has ceased to exist (Cobbe, 2020). Disciplinary forms of power exist in control societies, but they are exercised by malleable means to modulate behavior (Deleuze, 1992). Free to live their lives, people are subject to power no longer as a unified whole, but as “dividuals” (Deleuze, 1992). Modulation involves the request for dispersed information from consumers and its reorganization under the aegis of a specific code on a different plane from reality (Zwick & Denegri-Knott, 2009). The notion of the dividual replaces that of the individual and is linked to this process, which also transforms masses into samples, data or banks (Deleuze, 1990). Traditional marketing actions already operated as divisive technologies, transforming consumers into data collections that can be further analyzed and segmented into new marketable groups (Cluley & Brown, 2015). In addition to the dividualizing technologies aimed at modular control, dividualization is central to the logic of capitalist accumulation, which segments life into information measures (Zwick & Denegri-Knott, 2009).

¹ Microchips the size of a grain of rice are developed, refined and implanted under the skin of consumers despite ethical concerns. Such devices can be programmed to contain information and perform predetermined actions. On the one hand, Wahlquist (2017) points out that its performance is still limited and that some of these actions, such as opening car doors and driving without a key, demand investments and modifications that are not yet accessible on a large scale. On the other hand, there is the possibility of programming the microchip for multiple functions, such as serving as a pass in transport and events, unlocking doors, unlocking smartphones and computers or even providing the location of patients with dementia and Alzheimer’s.

The control and modulation of behavior consolidate Crary's (2013) vision of a 24/7 capitalism, whose final frontier to be colonized by capital and transformed into a commodity would be sleep. Wearables make this a reality. Omnipresent in contemporary consumer culture, they make sleep a value-producing (surplus) activity (Charitsis, 2016). An unimaginable amount of data is extracted by these platforms, contributing to dataism becoming powerful. We understand dataism as the belief that the greater the generation of data, the closer we will be to the truth (Charitsis, 2019). The extraction is now carried out in a consensual, fun and normally non-invasive way, always emphasizing the idea of an option for the consumer, both to join and to give up using the technology (Bridle, 2019). Wearables consumers believe they can benefit from constant self-monitoring. Dijck's (2014) approach to dataism contrasts with others that consider it capable of providing answers to the concerns of organizations, marketers and consumers. According to this perspective, the ability to collect large amounts of data would be associated with cultural assumptions that life should be quantified, because, through its datification – a process considered transparent and reliable – it would be possible to eliminate emotions and ideologies, in addition to predicting the future (Han, 2017).

Calls for optimizing diagnoses, reducing visits to the doctor or identifying diseases even before symptoms present themselves,² make wearables tempting. But, in addition to the issue of somatic surveillance, consumer division and the possibility of platforming the skin, other issues appear on the horizon when we investigate these devices. For example, Charitsis (2019) shows the strategic alliance between FitBit and one of the largest health insurance providers in the United States, making them adopt the FitBit Care platform as their primary solution. That is, when purchasing health insurance, the consumer will necessarily have to wear a wearable, which points to the combination of “self-surveillance practices, corporate wellness plans and the platformization of healthcare” (Charitsis, 2019, p. 140). Gidaris (2019) criticizes the adoption of insurance policies based on data collection – data is collected by wearables, and, in return, policyholders receive benefits such as policy price reductions and discounts on e-commerce sites such as Amazon – since this type of technologically mediated self-care contributes to and reproduces systemic social inequalities (Gidaris, 2019). It is also important to highlight the impact on the right to privacy that data collection and use represent (Zuboff, 2015), going beyond the consumer sphere and having social reach, with consequences for the stability of democracy itself.

Some of these questions are beyond the scope of this essay, but they signal the importance and extent of the topic under discussion. Data is infinite, produced by consumers who are probably unable to scale the amount of information made available to organizations (Tadajewski, Denegri-Knott & Varman, 2018). The platformization of the skin may seem like an absurd possibility, yet research involving tattoos and technology is advancing, as well as those combining cosmetics and wearable technologies. The DermalAbyss project (Mit Media Lab, 2017) proved it is possible to replace the ink used in tattoos with biosensors – these are embeddables, as they are located in a layer below the epidermis, like implants – whose colors or fluorescent intensity change in response to variations in biomarkers in the interstitial fluid. Tattoos would be interfaces that would help in medical diagnoses. Despite the initial success and continuing research, the laboratory insists that there are no plans to develop the material for commercial use and clinically test it.

Communicative capitalism and the datification of consumer

Information and communication technologies (ICT) have come to dominate markets and consumers. These changes are related to what Dean calls “communicative capitalism”, a form of late capitalism based on communicative exchanges as basic elements of capitalist production. In the context of communicative capitalism, “ideals of access, inclusion, discussion, and participation come to be realized in and through expansions, intensifications, and interconnections of global telecommunications” (Dean, 2008, p. 104), without, however, enabling a variety in modes of living and practices of freedom and more equitable distributions of wealth and influence, undermining political effectiveness for the majority of the world's people. Surveillance is a complementary part of this new logic of capitalist accumulation, whose objective is to predict and modify human behavior

² An article from the Mashable website (2020) discusses the sensors that can be inserted under the skin and that are capable of preventing biological attacks and future pandemics, such as COVID-19. These sensors could indicate that the person is ill before the onset of symptoms. The research developed by Profusa, a biotechnology company, and funded by Darpa, the research arm of the United States Department of Defense, explores the use of the lumee oxygen platform, a platform that monitors, through a biosensor, the oxygen levels in the fabrics. There is then pairing with a data probe attached to the skin above the sensor, which transmits information to a smartphone or other devices. Retrieved from <https://mashable.com/article/under-the-skin-sensor-flu-pandemic-coronavirus/>

in order to generate income and control the market (Zuboff, 2015). Its central element is big data, which can be understood as the set of data collected and analyzed in extremely vast quantities, which makes its processing possible only by algorithms (Fuchs, 2018).

Communicative capitalism focuses on consumption, as it highlights the central role of the market in social and political organization (Charitsis, Zwick & Bradshaw, 2018). Furthermore, consumption is central to the process of capital value realization (Fontenelle, 2015), which makes organizations true producers of consumers. The market becomes the reference that subjugates the State to the economy. This is one of the characteristics of neoliberalism: “The normative order of reason, or governmentality, that disseminates economic logic of cost and benefits across a wide range of sites” (Zwick & Bradshaw, 2018). Prado (2017) corroborates this definition by describing neoliberalism as a rationality that structures the mentality and, thus, the behavior of rulers and the ruled, making everyone willingly assume the condition of mere “human capital”.

Self production practices are the mainstay of consumer society and can be considered neoliberal practices “that govern the contemporary world, with the management of the self being the most important role that the subject is asked to assume in a type of *governmentality* [...] in which the ideology of the autonomous individual is linked to new political and economic rules” (Fontenelle, 2010, p. 218, author’s emphasis). Thus, ways of governing are associated with ways of thinking, and, therefore, there is a relationship between forms of power and subjectivation processes (Fontenelle, 2010). This signals a kind of biopower (Foucault, 1978) and, consequently, biopolitics, a process that subjugates and classifies all our bodily, social, and intellectual capacities as productive (Zwick & Bradshaw, 2018). In this way, the ICTs associated with marketing have transformed it into a biopolitics that aims to govern the lives of consumers while it seems not to do so. It is no longer just about creating a market, but also about mobilizing and extracting value from the creativity, communication, and lifestyles of consumers (Zwick & Bradshaw, 2018). Reinforcing these points, Darmody and Zwick (2020) argue that digital marketing practices have been greatly improved thanks to emerging technologies, allowing for the unlimited intensification and extension of consumer surveillance, manipulation and control while, on the surface, appearing to empower consumers.

The relations between State and market and between market and individual are transformed under the neoliberal aegis of communicative capitalism: the market becomes the locus of statements taken as true for the neoliberal individual (Charitsis et al., 2018). Digital data generate and support “truth markets” (Lupton, 2016), considered more objective, detailed and endowed with scientific authority, since they do not come from human subjectivity and its biases. Marketing and neoliberal statements that involve the management of the self and the need for improvement and optimization of life are directly linked to the logic of quantification and datification that are articulated and affect various aspects of life (Charitsis, 2019).

Datification is the process that transforms “complex human behaviors, feelings, relationships and motivations into forms of digital data” (Lupton, 2016, p. 137). This process is considered a legitimate means of monitoring, accessing, and understanding human behavior (Dijck, 2014). An example of neoliberal rationality and consumer datification is the Quantified Self movement (Bode & Kristensen, 2015). Through self-monitoring processes, self-quantifiers believe it is possible to obtain self-knowledge and improve themselves, becoming the ideal human being in every aspect of their own lives (Lupton, 2016; Wolf, 2009). In addition to the modern narcissistic quest for uniqueness and exceptionality (Morozov, 2013), which can justify self-monitoring, this is also encouraged by companies in exchange for incentives and rewards (persuaded self-tracking). Since wearables are not considered medical devices and, therefore, are not regulated by specific agencies, such as the North American FDA (Food and Drugs Administration) (Paluch & Tuzovic, 2019) or the Brazilian Anvisa, important issues about privacy and data security escape consumers, who are unaware of the purposes for which their data is used.

It is interesting to note that data produced individually and in large volumes (big data) are used to form profiles, which, in turn, are used in continuous experiments, part of the marketing efforts within organizations and the machinery of the state, used to define, for example, access to benefits in welfare states (Bruno, 2016; Charitsis et al., 2018). Profiles are “an algorithmic projection of categories that are intended to be adjusted to particular individuals, either in the form of personalized offers of potentially desirable products and services, or in the form of anticipating behaviors or risks to be avoided” (Bruno, 2016, p. 37). One of the problems with the construction of these profiles is that they function as

“an algorithmic triage mechanism for access to consumer circuits, well-being, civility, etc.” (Bruno, 2016, p. 37), used as vectors that allow acting before the fact or action, a kind of “anticipatory compliance”, according to Zuboff (2015), anticipating a future that becomes immediate and can lead to discriminatory practices, “manipulation, bias, censorship, [...] violations of privacy and property rights, abuse of market power, effects on cognitive abilities, in addition to a growing heteronomy” (Doneda & Almeida, 2018, p. 145).

Data collection and analysis is a dynamic and continuous information process between surveillance systems, profiling and personal information, which is renewed at each interaction between systems and consumers (Pridmore & Zwick, 2011). Through reality mining (Zuboff, 2015), the customization and structuring of the world is operated in an opaque way by various organizations. More than knowing what each one of us does at each moment and all the time, there exists the possibility of intervention and behavior change in a way that makes it impossible to distinguish what is real and what results from technocybernetic manipulation in real time (Charitsis et al., 2018).

Dataism and platform economy

Schwarcz and Starling (2015) state that good ideologies are like tattoos with the power to overcome society and produce reality. Ideology is not a dreamlike illusion constructed so that we can escape reality, but a fanciful construction that produces reality itself (Zizek, 1989), “dissolving any insurmountable inadequacy in the harmonic positivity of flawless enjoyment” (Safatle, 2003, p. 189). The constitution of the individual consumer in the heart of the society of control and information results from the action of an intelligent power – a smart power, as mentioned in Han (2017) – that seduces the consumer to explore himself through devices that allow self-monitoring, appealing to their emotions, while seeing the body as a “data collection”.

The ideology associated with communicative capitalism and the use of wearables is dataism, which celebrates self-monitoring tools “as bearers of objective quantitative truths about the user” (Charitsis, 2019, p. 141). The success of this ideology stems from the fact that many consumers, naively or unintentionally, entrust their personal information to corporate platforms (Dijck, 2014), as a result of the intertwining between government, business and academia (researchers). We corroborate the arguments of Dijck (2014), for whom researchers who endorse the information paradigm also understand data as natural features and platforms as neutral enablers. Sharing personal information across platforms has become the new norm, and metadata associated with information is routinely shared with third parties – including intelligence agencies, as denounced by Edward Snowden in 2013 – for personalized marketing purposes in exchange for free services (Dijck, 2014). Thus, metadata has become the currency by which citizens pay for communication services and security, an exchange that nestles in the comfort zone of most consumers (Dijck, 2014).

Self-monitoring through wearables is a locus in which “power is manifested as a regime of truth”, constructing the self-monitoring subject as a “scientized self that, following the tenets of dataism, adheres to the objectivity and credibility of metrics” (Charitsis, 2019). Dataism permeates all sectors of life, including education (Williamson, 2015), work (Moore & Robinson, 2016) and wellness programs, these associated with biopolitics, transforming life into a constant exercise of optimization, and demonizing those who fail to successfully self-optimize, because, after all, biopolitics is a regime of personal responsibility (Zwick & Bradshaw, 2018). By adopting this logic aimed at entrepreneurial self-optimization and self-knowledge, we implicitly assume that those who do not adopt these practices or fail to successfully engage in them are somehow deficient – “ignorant, lacking the appropriate drive, or willfully self-neglecting” (Lupton, 2016, p. 181). An example of this is that the absence of profiles on social networks is treated by the media with distrust in some of their approaches, indicating that people who resist them are problematic: “If you’re going out with someone and the person doesn’t have a profile on Facebook, you should be suspicious,” said Farhad Manjoo, columnist for Slate magazine, as quoted in Morozov (2013). If, on the one hand, there are benefits associated with the use of wearables – adopting healthy lifestyles, preventing disease, and minimizing health risks – on the other hand, profiles are formed through them thanks to the capture and analysis of (meta)data, which can be used in a discriminatory manner against consumers in any instance.

Capitalism is restructured from time to time and since 2008 it has been associated with a narrative focused on technological ascent, marking what became known as the cognitive, informational, immaterial or knowledge economy, called the “platform economy” (Srniczek, 2017). Platforms are places of power, resistance, and exclusion (Cobbe, 2020), and the platform economy is characterized by the extraction and use of a new raw material: data (Srniczek, 2017). Data is said to be the oil of the 21st century, and Morozov (2018) recognizes its importance, taking into account ongoing digital transformations. Similar to petroleum, data must be extracted and refined to be used. This process involves the capture of data by sensors, recording it on some type of material media and maintaining it in massive storage systems (Srniczek, 2017). However, data is information about something that happened, but it does not necessarily explain why something happened. For Srniczek, explanation is synonymous with knowledge.

Technological advances made the datification and recording of daily activities cheaper, and with the digitization of communications, the volume of data produced became stratospheric, but traditional business models were not suited to data extraction and data use activities. The platform is also a new business model that provides the infrastructure, acting as an intermediary between multiple users and exhibiting monopoly trends arising from network effects – the greater the number of users, the more valuable the platform and, in theory, the better its algorithms – employing cross-subsidies to attract diverse users – offer free services while profiting from advertising and using metadata. Complementarily, its architecture is designed to govern the possibilities of interaction, and the rules for the development of products and services on the platform are defined by its owner, which indicates that it is not an empty or apolitical space (Srniczek, 2017).

The term “platform” establishes a way of being that sanctions a particular state of affairs, discursively framing services and technologies from companies like Facebook in the context of financial, cultural and regulatory demands. This framework is strategic, positioning them in a way to

pursue current and future profits, [...] to strike a regulatory sweet spot between legislative protections that benefit them and obligations that do not, and to lay out a cultural imaginary within which their service makes sense. The term “platform” is discursively constructed to establish the very criteria by which these technologies will be judged, taking the form of a progressive and egalitarian arrangement, promising to support those whose stand upon it (Gillespie, 2010, pp. 348-350).

OF PLATFORMIZATION RISKS

Like other wearables (Charitsis, 2019; Giradis, 2019), biometric tattoos are linked to health and well-being projects. Deleuze had already cited the example of medicine without a doctor or patient, focused on potential patients and on risk, replacing the individual body with the dividual figure to be controlled (1990). Although the author considered his example fragile, wearables make it relevant. Every process in the information society that involves big data, algorithms, reality mining and profiling is guided by the predictive belief that through data we will get answers and we will be able to improve and empower ourselves exponentially. This makes room for us to debate the crisis of institutions in the midst of control societies, characterized by the implementation of a new regime of domination (Deleuze, 1990). Zuboff (2015) corroborates this point by stating that surveillance capitalism establishes a ubiquitous institutional regime, called Big Other.

This new regime annihilates the freedoms conquered and guaranteed by the Democratic State. It is a regime of independent and independently controlled facts, making contracts, governance, and the dynamism of market democracy negligible. The emerging future will replace the community of law-bound equals in the inevitable human struggle against uncertainty. The power associated with contract, rule of law and social trust will then be supplanted by a compliance system based on rewards, punishments, and linked to a new type of invisible hand, contributing to the accumulation of capital and surveillance assets and rights, insofar as individual rights are taken from individuals by the Big Other and unilaterally redistributed by them (Zuboff, 2015).

The result of this institutional change is described as a world without escape routes, in which the (in)dividual no longer submits to the mass or the group, a submission that occurred for the sake of security and prosperity - or civilization, as in Freud (1997). In the desert described by Zuboff, actual experience will be based purely on a form of automaticity of stimuli and responses,

and conformity (to the social) will occur “not as an action, but as a result, not cause but effect” (Zuboff, 2015, p. 82). Based on this, the agency that would be left to individualized consumers would be the choice of one of the shaped paths

by the financial and, or, ideological interests that imbue Big Other and invade every aspect of ‘one’s own’ life. False consciousness is no longer produced by the hidden facts of class and their relation to production, but rather by the hidden facts of commoditized behavior modification (Zuboff, 2015, p. 82).

This implies acknowledging that the information society’s individualized consumer runs the risk of being reduced to a mere animal condition, inclined “to serve the new laws of capital imposed on all behaviors through an implacable feed of ubiquitous fact-based real-time records of all things and creatures” (Zuboff, 2015, p. 82). As Arendt (1998, p. 322) put it: “The trouble with modern theories of behaviorism is not that they are wrong, but that they could become true, that they actually are the best possible conceptualization of certain obvious trends in modern society”.

We need to note the importance of deeply investigating how data is legally protected, including data captured by wearables, in order to safeguard the right to privacy, provided for in Article XII of the UN Universal Declaration of Human Rights. It is necessary for consumers to understand that they must fight to preserve privacy, even though they think they have nothing to hide. They must remember that, before being consumers, they are citizens and are involved in a much broader social network than their virtual versions. What is at stake with consumer datification and dataism is the rise of a ubiquitous and networked institutional regime “that records, modifies and commodifies everyday experience from toasters to bodies, communication to thought, all with a view to establishing new pathways for monetization and profit” (Zuboff, 2015, p. 81).

This discussion gains more traction now with the practices of confinement and social distancing, which foster the use of information and communication technologies (Biddle, 2020). Consumer health data can only be accessed by physicians and third parties with the express consent of patients (Gidaris, 2019). However, today they circulate on different platforms, and their information can be traded together with several others, within the process already discussed in this essay, since the consumer’s consent does not necessarily fit what the Data Protection Law (LGPD) ascertains. Secrecy is directly linked to privacy and derives from it, its cause. When exercising the right to privacy, we make choices, including keeping our data confidential. Thus, the right to privacy gives consumers the right to decide. Consents that depend on a mere click seem not to be sufficient to guarantee the availability of personal data by platforms associated with wearables.

FINAL DISCUSSION

Biotechnology, genetic engineering and nanotechnology are coming together, which makes us think about possible innovations and their impact on consumers. If we take as a base the numbers in the wearables market like FitBit,³ we can risk that consumers of these devices applied to the skin – such as biometric tattoos – and of embeddables – applied under the skin, such as subcutaneous implants – will be countless when they reach the market for mass consumption. The platformization of the skin seems to us a trend with a horizon of realization not too far away. Pedersen (2020) poses a question similar to ours, involving the possibility of platformizing the body. The author also demonstrates concern with embedded technologies (wearables, embeddables, etc.), since consumers may not be aware of potential threats – such as the BlueBorne virus, which spread through bluetooth devices – in addition to ignoring that your sensitive personal data can be uploaded, monitored, and even made available via the internet to algorithms and actors you are unaware of.

Public health crises like the worldwide coronavirus pandemic are likely to shorten these predictions. For many researchers, the pandemic is a scenario of uncertainty that will enable the acceleration and intensification of the mediation of life through digital platforms, also increasing surveillance and having other harmful consequences for everyone (Evangelista, 2020). If, on the one hand, the possibility of monitoring the advance of the coronavirus and respect for isolation is welcomed, on the other hand, it sparks a discussion about how data collection is and will be done, respect for privacy and the destination

³ According to the Business of Apps website, in 2020 there were 31 million FitBit users. More information at <https://www.businessofapps.com/data/fitbit-statistics/>

of this data (Passos, 2020). We envision the adoption of biometric tattoos for remote medical care, for example, and it would not be absurd to imagine that they could be improved in order to indicate whether a person is sick even before the onset of symptoms, within the logic of prediction and anticipation (Bruno, 2016; Dhar, Jarke & Laartz, 2014). Therefore, it is not unlikely that sensitive data - on race, sex life and health - generated by these devices are used for purposes not authorized by their users, see the case of the provision of data by telephone operators to the government hypothetically aiming to fight the coronavirus (Ventura, 2020).

This leads us to think that, if there is something we can associate with the platformization of the skin and originates from fiction films, it is the dystopian element associated with surveillance and lack of privacy, even though so far consumers feel free and empowered thanks to wearables. With the coming into force of the General Data Protection Law (LGPD) in August 2020, care for privacy and the control of personal data – understood as all information related to an identified or identifiable natural person – gained prominence. Health-related data are classified as sensitive and protected by doctor-patient confidentiality (Gidaris, 2019). To transact them, consumers and organizations that sell wearables and telemedicine services must observe the legal bases for data processing, listed in the LGPD. Consent is among them. But, if consent is the chosen base, it is important to be collected in an active, specific and detached way, and for a specific purpose (Pompeu, 2021). Based on the above, we leave it as a suggestion for future research to explore the theme of consent and consumer agency in the face of the use of wearable technologies. Interdisciplinary studies that can explore the intersections between consumption, marketing and privacy also seem relevant to us in a scenario in which information and communication technologies have become indispensable in our lives.

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