Peripheral territories and intersectionalities: experiences of oppression and resistance across physical and digital-informational spaces

Territórios periféricos e intersseccionalidades: experiências de opressão e resistência em espaços físicos e digitais-informacionais

Territorios periféricos e interseccionalidades: experiencias de opresión y resistencia en espacios físicos y digitales-informacionales

iD *Dayana Karla Melo da Silva*

Department of Communications and Arts, School of Communications and Arts (ECA), and Institute of Advanced Studies; University of São Paulo (USP). São Paulo (SP) – Brazil.

Abstract

Digital-informational territories have been constituted as forms of expression and expansion of physical territories, especially regarding the oppressions experienced by Black people, the poor, and women living in urban peripheries. Based on an understanding of *locality* as a social marker of difference, alongside race, class, and gender, we mapped four initiatives — *Data_labe, LabJaca, Movimento Conexão Favela*, and *De Olho na Quebrada* — that operate at the intersection between the urban/peripheral and the digital-informational. The methodological approach involved network mapping, with group identification, collection of digital data, and observation of communicational practices. The analyses show how these collectives, by appropriating digital technologies, seek to build forms of resistance capable of subverting logics of domination, exclusion, and discrimination present both in the spatial design of cities and in the development of modern communication technologies.

Keywords: Peripheral territories; digital-informational territories; intersectionality; digital networks; social initiatives.

Resumo

Os territórios digitais-informacionais têm se constituído como formas de expressão e expansão dos territórios físicos, sobretudo no que diz respeito às opressões experienciadas por negros, pobres e mulheres habitantes das periferias urbanas. Com base em uma leitura que pensa a localidade como um marcador social da diferença, tal qual raça, classe e gênero, mapeamos quatro iniciativas — Data_labe, LabJaca, Movimento Conexão Favela e De Olho na Quebrada — que atuam na interface entre o urbano/periférico e o digital-informacional. O percurso metodológico envolveu mapeamento em rede, com identificação dos grupos, coleta de dados digitais e observação de suas práticas comunicacionais. As análises mostram como esses coletivos, ao se apropriarem das tecnologias digitais, buscam construir formas de resistência capazes de subverter lógicas de dominação, exclusão e discriminação presentes tanto no desenho espacial das cidades quanto no desenvolvimento das tecnologias de comunicação modernas.

Palavras-chave: Territórios periféricos; territórios digitais-informacionais; intersseccionalidade; redes digitais; iniciativas sociais.

CRediT

Data Availability:

All data supporting this article are contained within the body of the text.

Inclusive Language:

The authors employ inclusive language that acknowledges diversity, demonstrates respect for all individuals, is sensitive to differences, and promotes equal opportunities.

Plagiarism Check:

Intercom Journal submits all documents approved for publication to plagiarism verification using a dedicated tool.

Resumen

Los territorios digitales-informacionales se han constituido como formas de expresión y expansión de los territorios físicos, especialmente en lo que respecta a las opresiones experienciadas por negros, pobres y mujeres habitantes de las periferias urbanas. A partir de una lectura que entiende la localidad como un marcador social de la diferencia, al igual que la raza, la clase y el género, mapeamos cuatro iniciativas — Data_labe, LabJaca, Movimento Conexão Favela y De Olho na Quebrada — que actúan en la interfaz entre lo urbano/periférico y lo digital-informacional. El recorrido metodológico incluyó el mapeo en red, con identificación de los grupos, recolección de datos digitales y observación de sus prácticas comunicacionales. Los análisis muestran cómo estos colectivos, al apropiarse de las tecnologías digitales, buscan construir formas de resistencia capaces de subvertir lógicas de dominación, exclusión y discriminación presentes tanto en el diseño espacial de las ciudades como en el desarrollo de las tecnologías modernas de comunicación.

Palabras clave: Territorios periféricos; territorios digitales-informacionales; interseccionalidad; redes digitales; iniciativas sociales.

Introduction

Formulated from a reading in which the oppressions experienced by Black women occur at the intersection of racism and sexism (Crenshaw, 1989), intersectionality is also constituted by other dimensions. Risam (2015) points out that oppression manifests through multiple identity facets that either grant or withhold privilege, referencing unearned advantages that accumulate for individuals based on their identities. In this sense, locality, much like race, gender, class, and sexuality, can be interpreted as a social marker of difference, meaning that experiences of oppression and exclusion are equally related to the place one inhabits—that is, to our dwelling in the world.

Urban peripheries and *favelas* have thus reflected the social and economic dynamics in the spatial design of modern cities—a process that Lélia Gonzalez (1984, p. 232) called the "racial division of space." Thinking in terms of physical/peripheral territories and digital-informational territories, we observe how the latter emerge as extensions of the former and of the injustices inherent to them. This means that networked digital technologies, through algorithmic bias, have contributed to the expansion of white supremacy and intersectional oppressions, becoming spaces that perpetuate power and privilege. Yet, just as strategies of resistance have emerged from the peripheries and *favelas*, we also find forms of resistance within the digital environment.

Based on the mapping of four initiatives operating at the interface between physical/peripheral territories and digital-informational territories—*Data_labe* (Complexo da Maré, Rio de Janeiro), *LabJaca* (Favela do Jacarezinho, Rio de Janeiro), *Movimento Conexão Favela* (Jardim Peri, São Paulo), and *De Olho na Quebrada* (Heliópolis, São Paulo)—we seek to identify how experiences of oppression and resistance unfold in terms of the mobilization and appropriation of networked digital technologies by these collectives and their members, who are mostly Black and peripheral individuals. To this end, we will begin with a discussion of the notions of territory, place, and periphery. Subsequently, we will address the idea of physical and digital-informational territories through the lens of intersectionality. Finally, we will present the case studies and the interpretations that emerge from them.

Territories, places, and peripheries

When addressing the idea of a return of the territory, Milton Santos (2005) criticizes the notion of territory inherited from modernity and argues that what makes territory the object of social analysis is not the territory itself, but its use. Like geographical space, territory is defined by Santos as a hybrid—a form in constant movement and construction—requiring a continuous historical revision. In contrast to classical analyses characteristic of the period of neoliberal globalization's consolidation, the author emphasizes the role of territory in understanding contemporaneity, which is equally marked by the emergence of new technological, scientific, and informational processes.

For Santos, the emergence of the nation-state and the establishment of a juridical-political notion of territory marked the passage "from the former individual communion of places with the Universe to today's global communion," such that "the universal interdependence of places is the new reality of territory" (Santos, 2005, p. 255). However, whereas territory once served as the basis and foundation of the nation-state, we now observe the emergence of the notion of the "transnationalization of territory," which replaces the earlier idea of the "Territorial State."

> But just as in the past not everything was, so to speak, a "statized" territory, today not everything is strictly "transnationalized." Even in places where the vectors of globalization are most operative and effective, the inhabited territory creates new synergies and ultimately imposes, upon the world, a form of counter-action. Its active role leads us to reflect on the beginnings of History, even though nothing is as it once was. Hence this metaphor of return. (Santos, 2005, p. 255)

The notion of used territory—a synonym for human space, inhabited space—is presented to indicate that, beyond its forms, territory is also constituted by objects and actions. Indeed, the used territory is the analytical category; it is what provides the foundation for political constructions. Its understanding is articulated with the understanding of its contents— that is, the form-contents that express socio-territorial and socio-spatial dynamism and are directly related to our existence. This notion is also the most appropriate for conceiving territory as something in transformation and in process, aligned with social dynamism and opposed to the idea of a static, immutable society: "If we take it from its content—as a form-content—territory must be seen as something in process. And

it is very important; it is the framework of life for all of us, in its global dimension, in its national dimension, in its intermediate dimensions, and in its local dimension" (Santos, 1999, p. 19).

At the same time, this used territory—human, inhabited, movement, process, form-content—constitutes a link between the immediate past and the near future. For this reason, it also presents itself as a field of forces, disputes, and contradictions, among which is the tension between the horizontal and the vertical. Indeed, the so-called horizontalities and verticalities are understood as the new construction of space and the new functioning of territory, marking the new territorial divisions that emerged at the end of the last century. The former are defined as "the domains of contiguity, of those neighboring places brought together by territorial continuity," while the latter are "formed by points distant from one another, connected by all forms and social processes" (Santos, 2005, p. 256).

Horizontalities are also connected to the idea of banal space—that is, all space and the space of everyone — whereas verticalities refer to networks, which represent only part of space and the space of a few. In this sense, territory is composed of "contiguous places" and "networked places": "They are, however, the same places that form networks and that form the banal space. They are the same places, the same points, but simultaneously containing different, perhaps divergent or even opposing functionalities" (Santos, 2005, p. 256). It is on the basis of this "simultaneous occurrence" that new solidarities may emerge in the form of "solidary occurrences," despite the differences among people and places.

The notion of used territory thus aligns with the notion of place, interpreted as the locus of resistance of civil society. As Maria Adélia de Souza points out, it is the dynamics of places that generate the use of territory, and place is the space of solidary occurrences, which, in turn, presuppose coexistence: "the world and the place constitute an inseparable pair [...] In the place, therefore, resides the only possibility of resistance to the perverse processes of the world, given the real and effective possibility of communication, and consequently of the exchange of information, and consequently of political construction" (Souza, 2005, p. 253).

This relationship between the global and the local, between contiguities and networks, also reveals the contradiction between the world and the place. It is in the place that the oppressions and discriminations imposed by the world are materialized, but it is also in the place that resistances can be articulated—grounded, in turn, in solidarities and in locally constructed and instituted knowledge. As Santos (2008, p. 17) argues, "The world of pathological globalization is countered in the place," adding that, "In this way, the place becomes the world of truth and hope, while the global, mediated by a perverse organization, becomes the realm of falsehood and deceit."

We understand place as a space of solidary occurrences that may emerge either in rural or urban contexts. In this sense, our attention turns to the peripheries, which can be conceived both in global terms—such as the global peripheries—and in localized terms, as urban peripheries. In the documentary *Encontro com Milton Santos: o mundo global visto do lado de cá* (Meeting Milton Santos: The Globalized World Seen from the Other Side), directed by Brazilian filmmaker Sílvio Tendler (2006), which precisely addresses the problems of globalization from the perspective of the peripheries, Santos—in an interview given four months before his death—points to the production of solidary forms with economic and political expression within cities, arguing that it will be the actors from below, through bottom-up action, who will change history.

Indeed, the last decades of the twentieth century were marked by the emergence of new forms of popular mobilization and organization (Gohn, 1991; Sader, 1988), which contrasted with and challenged the phenomenon of neoliberal globalization—a process that had already begun to take shape in the 1970s with the oil crisis, and even earlier, with the advent of so-called late capitalism. These dynamics have affected—and continue to affect — both global and urban peripheries, the latter understood in the same analytical key as *favelas* and *quebradas*: concepts shaped by stigma and by the ongoing effort to subvert that stigma through creative and contestatory appropriation.

In this regard, Tiaraju D'Andrea shows that the term periphery only began to enter the vocabulary of residents of urban peripheral areas in the 1980s, still carrying a strong burden of prejudice. It was only in the 1990s that the term was effectively appropriated by the residents of these areas, largely thanks to the hip-hop movement, which popularized it. D'Andrea (2020, p. 21) further notes that, from the 1990s onward, the trajectory of the term unfolded along at least three paths: (1) the academy, which lost its explanatory predominance almost at the same time it began to relativize the term; (2) the entertainment industry, which exploited an aesthetic of poverty and later abandoned it; and (3) the residents of the periphery, who continued to re-signify the term.

This entire movement of the deconstruction and reconstruction of meanings concerning the periphery—both as a concept and as a lived, inhabited space—has given rise to a peripheral consciousness, that is, a consciousness of place and belonging grounded in identities and collectivity. It has become increasingly common to observe within these peripheries narratives of empowerment concerning the territory and the practices of inhabiting—or, more precisely, co-inhabiting—that territory.

Physical and digital-informational territories through the lens of intersectionality

Urban peripheries, conceived from a perspective in which geographic space and the used territory are described as hybrids—form-content (Santos, 2009, 2005)—can also be interpreted through an intersectional lens (Collins & Bilge, 2020; Crenshaw, 1989). If, for Santos, socioeconomic formation, as formulated in Marxian thought, defines socio-spatial formations, peripheral territories appear as a social category of difference that intersects with other categories such as race, class, gender, sexuality, disability, age, and religiosity.

It is the modes of production and their spatial arrangement that create distinctions between places, whose "values" also depend on their qualitative and quantitative levels and on how these levels combine: "The modes of production become concrete upon a historically determined territorial basis [...] spatial forms would be a language of the modes of production. Hence, in their geographical determination, they are selective, thereby reinforcing the specificity of places" (Santos, 1982, p. 14). The way we position ourselves in space is, therefore, directly related to the modes of production that prevail in that space.

However, it is necessary to note that the socio-spatial formation, defined by the socioeconomic formation, is interwoven with other elements that generate differences and exclusions, affecting primarily Black people, women, people with disabilities, and/or LGBTQIAPN+ individuals. In this sense, territory itself possesses an intersectional dimension, just as intersectionality possesses a territorial one—both territory and intersectionality being equally traversed by the issue of power.

Lélia Gonzalez, an Afro-Brazilian thinker regarded as one of the precursors of intersectional thought—even before the term was formulated by Kimberlé Crenshaw (1989)—drew attention to the differentiation between the place or territory inhabited by whites and that inhabited by Blacks within the dynamics of Brazilian urban and rural spaces:

> From the colonial period to the present day, one can observe an evident separation in the physical space occupied by dominators and the dominated. The natural place of the dominant white group has been composed of healthy dwellings located in the most beautiful parts of the city or countryside, duly protected by various forms of policing—from overseers, capitães do mato (slave catchers), and hired gunmen to the formally established police. From the casa-grande and the sobrado to today's elegant buildings and residences, the criterion has remained the same. The natural place of Black people, on the other hand, is the opposite, evidently: from the senzala (slave quarters) to the favelas, tenements, illegal occupations, alagados (flooded settlements), and modern "housing complexes," the criterion has remained symmetrically the same—the racial division of space. (Gonzalez, 1984, p. 232)

We can therefore affirm that the social realities experienced by Black people, the poor, women, and LGBTQIAPN+ individuals are also intrinsically linked to the territories they inhabit. Beyond the disparities in accessibility—understood here in terms of the very right to the city, as formulated by Henri Lefebvre (2009) and David Harvey (2003), which encompasses the rights to housing, mobility, education, food, culture, leisure, and health—differences are also observed in how the other part of the city, that of the economically privileged, perceives the potentialities of the inhabitants of the peripheries.

Today, these injustices have expanded into territories beyond the physical ones— namely, the digital-informational territories shaped by information and communication technologies. Such technologies, through so-called predictive algorithms, have led to the emergence of new forms of policing and surveillance targeting Black and peripheral bodies and communities. Algorithmic systems are also employed in public and private decision-making processes, including hiring processes, bank loan approval, and access to medical care, privileging, above all, white men and perpetuating inequalities of race, class, gender, and locality. Even search engines, as well as facial and speech recognition software, privilege whiteness in its multiple nuances (Buolamwini, 2017; Koenecke et al., 2020; Noble, 2018).

In analyzing the relationship between networked digital technologies and intersectionality, Patricia Hill Collins and Sirma Bilge (2020) show how studies conducted in this field reveal issues related to the intersectional biases embedded within digital structures—their apparatuses, architectures, data, and algorithms—thereby shaping intersectional forms of oppression and reinforcing white supremacy. As an example, they describe how algorithmic

decision-making, which relies on historical data, can be used to deny housing to a Black person based on neighborhood eviction rates.

In this sense, networked digital technologies serve as true spaces for the perpetuation of power and privilege, fostering a culture of domination, oppression, and racial and territorial discrimination, as demonstrated by research concerned with understanding the extent to which these technologies support and amplify racism and social injustice (Benjamin, 2019). At the same time, just as peripheral physical territories have undergone—and continue to undergo—a process of inflection within this oppressive and exclusionary logic, in which residents of these areas, largely through the valorization of collectivity and intersectional identities, seek to construct new meanings for the concept of periphery, digital-informational territories can likewise have their meanings reconstructed

To this end, scholars argue that it is necessary to break with the modern/colonial project that prevails in these technologies (Mohamed; Png; Isaac, 2020; Aguiar; Silva, 2024), which is, in its essence, a racist, classist, and cisheterosexist project. After all, these technologies are not neutral; they are inserted within a structure, a system. This movement would occur through the inclusion of Black people, poor people, residents of peripheries and *favelas*, women, Indigenous people, LGBTQIAPN+ individuals, among many other minoritized groups, into the field of digital and networked technology development, which are predominantly designed by white, heterosexual men from economically privileged classes and territories.

The very fields of intersectional, postcolonial, decolonial, queer, feminist, and Indigenous perspectivist theories already ground the actions of artificial intelligence and digital humanities communities across various regions of the world. On this subject, Risam (2015) argues that digital humanities projects demonstrate how theory and method can be integrated to address the enduring role of race, class, gender, ability, sexuality, nationality, and other categories of difference within the field. She emphasizes that practitioners must ensure these projects become visible and legible, thereby moving them beyond the margins of the digital humanities.

Mapping, description, and analysis of the empirical field

In reflecting on physical and digital-informational territories and on how these two forms are configured as spaces of oppression, exclusion, and discrimination—but also of resistance—we turn our attention to the network mapping of initiatives situated at the intersection of these two environments and grounded in an intersectional perspective. In our understanding, the physical territory, or locality, is conceived as a social category of difference alongside race, class, gender, sexuality, and ability, whereas the digital-informational territory is understood as an expression and expansion of modern Western society and the structures of power and domination that constitute it.

It should also be emphasized that the separation between physical territories and digital-informational territories occurs primarily at the analytical-methodological level—that is, as an attempt to make the research path leading to our study comprehensible—rather than at the epistemological level. This is because, within the Miltonian perspective itself, which conceives the used territory as a hybrid, essentially form-content, the geographical milieu is currently defined as a technical-scientific-informational milieu (Santos, 2009). It is therefore impossible to separate social reality and imagination from technological reality and imagination, such that technologies constitute a milieu not merely in the sense of an instrument or intermediary, but as an environment.

Thus, physical and digital-informational territories become extensions of one another. The initiatives we mapped and analyzed exemplify this articulation between territories, with particular emphasis on the urban and peripheral physical territory—which is also the territory of the *favelas* and *quebradas*. Emerging from this context, the initiatives *Data_labe* (Complexo da Maré, Rio de Janeiro), *LabJaca* (Favela do Jacarezinho, Rio de Janeiro), *Movimento Conexão Favela* (Jardim Peri, São Paulo), and *De Olho na Quebrada* (Heliópolis, São Paulo) seek to appropriate and re-signify both types of territory (see Table 1)

This network-mapping method—conducted between November 2022 and March 2023—involved the following stages: (i) identification of the groups within the digital environment and of their strategies of action within the physical territory, through the systematic monitoring of websites, blogs, social media profiles, and references in news reports, which made it possible to delimit the universe of initiatives and to recognize their forms of community insertion; (ii) collection of textual, audio, visual, and audiovisual data produced by the groups on their digital channels, which were organized to compose the empirical corpus of the research; and (iii) analysis of the collected data, focusing on communicational practices and on the strategies of conceptualizing, using, and re-signification of technologies within their specific contexts, in order to understand how each collective articulates physical and digital-informational territories in its actions.

Table 1. Mapping of Collectives, Territories, and Networked Digital Practices

COLLECTIVES/ INITIATIVES	DESCRIPTION OF ACTIVITIES AND PROJECTS
Data_labe	It defines itself as "a laboratory that promotes the democratization of knowledge through the generation, analysis, and dissemination of data focused on race, gender, and territory from within the Complexo da Maré – RJ."[1] Founded in 2016, the laboratory emerged from the Observatório de Favelas—a civil society organization of public interest also based in Complexo da Maré—in partnership with Escola de Dados, a data training school. It operates primarily in the areas of journalism, training/education, and citizen-led data monitoring and production. Among the projects developed by the group is a manual that teaches how to process, analyze, and visualize data, titled *Dados sem Caô* (literally, "Data without Nonsense")[2], and Cocôzap[3], which aims to map issues related to basic sanitation, water supply, and waste collection in the *favelas* of Maré, while promoting citizen engagement. On the Cocôzap website, one can also find a data dashboard built from complaints submitted by residents through the project's WhatsApp channel. The information and activities produced by the group are also shared on other platforms, including Instagram[4], Twitter[5], TikTok[6], Facebook[7], Spotify[8], and YouTube[9].
LabJaca	Also originating from the city of Rio de Janeiro—specifically from the *Favela do Jacarezinho,* located in the city's North Zone—*LabJaca*[10] began its activities in 2020, in the context of the Covid-19 pandemic. It presents itself as "a laboratory for research, training, and the production of data and narratives about *favelas* and peripheries, [...] formed entirely by young Black people who use audiovisual production as a main vehicle for the scientific dissemination of data and the amplification of *favela* and peripheral narratives." The idea of "citizen data generation," that is, data produced through the participation of local residents and institutions operating in the area, is recurrent in the group's narratives. also uses platforms such as Twitter[11], Instagram[12], Facebook[13], and YouTube[14] to share its activities. Among the studies conducted individually or in partnership with other institutions and collectives are the Unified Panel on Covid-19 in the Favelas, a data source on the pandemic's impact in these territories, and the Jacarezinho Dengue Bulletin 2022, which explores the relationship between dengue and conditions.
Conexão Favela	Founded in 2019 in Jardim Peri, a neighborhood located in the North Zone of São Paulo, the *Movimento Conexão Favela* operates in partnership with the Instituto Jardim Peri, a non-governmental organization[15]. Presenting itself as "a movement of people determined to build bridges between privileged society and the *favela,*" the initiative aims to "empower youth from the community through education and access to technology." Among the activities and projects observed, we identified an emphasis on actions directed toward women, children, and youth within the community. One of the initiatives that most clearly illustrates the relationship between territory and technology proposed by the group is ConexãoTech, which seeks to train young residents of the community in computer skills, in partnership with +1Code, a free programming school for low-income individuals and residents of *favelas* and peripheries. In addition to maintaining a website, the group also uses platforms such as LinkedIn[16], Facebook[17], and Instagram[18].

[1] Available at: https://datalabe.org/. Accessed on: Feb 15, 2023.

[2] Available at: https://datalabe.org/dados-sem-cao/. Accessed on: Feb 15, 2023.

[3] Available at: https://cocozap.datalabe.org/. Accessed on: Feb 15, 2023.

[4] Available at: https://www.instagram.com/data_labe/. Accessed on: Feb 15, 2023.

[5] Available at: https://twitter.com/data_labe. Accessed on: Feb 15, 2023.

[6] Available at: https://www.tiktok.com/@datalabe. Accessed on: Feb 15, 2023.

[7] Available at: https://web.facebook.com/data_labe. Accessed on: Feb 15, 2023.

[8] Available at: https://podcasters.spotify.com/pod/show/data-labia. Accessed on: Feb 15, 2023.

[9] Available at: https://www.youtube.com/@data_labe8622. Accessed on: Feb 15, 2023.

[10] Available at: https://www.labjaca.com/. Accessed on: Feb 15, 2023.

[11] Available at: https://twitter.com/LabJaca/. Accessed on: Feb 15, 2023.

[12] Available at: https://www.instagram.com/LabJaca/. Accessed on: Feb 15, 2023.

[13] Available at: https://web.facebook.com/LabJaca/. Accessed on: Feb 15, 2023.

[14] Available at: https://www.youtube.com/labjaca. Accessed on: Feb 15, 2023.

[15] Available at: https://conexaofavela.com.br/. Accessed on: Feb 28, 2023.

[16] Available at: www.linkedin.com/company/movimentoconexaofavela. Accessed on: Feb 28, 2023.

[17] Available at: https://web.facebook.com/movimentoconexaofavela. Accessed on: Feb 28, 2023.

[18] Available at: https://www.instagram.com/movimentoconexaofavela/. Accessed on: Feb 28, 2023.

COLLECTIVES/ INITIATIVES	DESCRIPTION OF ACTIVITIES AND PROJECTS
De Olho na Quebrada	Operating in the *favela* of Heliópolis, located in the West Zone of São Paulo, *De Olho na Quebrada*[19] is an observatory project created by the União de Núcleos, Associações dos Moradores de Heliópolis e Região (UNAS). Founded in 2018, the observatory's goal is to verify the validity of official data about the and contrast it with data gathered through its own research, in order to contribute to the better design of public policies for the region. Another key aim is to narrate local stories and events from the perspective of the residents themselves, using platforms such as Instagram[20], Facebook[21], and Twitter[22] to do so. The observatory has conducted research on topics such as Covid-19 vaccination, the pandemic's impact on domestic workers, *baile funk* events in Heliópolis, mental health during the pandemic, and food security in times of crisis, among others.

Appropriations and Re-significations of Peripheral and Digital-Informational Territories

In addition to these four initiatives, our mapping also identified other groups that operate at the interface between physical territories—particularly *favelas*, peripheries, and *quebradas*—and digital-informational territories, while addressing in their practices the intersections of race, class, gender, and locality, such as *PerifaCode*[23] and *PerifaConnection*[24]. However, since these groups are not tied to a specific locality, we chose to focus our attention on the initiatives described here, given the potential they propose in terms of the appropriation and re-signification of the territories under discussion.

These initiatives join other efforts toward the decolonization of digital network technologies and their systems of artificial intelligence and machine learning that have been observed worldwide—for instance, those centered on race, social justice, feminisms, queer identities, and Indigenous perspectivisms (Aguiar; Silva, 2024). However, *Data_labe, LabJaca, Movimento Conexão Favela*, and *De Olho na Quebrada* bring to the debate what we understand as a peripheral/*favela*/*quebrada* ethics, which also connects with the notion of *gambiarra*—a "critical perspective on technique [that] deals with the formation of hybrids and their points of convergence present in the idea of precariousness" (Messias, 2020, p. 1)—as well as with the concept of technodiversity—an understanding of technics grounded in multiple cosmotechnical worldviews, and which is, in essence, "a matter of locality" (Hui, 2020, p. 82).

Another point to be emphasized is that the appropriations and re-significations we observed are not detached from critical reflection or from an awareness of the negative impact these technologies have on everyday life (Couldry & Mejias, 2019), or from the algorithmic oppression to which, above all, Black people and poor women are exposed (Mbembe, 2020; Noble, 2018). For this reason, appropriation occurs in conjunction with re-signification. To decolonize these technologies—that is, to purge them of their racist, classist, and cisheterosexist biases—they must be conceived and developed from other perspectives that take identities and alterities into account.

Conclusion

In the first section of this study, we focused on understanding the notion of territory in articulation with the concepts of place and periphery. Drawing on Milton Santos's (2005) notion of the used territory, we understand geographic space—its synonym—as a hybrid, a form-content whose analytical focus should be directed toward its use. This territory is likewise defined as human, inhabited, movement, and process, presenting itself as a field of forces, differences, divergences, and even oppositions. Place, in turn, is understood as the locus of resistance to the oppressions imposed by the world—oppressions that paradoxically materialize in that very place, as in the case of global and urban peripheries.

It is a fact that, after breaking away from mere stigma, the notion of periphery—as well as those of *favela* and *quebrada*—underwent a process of creative and contestatory appropriation. However, this does not invalidate the interpretation of locality as a social category of difference, alongside race, class, gender, and sexuality. In this

---

[19] Available at: https://linktr.ee/dolhonaquebrada. Accessed on: Mar 10, 2023.
[20] Available at: https://www.instagram.com/dolhonaquebrada/. Accessed on: Mar 10, 2023.
[21] Available at: https://web.facebook.com/olhonaquebrada. Accessed on: Mar 10, 2023.
[22] Available at: https://twitter.com/dolhonaquebrada. Accessed on: Mar 10, 2023.
[23] Available at: https://perifacode.com/. Accessed on: Mar 03, 2023.
[24] Available at: https://linktr.ee/perifa. Accessed on: Mar 03, 2023.

sense, in our reading, territory and locality both have an intersectional dimension, just as intersectionality also has a territorial or local dimension—one that has now expanded into the context of digital network technologies, as discussed in the second section of this study, which shows how these technologies, also described as digital-informational territories, have amplified forms of exclusion and discrimination against Black and peripheral bodies and communities.

However, through the mapping and observation of initiatives located in peripheries and *favelas* in the cities of São Paulo and Rio de Janeiro, we identified that just as the physical/peripheral/*favela*/*quebrada* territory has had its meanings deconstructed and reconstructed by its residents—giving rise to a peripheral consciousness—the digital-informational territory can undergo the same process of appropriation and re-signification. Grounded in the interconnection between these two territories and based on an intersectional perspective that is, in its essence, also decolonial, these initiatives and the people involved in them seek, through technology, to re-signify the places they inhabit and, at the same time—drawing on the epistemological and ontological power of these places of dwelling— to re-signify the very technologies themselves.

References

AGUIAR, Carlos Eduardo Souza; SILVA, Dayana K. Melo da. Tecnologia e decolonialidade: arranjos insurgentes e a questão das cosmotécnicas. **Tecnologia e Sociedade**, v. 20, n. 62, p. 114–127, 2024.

BENJAMIN, Ruha. **Race after technology**: abolitionist tools for the new Jim code. Medford: Polity, 2019.

BUOLAMWINI, Joy Adowaa. **Gender shades: intersectional phenotypic and demographic evaluation of face datasets and gender classifiers**. 2017. Tese de Doutorado - Program in Media Arts and Sciences (Massachusetts Institute of Technology), Massachusetts, 2017.

COLLINS, Patricia Hill; BILGE, Sirma. **Interseccionalidade**. São Paulo: Boitempo, 2020.

COULDRY, Nick; MEJIAS, Ulises A. **The costs of connection**: how data is colonizing human life and appropriating it for capitalism. Stanford, California: Stanford University Press, 2019.

CRENSHAW, Kimberlé. Demarginalizing the intersection of race and sex; a black feminist critique of discrimination doctrine, feminist theory and antiracist politics. In: **Feminism in the Law**: Theory, Practice, and Criticism. Chicago: University of Chicago Legal Forum, 1989.

D'ANDREA, Tiaraju. Contribuições para a definição dos conceitos periferia e sujeitas e sujeitos periféricos. **Novos Estudos - CEBRAP**, v. 39, n. 1, p. 19–36, 2020.

GOHN, Maria da Glória Marcondes. **Movimentos sociais e lutas pela moradia**. São Paulo: Edições Loyola, 1991.

GONZALEZ, Lélia. Racismo e sexismo na cultura brasileira. **Revista Ciências Sociais Hoje, Anpocs**, p. 223–244, 1984.

HARVEY, David. The right to the city. **International Journal of Urban and Regional Research**, v. 27, n. 4, p. 939–941, 2003.

HUI, Yuk. **Tecnodiversidade**. São Paulo: Ubu, 2020.

KOENECKE, Allison et al. Racial disparities in automated speech recognition. **Proceedings of the National Academy of Sciences**, v. 117, n. 14, p. 7684–7689, 2020.

LEFEBVRE, Henri. **Le droit à la ville**. Paris: Economica-Anthropos, 2009.

MBEMBE, Achille. **Brutalisme**. Paris: La Découverte, 2020.

MESSIAS, José. Gambiarra como mediação: um encontro entre materialidades da comunicação e filosofia da técnica a partir das mídias digitais. **E-Compós**, v. 23, p. 1–25, 2020.

MOHAMED, Shakir; PNG, Marie-Therese; ISAAC, William. Decolonial AI: Decolonial Theory as Sociotechnical Foresight in Artificial Intelligence. **Philosophy & Technology**, v. 33, n. 4, p. 659–684, 2020.

NOBLE, Safiya Umoja. **Algorithms of oppression**: how search engines reinforce racism. New York: New York university press, 2018.

RISAM, Roopika. Beyond the Margins: Intersectionality and Digital Humanities. **Digital Humanities Quarterly**, v. 9, n. 2, p. 1–14, 2015.

SADER, Eder. **Quando novos personagens entraram em cena**. São Paulo: Paz e Terra, 1988.

SANTOS, M. **A natureza do espaço**: técnica e tempo, razão e emoção. São Paulo, SP: Edusp, Ed. da Univ. de São Paulo, 2009.

SANTOS, Milton. **Espaço e sociedade**. Petrópolis: Vozes, 1982.

SANTOS, Milton. O território e o saber local: algumas categorias de análise. **Cadernos Ippur**, v. 2, p. 15–25, 1999.

SANTOS, Milton. O retorno do territorio. **OSAL : Observatorio Social de América Latina**, v. 6, n. 16, p. 255–261, 2005.

SANTOS, Mílton. **Técnica, espaço, tempo**: globalização e meio técnico-científico-informacional. São Paulo: EDUSP, 2008.

SOUZA, Maria Adélia Aparecida De. Milton Santos, um revolucionário. **OSAL : Observatório Social de América Latina**, v. 6, n. 16, p. 251–254, 2005.

ENCONTRO com Milton Santos: o mundo global visto do lado de cá. Direção: Sílvio Tendler. Brasil, 2006. 89 min.