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PROLOGUE

The book *Agenda 2030, Diversidade Natural e Cultural em Contexto Global* deals with a central question in the social sciences – namely that, in the twenty-first century, cities have become the main stage on which the global challenges of sustainability, democracy, and coexistence are played out. Urban spaces now concentrate not only the majority of the world’s population [United Nations, *2018 Revision of World Urbanization Prospects*], but also the many contradictions of our time: growth and multiple forms of exclusion, technological innovation and ecological degradation, cultural diversity and social fragmentation. Yet it is precisely in the urban context that the possibility of redefining a new balance between human beings, environment, and cultures emerges, within an ecosystemic and holistic framework where innovative solutions for reconciling the different dimensions – environmental, social, and cultural – of sustainability are tested.

This perspective is aligned with the spirit of the United Nations’ *2030 Agenda for Sustainable Development* and, more specifically, with Sustainable Development Goal 11, which calls for “inclusive, safe, resilient and sustainable cities.” It also resonates with the *New Urban Agenda* adopted in Quito in 2016, which conceives urban areas as engines of sustainable development, innovation, and equality. These frameworks, although global in their ambition, are deeply local in their implementation: they call for a rethinking of the governance of proximity and for a renewed alliance between institutions, civil society, and citizens. The challenge is to transform cities into spaces capable of combining social justice, environmental protection, and cultural vitality – a goal that requires systemic thinking, technological and social innovation, and participatory practices aimed at integrating the classical instruments of representative democracy.

The idea of the city as an “ecosystem” is essential to this vision. The ecological dimension of urban life cannot be reduced to environmental management alone. It involves the recognition that human health, environmental integrity, and social well-being are interdependent. This is precisely the rationale of the *One Health* approach, which has progressively become a key principle in global and European public policies. *One Health* – defined by the One Health High-Level Expert Panel (OHHLEP) as an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals, and ecosystems – also has an impact on urban planning. In fact, the challenge is to design strategies for the urban “ecosystem rehabilitation” of cities, considering green infrastructure, biodiversity protection, and access to healthy environments as structural components of collective health and resilience.

At the same time, as I have already mentioned, environmental sustainability cannot be separated from cultural and social sustainability. There is a growing global awareness that protecting ecosystems without protecting the cultural practices and social relations that shape them results in fragile, short-lived policies. The notion of “biocultural rights”, which has gained increasing attention in international and regional debates, expresses this interconnection. In fact, biocultural rights acknowledge that communities and individuals have the right to maintain the relationships that link their cultural identity with their natural environment. In cities, this principle translates into recognising that: on the one hand, cultural diversity, heritage, and social innovation are vital for ecological transition; and, on the other hand, citizens’ engagement through active participation of individuals is crucial for an urban decision-making that brings together different dimensions of sustainability. The Council of Europe’s *Faro Convention on the Value of Cultural Heritage for Society* (2005) already anticipated this perspective by affirming that access to and participation in cultural life

are essential to sustainable development and democratic citizenship. Likewise, the *European Landscape Convention* (2000) treats landscape as both a natural and cultural entity, a living space that shapes collective identities and wellbeing.

As this book effectively shows, cities have become spaces in which sustainability is negotiated, not imposed; and, as already noted, this negotiation requires participatory governance and, above all, active citizenship. The European Union has progressively recognised the importance of citizens' engagement and community-based decision-making in its urban policies: the *European Urban Agenda* and the *European Green Deal*, reinforced by the *European Climate Law* (Regulation EU 2021/1119), promote an integrated vision in which climate neutrality, social inclusion, and economic innovation must advance together. In this sense, active citizenship is not only a fundamental principle and a political goal, but a functional condition for sustainability: in fact, the ecological transition can succeed only if citizens are enabled to co-create it – through deliberation, local experimentation, and civic responsibility.

Participation, however, cannot be understood merely as consultation: cities that have experimented with participatory budgets, citizens' assemblies, and open-data governance demonstrate that inclusiveness and efficiency are not opposing, but mutually reinforcing values. A highly significant example in the European Union context is the *EU Mission for Climate-Neutral and Smart Cities*, which aims to support, promote, and empower 100 European cities in their transformation towards climate neutrality by 2030, turning them into hubs of experimentation and innovation that can serve as a reference point for all others. Each of the 100 pioneering cities that have committed to achieving this goal must sign a "*Climate City Contract*", a contract tailored to the specific realities of each city and

developed through a co-creation process designed to capture the voices of all stakeholders at every level. Therefore, Climate City Contracts aim at giving people and civil society an active role, providing them with new platforms for action and improved resources to imagine and implement climate-related measures.

The book also demonstrates that social sustainability is related to the intercultural dimension of urban life. In an era marked by intense mobility, also driven by transnational migrations, and plural identities, cities have become the natural space of intercultural encounters. The Council of Europe's *Intercultural Cities Programme* has long promoted this vision, proposing interculturalism as a model of urban citizenship based on interaction, equality, and recognition of diversity as a source of innovation. This approach goes beyond traditional multiculturalism, which often isolates communities within their cultural boundaries, and advocates for the active participation of all residents in shaping shared public life. "Intercultural cities" demonstrate that diversity, when institutionally supported and socially valued, enhances resilience and coexistence in pluralistic democratic societies. As stressed by a 2018 Report by the Migration Policy Group, cities that adopt more robust intercultural approaches inspired by the Council of Europe framework tend to have residents who view foreigners as a positive presence and perceive local services as reliable and effective.

Another very relevant aspect affecting active engagement in urban life is that of technological innovation. In fact, the technological transformation of contemporary cities introduces both new opportunities and new challenges to the complex ecosystem I've been trying to delineate. On the one hand, digital infrastructures can expand access to information, enhance participation, and support more transparent and responsive governance; in addition, technologies can facilitate the monitoring of environmental indicators

and optimize resource use, while helping to reduce inequalities by connecting marginalized groups to services and networks. Yet these same technologies also carry ecosystemic costs and ethical dilemmas: the material infrastructures of digitality – data centers, energy consumption, extractive industries – generate environmental footprints that are often invisible yet substantial. Furthermore, algorithmic governance and the concentration of digital power risk undermining democratic accountability and those checks and balances envisaged by liberal-democratic constitutionalism. In this regard, a sustainable city must be a digitally responsible city: the European Union’s digital strategy and its commitment to the “twin transition” – green and digital – recognize this interdependence [European Commission, *Annual Sustainable Growth Strategy 2020*].

From what has been outlined so far, it becomes clear that reimagining the city as a space for sustainable and intercultural coexistence requires a holistic approach: it demands that we bridge the artificial divides between nature and culture, human and non-human, local and global, material and digital. It invites us to see the city not as a problem to be managed but as a “living organism” where the future of democracy and sustainability is being invented.

The contributions gathered in this volume collectively embody this vision. They explore, from diverse disciplinary and geographical perspectives, the ways in which law and rights, cultural diversity, technologies and participation can converge to promote coexistence in sustainable cities. And they do so by confirming what comparative legal scholarship has long demonstrated – namely, that it is necessary to overcome a Eurocentric approach that tends to ignore the experiences of the *Global South* or, at best, to treat them merely as evidence of a one-directional circulation of (cultural, political, and legal) Western

models – flowing from the “centre” to the “periphery,” and almost always portrayed as marked by deficiencies or deviations.

Yet the picture is quite different: in fact, although in these pages I intended to recall several achievements within the European framework, it is now widely accepted in scholarly debate that the *Global South* has developed, and continues to develop, innovative and alternative legal solutions, which have come to serve as ‘models’ for European reflections.

With regard to the relationship between humans and nature, for example, studies on the development of environmental constitutionalism show that it is primarily in the constitutions of Africa, Oceania, Asia, and Latin America that the protection of nature has moved beyond a strictly rights-based approach and has begun instead to reshape the very form of the State and the regulation of decision-making processes. This is a form of environmental constitutionalism that is *bottom-up* in nature, oriented towards the reception of autochthonous cultures and of counter-hegemonic and radical visions of the human–nature relationship (as seen, particularly though not exclusively, in the constitutions of the *nuevo constitucionalismo andino*).

With regard to participatory democracy – despite the plurality of contexts and theoretical traditions underpinning it – the Latin American cultural environment undoubtedly stands as one of its privileged birthplaces, with specific reference to the path-breaking experience of the participatory budgeting in Porto Alegre, launched in 1989 and subsequently disseminated across the comparative landscape over the past decades.

Finally, regarding interculturalism, it is well known how this approach seeks to overcome the risks of essentialism and “communitarian isolation” inherent in multiculturalism by fostering dialogue and interaction among diverse groups with the aim of

creating syntheses that give rise to new, internally plural identities. Here again, Latin American experiences—particularly those of Bolivia and Ecuador – have emerged globally as leading models of a horizontal or post-majoritarian interculturalism: in these cases, interculturality is formulated in such a way as to permeate the entire constitutional order, influencing not only specific public policies but also the crucial domain of equal participation in shaping the constitutional and legislative rules that make it possible to “live together.”

Maria Chiara Locchi

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PRIMERAS PALABRAS SOBRE EL LIBRO

Ha transcurrido casi una década desde la celebración de la conferencia de las Naciones Unidas HABITAT III, a la que habían precedido las HABITAT I y II, para completar, desde Vancouver en 1976 hasta Quito en 2016, pasando por Estambul en 1996, casi medio siglo de documentos temáticos, asambleas mundiales, reuniones regionales y temáticas de alto nivel, compromisos políticos, foros urbanos nacionales, desayunos urbanos, celebración del Día Mundial del Hábitat y del Día Mundial de las Ciudades y muchas otras actividades de sedimentación de la idea fuerza de que la urbanización es una fuente endógena de desarrollo sostenible así como una herramienta para la integración social y la equidad.

El principal objetivo —y resultado— de la conferencia Hábitat III fue que los países miembros de la ONU acordaran la Nueva Agenda Urbana, que debería servir de guía para la urbanización en el siguiente ciclo de veinte años, desde 2016 hasta 2036.

Los 4 mecanismos que se diseñaron para articular la Nueva Agenda Urbana fueron, en primer lugar, unas políticas urbanas nacionales que promuevan «sistemas integrados de ciudades y asentamientos humanos», llevando adelante el «desarrollo urbano integrado y sostenible»; en segundo lugar, una mejor gobernanza urbana, «con instituciones sólidas y mecanismos que den visibilidad y poder a todos los actores urbanos», junto con un sistema de controles y equilibrios, para favorecer la previsibilidad, la inclusión social, el crecimiento económico y la protección del medio ambiente; en tercer término, una planificación urbana y territorial a largo plazo para optimizar la dimensión espacial de la ciudad y conseguir los resultados positivos de la urbanización, y, finalmente, unos marcos de financiación

eficaces «para crear, mantener y compartir el valor generado por una urbanización inclusiva y sostenible».

Esta referencia inicial a la Nueva Agenda Urbana tiene sentido en tanto el libro colectivo que aquí se prologa *-2030 Agenda, Natural and Cultural Diversity in a Global Context-*, coordinado por la profesora Thaís Janaina Wenczenovicz y el profesor Paulo Campanha Santana, se ocupa tanto de esa Agenda Urbana, quizá menos conocida y estudiada, como de la Agenda 2030 con sus 17 conocidos objetivos para conseguir un futuro sostenible.

Esa meta de la sostenibilidad mundial únicamente podrá alcanzarse si este compendio de aspiraciones se entiende como un conjunto de fines que se interrelacionan entre sí, pues lacras como la pobreza, la desigualdad, la discriminación o la degradación ambiental no se presentan de manera aislada y todas ellas demandan respuestas coordinadas que fomenten, de manera conjunta, la prosperidad, la paz y la justicia.

A esta actuación conjunta en pro de ese mundo sostenible es imprescindible contribuir también, como se hace en el presente libro, desde el ámbito académico, fomentando la reflexión interdisciplinar y el pensamiento crítico y propositivo; de ahí la importancia de los temas tratados en esta obra colectiva que buscan, cada cual enfocado en una concreta temática, contribuir a la sostenibilidad y la resiliencia, desde varios frentes, geográficos e idiomáticos, para, entre otras metas, avanzar en la prevención y en la necesaria reducción de los impactos del cambio climático, un fenómeno que, por más que no pocos actores políticos e, incluso, algunos supuestamente académicos, se nieguen a aceptar o, aceptándolo, rechazan combatirlo, ya lleva tiempo con nosotros.

En el mismo fin de semana en el que se escriben estas líneas se está desarrollando en Brasil, mi país de origen, concretamente en la ciudad de Belém, capital del Estado de Pará, la Conferencia de la ONU sobre cambio climático -COP30- y, pocos días antes de su apertura, el Embajador André Corrêa do Lago, presidente designado de la COP30, publicó su novena carta abierta a la comunidad internacional, en la que exhorta a gobiernos, instituciones y actores globales a responder al cambio climático con acción decidida y propósito compartido. El texto destaca el desafío crucial de mantener vivo el objetivo de 1,5 °C mediante la aceleración de la implementación y el fortalecimiento de la cooperación internacional. Basada en la urgencia científica y en el legado del Acuerdo de París, la carta invita a todos los actores a transformar las brechas climáticas globales en palancas de transformación. Apoyándose en documentos recientes — como el *Global Tipping Points Report* y los Informes sobre la Brecha de Emisiones y de Adaptación del Programa de Naciones Unidas para el Medio Ambiente—, el documento reconoce la magnitud de los desafíos y las herramientas disponibles para enfrentarlos. Las Contribuciones Determinadas a Nivel Nacional (NDC), los Planes Nacionales de Adaptación (NAP), los Informes Bienales de Transparencia (IBT) y el Marco Reforzado de Transparencia (MRT) son ahora instrumentos activos de la gobernanza climática global.

En esta misma línea de llamada a la cooperación internacional, en este caso académica, pero también de conocimiento de experiencias nacionales o locales, se insertan varios de los capítulos de esta obra, abarcando desde temas clásicos como, por mencionar algunos ejemplos, la educación o la salud, a asuntos más recientes, pero igualmente relevantes como el impacto de las tecnologías disruptivas en nuestras sociedades y en nuestros derechos.

Enhorabuena a quienes coordinan esta obra y a quienes la han hecho posible con sus contribuciones y muchas gracias por permitirme prologarla.

Oviedo, 10 de noviembre de 2025.

Regina H. Fonseca Fortes-Furtado

Profesora de Derecho Penal de la Universidad de Oviedo

PROLOGUE

Today, we see ourselves in a global dynamic where politics and politicians challenge not only the basis of our democracies but also our basic human rights. It's with great concern that we face the challenge to reassert and reinforce the notion that human rights are both a power limit and legitimize the decisions taken within that power. So, it's no wonder the fundamental role that the academic research has in this matter.

In this sense, an area that reflects this test is no other than the subject of climate change, and the affirmation that this is a human rights problem that requires an intersectional and differentiated approach that is respectful of those same rights. In the last few years, we encountered climate denialism, failure to fulfill obligations under the Paris agreement, and violations of rights as a result of climate disasters. That being said, the notion of climate vulnerability puts the focus on personal conditions or specific situations that any person or group of persons finds themselves in, facing the risks and negative consequences of climate change.

Indeed, we are faced with great inequality and discrimination in which the poorest regions and most vulnerable have the least resources and capabilities to cope with these impacts.

How should we proceed? The answer seems obvious: climate justice, the perfect tool to achieve equality, in a perfect scenario, but reality says we are not. And so, climate litigation has arisen as a savior to the most vulnerable in the sense that it allows them to demand accountability and climate action.

2025 has been the year of climate litigation, marked by two landmark decisions regarding climate change. Both decisions were the

result of requests for Advisory Opinions; the first one was Advisory Opinion AO-32/25 (May 29) pronounced by the Inter American Court of Human Rights, and the second one by the International Court of Justice (23 July).

In a few words, the relevance of these Advisory Opinions lies in the idea that the climate change international framework is complemented by international custom, general principles, rules of *jus cogens*, and international human rights law. This idea results in the establishment of parameters of conduct, such as the reinforced due diligence in the protection of the environment and the prevention of significant harm to the climate system. The breach of duties entails the international responsibility of the State in question. Another important standard, in this order of ideas, is the *jus cogens* nature of the obligation not to cause irreversible damage to the climate and the environment, especially if we consider the universal value of the survival of present and future generations. To the effectiveness of his principle, it is necessary to maintain the equilibrium of the conditions of life on the planet; in this context, anthropogenic conduct with irreversible impacts on the ecosystem equilibrium is contrary to international law, including human rights. Also, the right to a healthy climate has individual and collective connotations; the individual sphere protects each individual to be able to live in a climate system free of dangerous anthropogenic interference, and the collective sphere entails preserving a climate system that is suitable for ensuring the well-being and equilibrium of the climate system. The non-compliance will involve the State's responsibility.

That's how the climate crisis has proven to be a complex task that requires identifying risks and particular needs to prevent and reduce climate risks and damages; to provide a comprehensive

response, the measures must consider sustainable development as a means to ensure the resilience of humans and nature.

Today, more than ever, we must raise our voices and remember the crucial role academia has. Let´s put our ideas and claims on paper and demand climate action, after all, only our lives depend on it.

María Ignacia Sandoval Gallardo
Profesora e Investigadora CECOCH en Centro de Estudios
Constitucionales de Chile

INTRODUCTION

This work brings together reflections on the 2030 Agenda and the New Urban Agenda (NUA), with emphasis on item 36. The NUA is an international document that complements the 2030 Agenda, focusing specifically on how cities can contribute to sustainable development and address their current conflicting contexts. Item 36, within the framework of the NUA, is intertwined with specific goals related to resilient and sustainable cities, such as the promotion of sustainable urban infrastructure and the improvement of quality of life in urban areas, linked to regional characteristics, cultural diversity, multiculturalism, and interculturality, as well as the specificities inherent to diverse local contexts.

Item 36 of the NUA, in the context of a transnational society, emerges as a phenomenon of connection between environment and cultures, as well as the praxis of continuous exchange of ideas, aesthetic phenomena, and cultural practices. Facilitated by technology and human mobility, this society enables the creation of networks among individuals and communities from different countries and continents, who share knowledge and experiences, fostering intercultural coexistence in some geo-spatial contexts and multicultural coexistence in others.

In this context, several lines of reflection that guided the organization of this book are based on key conceptual themes: Environment, Citizenship, and Culturality; Social Inequalities and the Environment; Gender, Environmental Resilience, and Interculturality; Climate Justice and Cultural Regionalities; Cultural Policies and Resilience in the Constitutional Trajectory; Society, Culture, and Nature in 21st-Century Constitutionalism; Environmental Transversality and Regional/Local Cultures; and the Critical Theory of Fundamental Social, Environmental, and Cultural Rights in the face of rights violations and historical challenges of the 21st century.

The work consists of sixteen chapters, and among its authors, co-authors, and associated researchers, there is collaboration from individuals originating from or conducting research across the continents of Africa, America, Antarctica, Asia, Europe, and Oceania. In this way, the dialogues become both unique and broadened by the diverse geo-spatial and cultural realities represented, reinforcing the commitment to fostering transversal dialogues among scientists from the five continents. This movement of convergence, embracing a diversity of areas, themes, and methodological approaches, responds to the scientific demands of the 21st century.

The first chapter, entitled **FROM SUBALTERNITY TO LAW: HISTORICAL AND LEGAL TRAJECTORY OF THE PROTECTION OF CHILDHOODS AND ADOLESCENCES AGAINST SEXUAL VIOLENCE IN BRAZIL** is authored Alexandre Paulo Loro by Carini Zambiasi Vieira discuss the cases of sexual violence against children and adolescents at a national level, according to the Brazilian Public Security Forum (2025), referring to the year 2024, a total of 87,545 cases of rape and rape of vulnerable people were recorded in Brazil, as 67,204 are cases of vulnerable people. In relation to a gender analysis, 87.7% are female rape victims and 12.3% are male victims; in relation to the numbers corresponding to rape of vulnerable people, 86.2% are girls and 13.8% are related to boys; in relation to age group, it is possible to observe that 33.9% of rape cases are of girls aged 10 and 13 and in relation to boys, 32.8% are aged 5 and 10.

THE TECHNOLOGIES OF REVOLUTION 4.0 AT WORK AND WORKERS' PSYCHOLOGICAL HEALTH is authored by Alessandra Souza Menezes and Gabrielle Jacobi Kölling discuss the Revolution 4.0, also known as the Fourth Industrial Revolution, that has ushered in a new era of technological transformations based on intelligent automation, the digitization of production processes and

the integration of physical and digital systems. This new configuration has driven profound changes in the way production chains work, connecting organizations, people and services through digital platforms, artificial intelligence, big data and the internet of things. At the same time as boosting productivity and significantly reducing operating costs, this technological advance has also led to the extinction or transformation of many jobs, causing a significant reconfiguration of labor relations and the traditional employment model. In this new context, the expansion of teleworking stands out, a modality that allows work activities to be carried out remotely, using information and communication technologies, and which has gained legal support in Brazil since the 2017 Labor Reform.

The lack of clear boundaries between time spent at work and time spent on personal life, the intensification of demands for results, the invisibility of the hours actually worked, the loss of social interaction and the constant feeling of surveillance have all contributed to the mental illness of a significant portion of the workforce, leading to a significant increase in cases of occupational stress, anxiety and, in particular, Burnout Syndrome - a condition of physical and emotional exhaustion recognized as a work-related illness by the World Health Organization (WHO). In this scenario, it is urgent and necessary to carry out a critical reflection on the impacts of teleworking on workers' mental health, taking as a theoretical and normative reference the 1988 Federal Constitution, which enshrines health as a social right and a duty of the State, as well as the international commitments made by Brazil within the scope of the International Labor Organization (ILO).

This study therefore aims to analyze the consequences of Revolution 4.0 in the world of work, with an emphasis on teleworking as a legal, social and technological phenomenon, and its implications for workers' psychological health. It also seeks to understand the

extent to which the Brazilian legal system and international labor protection instruments have been effective in promoting decent, balanced working conditions that are compatible with the principles of human dignity, valuing work and social justice.

The third chapter titled **ACTIVE AND RESPONSIVE CITIZENSHIP: DEMOCRATIZATION OF SOCIETY AND POLYCENTRISM** by the authors Cesar Marció and Clóvis Reis presents the relationship between the exercise of citizenship and the decentralization of power, focusing on the sharing of responsibilities in the implementation of polycentric decisions as a foundational element of the Democratic Rule of Law in a postmodern context. By analyzing the established branches of government, the work proposes a redefinition of the traditional (vertical) provision of state protection, advocating instead for a (horizontal) polycentric and shared construction that fosters the democratization of society. Within this framework, the legitimacy of governmental decisions (public policies) is redefined through the evolution of rights and their democratic impacts. The central aim/desideratum is the democratization of society as a pathway to regional development, understood as the outcome of the political emancipation of citizens, who must therefore be active and responsive.

Following this, the fourth chapter **GENDER AND MOTHERHOOD: IMPACTS OF LACK OF ACCESS TO AND INDISCRIMINATE USE OF REPRODUCTIVE TECHNOLOGIES ON WOMEN'S HEALTH** by Cláudia Cinara Locateli and Anna Julia Schreiner Guareschi analyzes the imposition of motherhood as a social construction of gender and its relationship with the lack of access to and indiscriminate use of reproductive technologies, highlighting their impacts on women's physical and mental health. Although such techniques make it possible to overcome infertility, access to them

remains marked by deep inequalities that exclude countless women due to economic, cultural, and institutional barriers. On the other hand, among those who do gain access, the indiscriminate use of these procedures may generate significant risks, exposing abuses and perpetuating the logic of a normative standard of “being a woman.”

The next, **SMART CITIES AND OPEN GOVERNMENT: ACTIVE CITIZENSHIP AND SOCIAL PARTICIPATION FOR SUSTAINABLE DEVELOPMENT**, authored by Diogo de Calasans Melo Andrade and Agda Maria dos Santos Alves Costa Teixeira investigates the relationship between smart cities and open government, highlighting the central role of citizen participation in building inclusive, sustainable, and democratic urban environments. The evolution from digital to smart cities has often been guided by technological infrastructures, yet such top-down and technocentric approaches risk reinforcing inequalities and excluding marginalized groups. By contrast, Open Government principles, transparency, accountability, inclusive participation, and innovation, offer a framework for embedding democracy into urban governance. Within the scope of the United Nations 2030 Agenda, particularly SDG 11 (Sustainable Cities and Communities), the discussion underscores the importance of bottom-up models that respect local knowledge, cultural practices, and community-based solutions. Case studies such as Brazil’s Cistern Program demonstrate how social technologies rooted in traditional practices can be scaled into effective public policies, promoting resilience and equity. The chapter argues that the true intelligence of a city lies not only in its digital infrastructures but also in its ability to integrate diverse knowledge systems and empower citizens as co-creators of urban futures.

The sixth chapter, entitled **ANTARCTICA AND THE 2030 AGENDA: CHALLENGES AND SOLUTIONS FOR A GLOBAL**

COMMON GOOD by Erli Schneider Costa provides a critical analysis of Antarctica from the perspectives of environmental justice, equitable access, and protection of global commons, considering its strategic importance for climate balance and global biodiversity. It is based on a review of key international norms and treaties, particularly the Antarctic Treaty System and the Madrid Protocol, emphasizing their goals to promote collaborative scientific research, international cooperation, and strict environmental protection. The chapter discusses contemporary challenges such as anthropogenic pressures from tourism, fishing, and climate change, and the need to expand inclusive participation of countries, especially developing ones, ensuring equity and transparency in the use and management of the region. It concludes by highlighting Antarctica as a natural laboratory for sustainable practices and policies aligned with the 2030 Agenda, reiterating the need for institutional innovation to ensure its preservation for future generations.

Following this, the authors Gabriela Barreto, Leidy Dayane Paiva de Abreu, Liana Araújo Rodrigues Braz and Valéria Romão Pasqualini Nerio in the chapter titled **HEALTH AS THE LAST FRONTIER OF DIGNITY IN PRISION: AN EPIDEMIOLOGICAL ANALYSIS IN CEARÁ** reflects on how the prison environment represents one of the most socially vulnerable spaces, where the deprivation of liberty often extends to the denial of fundamental rights, making health the last frontier for preserving human dignity. Tuberculosis (TB), caused by *Mycobacterium tuberculosis*, emerges as a marker of inequity in these institutions, being the world's leading infectious disease and a serious public health problem. Neste contexto é possível apontar que the living conditions in prison, marked by deprivation, psychosocial issues, and precarious access to health services, intensify risks and deepen inequalities.

The chapter eighth, entitled **THE INVISIBLE FACTOR OF LAW: THE BRAZILIAN ARMY AND (NON) DEMOCRATIC CONSTITUTIONS OF BRAZIL** by Germano Schwartz examines the role of the Brazilian Army in the historical evolution of Brazil's constitutional framework, with a focus on the *invisible forces* concept rendered by Adam Podgórecki. Since Brazil's independence in 1822, the Army has played a pivotal role in shaping various constitutional regimes, often acting as a hidden force that influences political stability and the nature of governance. This analysis traces the Army's involvement at key moments in consideration of the constitution, highlighting its impact on democratic and authoritarian transitions.

The next, entitled **EDUCATION, COLONIALITY, AND INTERCULTURALITY: REFLECTIONS FROM GUINEA-BISSAU AND BRAZIL** by Hodávio José Siga analyzes the intersections between education, coloniality, and interculturality in the contexts of Guinea-Bissau and Brazil, exploring how colonial legacies shape educational systems and how epistemologies of the South and South-South cooperation can promote emancipation. Adopting a critical-theoretical approach based on literature and document review, the study engages with Sustainable Development Goals (SDGs) 4, 10, 11, 13, and 17, and New Urban Agenda item 36, which emphasizes sustainable urban infrastructure and quality of life. In Guinea-Bissau, the dominance of Portuguese and the marginalization of local knowledges, such as Balanta practices¹, perpetuate inequalities, while initiatives like the Bilingual Education Program seek inclusion (UNESCO, 2023). In Brazil, Law 10.639/2003 and UNILAB face barriers to decolonial curricula (MEC, 2023). The analysis highlights that intercultural education, by valuing multicultural heritage and promoting climate justice, strengthens transnational networks and environmental resilience. It concludes that Guinea-Bissau and Brazil can lead emancipatory education aligned with the 2030 Agenda, provided

they overcome coloniality through critical pedagogical practices. The Balanta, the largest ethnic group in Guinea-Bissau (about 30% of the population), are known for sustainable agricultural practices, such as rice cultivation in mangroves, using irrigation techniques adapted to the local climate, contributing to environmental resilience and food sovereignty (FAO, 2021).

The chapter tenth examines the incorporation of reproductive, unpaid domestic, and care work into the United Nations 2030 Agenda for Sustainable Development, focusing on Target 5.4, which calls for the recognition and valuation of such work through public services, infrastructure, and social protection policies, measured by time-use statistics. Its main objective is to critically assess the extent to which this inclusion addresses the structural conditions underpinning the sexual division of labor.

Grounded in Marxist feminist Social Reproduction Theory (SRT), the analysis moves beyond distributive concerns to explore the central role of reproductive labor in sustaining capitalist economies and its historical exclusion from economic value systems and public policy agendas. Methodologically, the chapter employs documentary analysis of the trajectory of women's rights as human rights, with particular emphasis on the treatment of reproductive and unpaid work in foundational international instruments, conventions, and political commitments. The findings reveal that, while time-use measurement constitutes an important step toward statistical visibility, it does not in itself transform the gendered and racialized organization of reproductive work.

The analysis highlights how global policy frameworks tend to individualize and privatize responsibility for social reproduction, thereby limiting the transformative potential of recognition. The chapter concludes that incorporating unpaid work into the development

agenda must move beyond counting hours, requiring structural reforms that redistribute responsibilities, expand public investment in care infrastructure, and integrate social reproduction into the core of economic and social policy. The chapter is written by Ivi Vasconcelos Elias and is titled **COUNTING UNPAID WORK, SUSTAINING INEQUALITY: THE 2030 AGENDA AND THE POLITICS OF SOCIAL REPRODUCTION**.

The next **EDUCATION AS A HUMAN AND FUNDAMENTAL RIGTH: THE SPECIFICITIES OF EDUCATION IN CHINA IN THE JIANGSU-ZHEJIANG-SHANGHAI REGION IN CONTRAST TO BRAZILIAN EDUCATION BETWEEN THW UNIVERSALIZING PATRIARCHAL STRUTURE AND ETHNIC AND CULTURAL EDUCATION** by the authors Marlei Angela Ribeiro dos Santos, Shuyi Ge and Thaís Janaina Wenczenovicz this chapter presents a comparative analysis of the educational systems of the Jiangsu-Zhejiang-Shanghai region of China and Brazil, focusing on education as a fundamental human right and a liberating instrument of pre-established standards.

The research, qualitative, bibliographical, and investigative in nature, examines the cultural, political, and pedagogical specificities of both contexts, with an emphasis on the tensions between the universalizing patriarchal culture of Brazilian education and the plurality of ethnocultural education. In the Chinese case, we observe an educational system centered on academic excellence and influenced by collectivist and Confucian values. In Brazil, on the other hand, education reveals a duality: facing the reproduction of patriarchal, Eurocentric, and exclusionary structures and the resistance movements of indigenous knowledge. This paper addresses a current and emerging global theme: the relationship between education, gender, culture, and social justice.

It highlights how educational models can reinforce or combat structural inequalities. The theoretical framework of Epistemologies of the South underpins the critique of the epistemicide promoted by the monoculture of Western knowledge in Latin America, proposing a pedagogy committed to cognitive and social justice. Studying this theme shifts paradigms and contributes to reflection on anti-colonial and multi-epistemic educational alternatives capable of promoting equity and identity recognition.

The chapter twelfth, entitled **INVISIBLE INFRASTRUCTURES AND ENVIRONMENTAL JUSTICE: THE HIDDEN FACE OF DIGITAL CITIZENSHIP** by the author Nicolo Basigli investigates digital citizenship within the framework of the 2030 Agenda, focusing on its democratic promises and the limits imposed by digital infrastructures that remain invisible yet generate significant socio-environmental inequalities. The objective is to understand how the myth of technological neutrality conceals power relations and reinforces exclusions, shifting the debate from mere digital inclusion to a critical analysis of ecological and social justice. The methodology relies on an interdisciplinary literature review, combining theories of the network society, philosophy of technology, and ethics of artificial intelligence, as well as the analysis of international documents and public policies related to digital sustainability. The study identifies three main axes: a) the emergence of digital citizenship and its democratic paradoxes; b) the materiality of digital infrastructures and their invisible impacts on territories and communities; c) possible pathways for a sustainable and fair digital citizenship that integrates human rights, environmental justice, and transnational governance of technology. The results indicate that digital citizenship can only be effective if accompanied by a critique of the power asymmetries structuring the global infosphere, requiring new institutional pacts

that reconcile technological innovation with socio-environmental justice.

Gupta in the chapter titled **SUSTAINABLE DEVELOPMENT AND ARCTIC SHIPPING TRAFFIC: SAFEGUARDING THE SEA GOVERNANCE, INDIGENOUS COMMUNITIES' RIGHTS AND MARINE ECOSYSTEM** discuss about the rapid decline of 'Arctic Sea ice melt' due to global warming has undoubtedly opened the new sea trade routes while increasing the maritime traffic simultaneously which has brought forth lots of legal implications and challenges for the countries. Excessive traffic in shipping routes lead to pollution, habitat disruption and risk to marine life. Additionally, it is raising a concern about governance, international regulatory mechanism for emergency infrastructure response system and accidents along with security and environment protection. Thus, the research paper firstly discusses in detail the sustainable legal landscape surrounding Arctic shipping, focusing on governance structures, security considerations, and environmental protection. Further the research examines the international and domestic laws throwing light on the existing governing laws to Arctic shipping and propose recommendations for addressing evolving concerns. Lastly, the study aims to clarify the legal complexities, governance challenges, and environmental risks linked to Arctic shipping by integrating insights considering the case study of Suez Canal.

The chapter fourteenth, entitled **DISRUPTIVE LAW AND DISRUPTIVE TECHNOLOGY: THE DIMENSION OF NEW TECHNOLOGIES OR OF ENHANCED TECHNÉ** by Paulo Junior Trindade dos Santos, Sabrina Lehnem Stoll and Uliana Helena Mengarda aims to demonstrate the connection between Disruptive Law and Disruptive Technologies by analyzing how Technoscience abruptly impacts all sectors of society—including the very biological

structure of the human being. This scenario imposes the need to rethink Law from its foundational bases so that it may preserve ethical and democratic elements.

The next, entitled **URBAN RESILIENCE AND CULTURAL DIVERSITY: PATHWAYS TO INCLUSIVE SUSTAINABLE CITIES IN INDIA** by the authors Priyanka Taktawala, Faiz Ayat Ansari and Tanmayee Kar explores the interplay between urban resilience and cultural diversity in India, a nation characterized by its rich heterogeneity. It examines how cultural diversity serves as a driver for sustainable urban development, addressing challenges and opportunities in fostering inclusive cities. The study employs a mixed-methods approach, including literature reviews, case studies of Indian cities, and statistical analysis of urban demographic trends. Key findings highlight that India's diverse cultural fabric enhances community resilience but faces challenges from inequitable urban planning and socioeconomic disparities. The paper concludes by proposing inclusive policy frameworks that leverage cultural diversity to build sustainable, resilient urban ecosystems.

The chapter sixteen entitled **THE STUDY OF CARE FROM A GENDER PERSPECTIVE: SOCIO-LEGAL CHALLENGES AND THE SEARCH FOR A RIGHT TO CARE** is written by Roberta Pinheiro Piluso and Carmen Lucia Tavares Felgueiras and examines care work from a socio-legal and gender perspective, analyzing the feminization and invisibility of care work, contextualizing it in the current moment of capitalism, the sexual division of labor, and the UN 2030 Agenda. The text also addresses the intersections of gender, race, and class, showing how black and poor women are disproportionately impacted, and discusses the repercussions of care in the Brazilian judicial system, as evidenced in decisions on maternity leave and alimony, in addition to initiatives to recognize care as a human right, such as the

request for an opinion to the Inter-American Court of Human Rights. As a result, it is emphasized that the feminist perspective is crucial for politicizing care, promoting equitable public policies, and transforming the structures that devalue it, ultimately aiming for a more just society.

The chapter seventeenth entitled **HUMAN RIGHTS AND THEOLOGICAL EDUCATION CONSIDERING THE SUSTAINABLE DEVELOPMENT GOALS** is written by Rodrigo Espiúca dos Anjos Siqueira and Gustavo Gilson Sousa de Oliveira and examines the relationship between theological education and the promotion of a human rights culture, considering the Sustainable Development Goals (SDGs) as a guiding framework. The research argues for the urgent need to update theological education so that the church can more effectively fulfill its teaching mission, which involves teaching, baptizing, and nurturing new believers.

The study contextualizes education as both a fundamental human right and a means of accessing other essential rights within society. It proposes that theological education be aligned with international human rights standards to foster values such as dignity, equality, freedom, and justice, both within the church and in its interactions with broader society. The article highlights the importance of addressing contemporary issues—including gender, sexuality, ethnicity, and religion—through biblically grounded and contextualized responses, avoiding discriminatory practices.

The research adopts a deductive scientific approach, utilizing documentary and bibliographical analysis. The findings suggest that integrating human rights principles into theological education not only strengthens the church's identity and mission but also contributes to the formation of inclusive, ethical, and socially responsible individuals. Ultimately, the article advocates for a paradigm shift in theological education, positioning it as a transformative force for building a more

just, inclusive, and compassionate society, aligned with both Christian values and the universal promotion of human rights.

The chapter eighteen and the last one titled **LIFE AFTER SLAVERY: BUILDING FREEDOM WITHIN AND BEYOND THE LABOR MARKET** is written by Vitor Araújo Filgueiras and Livia Mendes Moreira Miraglia. The paper analyzes Brazil's efforts to combat contemporary forms of slavery and to evaluate the challenges faced after workers' rescue, emphasizing the need for sustainable reintegration policies. Between 1995 and 2025, Brazil rescued over 65,000 workers from conditions analogous to slavery, yet there has been no significant reduction in extreme labor exploitation. Many rescued individuals experience repeated victimization, revealing a persistent cycle of social vulnerability. Data from national and international studies show that a considerable portion of victims are rescued multiple times, underscoring the lack of effective post-rescue support. The Mobile Inspection Task Force (GEFM), operating for three decades, has played a key role in identifying and rescuing workers, demonstrating institutional resilience. However, post-rescue assistance remains fragile and temporary. To address this, the Brazilian government created the **Vida Pós Resgate (Life After Slavery)** program, which seeks to provide sustainable alternatives and restore dignity to rescued workers.

An excellent read.

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Paulo Campanha Santana

Thaís Janaina Wenczenovicz

Editors

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FROM SUBALTERNITY TO LAW: HISTORICAL AND LEGAL TRAJECTORY OF THE PROTECTION OF CHILDHOODS AND ADOLESCENCES AGAINST SEXUAL VIOLENCE IN BRAZIL

Alexandre Paulo Loro¹

Carini Zambiasi Vieira²

1 INTRODUCTION

Sexual violence can be considered as any act that puts a child or adolescent in the position of committing or witnessing a libidinous act, it can also be related to the exposure of the body, in person or through photos and videos. It can be classified as: sexual abuse, commercial sexual exploitation, and human trafficking (Brasil, 2017).

According to Law No. 12,015, of 2009, Art. 213, rape is “compelling someone, through violence or serious threat, to have sexual intercourse or to perform or allow another libidinous act to be performed with them”. It is considered rape of a vulnerable person, having sexual intercourse with minors under 14 years of age, or any person who cannot consent or offer resistance, due to an illness or mental disability (Brasil, 2009).

When analyzing cases of sexual violence against children and adolescents at a national level, according to the Brazilian Public Security

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Forum (Fórum Brasileiro de Segurança Pública, 2025), referring to the year 2024, a total of 87,545 cases of rape and rape of vulnerable people were recorded in Brazil, as 67,204 are cases of vulnerable people. In relation to a gender analysis, 87.7% are female rape victims and 12.3% are male victims; in relation to the numbers corresponding to rape of vulnerable people, 86.2% are girls and 13.8% are related to boys; in relation to age group, it is possible to observe that 33.9% of rape cases are of girls aged 10 and 13 and in relation to boys, 32.8% are aged 5 and 10.

It is clear that sexual violence has a gender and power relationship, due to the number of cases involving vulnerable children and girls. Gender-based violence affects women, children and adolescents regardless of sex. Patriarchal society favors and somehow tolerates men exercising power over those who are considered different or inferior. Even within this gender construction, it would not be enough for other categories of people to submit, so the use of violence becomes a mechanism of power (Saffioti, 2001).

For a long time in human history, children and adolescents were not considered as subjects deserving of rights, with their physical and psychological protection often neglected by adults. The contemporary representation of childhood and adolescence is still very recent, only in the last twenty years have protection laws and public policies emerged that promote care, protection and rights (Carvalho; Bizzotto, 2022; Brasil, 2013; Faleiros; Faleiros, 2007).

In view of the above, this work aims to analyze the historical construction of the concepts of childhood and adolescence, contextualizing it in the Brazilian social reality. In particular, the progression of the institutionalization of legal frameworks and specific rights is detailed, especially with regard to protecting and confronting violence of a sexual nature.

2 BEING A CHILD AND ADOLESCENT IN HISTORY

According to author Heywood (2004), it is important to see childhood, as well as adolescence, as a social construction, which belongs to a historical period and changes based on the social and ethnic groups in which they live. During the Middle Ages (from the 5th century to the 15th century) there was not much interest in portraying childhood and adolescence, so there were few records. It took a while for the emergence of a distinction between what adults were and what children were and even when this perception emerged, the boys were the ones who were seen, the girls were imperceptible.

The author Àries (1986) observes from the paintings that during the 11th, 12th and 13th centuries, there was a clear lack of space for children in society, and when they were represented in works of art, they were not portrayed as we see them but with adult features, with height as the only child characteristic represented. One of the examples analyzed is the “[...] scene in the Gospel in which Jesus asks that little children be allowed to come to him, the Latin text being clear: *Parvuli [...]*” (Àries, 1986, p. 50), but the person portrayed is a small adult. The image of the child was not important in artistic representations, therefore, it can be understood that not even in society was this phase of development seen as a period of transition, unimportant and soon forgotten.

In the first two years of their lives, children were seen as cute little animals that were used for the amusement of adults. The indifference and lack of care towards children made infant mortality very high, and if they died in the early years, some people could feel their loss, but not for long, as that child would soon be replaced, thus not being able to escape a kind of anonymity. The life expectancy of children during the middle ages was up to fourteen years old, as many

died before reaching the age of seven. This way, their labor force should be used, thus generating some profit for the family (Ramos, 2010; Àries, 1986).

As soon as children learned to talk and walk, they were placed alongside adults in domestic work, agriculture, and social life in general, and this way they learned to coexist, being seen from the age of five to seven as adults, or adults with defects who served as servants and were seen as objects. From an early age, these children were taken away from their parents, being looked after by strangers so that they could teach them how to become a worthy person, therefore, parents had no way of bonding and creating emotional bonds with their children. The lack of value that children had meant that the royal crown advised parents to enlist their children for vessels due to the lack of adult labor, so children aged between nine and sixteen were already capable of these jobs, but it was common to have children younger than the expected age. Even knowing that mortality inside the ships was high, for parents it was a good deal to send their children, as in addition to having one less to feed, they received money for the work their children did and if they did not survive, infant mortality was already so high within the country, by enlisting their children they could thus profit from their short lifespan (Ramos, 2010; Heywood, 2004; Àries, 1986).

In relation to the way in which the sexuality of children and adolescents was seen, the author cites the diary written by Louis VIII's doctor, which demonstrates that at the end of the 16th century and beginning of the 17th century, children's sexuality was not protected as it is today. The caregivers, as well as the parents, communicated in a rude and shameless way, touching the children's private parts, as if it were a game, the sexual life of adults was exposed, in this way young children reached "sexual maturity" before they even turned five. When they reach seven years of age, these games disappear, the child becomes

a man and needs to fit in socially. At the age of 14, Louis VIII was already considered a ready man, marrying a 13-year-old girl. Exposing to children the sexuality nowadays considered private to adults, was not just a particularity of the royal family, all families from this period of history had these same customs (Àries, 1986).

Children and adolescents began to be perceived at first within the religion, they were seen as pure and innocent, containing wisdom in their words. They understood childhood as a transitory moment, thus showing that there was a notion about growth, but they were not understood and were often treated with contempt (Heywood, 2004).

In the 13th century, paintings and sculptures of angels can be identified, approaching what we understand today as traits of children and adolescents. These images were the representation of Clerics, who resembled the characteristics of young boys, were educated to help in masses and were old enough to learn to read. The baby Jesus was also an artistic representation of childhood, but the first paintings had adult features and child size. In the middle of the 12th century, the first painting of Jesus appeared with a greater similarity to what we understand would be childish features (Àries, 1986).

In the 14th century, childhood began to be represented in a religious way, showing an evolution of the view on children's traits and behaviors, as was already being pointed out at the end of the 13th century. The artists represented behaviors in which they showed affection in paintings of Jesus and Mary, and which represent early childhood such as: the child being breastfed, wrapped in fabric, playing with his toys at his mother's feet. However, these images took a long time to be understood beyond art. Royal children were rarely painted, if they survived it was not important to have records of this phase and if they died it was not important to have a memory of this. Until the 19th century, it was common to have many children, without

establishing emotional attachments, or even seeing that child as having a personality, as many did not survive (Àries, 1986).

From the 17th century onwards, there was a cultural change, with the influence of the church and a new interest in the field of education, children began to be seen as innocent beings in need of care, thus prolonging childhood, however this view of care was reserved only for children in the medical class. In this century, thinkers were those who came closest to the conception we have of childhood today, they perceived its importance, and not as imperfect beings that need to be molded. In relation to sexuality, children began to be preserved and adolescents were punished and sexually repressed; masturbation, for example, could cause illness if it were practiced (Heywood, 2004).

Important scholars on childhood and adolescence emerged at the end of the 19th century and beginning of the 20th century. During this period, children appeared without economic value. However, working families used their children's work and wages for family income. This only changed with the emergence of laws against child labor (Heywood, 2004).

During the 20th century, the period of childhood and adolescence was seen as a passing moment of preparation for adult life. Having children and adolescents as immature people, without social skills, irrational, and who would be in the process of becoming a mature adult, containing the necessary tools to fit into society. For a long time, childhood as a whole was disregarded by science, with only immaturity as an emphasis, related to biological issues relating to this period of development, which was considered a factor that defines this moment of life (Heywood, 2004).

Several historians undoubtedly risk making a somewhat exaggerated statement about the "discovery" of childhood, in an attempt to dramatize

the importance of their conclusions. Any long-term survey in this area would probably make a mockery of attempts to limit the emergence of fundamental ways of thinking to one period. The cultural history of childhood has its milestones, but it also moves along circuitous lines as the century passes: the child could be considered impure at the beginning of the 20th century as much as in the High Middle Ages. Thus, on the one hand, the long-term shift towards a pluralistic urban society favored the gradual emergence of a prolonged version of childhood and adolescence. The middle classes, whether in 12th century Italy or in England during the Industrial Revolution, accepted the need for broad education and a determined segregation of young people from the adult world (Heywood, 2004, p. 45).

During the 12th century it was a common perception that babies were born in sin, and if they died before being baptized, they would go straight to hell, this perception goes against the idea of an innocent and pure child. In the 16th century, in a German sermon, children were described as impure, with sexual desires, angry, among other adjectives considered negative. However, on the other hand, children up to five and six years old were seen as innocent. Catholics determined that children were born with evil within them. In this way we can understand that in several periods of Western history there was a dichotomy, between, for example, seeing the children as naive or that at birth evil was already part of them (Heywood, 2004).

3 CHILDHOOD AND ADOLESCENCE IN BRAZIL

According to Leite (2011, p. 21), the definition of a child (“criança”, in Portuguese) comes from the verb “criar”, translatable as

“to raise”, meaning the children were raised by their parents or often by people in the community. Children aged 0 to 3 years, because they could not walk, were carried by their mothers, brothers or slaves, according to the author, they were called “standing helpless”, being devalued because they were unable to perform any work activity, unlike slightly older children. The oldest age was 12 for girls and 14 for boys, boys also underwent preparation for adult life from 8 to 12 years old, were dressed as adults and attended social spaces, and at church at 7 years old it was already considered “the age of reason”.

The period that demarcates childhood and adolescence in Brazil between the Colony and the Empire varies according to the social reality of each individual. The end of early childhood is marked by the end of breastfeeding, which lasts until three to four years of age. The second lasted until the age of seven, where children stayed close to their parents and learned everyday tasks. From then on, children were sent to work, many went to public schools created in the mid-18th century and others were taught in their homes with teachers. In Jesuit schools, white, slave and indigenous children occupied the same spaces, but as soon as they turned seven years old, the whites remained and the others were sent to work (Priore, 2010).

In Colonial Brazil (1530–1822), indigenous and black children’s function was work, their exploitation was legitimized by the entire society, showing that childhood was not considered but rather dehumanized. Children were more vulnerable to being converted by the Jesuits, so they were under the supervision of priests for catechization and education. In these spaces, the objective was to educate people to follow the teachings and ideals of the colonizers, devaluing the culture present there. Around 1755, the Jesuit priests were expelled and there was a perception that children could serve, without the cost of education (Linhares, 2016; Rizzini; Gondra, 2014).

For the colonizers, the communities that inhabited the land, with all aspects of their culture, represented backwardness and, therefore, there was no need for assistance and education, facts that contributed to the dehumanization of indigenous peoples, devaluation of their cultural and religious traditions, justifying, for example, slavery and the absence of schools, even catechist ones. The school became restricted to the wealthiest. With the expulsion of religious people from the Society of Jesus, the education of the natives was left adrift from society for many years (Linhares, 2016, p. 32-33).

According to Góes and Florentino (2010), in relation to enslaved children, they did not have a record of their trade at an early age, they were bought or sold when they were older. In the early years, they came with their mothers or were born on farms and many were donated soon after their birth. When sold, the main objective was to get the mother to work in agriculture, many of these children died due to lack of breastfeeding, as their mothers served as wet nurses for their masters' children (Rizzini; Gondra, 2014).

Among the captives in Brazil, adults predominated, few of whom reached fifty years of age. The balance between the sexes varied according to fluctuations in trafficking, and in times of large landings, there were up to seven men for every three women. On average, children represented only two out of every ten captives.

Obviously, the longer a squad was away from the slave market, the less pronounced these imbalances were: on farms that had not purchased captives for twenty years, the balance between the sexes was the norm, and children could account for a third of the slave population; in establishments separated from the

market for fifty years, children accounted for almost half of all captives (Góes; Florentino, 2010, p. 178).

Generally, when a child was sold, they were often separated from their parents, thus preventing the formation of emotional bonds or the bonds that had already been built were broken. They sought sponsorship among slaves to remain as close to their family of origin and in an attempt to obtain protection. Many children did not survive after one year of age, those that survived soon lost their parents, so by the time children reached eleven years of age, the vast majority were orphans (Linhares, 2016; Góes; Florentino, 2010).

According to Scarano (2010), children born to slaves in Minas Gerais, until the age of seven, lived free and shared the same environments as other free white children. White women saw them as toys or pets, they thought the children were cute, they played and had fun with the little ones and offered them food. After the age of seven, they worked as adults, whether in agriculture, domestic services, or carrying out various activities. They did not have any privileges or greater care because they were still small, thus, they were unassisted, without access to good food, adequate clothing, or even education (Linhares, 2016).

Law n. 2,040 of September 28, 1871, known as the Free Womb Law, gave some rights to children, thus guaranteeing some protection. Article 1 states that children born as a result of this law would be free, putting an end to child slavery, and also prohibiting the sale of children under the age of twelve. However, even after the creation of this law, “[...] the slave children remained in the hands of their masters, who had the option of keeping them until they were 14 years old, and could then reimburse themselves for the expenses with the children, either through free labor until they were 21, or by handing them over to the

State, through compensation [...]” (Linhares, 2016; Rizzini; Gondra, 2014, p. 18; Brasil, 1871).

Poor, white children had a certain privilege due to the color of their skin, having a greater chance of socializing, studying or even getting a good job. However, the treatment was the same, they were not seen or considered, they started working at a very young age. Boys had greater possibilities, the vast majority of them entered military life, factories, barbershops and workshops. As for the girls, only domestic activities remained, with no prospect of studies (Linhares, 2016).

Children who arrived in Brazil on ships in the 16th century were generally accompanied by their parents, and those who came alone were generally orphans, and were only allowed on the vessel as “cabin boys or pages”. Children went through difficult situations, even those who were accompanied were at risk of being sexually abused by sailors or anyone else on the vessel. If the ship was invaded by pirates, poor adults were usually murdered and children were kidnapped, enslaved and prostituted. When a ship sank, it was common for children to get lost from their parents, die or become lost, even if they managed to reach land, no one would look for them, so they were left alone to fend for themselves (Ramos, 2010).

According to Ramos (2010), on average 22% of the population were pages and servants under the age of 16, for a crew of 150 men. The vast majority of the pages were children from poor families, but who had some contact with the royal family, or belonged to lower nobility. The families saw the navy as an opportunity to earn money and grow socially. On ships they directly served the nobility, they were assigned to functions related to comfort such as making beds, dormitories and serving tables, they had advantages in work considered light and because they were close to the officers they had a richer diet, having a lower probability of illness and death. In a hierarchy they were above

the sailors and cabin crew who, in turn, were assigned to heavier work and when they did not follow orders they suffered severe punishments. Even though they had some advantages from being close to officers, they were not free from suffering violence, including sexual violence.

Some boys who were sons of officers or who had some privilege embarked as escorts or pages, poor boys like lumps. In turn, the vast majority of girls, under the age of 16, who lived in orphanages or those who were fatherless, were forcibly taken from their families and boarded on ships as orphans of the king. Because they were alone on ships, they became easy targets for rape by sailors or any other man present on the vessel. Many of these girls under the age of 16, when they were embarked, were already destined for marriage, so some religious people protected them. It was not an easy task, due to the number of people in the crews and the lack of food, many died before disembarking (Ramos, 2010).

According to Leite (2011), there is difficulty in seeing the history of children and adolescents in the 19th century, due to the few studies of historical demography. Just like women, children are erased within family records, remaining hidden within these groups when searching for quantitative data. In addition to the data, the children did not have a voice, were not heard or perceived.

4 SANITIZATION AND CONTROL OF CHILDREN AND ADOLESCENTS

In the 19th century, medicine focused on the high rate of infant mortality and began to worry about hygiene, demonstrating the need for this knowledge in all institutions. In this way, it can be used as an

instrument to obtain power and control over people and institutions (Rizzini; Gondra, 2014; Rizzini; Pilotti, 2011).

[...] medicine claims to recognize the disease, predicting its evolution and appropriate therapy, also establishing itself as a necessary art to face certain situations converted into a field of medical action. As a practice, it is also an exercise capable of making the patients adhere to the diagnosis and subjecting them to a new lifestyle. It is precisely in relation to this regime of life that the task of persuasion becomes more important, more decisive, since it results in the acceptance of changing a set of practices with regard to drinks, food, exercise, sexual relations, in short, an entire way of life (Rizzini; Gondra, 2014, p. 564).

Based on this science, it is proposed to develop hygienic practices within institutions such as schools, hospices, churches, barracks, prisons, among other institutions. These practices are not just about physical and environmental hygiene, they are related to clothes, food, lighting in the place, determining for how long, the balance, how intense interventions would be carried out on people and the population in general. For the good running of schools, for example, medicine seeks to understand the best age to start schooling and, in addition, it seeks to understand the functioning of people's bodies and psyches, in this way schools would produce educated people who follow a hygienist idea (Rizzini; Gondra, 2014).

Before the 19th century, in Europe, around the 18th century, discussions and publications began, mainly by doctors, administrators and military personnel on the care of children. The concern was about the future of civilization and for this it was important to think about the way children were educated. At the center of the discussions were abandoned children living in hospices, children raised by wet nurses

and the superficial way in which rich children were educated. One of the main objectives was to keep alive children and adolescents who lived in so-called hospices, where mortality was high, causing damage to the state. Survival was essential so that they could serve, whether in military work, in the navy or to be sent to colonization. As there was no family connection, they were able to be sent anywhere (Donzelot, 1980).

During this period, the importance of education begins to be seen and, consequently, the change in the perception of childhood. These changes occurred due to an interest in changing some ways of educating, which are divided into two points, the first, “diffusion of mestiza medicine”, which consisted of teaching parents, especially mothers, about how to take care of their own children, in order to no longer need servants, thus avoiding negative influences. And the second point is to control birth rates among the poorest population, so that they could take care of their own children, thus reducing the number of children supported by the state (Donzelot, 1980, p. 23).

According to Donzelot (1980), at the end of the 18th century and during the 19th century, medicine created material with instructions on how to educate children, hygiene care and medication. At the end of the century, the way medicine was positioned changed its shape, they realized the need to change communication with families, due to the increase in unqualified people who were pretending to be doctors, trivializing knowledge and thus reducing the power of medicine. Family Medicine brings doctors closer to mothers and this influence generates three changes in the way families organize themselves:

[...] 1. the closure of the family against the negative influences of the old educational environment, against the methods and prejudices of servants, against all the effects of social promiscuity; 2. the creation of a

privileged alliance with the mother, which promotes women due to this recognition of their educational usefulness; 3. the use of the family by the doctor against the old teaching structures, religious discipline, the habit of boarding school (Donzelot, 1980, p. 24).

Despite developments in children's and women's health, medicine maintains a prejudice against servants, they are against midwives, they preach the importance of choosing a good wet nurse and they do not agree with the way they take care of babies. But on the other hand, medicine was important in studying the relevance of playing, caring about how and what is said to children, the importance of having a space dedicated to the child and the constant vigilance of a caregiver. This change in the way of governing children aims to enable free growth, strengthening the body, favoring good development, and also aims to protect them from possible "sexual abductions", and disseminates the importance of taking care of hygiene, thus having greater disease control (Donzelot, 1980, p. 24).

In Brazil, between the end of the 19th century and the beginning of the 20th century, concern about childhood began among medical professionals, social workers, judges and pedagogues. This concern comes with the idea of sanitizing society, thus the need for sanitation, vaccination, the creation of schools, hospitals, prisons and hospices. The main focus of the hygienist idea was poor children, as there was a danger of a non-functional society among them, which led to the creation of asylums or hospices for their detention. The objective was comprehensive education, containing housing, a school and the possibility of technical training to train qualified workers in the same space (Rizzini; Gondra, 2014).

In Brazil, concerns about delinquency, public insecurity, industrial development and the growing urbanization of Rio de Janeiro and São Paulo began to characterize the attention of different agents to issues linked to the government of populations, around the end of the 19th century and the beginning of the 20th century. Through the motto “save the children”, an entire network of authorities began to be discussed and made viable, within the body of legal-state apparatuses, focused on attention to children and their control [...] (Schuch, 2006, p. 61).

In this project to clean the cities and increase population control, children were taken off the streets, detained together with adults, seen as little strays. The fate of these children began to be questioned, as there was no return to society. In 1899, the police chief of Rio de Janeiro founded a school for these children, with the aim of teaching subjects such as spelling, mathematics, arts, subjects on hygiene, physical preparation, taught about mechanics and prepared students for work in agriculture, domestic activities and industry, which was considered the greatest objective (Rizzini; Gondra, 2014).

The period adopted by the institutions for the beginning of the educational action did not contradict the medical agenda: hospitalization occurred between the ages of 6 and 7, when the child was introduced to learning the first letters in the classrooms located inside the asylums. Training for work was to be postponed until the age at which the boy was strong enough to withstand the demands of manual labor in the workshops and in the field. The entry into puberty heralded the time of work, and, if in regular schools, photographs of active classrooms represented educational work, in boarding schools, photographs of apprentices working in workshops emerged as a means of affirming their educational identity: training

workers dedicated to their duties (Rizzini; Gondra, 2014, p. 571).

In 1920, the Child Assistance Service (SAM), a federal body responsible for controlling assistance at a national level, was created. It helped abandoned children or those who were on the streets, and referred them to public and private institutions that had partnerships with the government. Within this public and private partnership, there were many situations of corruption, exchanges of favors, resources transferred without oversight and fiscal control, funds diverted, thus many benefits were not passed on to children and adolescents. Unregistered private institutions received government funds and parents of rich children admitted their children to the best asylums, pretending to be children in need (Rizzini; Pilotti, 2011).

According to Rizzini and Pilotti (2011), it was in the colonial period that Brazil's lack of appreciation of childhood originated, but it was during the period of the republican regime that there were debates regarding the importance of investing in children, of thinking about public policies capable of enabling more egalitarian development. However, instead, funds were spent on creating asylums for children and adolescents, with the aim of taming those on the streets, and other poor children and adolescents who had families became workers.

The ancient practice of collecting children in asylums led to the creation of an institutional culture deeply rooted in the forms of "assistance" proposed in Brazil, lasting to this day. Retention, or institutionalization, presupposes, firstly, the segregation of the social environment to which the "minor" belongs; confinement and spatial containment; time control; submission to authority - forms of disciplining inmates, under the guise of preventing deviations

or re-educating those segregated. As care methods were improved, institutions adopted new names, abandoning the term asylum, representative of outdated practices, and replacing it with others, such as preservation, premonitory, industrial or reform school, educational, institute... (Rizzini; Pilotti, 2011, p. 20).

Recently, children and adolescents began to be seen as subjects with rights, laws were formulated with their protection and care in mind. However, “[...] the history of social policies, legislation and assistance (public and private), is, in short, the history of the various formulas used, in order to maintain social inequalities and segregation of classes - poor/servile and privileged/leaders [...]”. In this way, we can see that even today many children and adolescents are criminalized, medicated, pathologized and the laws are not designed for children and adolescents who live in peripheral areas or in situations of poverty. Thus demonstrating that, despite many advances, situations of violence and neglect still occur, change and have other ways of exercising power (Rodrigues; Lemos, 2019; Rizzini; Pilotti, 2011, p. 16).

5 CREATION OF LAWS AND PROTECTION

In Brazil during the 19th century, due to industrial capitalism and the emergence of mass production lines, children had a working day of approximately 16 hours or more. With this reality came changes in the family structure, an increase in illnesses and social problems, in return, actions began to protect and care for children and adolescents. Also in this century, the first law was created establishing a minimum age for work in coal mines and woolen factories, and prohibiting

children from working at night. However, only at the end of the 19th century and beginning of the 20th century did the idea of protecting children emerge, but the application of laws, the view of the child as a subject of rights, emerged only in the last twenty years (Carvalho; Bizzotto, 2022; Brasil, 2013; Faleiros; Faleiros, 2007).

The Geneva Declaration on the Rights of the Child, from 1924, is considered the first mention, recorded in an international instrument, of the need for childhood and adolescence to have different treatment from adults. A few years later, the 1948 Universal Declaration of Human Rights highlighted the need for all children and their mothers to receive special care and assistance. In 1959, the Universal Declaration of the Rights of the Child provided the doctrinal basis for the Convention approved three decades later, in 1989 (Carvalho; Bizzotto, 2022. p. 31).

The 1989 Convention on the Rights of the Child was a legal framework that favored the creation of other laws to protect and guarantee rights. It has not yet included children as a subject of rights, but has included children under 18 in the Declaration of Human Rights. In documents prior to this, children and adolescents were seen as objects of protection, where the total responsibility lay with the family and the government was not involved, thus not having the possibility of including children and adolescents in public policies. “[...] The Convention is the most ratified human rights document in the world and triggered the review of national legislation in more than 190 signatory countries [...]”. Countries that have committed to the Convention are obliged to update documentation and create public policies, in addition to encouraging projects and actions (Carvalho; Bizzotto, 2022, p. 35).

In 1988, Brazil had a new constitution approved where its creators dreamed of a better country. It calls for the demarcation of indigenous lands, as well as the right to the territory of descendants of slaves; declares rights to the elderly, women and the environment. In addition to focusing on the protection of children and adolescents in a comprehensive manner, paragraph 4 of art. 227 where, “The law will severely punish abuse, violence and sexual exploitation of children and adolescents”. According to the National Plan to Combat Sexual Violence Against Children and Adolescents (Brasil, 2013), these laws were created from the mobilization of social groups who saw the need for the state to formulate laws that protected minors, given that sexual violence is a veiled violence, still little talked about or seen (Brasil, 2013; Faleiros; Faleiros, 2007).

CF/88 was a milestone, as it caused a substantial change in the field of human rights for children and adolescents. The view of the “object child”, the “minor child”, that is, the hygienist and correctional view is replaced by the view of the child as a subject of rights. The most important thing in this movement, inaugurated by the Constituent Child and which culminated in the approval of the Child and Adolescent Statute - ECA, in 1990, is the affirmation of the universality of children’s rights. It is no longer a question of categorizing childhood as “irregular”, but of thinking about the diversity of this population in Brazil (Brasil, 2013, p. 7).

On July 13, 1990, the Child and Adolescent Statute (ECA) was sanctioned, which repeated provisions such as the child’s right to safety, school, family life, food, leisure, health, which were already present in the Constitution. It innovated when it brought Childhood and Adolescence as “subjects of rights” and in need of full protection,

in addition to placing protection and care under the responsibility of the family, the State and society (Brasil, 2022, p. 8; Brasil, 2013).

Brazil was one of the first countries to formulate a Child and Adolescent Statute (ECA), which encouraged many other countries in Latin America. With the ECA, it was possible to create other protection and care services for children, such as the Children and Youth Court, Police Stations specializing in the care of children and adolescents who have suffered violence, and Public Ministries and Public Defender's Offices specializing in this population (Brasil, 2022; Brasil, 2013).

In 2000, the National Council for the Rights of Children and Adolescents (CONANDA) approved the creation of the National Plan for Combating Sexual Violence against Children and Adolescents, demonstrating great progress in combating violence. Its function was to assist non-governmental institutions in formulating preventive measures and campaigns, in addition to facilitating the monitoring of Public Policies (Brasil, 2013).

These laws do not ensure that the rights of children and adolescents are guaranteed. When public policies are developed, cultural diversity and inequalities present in the country must be considered, taking into account racial, gender, economic issues, etc. It is extremely important to look at violence closely, to carry out research that maps the needs of a given region, thus enabling the creation of measures for the needs present there (Carvalho; Bizzotto, 2022; Fonseca; Cardarello, 2009).

According to Carvalho and Bizzotto (2022), children's space is currently separate from that of adults. The public and the streets are reserved for adults, while children only have access when accompanied by a responsible person, which is reflected in the way they occupy these places. An example is the transformation of play, which used to be outdoors, is now reserved for indoor spaces. The houses are reserved

for the care and protection of children and family planning. Schools emerged with the aim of preparing children for life, also keeping them away from work and violence. A consequence of this division and lack of children's participation in public life is their invisibility when it comes to planning public policies.

The domestication of childhood, which can be seen as institutionalization, is a way of standardizing behaviors based on a childhood experienced by upper middle class children from European and North American countries. When a child lives a different childhood than usual, it is said that they do not have a childhood, thus disregarding other ways of living childhood or the childhoods of children who live in other countries with different cultures, social classes, with other realities (Carvalho; Bizzotto, 2022).

And sometimes the diversity of childhood becomes inequality. In 2021, the Brazilian population was estimated at 213 million inhabitants. Children and adolescents aged 0 to 19 account for 33.0% of this population, around 70.4 million. In the North and Northeast regions, children and adolescents live more in rural regions, while in the South, Southeast and Central-West regions, they mostly reside in urban locations. According to data from 2020, 44.5% of children up to 14 years of age live in low-income households in Brazil (Carvalho; Bizzotto, 2022; Fundação Abring, 2022).

Although the inequalities affecting Brazilian children are historic and persistent, several studies have pointed to the worsening of the situation during the pandemic, identifying: the increase in school dropout rates, the decline in enrollment in daycare centers, the stagnation of the mortality rate (which had been decreasing), the increase in the number of malnourished children under 5 years of age and in the notification rates of domestic and sexual violence, in

addition to the decrease in mandatory vaccination coverage for children. In common, these studies reveal that the situation is even more serious for Brazilian children living in rural areas, poor, black or disabled (Carvalho; Bizzotto, 2022, p. 27).

According to Sarmiento and Pinto (1997), even after the development of laws and public policies, children and adolescents are the largest age group that suffers from inequality, they are the biggest victims of poverty, violence, oppression, they are affected by wars, and child labor is still present in many countries, in addition to being the biggest victims of sexual tourism.

Childhood and adolescence are extremely relevant for integral human development, in addition, they are a relatively short period compared to other age stages, showing how urgent it is for public policies to be seen and revised, as those that exist often prove to be inefficient due to the gaps in continuity and ruptures they have. It is important that when developing and executing actions within public policies, childhood and adolescence are seen from their realities, thus avoiding an incongruity between needs and what is proposed (Gomes, 2022).

6 FINAL CONSIDERATIONS

This text aimed to explore summary points in the history of childhood and adolescence, demonstrating the historical and social importance of creating protection laws and statutes, focusing on sexual violence.

It is possible to observe that throughout the history of humanity the conception of childhood and adolescence has undergone changes,

at one extreme the awareness of the need for care, but up to a certain age, and at another the total lack of care. At various times in history it was possible to see how early people entered work, social life and how sexuality was not protected. Another point to be noted is the difference in classes, gender, and race, which changed the treatment and the possibility of access to schooling, respect and care. Unfortunately, even today it is possible to notice these differences in our country, which places some children in a place of greater vulnerability.

When it comes to sexual violence, according to the Brazilian Public Security Forum (Fórum Brasileiro de Segurança Pública, 2025), children and adolescents are still the biggest victims, accounting for 67,204 cases, taking into account that they are vulnerable minors and when it comes to gender, it is females who are most vulnerable, accounting for 87.7% of cases. These data show us how children and adolescents still find themselves in a social place of vulnerability, carelessness, and sometimes lack of care. Power relations continue to place children and adolescents as inferior, not deserving of respect.

It is well known that throughout Brazil's history there have been advances in relation to the creation of laws, which value the rights, care, access and preservation of childhood and adolescence, but are these movements enough? Do all children, regardless of social class, race and gender, have the same care and rights? Reality, however, shows that this is not enough: a structural and cultural change is needed in the way society perceives childhood and, above all, its differences.

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THE TECHNOLOGIES OF REVOLUTION 4.0 AT WORK AND WORKERS' PSYCHOLOGICAL HEALTH

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1 INTRODUCTION

Every day more workers suffer from Burnout Syndrome, an occupational illness with a direct causal link to working in adverse conditions. Officially recognized by the World Health Organization (WHO) as a disorder related to professional burnout, Burnout has intensified in the context of liquid modernity and the productive acceleration typical of contemporary societies. Exhaustive working hours, excessive demands for targets, hyperconnectivity and the absence of objective limits between working time and rest time contribute significantly to workers' psychological breakdown. The suppression of the right to disconnect, the weakening of social ties and the isolation resulting from new work formats, such as teleworking, further aggravate this scenario of silent and structural illness.

This phenomenon is part of a broader context of reconfiguration of labor relations, especially driven by the Fourth Industrial Revolution,

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also known as Revolution 4.0. This new technological phase is marked by the incorporation and integration of advances such as artificial intelligence, advanced robotics, the internet of things (IoT) and big data, which together have significantly transformed the traditional logic of production, the profile of the worker, as well as the organization of time and space in the workplace.

Big data, in particular, refers to the massive amount of digital data collected in real time from various sources, such as sensors, connected devices, social networks, business systems, among others. Through advanced techniques for storing, processing and analyzing these large volumes of data, companies are able to extract valuable information that helps them make strategic decisions, optimize production processes and develop customized products and services. In the workplace, big data makes it possible to monitor employee performance, predict production demands, identify patterns of behavior and even anticipate possible health or productivity problems, creating a highly connected and controlled environment.

These technological transformations, while providing significant gains in productivity and flexibility, also introduce complex challenges. The growing dependence on digital technologies and automated systems creates insecurity among workers, who face the threat of being replaced by machines or having their working conditions made more precarious. In addition, legal vulnerability is growing as the legal system struggles to keep up with the speed of these changes, especially in terms of protecting labor rights and guaranteeing workers' physical and mental health. Finally, the emotional and psychological impacts of these new working dynamics represent a contemporary challenge, requiring an integrated and multidisciplinary approach to ensure the well-being of the working class in the face of digital transformation.

In this context, this article proposes a critical analysis of the creation and objectives of the International Labor Organization (ILO), the impact of Revolution 4.0 on labor relations and the effects of the legal permissive that institutionalized teleworking in Brazil, particularly with regard to workers' psychological health. The analysis is based on the premise that the legal system, both nationally and internationally, must operate as a mechanism to protect the dignity of the human person, a fundamental principle of the Democratic State of Law, set out in the 1988 Federal Constitution. Workers' health and the preservation of a balanced and healthy working environment are not just social rights, but ethical and legal requirements linked to the idea of social justice.

The ILO is an institution that emerged at the beginning of the 20th century in response to the degrading working conditions caused by the Industrial Revolution. Since then, its fundamental mission has been to promote international standards aimed at improving working conditions at a global level. The ILO's institutional structure, its historical evolution and the commitments made by Brazil as a member state will be analyzed, especially those related to the Decent Work Agenda, which aims to ensure the effectiveness of four fundamental axes: respect for rights at work, promotion of productive employment, expansion of social protection and strengthening of social dialogue. These strategic objectives are directly linked to the commitments made by the United Nations in the 2030 Agenda, target 8 of which provides for the promotion of sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

In order to contextualize the issue in depth, we will examine the four Industrial Revolutions and the structural impacts that each one has had on labor relations. The Fourth Revolution, in particular, is characterized by digital integration, automation and decentralization

of work - elements that culminate in the flexibilization of employment relationships and the emergence of new ways of providing services, such as teleworking, often without effective regulation and protection mechanisms.

At the domestic legal level, the conceptualization and positivization of teleworking in Brazil will be addressed, starting with the 2017 Labor Reform (Law n. 13,467/2017), as well as the implications of this modality for employers and employees. The analysis will include the economic motivations behind the adoption of teleworking, such as reducing operating costs and increasing productivity, but will also highlight the negative effects of this form of work organization on workers' psychological health, with emphasis on the increase in cases of Burnout Syndrome.

Finally, this research aims to reflect on the effectiveness of legal standards and international commitments in ensuring decent working conditions in the contemporary context, especially in light of the challenges posed by the digitalization of work. The discussion aims to assess whether Brazil has effectively fulfilled the commitments made within the ILO and the 2030 Agenda and whether it has effectively ensured the fundamental rights of workers in the face of new production and technological paradigms.

2 THE ILO, FUNDAMENTAL RIGHTS, THE 1988 BRAZILIAN CONSTITUTION AND THE DECENT WORK AGENDA

The International Labour Organization (ILO) was established in 1919 through the Treaty of Versailles, which aimed to agree on operational rules for the post-war period. It created the League of

Nations and stood out as a pioneering treaty for recognizing social justice as imperative for achieving universal peace.

Part XIII of the Treaty addressed International Labor Law and the need to establish an international civilizing framework for human labor based on social justice. The provision clearly stated that the League of Nations would aim to establish universal peace and that such peace could only be achieved on a foundation built on social justice.

Part XIII also addressed the need for the establishment of the ILO. Thus, the Treaty of Versailles came to be considered the first constitution of the ILO, whose task would be to give a civilizing content to labor relations in compliance with the labor protection guidelines set forth in the Preamble to Part XIII..

The ILO established itself on the international stage in its first 20 years of existence (until 1939), with the adoption of 66 Conventions and 66 Recommendations. With World War II, the ILO's activities were suspended for four years, and its headquarters were moved from Geneva to Canada.

The League of Nations was dissolved and succeeded by the creation of the United Nations (UN). However, despite the dissolution of the League of Nations, the ILO was not dissolved. On the contrary, despite having suspended its activities during World War II, it returned to its international activities with significant emphasis as soon as possible.

In 1944, the Declaration of Philadelphia (Declaration on the Aims and Purposes of the ILO) was drafted, marking the expansion of the International Labor Organization and its principle of social justice. It presents five interconnected principles aimed at achieving the principle of human dignity. These principles are: a) affirmation that work is not a commodity through the recognition of workers as human beings and subjects of rights and the affirmation of the fundamental

right to decent work; b) freedom of expression and association; c) the threat of poverty to general prosperity, thus emphasizing that combating poverty requires regulating labor and labor law, which is an indispensable instrument for ensuring citizenship for workers at the socioeconomic level and dignity at the individual level; d) tripartite social dialogue, that is, dialogue between representatives of employees, employers, and the government, whether in the context of economic, social, or labor policies; e) social justice, understood as the construction of a more equitable society in which individuals have equal access to rights and opportunities, regardless of their origin, race, gender, or economic status. This principle was widely propagated, becoming a definitive reference for the construction of the international order and, notably, for the consolidation of International Labor Law (Delgado, 2019).

The globalization process that occurred or deepened in the late 1970s, as well as the broadly globalized capitalism and ultraliberal ideology spread throughout the Western world, ultimately impacted production methods and labor relations. This posed a huge challenge for the ILO in terms of achieving social justice. Although the ILO created conventions and recommendations, the ratification of international standards stagnated, leading the ILO to seek other avenues to reaffirm itself at a time when the concept of social justice was weakened. (Delgado, 2019).

It should be emphasized that the ILO's purpose is to recognize social justice and ensure human dignity, a concept that has been constructed throughout human history. Human dignity is considered an absolute, supreme principle that cannot be relativized to justify human behavior that violates it.

The principle of human dignity guides the 1948 Universal Declaration of Human Rights, conceived after World War II, whose

purpose was to promote harmonious and balanced coexistence among peoples and nations, avoiding new conflicts and atrocities. The Declaration of Human Rights addresses, in its preamble, human dignity as a fundamental rule for promoting fundamental rights and freedoms, equality, social progress, justice, and peace in the world: “Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice, and peace in the world” (United Nations, 2024)

Nunes (2002, p. 55-56), when studying the constitutional principles of dignity, equality, and proportionality, teaches that:

Apenas dizemos que, como o mais importante princípio constitucional é o da dignidade humana, é ele que dá a diretriz para a harmonização dos princípios, e, via de consequência, é nela – dignidade – que a proporcionalidade se inicia de aplicar. Mas, também, quando se tratar de examinar conflitos a partir do princípio da igualdade, o da proporcionalidade estará presente.

Agora, realmente é a dignidade que dá o parâmetro para a solução do conflito em abstrato de princípios como no caso real, concreto, é a dignidade que dirigirá o intérprete – que terá em mãos o instrumento da proporcionalidade – para a busca da solução.

Assim, por exemplo, o princípio da intimidade, vida privada, honra, imagem da pessoa humana etc. deve ser entendido pela da dignidade. No conflito entre liberdade de expressão e intimidade é a dignidade que dá a direção para a solução. Na real colisão de honras, é a dignidade que servirá – via proporcionalidade – para sopesar os direitos, limites e interesses postos, e gerar a solução. A isonomia, é verdade, também participará, mas, sem sombra de dúvidas, a luz fundamental,

a estrela máxima do universo principiológico, é a dignidade da pessoa humana.³

The principles and rules of fundamental rights defined by the ILO as fundamental to maintaining human dignity and achieving social justice guided the 1988 Federal Constitution and, thus, the entire framework for worker protection, given that the 1988 Federal Constitution has, among its foundations, human dignity and the social values of work. Furthermore, the Federal Constitution enumerated an extensive list of individual rights in Article 5 and social rights in Article 6, including the rights to life, health, and work. Article 7 sets out workers' rights, considered a minimum standard to be observed, and Article 8 addresses the right to professional and union association.

Article 196 of the Constitution states: Health is a right of all and a duty of the State, guaranteed through social and economic policies aimed at reducing the risk of disease and other harm and ensuring universal and equal access to actions and services for its promotion, protection and recovery.

The 1988 Federal Constitution, inspired by the 1948 Declaration of Human Rights and ILO guidelines, protects health, elevating it to the status of a fundamental right. Article 200, «caput,» II and VIII,

³ We simply say that, since the most important constitutional principle is human dignity, it is this principle that provides the guideline for the harmonization of principles, and, consequently, it is within this principle – dignity – that proportionality begins to apply. However, when examining conflicts based on the principle of equality, proportionality will also be present. Now, it is truly dignity that provides the parameter for resolving the abstract conflict of principles, as in the real, concrete case. It is dignity that will guide the interpreter – who will have the instrument of proportionality in hand – in the search for a solution. Thus, for example, the principle of privacy, private life, honor, image of the human person, etc., must be understood through the lens of dignity. In the conflict between freedom of expression and privacy, it is dignity that provides the direction for the solution. In the real clash of honors, it is dignity that will serve – via proportionality – to weigh the rights, limits, and interests at stake, and generate the solution. Equality, it is true, will also participate, but, without a shadow of a doubt, the fundamental light, the maximum star of the principled universe, is the dignity of the human person (free translation).

of the Federal Constitution includes among the responsibilities of the Unified Health System (SUS) the implementation of sanitary and epidemiological surveillance actions, as well as those aimed at worker health and environmental protection, including the workplace. Similarly, Article 7 includes the reduction of risks inherent to health, hygiene, and occupational safety as a worker's right. In this sense, Professor Melo (2005, p. 100) states:

O inciso XXII do art. 7º da CF, ao conferir o direito à “redução dos riscos inerentes ao trabalho, por meio de normas de saúde, higiene e segurança”, apresenta caráter nitidamente ambiental e sanitário, uma vez que essas normas não podem ser consideradas como normas de direito privado vinculadas estritamente ao contrato individual do trabalho. São muito mais do que isso. Assim, o direito ambiental do trabalho constitui direito humano fundamental inerente às normas sanitárias e de saúde do trabalhador (CF, art. 196), que, por isso, merece a proteção dos Poderes Públicos e da sociedade organizada, conforme estabelece o art. 225 da Constituição Federal.⁴

When addressing worker health, the 1988 Constitution sought to maintain physical, mental, and social well-being, not merely the absence of disease. It sought to protect the physical, mental, and social integrity of workers, thereby achieving the fundamental objective of human dignity, as the human person constitutes the center of the entire constitutional framework. Furthermore, since 1994, Brazil has

⁴ Article 7, Section XXII of the Federal Constitution, by granting the right to «reduce risks inherent to work through health, hygiene, and safety standards,» is clearly environmental and sanitary in nature, since these standards cannot be considered private law standards strictly linked to the individual employment contract. They are much more than that. Thus, environmental labor law constitutes a fundamental human right inherent in the health and sanitation standards of workers (Article 196 of the Federal Constitution), which, therefore, deserves the protection of public authorities and organized society, as established in Article 225 of the Federal Constitution. (Free translation).

been a signatory to ILO Collective Agreement 155, which addresses worker safety, health, and the work environment.

As already stated, human dignity guides the understanding of fundamental rights adopted by the ILO, which drafted the 1998 Declaration on Fundamental Principles and Rights, with four basic principles: freedom of association and recognition of the right to collective bargaining (ILO Conventions 87 and 98); the elimination of all forms of forced or compulsory labor (ILO Conventions 29 and 105); the abolition of child labor (ILO Conventions 138 and 182); and the elimination of discrimination with respect to employee and occupation (ILO Conventions 100 and 111).

Since the approval of the document entitled “Transforming Our World: The 2030 Agenda for Sustainable Development” in 2015, it seeks to eradicate poverty in all its forms and dimensions, including extreme poverty. As a result, the concept of decent work has gained prominence (Brasil, 2011)

Decent Work has as its convergence point the ILO’s four strategic objectives (respect for rights at work, promotion of employment, extension of social protection, and strengthening of social dialogue). Respect for these principles is the foundation for overcoming poverty, reducing social inequalities, ensuring democratic governance, and sustainable development. The ILO (International Labour Organization, 2024a) assumes the following obligations and commitments: freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labor; the effective abolition of child labor; the elimination of discrimination in employment and occupation; and a healthy and safe working environment (International Labour Organization, 2024b)

The aforementioned document contains 17 sustainable development goals (SDGs), and SDG 3 aims to ensure healthy lives and

promote well-being for all at all ages. Goal 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. Item 8.8 expressly mentions the protection of labor rights and the promotion of safe and secure working environments for all workers, including migrant workers, particularly migrant women, and people in precarious employment. The 2030 Agenda has targets at the national, regional, and global levels.

Domestically, in 2003, Brazil signed a memorandum of understanding with the ILO, the «Technical Cooperation Program for the Promotion of a Decent Work Agenda (ANDT).» At the same time, it signed other documents implementing the National Agenda, which was officially launched in 2006 during the ILO's 16th Regional Meeting. Subsequently, the Ministry of Labor and Employment (MTE) issued Ordinances No. 540/07 and 114/08. Subsequently, the Joint Declaration of the President of the Republic of Brazil and the Director-General of the ILO was signed in Geneva, establishing the basis for the National Decent Work Plan, which defined the priorities: generating more and better jobs, with equal opportunities and treatment; eradicating slave labor and eliminating child labor, especially in its worst forms; and strengthening tripartite actors and social dialogue as an instrument of democratic governance. (Arantes, 2023)

3 THE FOURTH INDUSTRIAL REVOLUTION AND THE LEGAL PROVISION FOR THE ADOPTION OF TELEWORKING IN BRAZIL

Major developments affecting the means and forms of production ultimately produce significant changes in labor relations. In the 18th century, the Industrial Revolution saw the replacement of

manufacturing by steam engines, which culminated in job losses and, consequently, increased unemployment. Between the second half of the 19th century and the beginning of the 20th century, the second industrial revolution occurred, when coal and iron were replaced by steel, electricity, and oil, significantly altering the way production operates.

With the third industrial revolution, which occurred in the second half of the 20th century, the focus shifted to the scientific revolution rather than just the technological revolution. The digital advancement resulting from globalization led to changes in biotechnology, telecommunications, and electronics, which gained ground and altered the organizational structure of large companies. These changes had a positive impact on production processes, but resulted in a reduction in the workforce and job losses.

The so-called fourth industrial revolution, also known as revolution 4.0, brought intelligent production techniques that connect organizations and people, interconnecting society as a whole to the global economy. The digital age has facilitated access to the internet and computers with innovations such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, nanotechnology, biotechnology, and so on. Revolution 4.0 primarily aims to increase productivity. New technologies facilitate work execution at lower costs, which ultimately reduces jobs, with the replacement of people by robotics, for example, increasing unemployment and worsening employment relationships.

In this context of the fourth industrial revolution and considering the agenda for flexibilization of labor rights, the Labor Reform introduced the concept of telework, which is defined in art. 75-B: «Telework or remote work is considered the provision of services outside the employer's premises, predominantly or not, with the use of

information and communication technologies, which, by their nature, do not constitute external work.»

Therefore, it can be seen that although teleworking takes place outside the employer's premises, it presupposes the use of information and communication technologies that, by their nature, do not constitute external work. Teleworking reduces operational costs such as water, electricity, internet, cleaning of the employer's premises, and other operational expenses incurred by the employer, and allows for a reduction in the company's physical footprint. Furthermore, it is understood that teleworking ultimately allows workers to have a greater level of concentration at work, as they do not leave their workstation to interact with colleagues, which ultimately impacts improved productivity. This means that teleworking is encouraged by the 4.0 revolution.

Until the 2020 pandemic, teleworking was not widely used; however, the need for social isolation ultimately forced companies to adopt it. However, after the pandemic ended, many companies interested in reducing production costs and optimizing results continued to adopt this work model. Article 75-B, §1, of the Consolidation of Labor Laws (CLT) provides that an employee's attendance, even habitually, at the employer's premises to perform specific activities that require their presence on the premises does not constitute teleworking or remote work (Brasil, 1943)

Meanwhile, § 2 of the same legal provision provides that employees working remotely or teleworking may provide services by workday or by production or task. § 3 provides that the provision of services under a teleworking or remote work regime by production or task will not be subject to the provisions of Chapter II of Title II of this Consolidation, a provision already contained in item III of art. 62

of the same legal provision. That is, they are exempt from workday control (Brasil, 2011)

And § 5 contains a provision stating that the time spent using technological equipment and necessary infrastructure, as well as software, digital tools, or internet applications used for teleworking, outside the employee's normal working hours, does not constitute time on call, standby time, or on-call time, unless otherwise provided for in an individual agreement or collective bargaining agreement. (Brasil, 2011).

4 TELEWORKING AS A CAUSE OF BURNOUT SYNDROME

As previously mentioned, after the 2020 pandemic, teleworking has been adopted by many companies in Brazil, and it is necessary to reflect on the impacts of this type of work on psychological disorders that may have begun or worsened in employees.

Burnout Syndrome, or Professional Burnout Syndrome, is an emotional disorder whose symptoms include extreme exhaustion, stress, and physical exhaustion resulting from demanding work situations that require a great deal of competitiveness or responsibility. It involves psychological distress and physical problems such as diarrhea, excessive fatigue, and dizziness. Its main symptoms are: excessive physical and mental fatigue; frequent headaches; changes in appetite; insomnia; difficulty concentrating; feelings of failure and insecurity; constant negativity; feelings of defeat and hopelessness; feelings of incompetence; sudden mood swings; isolation; fatigue, high blood pressure, muscle pain, gastrointestinal problems, and changes in heart rate. (Brasil, 2005)

Depression is characterized by the presence of sadness, pessimism, and low self-esteem, which appear frequently and can combine with each other (Brasil, 2011). Anxiety corresponds to distress, anguish, and disturbance of the spirit caused by uncertainty, a relationship with any context of danger, etc., while in the technical aspect it is understood as a phenomenon that sometimes benefits, when it stimulates the individual to take action; sometimes harms the individual, when excessive, depending on the circumstances or intensity, and can become pathological, that is, harmful to our psychic (mental) and somatic (physical) functioning (Brasil, 2011).

Burnout syndrome differs from depression and anxiety because it is exclusively caused by work, while the others may or may not have a causal link with work. Since 2022, the World Health Organization (WHO) has classified Burnout syndrome as an occupational disease, included in the International Classification of Diseases (ICD-11). However, in Brazil, the disease has been recognized as occupational since 1999, listed in Annex II (which addresses pathogens related to occupational diseases), item XII, Group V, of Decree 3.049/1999, which approved the Social Security Regulation. It is associated with a strenuous work schedule and other work-related physical and mental difficulties.

Cataldi (2015, p. 61) explains: «The concept of burnout is recognized as the most important aspect of professional stress and represents the price a professional pays for their dedication to caring for others or their struggle to achieve great achievement.»

It's a disease that doesn't set in immediately, but rather insidiously and progressively. The professional categories with the highest number of workers affected by burnout syndrome are: doctors, nurses, social workers, teachers, bank employees, correctional officers, and police officers (França; Rodrigues, 2002)

It should not be forgotten that teleworking can be attractive not only to the employer but also to the worker, who can perform their activities at a convenient location, without having to travel long distances, in addition to being close to family, for example. However, there is a fine line between teleworking and home life, which often blurs the worker's routine. Precisely because of this confusion between work and domestic life, in many situations, the worker may be at the employer's disposal for more hours than is reasonable, as there is no defined start and end to the workday and, on many occasions, there is no intra-workday break, which can be very convenient for the employer, since «in theory» he does not monitor the workday and the worker who is available for longer than when working on the employer's premises is able to produce more and with better quality.

However, it cannot be said that work performed outside the employer's «eyes» is not subject to oversight, since the adoption of webcams, intranets, telephones, radios, GPS, a minimum number of tasks, and control via machine log-in and log-off are plausible. In fact, the sole paragraph of Article 6 of the Consolidated Law contains a provision stating that telematic and computerized means of command, control, and supervision are equivalent, for purposes of legal subordination, to personal and direct means of command, control, and supervision of the work of others (Brasil, 2011)

On the other hand, employers often demand production far above what is reasonable, setting goals that are practically unattainable during the normal workday, leaving the worker with no alternative but to extend their workday. Another important issue is that, when teleworking, there is no interpersonal relationship or socialization among the team, making the worker feel lonely.

All of these circumstances, especially when workers work long hours and are unable to disconnect from work, lack leisure time, and

quality time with family and friends, nor are they able to develop other skills and hobbies, can end up suffering from various illnesses such as burnout syndrome. Regarding the right to disconnect when teleworking, Delgado (2019, p. 1070) states:

Em suas novas regras sobre o teletrabalho, a CLT ainda não enfrentou temas candentes como as limitações à tendência de exacerbação da disponibilidade obreira às demandas do trabalho no ambiente virtual e o denominado “direito à desconexão” – temas que são importantes na dinâmica desse novo regime laborativo. A par disso, não determinou a fixação imperativa de qualquer custo ao empregador – que absorve, evidentemente, os riscos do empreendimento (art. 2º, caput, CLT) –, referindo-se apenas à previsão “em contrato escrito” (art. 75-D, CLT). Abre-se, portanto, significativo espaço à interpretação e à integração jurídicas nesse novo segmento jurídico laborativo.⁵

Once the disease has set in, the worker can seek legal action to protect their rights (actions for compensation for moral and material damages, indirect termination of the employment contract, among others, depending on the specific case).

However, considering the entire constitutional framework, which places health as a fundamental right, as well as the fact that Brazil has ratified ILO Convention No. 155, which governs the safety and health of workers and the work environment, and has made a

⁵ In its new rules on teleworking, the CLT has not yet addressed pressing issues such as limitations on the tendency to exacerbate workers’ availability to meet work demands in the virtual environment and the so-called «right to disconnect»—issues that are important in the dynamics of this new labor regime. Furthermore, it did not determine the mandatory determination of any costs to the employer—who evidently bears the risks of the enterprise (art. 2, caput, CLT)—referring only to the provision «in a written contract» (art. 75-D, CLT). Therefore, significant room is opened for legal interpretation and integration in this new labor law segment. (Free translation.)

commitment to implement the decent work agenda nationwide, it would be impossible to conceive of a labor reform that did not provide that companies adopting telework must limit their employees' working hours and not be punished for violating the right to disconnect.

5 FINAL CONSIDERATIONS

The Fourth Industrial Revolution, marked by the integration of digital technologies, artificial intelligence, and automation, significantly transformed the dynamics of labor relations. In the Brazilian context, this process was driven by regulatory reforms, particularly the 2017 Labor Reform, which institutionalized teleworking as a regular service provision method.

The expansion of this form of work intensified during the Covid-19 pandemic, proving to be a viable and functional alternative to the continuity of economic activities amid the global health crisis. However, its use has consolidated beyond the emergency period, indicating a structural transformation in the organization of contemporary work.

Teleworking offers undeniable advantages for both employers and employees. For companies, it reduces operating costs and potentially increases productivity; for workers, it offers flexibility, time savings on commutes, and greater autonomy in managing their routines. However, these observed benefits do not eliminate the risks inherent in this model, especially when legal regulations are insufficient to protect workers' physical and mental health.

Among the main challenges are the lack of clear workday definitions, the elimination of breaks, increased pressure on productivity, and a lack of respect for the right to disconnect. These

conditions directly contribute to the emergence of stress, anxiety, social isolation, and burnout syndrome, highlighting the negative impact of work overload and the lack of boundaries between the workplace and personal life. Added to this are the precariousness of working conditions and the risk of long workdays becoming commonplace, with limited oversight by the relevant agencies.

Although Brazilian legislation has incorporated teleworking, effective mechanisms have not been established to ensure compliance with labor rights in this new format. The same technological apparatus that enables remote work could—and should—be used to control working hours, manage time, and monitor compliance with occupational health and safety regulations. However, a regulatory gap exists that contributes to the intensification of labor and social inequalities.

Furthermore, it is important to highlight that teleworking can reproduce structural inequalities, especially gender and class inequalities. The burden placed on women, who combine professional and domestic activities in the same space, and the limited adequate infrastructure in the homes of low-income workers are factors that expose the inequality in access to the minimum conditions for dignified and healthy teleworking.

Thus, it can be concluded that the Brazilian legal system is still insufficient to guarantee, in practice, comprehensive protection for the physical, mental, and social health of teleworking workers. Nor have the international commitments signed by Brazil within the International Labor Organization (ILO) been effectively incorporated into public policies and business practices that ensure decent work.

There is an urgent need to review and improve the regulatory framework, with a view to implementing specific standards on working hours, ergonomics, equipment, workload control, and the

right to disconnect. The construction of a new labor pact must be based on human dignity, respect for the fundamental rights of workers, and the promotion of a healthy work environment, even when this environment takes place in the home.

Thus, teleworking should not be understood simply as a technological advancement or an economic solution, but as a complex phenomenon that demands critical reflection and interdisciplinary action. The contemporary challenge is to reconcile the benefits of innovation with the guarantee of social rights, ensuring that technological progress serves well-being and social justice.

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ACTIVE AND RESPONSIVE CITIZENSHIP: DEMOCRATIZATION OF SOCIETY AND POLYCENTRISM

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1 INTRODUCTION

The central theme of this study is the decentralization of power (polycentrism) and democratic horizontalization (radicalization of democracy) approached from a transdisciplinary perspective as a foundation for shaping the Democratic Rule of Law in a postmodern context. Based on an analysis of the constituted powers, the work proposes a reinterpretation of the provision of state protection (public policies) as a constructive process that democratizes society and, therefore, produces both legal and social effectiveness. As a result of academic research developed at the Master's and Doctoral levels, the discussion draws on cultural references from Europe (England, France) and the Americas (United States of America and Brazil). The central thesis affirms that democratic horizontalization is not merely a mechanism for decentralizing and sharing power, but rather a fundamental condition of the Democratic Rule of Law.

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2 FROM TOP-DOWN DEMOCRACY (DEMOCRATIZATION OF THE STATE) TO HORIZONTAL DEMOCRACY (DEMOCRATIZATION OF SOCIETY)

*“[...] citizen participation will prove to be a welcome
reinvention of democratic institutions.” — François Ost*

Discussing democracy³ in Brazil is a complex/sensitive issue, especially in the current context, in which various actors indiscriminately appropriate the term to justify their own pursuit of power.⁴ At the outset, it is important to clarify that the purpose of the following paragraphs is neither to exhaust the subject⁵ nor to retrace the origins of the term in question. Rather, this study aims to develop a conceptual framework that allow for the structuring of a theory⁶

³ The first reference to this word is found in Thucydides (455–398 BCE), recorded in Pericles’ funeral oration to the Athenians who died in the Peloponnesian War: “We have a political system that does not emulate the laws of other peoples, and rather than being imitators of others, we are a model to follow. Its name, since the government does not depend on a few but on the majority, is democracy” (Ribeiro, 2010, p. 96).

⁴ Definitions of democracy, as everyone knows, are numerous. Among them all, I prefer the one that presents democracy as “power in public.” I use this concise expression to refer to all those institutional mechanisms that compel rulers to make their decisions openly and allow the governed to “see” how and where those decisions are made [...] The preliminary condition for the proper functioning of a democratic regime, Pericles seems to affirm, is the citizens’ interest in public affairs and the sound understanding that stems from this interest (Bobbio, 2000, p. 386 e 417).

⁵ One can already discern the transition from apparent knowledge to real knowledge. Apparent knowledge believes and flaunts that it knows everything. Real knowledge, the more genuine it is, the more it distrusts both what it is apprehending and what it elaborates (Barbosa, 2007, p. 44).

⁶ Nothing is more important, therefore, than not following like sheep the herd of those who came before us, thus going not where they want us to go, but rather where we truly wish to go [...] Let us not die merely by following the example of others. The way out is to separate ourselves from the crowd and remain safe (Sêneca, 2012, p. 8).

capable of understanding the legitimacy/illegitimacy of postmodern decisions that implement public policies (Ost, 1999, p. 191).

By analyzing law, particularly in relation to constitutional Democracy, this study seeks to understand⁷ the “evolutionary” cycle that has led to the emergence of a postmodern reality (horizontal democratic legitimacy⁸ participatory democratic legitimacy of decisions resulting from a shared construction in the realization of fundamental rights). To this end, the democratic configurations of the Modern, Constitutional, and Postmodern States will be presented.

Although not the central focus of this study, a brief discussion of the terminology is necessary to enable an understanding of the concepts at hand, which is done solely to establish similarities and differences between ancient (direct) democracy and modern (representative) democracy, with the aim of assessing the contributions and impacts of this democratic evolution (from vertical to horizontal) within the aforementioned state models. In analyzing the term *demos*,⁹ which in ancient times was linked to the direct exercise of power by the *demos*,¹⁰ and in modern times corresponds to the power of representatives of the *demos*, one can already perceive one of the most significant divergences. The numerous transformations in the socio-political context have not only increased the complexity of relationships but have also prompted a shift from the constructive idea of a dual legal system to that of a

⁷ Deep down, only our own thoughts are true and alive, for only they are understood in an authentic and complete way. The thoughts of others, those we read, are like leftovers from someone else’s meal or clothes left behind by a guest in the house (Shopenhauer, 2012, p. 41).

⁸ For a deeper exploration of the topic “horizontalization of democracy”, see Rousseau (2010).

⁹ If later the term *demos*, understood generically as the “community of citizens,” was defined in various ways – sometimes as the many, the masses, the poor in opposition to the rich – and therefore democracy was defined sometimes as the power of the many or the masses, sometimes as the power of the people or the poor, this does not change the fact that the power of the people, the many, the masses, or the poor was not to elect those who should decide for them, but for them to decide themselves [...] (Bobbio, 2000, p. 372).

¹⁰ However, the issue is quite simple, according to the definition we have just given, citizen is one who participates in government (Aristóteles, 2007, p. 115).

polycentric legal system. In this context, even the term *citizen* (Bobbio, 2000, p. 373) has come to hold a meaning quite different from that experienced in its origin (Aristóteles, 2007, p. 128). Participatory Democracy seeks to transcend Representative Democracy, without, however, discarding it. Given the wide range of studies on this subject, many divergences exist regarding the implications of the term, making it important to clarify the distinctions between formal representative democracy (Modern State), substantial representative democracy (Constitutional State), and participatory democracy (Postmodern State), which distinctions will demonstrate the importance/legitimacy of a polycentric path (shared construction of public policies –horizontal democracy).

In light of the above, it is important (at the outset) to address the characteristics of the Reactive State (Absolute/Liberal/Social) and the democratic restructuring that led to the establishment of an Active State (Constitutional), so that the transformations proposed by the emergence of an Active and Responsive State (Postmodern) can subsequently be understood (Santos, 2020a). Despite the inherent distinctions among the various state models, what unites them is the conception of structures in which the construction of Law and the consequences of this new way of understanding social life, come to be centered on the figure referred to by the terms Sovereign/Sovereignty. Initially, the State begins to centralize power (Sovereign)¹¹, legitimizing itself as the sole authority not only in creating laws but also in applying them (heteronomous protection), thereby removing the

¹¹ Laws are the rules of what is just and unjust, with nothing considered unjust unless it is contrary to some law [...] The legislator is the one who makes the law [...] the sole legislator becomes the sovereign [...] the sovereign of a State, whether an assembly or a single person, is not subject to the laws [...] Except for natural law, the others must be conveyed orally, in writing, or by another act issued by the sovereign authority to all who are obliged to obey it. This is because the will of someone can only be understood through their words or actions or by conjecture based on their objectives and purposes, which must always be considered, in the person of the State, in harmony with equity and reason (Hobbes, 2012, p. 213 e 218).

autonomy of individuals (Sovereignty) to resolve their own conflicts (self-protection), emerging, thus, the well-known representative (verticalized) democracy. This process enabled the transition from the state of nature (survival) to a supposed civil/artificial state (coexistence), the result of a social fiction (idealization of social peace). Through the positivization of law, the State, concentrating power, takes on responsibility for legal directives, as it is (legitimized by the fictitious social contract) the sole agent in jurisdictional matters, claiming exclusive authority over the enactment and implementation of laws (Verticalized Provision of State Protection).

In this context, the state-building process experienced in England [Modern State (Ost, 1999, p. 375)] legitimates (through the social contract) the concentration of all power in the figure of this fictitious entity, marking the moment when law, no longer declared on the basis of metaphysics (divinity), becomes the product of the will of the Absolute (despotic) State, which, as the holder of sovereign power (Hobbes, 2012, p. 140), comes to wield a monopoly on force.¹² This is the thinking of the Englishman Thomas Hobbes [will of the sovereign (Brutau, 1977, p. 10)], who proposes a structure [separation between Church and State – concentration of power – consent of the governed]¹³ in which subjects (without civil and/or political participation) renounce their (natural) rights in favor of concentrating power in the figure of the State/King [the people are bound to comply

¹² From this, it becomes clear that Law is limited to the state's will, since it is up to the State to determine the behaviors to be observed by society. This monopoly is justified by the need to maintain social harmony, which would be threatened if there were another power with the same possibilities. Thus, the so-called "*law of the State*", arises, which configures a law of sovereignty, seen from the perspective of subjects as a *duty of every individual to comply with the orders issued by the state authority*" (Engelmann, 2001, p. 32).

¹³ Just as men, seeking to achieve peace and through it their own preservation, created an artificial man called the State, they also created artificial prisons, called civil laws, which, through mutual agreements, keep them imprisoned, on one end, to the man or assembly to whom they entrusted sovereign power, and on the other, to their own ears (Hobbes, 2012, p. 171).

with the pacts (Villey, 2005, p. 683 e 716) under threat of coercion by the Sovereign].¹⁴

In France, the Absolute State begins to differentiate the traditional functions of government, strengthening the Executive Branch, which, assuming new responsibilities and failing to fulfill them, starts to grant “concessions” to the private sector, initiating the process of State Democratization (an important brake on power guided by the monarch’s will) (Zagrebelsky, 2004, p. 17-18). In this context (the beginning of bureaucracy), medieval methods are broken, and the political function (no longer serving the king) becomes “public and at the service of the nation,” replacing the concept of sovereign (power personified in the figure/person of the king) with sovereignty (Montero, 1999, p. 27). In light of these transitions, the social game exhibits a new division of power (anthropocentric), giving rise to representative democracy (Democratization of the State – Vertical Democracy). Bureaucracy¹⁵ begins to present social function as a *munus publicum* in service of the nation, enabling the political power to be seized by a caste that, until then, held only economic power. The Englishman Locke¹⁶ (emancipation of civil society), aiming to free the bourgeoisie

¹⁴ The doctrine of the Absolute State, proposed by Hobbes, where laws are products not of *reason* but of the sovereign’s *will*, so that these mandates become the exclusive criteria of *justice* and *injustice*, was the first condition for the judicial function to remain limited to the mere declaration and application of laws, without magistrates being granted even the power to interpret them, as later occurred at the beginning of the 19th century in France (Silva, 1997, p. 74).

¹⁵ From the perspectives of Weber and Arendt, it can be concluded that the authors hold distinct views on bureaucracy. For Weber, bureaucracy is seen as something positive – a structure that enables the professional execution of public service. In contrast, for Arendt, bureaucracy is perceived negatively, as it isolates the individual from the whole, causing a loss of awareness of the broader context and dissociating personal responsibility from the final outcome of the process (Limberger, 2010, p. 218).

¹⁶ It thus becomes evident, from what has been stated above, that absolute monarchy – which some consider the only form of government in the world – is, in fact, incompatible with civil society, since the purpose of civil society is to avoid and overcome the inconveniences of the state of nature, which inevitably arise from the fact that each individual may act as judge and executor in their own cause, and, to this end, a recognized authority is established to which all members of this society may appeal for any harm suffered or dispute that may arise, and to

from the chains of Absolutism (expansion of rights – guaranteed only to participants in the representative democratic process), exalted the importance of first-generation rights (civil and political participation – negative liberties: the right to one’s own freedom and to property). The Frenchman Rousseau (responsible for democratic expansion – new social participants) initiated debates that influenced the formation of second-generation rights (social, economic, and cultural improvements, resulting from the rights to equality and security – positive liberties). These two models of a Modern/Reactive State (Liberal and Social) led, subsequently, to a combination of negative and positive liberties, a development that made possible the emergence of the Constitutional/Active State (the transition from generational to dimensional rights), a reality born of humanity’s historical achievements [human/fundamental rights (Villey, 2005, p. 172)]. In this context, due to the necessary constitutional reinterpretation, a new model of State becomes imperative (Postmodern/Active and Responsive), a moment in which the constituted powers, joining forces with other social participants (Active and Responsive Citizens), must understand the constitution as a legal instrument (Constitutional Democratic Rule of Law – Legal Foundation), and no longer merely as a Political Charter (Liberal and/or Social Rule of Law – Wills of Individuals and/or Groups).

The changes inherent to this new worldview will trigger significant transformations in social life, born of the need to limit the powers¹⁷ of the State while, in turn, expanding individual freedoms (decentralization of power). This pursuit [man ceases to be dominated

which all members must submit (Locke, 2001, p. 63).

¹⁷ Unlike the counter-revolutionaries, Constant does not believe that pre-revolutionary France already had a constitution. A constitution is a product of time and should be rigid and cover only a few matters. Everything that does not concern the limits and responsibilities of powers and individual rights is not a constitutional matter [...] The aim of constitutionalism should be to activate the indispensable structures of representative government and to prevent the return of tyranny or civil war (Bercovici, 2008, p. 185).

by nature and instead begins to dominate it (Bobbio, 2000, p. 24)], offers law the possibility of a continuous invention of the social and political realm, in light of the divisions and conflicts inherent to human coexistence. Marx (2011, p. 24 e 75) [a harsh critic of the bourgeoisie – selfish man separated from the collective (Claude, 1983, p. 43-44)], recognizing the Bourgeois Revolution as a mechanism of political emancipation (Marx, 2011, p. 16), presents it as a necessary and transitional moment in the process of human emancipation¹⁸, a new social context that allows for the emergence of a Democratic State that marks the transformation of the political landscape, celebrating the ideals propagated with the birth of the Rule of Law (Claude, 1983, p. 48 e 53). At first, the Democratic State aimed to guarantee/secure private property (liberalism),¹⁹ with positive law serving to defend individuals against both the State and other individuals (negative liberties).²⁰ The concept of citizen, in this period, was conflated with the idea of electoral enlistment (only the bourgeois, and only through voting, were guaranteed rights to social participation))²¹ (Nunes, 2011, p. 21-23).

At this social level, marked by the loss of the sovereign power's hegemony held by the king, there occurs a shift in the form of power

¹⁸ Marx simultaneously hated and admired the bourgeoisie. He saw it as the class that, on the one hand, harshly exploited part of humanity, but on the other, destroyed old relations of servitude and feudalism, creating space for the development of a world literature (Morin, 2005, p. 43).

¹⁹ Liberalism is, as an economic theory, a defender of the market economy; as a political theory, it supports a government that intervenes as little as possible or, as is said today, a minimal State (that is, reduced to the necessary minimum) (Bobbio, 2000, p. 128).

²⁰ The conception of liberty with which Mill works is the same as that of liberal thought: negative liberty – that which ensures that an individual cannot be prevented by an external force from doing what they wish, and even less so be forced to do what they do not wish. The intention is for the individual to enjoy a freedom protected against State intrusion, thus delimiting the private sphere in relation to the public one (Cademartori, 2006, p. 43).

²¹ Little by little, society in its various articulations becomes the whole, while the State, narrowly considered as the coercive apparatus through which one sector of society exercises power over another, is reduced to being merely a part (Bobbio, 2010, p. 61).

centralization within the State (from a personal/sovereign power to an institutional power/sovereignty), giving rise to the idea that the legitimacy of decisions (public policies) stems from democratic representation (Silva, 1997, p. 204). This constitutes a new structural model of power which, based on the principles of legitimacy and legality, brought changes in the way power is exercised, allegedly guaranteeing politica,²² social, and civil freedom to citizens. These factors enabled the development of individual personality, resulting in the emergence of a supposedly legitimate, “limited” and bureaucratic power.

It is within this context of expanding subjects that, going beyond the interests of the bourgeoisie, the emergence of the Welfare State advocates State intervention²³ in all domains of life. The strengthening of social groups formed within civil societies (Bobbio, 2000, p. 35), allowed the new citizen subjects not (only) to defend themselves against the State²⁴ but also to seek from it the guarantee and, especially, the realization of rights [Declaration of the Rights of Man and of the Citizen (Morin, 2005, p. 37) – negative and positive freedoms²⁵ – social rights (Cademartori, 2006, p. 47-

²² Considering the two fundamental features highlighted by Tocqueville in American democracy, the principle of popular sovereignty and the phenomenon of association, the representative State (which had gradually been consolidating in England and, from there, spreading through the constitutional movement of the early decades of the 19th century to most European States) undergoes a process of democratization along two lines: the expansion of voting rights up to universal male and female suffrage, and the development of political associativism leading to the formation of mass political parties and the recognition of their public function (Bobbio, 2010, p. 153).

²³ In a word, even if the idea of progress was not born with the socialist movement—having previously mobilized a liberal, humanitarian current—it nevertheless found within it its strongest expression, being associated with the notion of State intervention (Claude, 1983, p. 75).

²⁴ Among the classical conceptions, George Jellinek’s theory of the state offers a more precise comparison: *status negativus* (freedom from the State [Freiheit vom Staat], right to resist the State [Abwehrrechte]), *status positivus* (claims and demands, claims [Leistungen] e and participation, procedural *status*) (Muller, 2003, p. 80).

²⁵ Thus, democracy understood as *guarantor* means the *Rule of Law* equipped with both liberal rights (*rights to*) and social rights (*rights for*), the latter characteristic of interventionist States such as Brazil, which, however, in practice remain (rhetorical) promises withheld (Rosa, 2005, p. 12).

49)]. Thus, contrary to bourgeois thought, these new social groups integrated into civil society began demanding greater participation in the democratic process, achieving universal suffrage and, notably, the extension of this right to new public spheres, a measure that, although expanding the democratic game, did not manage to shift democratization from the State to Society (Canotilho, 1993, p. 39).

Within this context, the Liberal and Welfare States mark an important milestone in addressing issues central to the present study, particularly concerning the legitimacy and competence of constituted powers (Locke, 2001, p. 101), highlighting, for that purpose, the crucial role of the emancipation of civil society. One of the main expressions of this new worldview is the Declarations of the Rights of Man and of the Citizen (American and French)²⁶ (Miranda, 1932, p. 225-226), thus remaining, in this context, important to understand the social impacts of this evolution for the construction and realization of a new State model – the Democratic State of Constitutional Law (Postmodern) (Santos; Marció, 2021).

3 POLITICAL DECENTRALIZATION (POLYCENTRISM) AND SHARED POWER AS A CONDITION OF THE DEMOCRATIC RULE OF LAW

Once the transition between the State models that marked Modernity (Absolute/Liberal/Welfare) has been verified, it becomes important to analyze the impacts of these generations of rights

²⁶ The highest practically relevant expression of this inversion is the American and French Declarations of Rights, in which the principle that government exists for the individual and not the individual for the government is solemnly stated—a principle that exerted great influence not only on all subsequent constitutions but also on reflections about the State, thus becoming, at least ideally, irresistible (Bobbio, 2010, p. 65).

on a conception of political citizenship (expansion of democratic participation) made possible by the Constitutionalization of the State. The democratic reconfiguration (horizontalization) thus proposed aims not only to broaden the (representative) participation of the people in (verticalized) social decisions but, above all, to add new means/mechanisms of civil and political participation (first generation of rights), which must be done by fostering the third dimension of rights (transindividualism/solidarity). In this context, Bobbio²⁷ presents as important prerequisites for the exercise of democracy the knowledge and exercise of power *in the public sphere* – elements that are complex/difficult in countries marked by a belated modernity.

The Welfare State, by broadening not only the number of participants but also, subsequently, the spaces for democratic participation, began contributing collectively to political and legal decisions. In this new phase, the indicator of democratic development ceases to be measured by the number of people participating in the democratic game and comes to be conditioned also by the number of instances beyond those traditionally political (i.e., not limited to the exercise of the right to vote “for all”)²⁸ (Alfaro, 2007, p. 221). The ideas of Bobbio and Aristotle²⁹ present knowledge and the exercise of power in public as necessary features for the effective configuration

²⁷ I prefer the one that presents democracy as “power in public.” I use this succinct expression to indicate all those institutional means that oblige rulers to make their decisions openly and allow the governed to “see” how and where these decisions are made [...] The preliminary condition for the proper functioning of a democratic regime, seems to affirm Pericles, is the interest of citizens in public affairs and the good understanding that derives from this interest (Bobbio, 2000, p. 386 e 417).

²⁸ Donde, tal Estado hace mucho más que adoptar unas cuantas políticas y programas de bienestar (Damaska, 1986, p. 127).

²⁹ But of all the things we have said, what contributes most to the permanence of constitutions is the adaptation of education to the forms of government, although this principle is always neglected. The best laws, those sanctioned by each citizen of the City, will be completely useless if the citizens are not educated by habit and instruction in the spirit of the constitution, democratically, if the laws are democratic (Aristóteles, 2007, p. 200).

of a democratic form of government, no longer tied (solely) to the procedures³⁰ described by formal democracy.

True democracy must preserve the importance of content, of the substance revealed through this enlightened exercise of power in public; in other words, this new model, without eliminating the abstracted figure of the State (Vertical Representative Democracy), requires that the democratic government fulfill the promises contained in a constitutional program, thereby configuring the concrete transition from the Liberal and Welfare States (Reactive) to the Constitutional State (Active), which, through a Postmodern reading (Horizontal Participatory Democracy), must be conceived not only as Active but also as Responsive. The proposed model enables the transition from a legal framework with a predominantly protective-repressive function (State-Conferred Protection) to one increasingly promotional (Cademartori, 2006, p. 50) / enabling (Shared/Polycentric Construction of Public Policies).

The domain of these new social actors becomes civil society (the realm of diversity), marked by the emergence of a constitutional democracy that, while maintaining the ideals of formal/procedural democracy, seeks to go beyond it in pursuit of content and substance. However, for this new democratic game to be successful, it is necessary, while acknowledging negative liberties, to promote social inclusion (polycentric decisions – shared power) as a result of the achievements that made positive freedoms possible, while avoiding at all costs the tyranny of individual and/or group wills (sovereigns and majorities). These social factors highlighted the relevance of this new democratic model, which came to be recognized as Constitutional Democracy –

³⁰ I preliminarily assert that the only way to reach an agreement when speaking of democracy, understood in opposition to all other forms of autocratic government, is to consider it characterized by a set of rules (primary or fundamental) that establish who is authorized to make collective decisions and by which procedures (Bobbio, 2000, p. 30).

a system that incorporates the idea of limiting power (negative and positive liberties – fundamental rights guaranteed to citizens).

The expansion of participation in the democratic game, by creating new means for civil and political engagement [Decentralization of Power – Democratization of Society (Santos, 2020)], entails the necessary inclusion of new participants due to the need to realize fundamental rights. Democracy (now) constitutional, shifting from the individual to the collective (third dimension – transindividual – solidarity), enables a restructuring of the State (Postmodern State – Active and Responsive), a moment in which constitutions (reinterpreted democratically), by recognizing changes in the mode of human coexistence (the role of civil society in the political context – new socially expressive and politically relevant actors), offer new means/spaces for the exercise of democracy, a mechanism necessary for the true decentralization of politics (Polycentrism). Decisions that affect the realization of rights (fundamental – public policies) must be shared (effective social participation), making political debate (dialogue) open to new means/spaces for the exercise of power, at which point technology may/should emerge as a means (*locus*) for regional development.

This democratic evolution affects not only the broadening of political participants but, more importantly, the means and spaces of participation that, going beyond the representative spectrum (Vertical Democracy – Democratization of the State), enable the effective decentralization of power (Horizontal Democracy – Democratization of Society), a reality that allows for the emergence of new social actors (Shared Power) within a True Democratic Rule of Law. In addressing the Rule of Law and the Democratic State, Bobbio and Ferrajoli present complementary views regarding the guarantee of effectiveness of such a form of State. The former, not linking democracy and the Rule of

Law, presents an idea of formal democracy, while the latter, in turn, understanding the Rule of Law as axiologically prior to the Democratic State, presents a more substantive understanding.³¹ The main difference between formal democracy and substantive democracy lies in the fact that the former defines *who* decides and *how* decisions are made, while the latter defines the subjects about which one must not and, above all, must decide. This distinction marks a fundamental difference between liberal and social democracy models (focused only on *who* and *how*) and constitutional democracies (adding *who* and *how* to what cannot and what must be decided). This evolution, influenced by the effects of the Declaration of the Rights of Man and of the Citizen (1789) and, especially, the Universal Declaration of Human Rights (1948), fostered the constitutionalization of human rights, a moment when they began to be conceived, at the national level, as fundamental rights,³² leading to the emergence of what came to be known as the Constitutional Rule of Law (Active State). In this framework, democracy, ceasing to be merely formal (Democratization of the State – Representative Democracy – Vertical Democracy), proposes to become substantive, aiming to guarantee the effectiveness of fundamental rights enshrined in the constitution (Democratization of Society – Participatory/Horizontal Democracy) (Santos, 2020a).

³¹ Furthermore, according to Ferrajoli, the *garantist* project leads to a redefinition of the concept of democracy – differentiated formally and substantially – and also to the fusion of substantive democracy with the Rule of Law. Thus, seen as a system formed by the sum of liberal guarantees plus social guarantees, the Rule of Law can be configured as a *system of meta-rules with respect to the very rules of political democracy*. That is, the rule of political democracy, according to which decisions must be made by indirect or direct majority of citizens, becomes subordinated to the Rule of Law (Cademartori, 2006, p. 163).

³² Indeed, the *General Theory of Garantism*, understood as a legal model, is based on respect for *human dignity* and *Fundamental Rights*, with formal and material subjection of legal practices to constitutional contents. This is because, faced with contemporary complexity, the legitimation of the *Democratic Rule of Law* must surpass mere formal democracy to achieve *material* democracy, in which *Fundamental Rights* must be respected, realized, and guaranteed (Rosa, 2005, p. 4).

As a result of this new democratic context, Ferrajoli thought (2008, p. 35), Advocating for the expansion of substantive democracy, rejects the idea of the omnipotence of the majority. For the author, it is impossible to speak of democracy without referring to constitutionalism, whose fundamental principle is the limitation of powers, including that of the majority³³ itself. Thus, while formal democracy refers to the representative political State, which draws its legality from the principle of the majority, substantive democracy is nothing more than the Rule of Law endowed with effective guarantees, both liberal and social, a system referred to as *garantismo*.³⁴

In this regard, Ferrajoli (2008, p. 31) understands that the essence of constitutionalism and of *garantismo*, stemming from a constitutional democracy, encompasses the set of limits imposed by constitutions on all powers, which is made possible by building a system of sharing and balancing among them. To this end, Constitutional States³⁵ must not only guarantee fundamental rights but, above all, provide mechanisms for their oversight and reparation in case of violation. This substantive claim, inherent to constitutional democracy, carries within it the rigid constitutionalization of fundamental rights ensured by the duties and prohibitions imposed upon public/constituted powers, a process that

³³ Constitutionalism is the theory (or ideology) that establishes the principle of limited government as essential to guaranteeing rights in a structuring dimension of the political-social organization of a community. In this sense, modern constitutionalism represents a specific technique of power limitation with guarantist purposes (Canotilho, 2002, p. 51).

³⁴ As a corollary, for 'guarantism,' the expansion of democracy must occur not only through the multiplication of its areas of action, also encompassing non-political spaces where the who and how of decisions are formally democratized. This expansion should also include extending the structural and functional bonds imposed on all powers – democratic and bureaucratic, public and private – for the substantial protection of ever-new vital rights and, at the same time, through the development of new guarantist techniques capable of ensuring greater effectiveness (Cademartori, 2006).

³⁵ Only the democratic constitution is authentic and normative, for it alone can effectively limit the exercise of power, intertwining validity and legitimacy [...]. The legitimacy of the constitution is internal, not merely external, since in constitutional democracy it is impossible to separate validity from legitimacy, that is, the creation and content of the norm (Bercovici, 2008, p. 17-18).

adds the material benefits of substantive democracy to its traditional, merely formal/procedural, political dimension.

When addressing constitutional democracy, Ferrajoli (2008, p. 28-29) argues that the foundations from which representative democracy arose, such as majority rule³⁶ and economic liberalism, prove to be incompatible with the principles and objectives of constitutional democracy. For the author, the absolutisms of both the political powers of the majority and the economic powers of the market are contrary to the very essence of constitutionalism and *garantismo* as proposed in this new model. Thus, constitutional democracy is defined by him as the set of limits imposed by constitutions on all forms of power, a system ensured by the rigidity of constitutional charters which, no longer serving as mere political instruments, at this stage acquire legal contours/guarantees against majorities.

This garantist system (where fundamental rights are enshrined in the constitutional text) presents law not as a set of empty promises, but in an objective form (with immediate applicability), causing a notable shift in the center of decision-making from the Legislative and Executive branches to the Judiciary (Heck, 1947, p. 235-236), reality that results from the ineffectiveness (acts of will – discretion – non-implementation of promises) of public policies driven by the will of the constituted powers. On this topic, Streck³⁷ argues that *discussing the conditions for the possibility of legal decisions is, above all, a matter of democracy [...] The drama of discretion, which I criticize, lies in the fact that it turns judges into legislators.*

³⁶ For that purpose, the bonds in the *garantist-leaning Democratic Rule of Law* are so substantial/material that they prevent the predominance of the conception of democracy tied to the will of the majority, clearly oppressing the minority, thus articulating the sphere of the undecidable (Rosa, 2005, p. 4).

³⁷ And that is the problem. Therefore, Ferrajoli is right because, as it is presented, neoconstitutionalism depends on axiological and voluntarist stances that foster attitudes incompatible with democracy, such as judicial activism and discretion (Ferrajoli; Streck; Trindade, 2012, p. 64).

Thus, the analysis of the conceptual transformations of the term *democracy*, the importance of the theme becomes evident, especially given that in Brazil, human/fundamental rights have been enforced through judicial power, a procedure that has sparked intense debate regarding the legitimacy and limits of the constituted powers. This complex social context stems from the (unfulfilled) constitutional promises made by the original constituent power which, more than thirty years later, have not produced the necessary social effectiveness, resulting in a significant discrepancy between the formal Constitution³⁸ and the real Constitution. This is a consequence not only of educational and cultural issues permeating society, but also of bureaucratic and structural problems in the organization and limits of the constituted powers, all of which are further exacerbated by the inefficiency/ineffectiveness/nonexistence of shared public policies³⁹ (*polycentrism*) (Santos; Marció, 2021).

From this chaotic context arises the question concerning the legitimacy/competence of the Executive Branch with regard to the procedures (vertical democracy) employed to implement public policies based on will (discretion) and not on fundamental rights and guarantees (representative democratic model). To address this issue, the study seeks to understand the foundations that shape the idea of participatory democracy (Decentralization of Power), aiming to overcome the subject/object relationship in favor of a subject/subject relationship, a stage in which citizens, understanding the importance of their civil and political participation (first dimension), must assume

³⁸ It is precisely in this area that the *garantist fallacy* materializes. This is because a mere declaration of rights is not enough if there are not also, simultaneously, adequate mechanisms capable of correcting deviations and fully enforcing those rights (Rosa, 2005, p. 33).

³⁹ After the pendular movement between antidemocratic and democratic Constitutions, the 1988 Constitution emerges, a wave in which democracy begins to stabilize and allows room for the effectiveness of rights. Thus, the discussion of public policies gains prominence in the legal scenario (Limberger, 2010, p. 63-64).

an active and responsive role in the pursuit of shared power for the realization of constitutional/fundamental rights (Santos; Marció, 2021).

Within this framework, the study aims, without any pretension of exhausting the topic, to build elements that allow for the structuring of a theory⁴⁰ capable of, while moving beyond representative democracy, assessing the (il)legitimacy of political-volitional/discretionary decisions (sovereign vs. sovereignty) that implement public policies.⁴¹ The constitutional evolution (origin and developments of the term *democracy*) should foster (Postmodern – Active and Responsive State) the emergence of a new subject/citizen (Active and Responsive) who, in the exercise of their horizontal/participatory democratic legitimacy, must engage in power-sharing during the (collective/plural) construction of decisions (public policies) that ensure regional development. Accordingly, an essential part of the study's development is the discussion on the competence/legitimacy of the constituted powers in the (vertical/volitional/discretionary) construction of postmodern administrative decisions

⁴⁰ Nothing is more important, therefore, than not following like sheep the herd of those who came before us – thus going not where they want us to go, but rather where we truly wish to go [...] Let us not die merely by following the example of others. The way out is to separate ourselves from the crowd and remain safe (Sêneca, 2012, p. 8)

⁴¹ Everyone knows, however, that any written text is interpreted and that interpretations are creative. Language theory has shown the inevitability of interpretation; legal theory has established the normative character of jurisprudential production. If it has become clear that the judge does not merely repeat a preexisting norm but contributes to shaping it (sometimes adapting it, sometimes creating it), then the problem of retroactivity arises again. Certainly, if the judge could dissociate the resolution of the particular case from the basis of the “old” rule, and the formulation of a “new” legal rule that seemed better, the issue would not arise (OST, 1999, p. 191).

(normative/cultural advancements – improvement of the human social condition⁴²).⁴³

To this end, it is necessary to revise the democratic conception still grounded in a model that perceives members of civil society as legitimizing people⁴⁴ (subject/object relationship), then, new spaces/mechanisms must be created to foster and enable popular participation⁴⁵ (decentralization of power). With this goal, the text proposes, as a democratic restructuring, the idea⁴⁶ of a participatory/

⁴² In 1847, Puchta wrote: “Law rests, as to its ultimate historical foundation, on the common conviction of a people” [...]. Beseler echoed these words when he stated: “Law is not a product of human arbitrariness or finished design, nor of legislation or philosophical abstractions; it developed directly in the life of peoples like custom and language” (OST, 1999, p. 84).

⁴³ The life of law is far from representing that long, calm river that many may imagine from the outside within it, the living forces of social consciousness are stirred, and the most varied types of practices and interests clash, of which only a part conform to the norm. Moreover, official law itself is capable, on occasions of revolutions and other major political refoundations, of mobilizing the resources of the collective imagination. On a more individual scale, courts daily record the clashes of centrifugal forces that shake the law according to particular interests and personal dramas. [...] Furthermore, it would be a mistake to represent the law as a rigid corset that leaves no room for the actors to act: many laws, on the contrary, acquire a supplementary form, imposing themselves only in the absence of another option adopted by private parties (OST, 2004, p. 19-20).

⁴⁴ The active people elect their representatives; from their work result (among other things) the texts of the norms; these are, in turn, implemented in the various functions of the State apparatus; the recipients, those affected by such acts, are potentially everyone, namely, the “people” as population. All this forms a kind of cycle [Kreislaufl] of acts of legitimation, which nowhere can be interrupted (in a non-democratic way). This is the democratic side of what has been called the *legitimation structure* [...] It is true that the legitimation cycle has not been interrupted at this point in a non-democratic manner, but it has been interrupted. It seems plausible in this case to see the role of the people in another way, as the *global instance of attribution* of democratic legitimacy. It is in this sense that judicial decisions “in the name of the people” are issued and pronounced (Muller, 2003, p. 60)

⁴⁵ After the achievement of universal suffrage, if it is still possible to speak of democratization, it should reveal itself not so much in the transition from representative democracy to direct democracy, as is commonly stated, but rather in the transition from political democracy to social democracy – not so much in the answer to the question “Who votes?” but to this other question: “Where does one vote?”. In other words, when one seeks to know whether there has been a development of democracy in a given country, what should be examined is not whether the number of those entitled to participate in decisions that concern them has increased, but whether the spaces in which they can exercise this right have expanded (Bobbio, 2000, p. 27-28)

⁴⁶ But, gentlemen, those who rise early to read should also rise early to think. Reading is commonplace; reflecting is rare. Knowledge does not reside in other people’s science, which is merely absorbed, but chiefly in one’s own ideas, which are generated from the knowledge

horizontalized democracy, a mechanism that would legitimize (as decision) the construction of socially grounded responses based on factual and phenomenological foundations. This means recognizing a fourth (and principal) constituted power (horizontal democracy) through the socialization/sharing of administrative decisions (a social response built collaboratively rather than a mere Provision of State Tutelage), transforming the social fabric by the effective contribution of participants (subject/subject relationship) in the foundation of a (polycentric) decision. The decision ceases to be (a merely/discretionary) function of the public manager and becomes a multifaceted social responsibility. In this democratic context, the Shared Decision, no longer an archaic legal instrument subservient to Syllogism, Motivation and/or Argumentation (Discretion and/or Arbitrariness), becomes a social, political, and legal phenomenon⁴⁷, at which point simple legality and/or formal competence (which, when abstracted, lead to solipsisms), though not eliminated from the system, make room for legitimacy not only of the State/Administrator but also of the decision itself, which, shedding its verticality typical of the Modern (Reactive) or Constitutional (Active) States, is now built by a Horizontalized Democracy (collective/participatory) characteristic of a Postmodern State (Active and Responsive) (Santos, 2020b).

absorbed, through the transmutation that occurs in the mind that assimilates it. A learned person is not a cupboard of stored wisdom but a reflective transformer of digested acquisitions [...] One can readily see the passage from apparent knowledge to real knowledge. Apparent knowledge believes and flaunts that it knows everything. Real knowledge, the more genuine it is, the more it distrusts both what it is apprehending and what it elaborates (Barbosa, 2007, p. 44).

⁴⁷ [...] cumple misión jurídica (como instrumento para la realización del derecho objetivo en caso de litigio), política (como garantía del justiciable y, a fin de cuentas, de la libertad) y social (al contribuir a la pacífica convivencia de los habitantes de un Estado y a equilibrar sus fuerzas en la empresa de obtener justicia), no es, sin embargo, un remedio mágico que sirva para todo e del que quepa esperar milagros. Al contrario, el proceso, que es no ya útil, sino indispensable e insustituible dentro de determinados límites, o sea de aquellos que son consubstanciales con su función peculiar, resulta inútil, perturbador y hasta peligroso cuando, por cualquier causa, se le hace traspasar sus fronteras naturales (Alcola-Zamora, 1991, p. 233-234).

Thus, participatory democracy emerges, in the Postmodern State, as an important legitimizer of this new model of social construction of a living law (O Moro, 2012), a stage in which Shared Decision becomes a valuable element that breathes life into the aspirations of society. It presents itself as a key *locus* for recognizing the social dynamic⁴⁸ as framed by the parties within a true (not simulated) democratic game, as it generates a balance of forces between the parties (decentralization of power), fostering a power-sharing process that may eventually result in an effective (and much sought-after) polycentric/shared decision.

4 FINAL CONSIDERATIONS

As outlined throughout this study, the central theme concerns the legitimacy of postmodern decisions aimed at the realization/creation of normative and cultural advancements for the improvement of humanity's social condition. The postmodern challenge lies in enabling the hybridization of formal representative democracy (form and procedure), substantive democracy (content and substance), and participatory democracy (a new space/means for civil and political participation), introducing new elements for juridical and democratic reconfiguration. The difficulty in implementing this new model stems from an archaic mindset that clings to the State's subjectivism (discretion), reducing law to mathematical and/or subjectivist operations. The objective proposed by this study is to build a new democratic perspective to achieve democratic decision-making (a movement toward the decentralization of political/legal power),

⁴⁸ Overcoming the understanding of the process as a mere guarantee of individual rights, it has been elevated to a political instrument of participation in the formulation of law by intermediate bodies and of prompting the action of public and private agents with regard to the collective or transindividual interests for whose satisfaction they are responsible (Passos, 1988, p. 95-96).

enabling shared decisions grounded in the constitutional text (a legal/effective/polycentric decision).

Law, faced with the inertia of the constituted powers (unfulfilled constitutional promises), has been undermined by solipsisms and discretionary practices (formal/vertical democracy) – a framework that must be reconfigured to achieve the effectiveness of social responses through the democratization and participation in/of decisions and the realization of fundamental rights (horizontalization/decentralization of power). In this new context, political decisions must reveal and resolve social problems, reaffirming the importance of the *being* (citizens – subject/subject relationship), requalifying the participants in the decision-making process, and resignifying the Provision of State Tutelage. The realization of fundamental rights (in a polycentric/collective/shared manner) must be built (without protagonists) by both the State and the Citizens (Both Active and Responsive – *Auctoritas* – Constitutional Postmodern Democracy), fostering the long-desired social effectiveness as the result of a Legitimate Decision (Democratic/Constitutional/Horizontal/Shared).

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GENDER AND MOTHERHOOD: IMPACTS OF LACK OF ACCESS TO AND INDISCRIMINATE USE OF REPRODUCTIVE TECHNOLOGIES ON WOMEN'S HEALTH

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1 INTRODUCTION

International human rights agendas, such as the 2030 Agenda (Organização das Nações Unidas, 2015) and the New Urban Agenda (Organização das Nações Unidas, 2019), draw attention to the need to guarantee equal access to essential services, technologies and spaces, which includes reproductive health. However, in the field of reproductive technologies, the scenario of economic exclusion persists, making it impossible for most women to use them safely, coupled with a lack of knowledge about their impacts, often maintained by the logic of the commodification of the female body.

This context encourages medical and economic abuse, supporting the idea that women must inevitably reproduce. This logic stems from the sense that motherhood, often associated with female identity, has historically been imposed as a central role in women's lives, shaping cultural, social and institutional norms that restrict fundamental rights. This cultural imposition not only imposes rigid

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expectations about what it means to be a woman, but also conditions reproductive decisions, directly affecting the exercise of sexual and reproductive rights and women's health.

Reproductive technologies have opened up new possibilities for motherhood. However, access to these procedures remains profoundly unequal. While a small portion of the female population has favorable economic, social and cultural conditions to take advantage of these techniques, many women remain excluded due to financial barriers, lack of information and the absence of policies that consider their cultural specificities. This disparity reinforces historical inequalities and highlights the inadequacy of public policies in guaranteeing universal, equitable and culturally sensitive access to reproductive technologies.

The aim of this study is to critically analyze how the cultural imposition of motherhood, associated with inequalities in access to and indiscriminate use of reproductive technologies, impacts the exercise of fundamental rights related to women's health, in light of the commitments made by Brazil in the international human rights agendas.

This analysis is part of the context of urban dynamics, the focus of the New Urban Agenda (Organização das Nações Unidas, 2019), especially item 36, which emphasizes gender equality, respect for cultural diversity and interculturality. Despite these guidelines, public policies and infrastructures often fail to take into account the multiple demands and socio-cultural realities of women. The absence of an intercultural approach to gender reveals not only a lack of respect for Brazil's ethnic and cultural diversities, but also a compromise of fundamental rights and a move away from effective compliance with the international commitments made by the country.

In this way, the compulsory nature of motherhood, reinforced socially and by the imposition of a normative standard of “being a woman”, is intertwined with the lack of access to and indiscriminate use of reproductive technologies which, far from increasing female autonomy, can reproduce coercion and widen inequalities. This scenario compromises the right to reproductive planning and the physical and mental health of women in situations of regional, economic and cultural vulnerability, highlighting gaps in public policies and regulations aimed at serving them. This fragility constitutes a violation of fundamental human rights, while at the same time contradicting the principles of social sustainability.

2 GENDER NORMS AND THE IMPOSITION OF MOTHERHOOD IN THE CONSTRUCTION OF FEMALE IDENTITY

Motherhood occupies a central place in the construction of female identity and is often conceived as an inevitable role in women’s lives. This cultural imposition transcends individual choices and is reinforced by social, religious and economic norms and gender expectations. Historically, women’s biological capacity has been used as justification for restricting them to the domestic sphere, consolidating their role as caregivers and subordinates within the family structure. Scavone (2001) states that motherhood is not just a biological event, but a social construction loaded with symbolic meanings that shape the behavior expected of women.

Despite the achievements made by feminist movements, the idea that women are naturally destined for motherhood still persists. Gradvohl, Osis and Makuch (2014) note that, since the Middle Ages,

motherhood has been idealized as absolute devotion to the family, often to the detriment of personal desires and projects. In the contemporary context, the emergence of technologies such as in vitro fertilization and pregnancy by surrogacy has expanded the possibilities of reproduction, but has also reinforced social pressures for women to resort to such methods, often in risky conditions or without total freedom of choice.

According to Diniz and Buglione (2002), the use of these technologies is not always the result of autonomous decisions, but of social impositions that turn motherhood into an obligation. Tubert (1996) stresses that such practices can lead to “technified motherhood”, medicalizing the female body and dehumanizing pregnancy. In addition to the cultural aspect, these pressures have a physical and psychological impact on women. Iaconelli (2015) points out that compulsory motherhood can cause emotional distress, and Beauchamp and Childress (1999) highlight the need to consider women’s well-being in reproductive decisions.

This imposition also perpetuates gender inequalities, restricting women’s full participation in other social spheres. Scavone (2010) observes that structural obstacles to female autonomy persist, reinforced by discourses that link their social value to the maternal role. For Diniz (2000) and Tamanini (2006), critically reflecting on this scenario is fundamental to defending reproductive rights and deconstructing the naturalization of motherhood as an inevitable destiny.

Gender norms, deeply rooted in cultural, religious and social traditions, act as symbolic mechanisms that associate female identity with the reproductive function (Scavone, 2001). Gradvohl, Osis and Makuch (2014) show that motherhood has historically been idealized as an act of sacrifice and dedication, marginalizing women who choose not to be mothers. This pattern was also reflected in the civil and

criminal legislation of the early 20th century, institutionalizing female subordination. Despite constitutional changes, patriarchal values still sustain inequalities and oppression.

The introduction of reproductive technologies, although it represents a scientific milestone, does not always result in access and the ability to make free and conscious choices. Diniz and Buglione (2002) point out that the discourse surrounding these techniques is permeated by values that pressure women to seek motherhood at any cost, even at the expense of their health. This influence extends to public policies, which, according to Diniz (2000), lack wide accessibility, cost reduction and an ethical approach that takes into account the diversity of women's experiences.

The role of the family and society in imposing motherhood is decisive. From childhood, family and cultural discourses associate female value with the ability to be a mother, creating pressures that compromise women's autonomy (Gradwohl; Osis; Makuch, 2014). In the family environment, these pressures are continually manifested through expectations and comments that reinforce motherhood as a woman's full achievement. Scavone (2001) observes that, in many cultures, women are valued for perpetuating the lineage and providing care, often to the detriment of their own projects.

Society, in turn, amplifies these impositions through idealized representations of the "perfect mother", often conveyed by the media (Diniz; Buglione, 2002), which feed unattainable standards and generate frustration and suffering. Women who choose not to have children face stigmatization, being labelled as selfish or deviant - a social control mechanism that restricts women's choices (Scavone, 2010). Families often encourage the use of reproductive technologies even in the face of health risks, reinforcing the idea that motherhood should be prioritized at any cost (Diniz, 2000).

Culture, religion and the media play a central role in consolidating motherhood as an essential part of female identity. Narratives and images disseminated by the media associate being a woman with motherhood and family care as an inevitable destiny. Scavone (2010) points out that the media idealizes this experience as full and universal, ignoring the concrete challenges faced by women. Diniz and Buglione (2002) point out that such representations create rigid and unattainable models, putting pressure on women to live up to idealized standards, even in the face of financial, emotional or structural difficulties.

At the same time, women who do not wish to have children or who challenge traditional roles are stigmatized as selfish or incomplete (Scavone, 2001), reinforcing motherhood as a social obligation. The media also legitimizes reproductive technologies as miracle solutions, omitting risks and complexities (Diniz, 2000). Works that question the maternal ideal, as Tubert (1996) notes, are rare and often marginalized in the face of dominant discourses. For Beauchamp and Childress (1999), building a fairer society requires recognizing the multiple trajectories of women and overcoming imposed stereotypes.

The imposition of reproduction at any cost is configured as a gender performance, as it reproduces and reinforces roles socially attributed to women, linking their identity and social value to the ability to bear children. This pressure manifests itself as a form of violence, becoming even more serious when women are unable to reproduce naturally and need to resort to medical treatment. In this context, after the medical indication of reproductive technologies, both the lack of access to these procedures, marked by economic, cultural and institutional barriers, and their indiscriminate use, often driven by religious, social and media expectations, can have significant impacts

on women's physical and mental health, increasing vulnerabilities and perpetuating gender inequalities.

3 MATERNAL DESTINY, WOMEN'S HEALTH AND WELL-BEING

The social imposition of motherhood has a profound influence on women's mental health and emotional well-being. The expectation that being a mother is a mandatory destiny generates anxiety, feelings of inadequacy and, in some cases, depression, especially in women who do not want or cannot have children. Scavone (2001) points out that this imposition creates internal conflicts, forcing women to conform to external standards that do not reflect their own desires and wishes.

Among the most recurrent effects is anxiety, particularly in women who have difficulties getting pregnant or who choose not to become mothers. Diniz and Buglione (2002) explain that these women often feel guilt, low self-esteem and emotional overload in the face of family and social expectations. Motherhood, in this context, ceases to be a choice and becomes an imposed duty, generating significant suffering. Beauchamp and Childress (1999) emphasize that this social coercion compromises female autonomy, intensifying psychological suffering and hindering personal fulfillment in other dimensions of life.

In order to deal with these consequences, it is necessary to deconstruct stereotypes that link female identity exclusively to motherhood. As Scavone (2010) argues, it is essential to create spaces of freedom for each woman to exercise her reproductive choices autonomously and without judgment, promoting an ethical and sensitive approach to the plurality of women's experiences.

At the same time, the use of reproductive technologies, while representing important scientific innovations, can also have significant physical and emotional impacts when used under social, cultural or religious pressures that idealize motherhood (Diniz, 2000). Procedures such as IVF require high doses of hormones and can cause side effects such as swelling, nausea and, in severe cases, ovarian hyperstimulation syndrome. Tamanini (2006) warns that these risks are often minimized in medical discourse, contributing to an idealized and incomplete view of the process. Egg collection surgeries can cause pain, infections and other physical damage, especially when performed under family or social coercion (Diniz, 2000).

The psychological effects are also profound. Women who experience unsuccessful attempts often report frustration, guilt and low self-esteem. Scavone (2001) observes that motherhood imposed as a social obligation amplifies subjective suffering, intensified by the medicalization of reproduction, which reduces the reproductive experience to a set of tests and results. Diniz and Buglione (2002) stress that technical failure is often internalized as a personal failure, disregarding the limits of the body and the woman's real desires.

On a psychological level, treatments can generate stress, anxiety and frustration, especially in the face of failure or the impossibility of access due to economic barriers. Scavone (2001) observes that the social pressure for motherhood can turn reproduction into an exhausting experience, while Diniz (2000) warns of the medicalization of reproduction, which reduces pregnancy to technical processes and makes female subjectivity invisible. This scenario is aggravated by the symbolic value attributed to biological pregnancy as a "legitimate" form of motherhood, encouraging women to undergo procedures even in the face of risks (Tubert, 1996).

Ethical issues also emerge, especially in surrogacy and egg/embryo donation, which, in contexts of social inequality, can take on the appearance of exploitation (Diniz and Guilhem, 2002). Beauchamp and Childress (1999) stress that consent is only valid if it is obtained without economic or social pressure. Without minimum social guarantees and robust regulation, there is a risk of turning the female body into a mere biological instrument.

Even when the use of technologies results in pregnancy, the emotional effects remain, including anxiety, fear and exhaustion, especially in the absence of adequate psychological support. Beauchamp and Childress (1999) argue that respect for autonomy must include care for emotional health, not just physical results. Scavone (2010) adds that when women stop treatment, they still face social and family judgments, reinforcing the idea that motherhood is a social obligation, not a choice.

The lack of psychological support and integrated public policies is an aggravating factor, affecting women in situations of social vulnerability even more, as they have less access to information and comprehensive care. Diniz and Buglione (2002) recommend that this support should be part of medical protocols. Diniz (2000) and Tubert (1996) advocate public policies based on ethics and intersectionality, guaranteeing equal access, respect for individual decisions and emotional acceptance, transforming reproductive technologies into instruments of freedom, and not additional sources of oppression.

4 INEQUALITIES IN ACCESS TO AND USE OF REPRODUCTIVE TECHNOLOGIES IN THE HEALTH SYSTEM

Despite the normative changes driven by international human rights agendas, such as the UN's 2030 Agenda (Organização das Nações Unidas, 2015), which includes the promotion of gender equality and the empowerment of women and girls in Sustainable Development Goal 5, there are still structural barriers that limit the effectiveness of these guidelines.

Issues related to reproduction and care remain marginalized in global debates, being dealt with in a sectoral and fragmented way, without tackling the social, economic and cultural inequalities that condition women's reproductive autonomy. In this sense, reproductive health, especially with regard to access to and use of reproductive technologies, reveals contradictions between the international commitments made and the concrete reality marked by class, race and gender asymmetries.

Reproductive technologies can be indicated as complementary treatments for women's reproductive health in cases of infertility or sterility, as well as in other family configurations, including same-sex families. These procedures aim to help individuals and couples who are having difficulties conceiving naturally. The main techniques include artificial insemination, in vitro fertilization (IVF), surrogate motherhood, as well as the freezing of eggs, sperm and embryos.

Artificial insemination, considered the least invasive procedure, consists of introducing sperm into the uterus during the fertile period and is generally indicated in the early stages of infertility treatment. In vitro fertilization (IVF), on the other hand, is characterized by the union of gametes in a laboratory environment, followed by the

transfer of the embryo to the uterus. This is a more complex and costly technique, recommended for severe cases of infertility or when other methods do not produce satisfactory results.

In addition to these practices, other techniques are gaining relevance in the field of assisted reproduction. The freezing of gametes and embryos allows fertility to be preserved, making it possible to postpone motherhood or fatherhood due to personal choices or medical circumstances. Surrogate motherhood, also known as “gestation by substitution” or “surrogacy”, occurs when a woman gestates the child of another person or couple, and is the only viable alternative in specific situations, such as congenital absence of a uterus or diseases that make gestation impossible (Diniz, 2000).

Access to these technologies is part of the right to health, provided for in Article 6 of the Federal Constitution, which covers reproductive health and the right to develop a parenting plan in the context of the various forms of family organization. In Brazil, the matter is regulated only by resolutions of the Federal Council of Medicine (CFM), such as Resolution n. 2,320/2022, which allows use in proven cases of need, prohibiting its commercialization, and there is no specific legislation that deals comprehensively with assisted reproduction techniques. This regulatory gap due to the absence of a special law, as Diniz (2000) warns, contributes to legal uncertainty, informal agreements and the risk of clandestine practices.

Despite representing important medical innovations, these technologies remain inaccessible to the majority of the population due to their high cost and the limited supply by the Unified Health System (SUS). According to Diniz and Buglione (2002), the most complex procedures, such as IVE, surrogate motherhood and egg freezing, are practically restricted to the private network, reaching only women with greater purchasing power. This exclusion, as Tubert (1996)

notes, constitutes a violation of reproductive rights and the right to health, deepening inequalities and limiting reproductive autonomy. In some countries, according to Diniz (2000), procedures such as IVF are subsidized by the public system; in Brazil, availability is scarce and uneven between regions.

In Brazil, these procedures are not necessarily covered by the state's obligation to protect the fundamental right to health, except in exceptional situations where there is a risk to the woman's life or health. In reality, in the judiciary reproductive techniques are analyzed in the context of family planning, provided for in art. 226, §7 of the Federal Constitution, regulated by Law n. 9.263/96, which guarantees freedom of decision, access to scientifically accepted methods and adequate clinical follow-up.

The National Policy for Comprehensive Care in Assisted Human Reproduction (Ordinance n. 426/2005) establishes three levels of care, with the High Complexity level being responsible for IVF procedures. Since 2012, the Brazilian National Health System has offered artificial insemination and IVF programs, but access is limited by the geographical availability of partner clinics, strict eligibility criteria and long waiting lists, often exceeding four years, making state funding almost unaffordable for many women, as evidenced by court decisions (REsp 1617970).

This scenario shows that, despite the state's legal duty to enable the right to family planning, the practical implementation of reproductive technologies faces significant barriers, reflecting institutional challenges, regional inequalities and limitations in the exercise of fundamental rights to health and reproduction.

In addition to economic barriers, there are significant physical and emotional impacts. IVF, for example, requires intense hormonal interventions and invasive procedures that can cause side effects such

as weight gain, fatigue and ovarian hyperstimulation syndrome (Diniz and Buglione, 2002). The indiscriminate use of these techniques, without adequate medical indication, puts women's health at risk. Beauchamp and Childress (1999) argue that such interventions should be carried out with caution, respecting physical limits and ensuring consent free from coercion.

Thus, although reproductive technologies are scientific achievements that expand the possibilities of parenthood, their use requires inclusive public policies, rigorous ethical regulation and a guarantee of equitable access, in order to ensure that they become instruments of reproductive justice and not of reinforcing existing social inequalities.

5 SUSTAINABILITY AND WOMEN'S REPRODUCTIVE HEALTH

The guidelines of international human rights agendas, such as the New Urban Agenda (Organização das Nações Unidas, 2019), reinforce the need to guarantee equitable access to essential services, technologies and environments, including reproductive health, as a condition for promoting social justice and sustainability. Gender equality, understood as a central element for sustainable development, is a fundamental pillar of contemporary global policies.

Sustainability cannot be dissociated from the material and symbolic conditions that structure gender relations, since the exclusion of women from essential services and the imposition of naturalized social roles, such as compulsory motherhood, perpetuate cycles of inequality. Linking gender justice to sustainability shows that guaranteeing women equal access to health, technologies

and autonomous decisions about their bodies is not just a matter of individual rights, but also a requirement for fairer, more resilient and sustainable societies.

However, in Brazil, reproductive technologies remain strongly limited by economic and social barriers, which restrict their safe and informed use, especially among women in vulnerable situations (Diniz, 2000). This inequality is exacerbated by the lack of clear information about risks and consequences, often overshadowed by the logic of commodification of the female body. In this context, abusive medical and economic practices reinforce the naturalization of motherhood as an obligation, in clear contradiction to the principles of equality, dignity and autonomy defended by international agendas, compromising social sustainability, equity and the full exercise of human rights.

Brazilian public policies aimed at exercising reproductive rights are still insufficient in the face of the ethical, legal and social challenges surrounding assisted human reproduction techniques. Diniz (2000) observes that the absence of specific legislation contributes to the precariousness of these rights, allowing the indiscriminate use of often invasive techniques, without adequate institutional support, compromising women's physical and mental health. In addition, the lack of supervision and the elitist nature of access reinforce historical and social inequalities.

When looking at the context of international human rights agendas, especially the New Urban Agenda (Organização das Nações Unidas, 2019), item 36 of which emphasizes gender equality, it can be seen that Brazilian public policies still do not adequately guarantee accessibility, sustainability and interculturality, showing significant non-compliance with international guidelines. Tubert (1996) points out that Brazilian public policies often fail to take into account the

cultural and socio-economic diversity of women, ignoring their specificities and weakening their right to full citizenship.

The lack of an adequate intercultural approach highlights the invisibility of ethnic and cultural diversity and jeopardizes the effectiveness of international commitments. Thus, the rules on access to and use of reproductive technologies are limited and fragmented, mostly regulated by deontological resolutions of the Federal Council of Medicine (CFM), such as Resolution 2.320/2022.

Diniz and Guilhem (2002) point out that, although important, these rules do not have the force of law, creating legal uncertainty for users and health professionals. Article 226, §7 of the Federal Constitution guarantees family planning, but does not specifically regulate assisted reproduction, which perpetuates inequalities and allows for subjective interpretation of reproductive rights.

The CFM's resolutions, by prohibiting surrogacy for profit and limiting its practice to relatives up to the fourth degree, seek to avoid the commodification of the female body. Beauchamp and Childress (1999) argue that justice in medical regulation requires equitable access, but the Brazilian model still favors traditional family patterns. Diniz and Buglione (2002) warn that this normative fragmentation and restriction of access highlights the need for an inclusive legal framework, capable of encompassing different forms of parenthood.

Unequal access to reproductive technologies reflects the exclusion of socially and economically vulnerable women. Tubert (1996) observes that the few existing public initiatives, concentrated in university centers or referral hospitals, fail to meet demand, reinforcing inequalities and limiting the right to reproductive choice. This limitation violates the principles of universality and equity of the SUS, as well as the commitments of the New Urban Agenda (Organização das Nações Unidas, 2019) and the 2030 Agenda (Organização das

Nações Unidas, 2015), which prioritize equal access to health services, technologies and information.

In addition, partial regulation makes it impossible to effectively supervise private clinics, favoring commercial exploitation and inappropriate use of procedures. Diniz and Guilhem (2002) point out that the absence of strict clinical criteria and integrated protocols compromises patients' physical health, while Beauchamp and Childress (1999) stress that medical ethics must consider subjective impacts and respect women's autonomy.

Given this scenario, it is clear that public policies and the regulation of reproductive technologies must be reformulated to ensure that access only occurs in justifiable situations, preventing damage to women's physical and mental health. Diniz and Buglione (2002) advocate the creation of a comprehensive legal framework that combines bioethical principles with social and feminist demands, ensuring reproductive justice, inclusion and respect for diversity. Only with clear legislation, effective social participation and intercultural public policies will it be possible to transform reproductive technologies into instruments of emancipation and not mechanisms of oppression, in line with international commitments such as the New Urban Agenda (Organização das Nações Unidas, 2019) and the 2030 Agenda (Organização das Nações Unidas, 2015).

It is essential that public policies aimed at sexual and reproductive rights, family planning and the development of parenting projects incorporate a critical human rights perspective, recognizing that not every woman wants or needs to have children, and that parenting is not restricted to biology. Diniz (2000) points out that women in different social contexts cannot be framed in a homogenous nuclear family model, and that the plurality of reproductive experiences should guide the formulation of policies.

Access to knowledge about sexual and reproductive rights, gender guidelines and the different ways of experiencing the condition of being a woman is essential, as is the conscious use of reproductive technologies, avoiding excesses that compromise the physical and psychological health of users. Beauchamp and Childress (1999) emphasize that health justice requires measures that take into account diversity and respect women's autonomy, ensuring that access to technologies and information is equitable, ethical and safe.

On the other hand, the excessive medicalization of motherhood and the lack of interdisciplinary support aggravate the impact on women's mental health. Scavone (2001) emphasizes that the lack of knowledge about risks and alternatives to procedures favors decisions made under social, religious or cultural pressure, reinforcing the imposition of motherhood as a duty and not a choice. Even when the procedures result in pregnancy, anxiety, exhaustion and fear persist, highlighting the need for public policies that integrate psychological, social and legal support.

In this sense, public policies should prioritize the dissemination of knowledge, health education and access to services compatible with the demands of a plural state, ensuring that health protection and freedom of choice are effective for all women.

6 CONCLUSION

This research has shown that although international human rights agendas, such as the New Urban Agenda (Organização das Nações Unidas, 2019), emphasize the need to guarantee equal access to essential services, technologies and spaces, including reproductive health, the Brazilian reproductive technology scenario remains

marked by economic exclusions, misinformation and the logic of commodification of the female body. This potentializes medical and economic abuses, reinforcing motherhood as a social, cultural and family imposition, in affront to the principles of equality, dignity and autonomy that these agendas seek to ensure.

Despite representing relevant scientific innovations, procedures such as in vitro fertilization, artificial insemination and surrogate pregnancy tend to reproduce inequalities when applied without inclusive regulation, effective public policies and broad ethical debates. The lack of access to these technologies by women in vulnerable situations and their indiscriminate use by privileged groups deepen social exclusion and compromise the right to dignified reproductive planning. In addition to the physical risks, there are psychological impacts such as anxiety, frustration, low self-esteem and depression, which are often made invisible in technical and medical discourse.

Given this context, it is essential to formulate public policies that ensure humanized and ethically oriented practices in assisted reproduction, with comprehensive psychological monitoring, clear guidance and interdisciplinary support. It is essential to guarantee equitable access to knowledge, information and reproductive technologies, respecting the plurality of women's bodies and experiences. Only in this way will it be possible to align assisted reproductive practice with international human rights commitments, gender equality goals and the promotion of public health that truly respects women's autonomy in sustainability.

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SMART CITIES AND OPEN GOVERNMENT: ACTIVE CITIZENSHIP AND SOCIAL PARTICIPATION FOR SUSTAINABLE DEVELOPMENT

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1 INTRODUCTION

Debates about democracy and social inclusion have intensified in recent times. Access to the internet and, consequently, to social media, has given people greater access to information about their representatives and also about the government's own political actions.

Beyond cyberspace, the organization of today's society, now networked (Castells, 2002), also requires greater connectivity in physical space, synergistically interconnecting spaces in what has been conceptualized as a “phygital” space (Klaus, 2021, p. 1).

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Therefore, a new perspective on the city, especially urban spaces, has been emerging. In the 1990s, the integration of urban space and technology gave rise to the idea of a digital city, the goal of which was to provide this space with efficient digital integration (Lemos, 2013, p. 46).

While the trend once was to idealize a digital city, today, no longer a trend, there is a clear need to make cities smarter. According to André Lemos (2013, p. 48), the smart city is intrinsically related to information and communication technologies, given the enormous volume of processed data and information constantly produced, consumed, and distributed. In his words, “this intelligent processing will serve as a reference and guide the decision-making of companies, governments, and citizens, with the aim of making urban activities more efficient and sustainable in the economic, social, ecological, and political spheres.”

The right to the city is not only a human right guaranteed to all, but has also been reinforced as one of the Sustainable Development Goals proposed by the United Nations 2030 Agenda (United Nations, 2015). The intention is for coordinated physical and digital spaces to build sustainable, smart, and inclusive cities and communities. However, it is important to emphasize that uncoordinated technological diffusion and public policies that fail to place citizens at the center of the process and that follow a top-down approach – that is, in which citizens are merely passive agents subject to the decisions and political actions of their leaders – limit the utopian conception of an inclusive and connected city (Andrade, 2023).

A public policy that effectively aims to meet the needs of citizens and is aligned with their relationships with urban space must necessarily position them as partners and co-creators. It requires

devising strategies and models to achieve as close as possible to a truly transparent and participatory democracy.

In this scenario, also driven by technological transformations and the power of the internet, the proposal for open government emerged, a government management model where citizens can directly contribute to the political agenda, participate in the development and implementation of public policies, and monitor the actions implemented.

By connecting the open government initiative with the idea of a smart city, we can see a direction in which open government can be the means and the realization of a truly smart city can be the end.

Thus, the following sections will explore the interconnected ideas of smart city plans, open government, and active citizen participation. The data collected and presented here are the result of exploratory research, with documentary and bibliographic analysis using a qualitative approach.

2 OPEN GOVERNMENT AND ACTIVE CITIZENSHIP

The challenges faced by contemporary society due to technological advances have been the subject of study in various fields of knowledge, with due intersectionality. Analysis is required from the sociological, legal, economic, technological, and educational perspectives, perhaps across all fields of knowledge.

Their consequences permeate, beyond private life and debates about privacy and data protection, public life and social relations – both between individuals and between individuals and the State.

Aiming to add positive value to the democratic process, a new form of social participation in public administration has been

proposed through Open Government. With Open Government, public administration embraces technologies to connect with people, “sharing resources – data and information – that were previously exclusive to the State, with no access to individuals, assuming a collaborative role among all to establish and promote transparency” (Jarude, 2023, p. 14).

The proposal for an Open Government, already under this name, is not new. In 1957, Wallace Parks addressed the topic in his article “The Open Government Principle: Applying the Right to Know under the Constitution” (Parks, 1957), but it is undeniable that the idea took on greater proportions with the spread of the internet and big data.

To strengthen and disseminate the Open Government model, the Open Government Partnership (OGP) was created in 2011 by governments and civil society organizations. Currently, the OGP has the participation of 74 countries and 150 local governments, representing more than 2 billion citizens (Open Government Partnership, 2025).

According to the standards defined by the OGP, a government is considered open when it follows four guiding principles: Transparency; Inclusive Participation; Accountability; and Innovation and Ambition (Open Government Partnership, 2022).

Although already provided for in the 1988 Brazilian Federal Constitution since its enactment, the transparency implied by the text of Article 5, XXXIII, is more related to passive transparency, which refers to “the State’s obligation to grant, to all citizens who request it, timely access to official documents, except those that are legally protected for reasons of national security, public investigation, third-party rights, etc.” (Brasil, 1988; Zuccolotto; Teixeira, 2019, p. 49).

The Brazilian Access to Information Law, which regulates and complements the constitutional text, follows this same line,

viewing transparency as a responsive obligation (Brasil, 2011). The Open Government initiative aims to transform the perspective of transparency: it shifts to active transparency, which “results from voluntary actions by public administrators or legal obligations imposed on state agencies, requiring the publication of necessary and sufficient information for society to evaluate government performance” (Zuccolotto; Teixeira, 2019, p. 49).

Furthermore, transparency constitutes only one, but no less important, principle of Open Government. Citizen participation, by having greater access to information about government actions, also provides greater feedback.

It can be seen, then, that the government process is a continuous cycle. And so are public policies, the tools that implement this process. In the words of Jarude (2023, p. 171, our translation), “transparency is a necessary condition for enabling participation in policymaking”.

Open Government thus offers a crucial framework for rethinking governance in contemporary societies, particularly by reinforcing transparency, accountability, and citizen participation. However, translating these principles into practice remains a challenge: initiatives often face institutional resistance, lack of coordination, or remain confined to symbolic gestures rather than structural change.

These limitations become even more evident in the urban context, where discourses on smart cities tend to emphasize technology over democratic governance. The following section turns to these narratives, examining how the predominance of top-down approaches has shaped the ways in which cities are imagined and governed.

3 SDG 11: SMART AND SUSTAINABLE CITIES AND COMMUNITIES AND THE SOCIAL PARTICIPATION

Urbanization has been a growing migratory movement since the First Industrial Revolution, and the very notion of the city has been undergoing transformations ever since (Andrade, 2023, p. 20). Forecasts released by the United Nations (UN) indicate that, by 2050, 68% of the world's population will live in urban areas. In 2018, this figure was 55% (United Nations, 2018).

Urbanization can be understood by the process of “transformation of human production and lifestyles from rural to urban areas, including population concentration, non-agricultural activities, and drastic landscape changes” (Chen *et al.*, 2022, p. 340)

The agglomeration of people in urban spaces, given spatial limitations and socioeconomic inequality, tends to generate informal settlements, especially in metropolises. Although the Universal Declaration of Human Rights, ratified in several countries around the world, already established in 1948 that “Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits” (Article 27) and that “Everyone has duties to the community in which alone the free and full development of his personality is possible” (Article 29), it is clear that many people remain marginalized from the community process (United Nations, 1948).

Considering that community life is closely linked to coexistence in society and in cities, although not restricted to urban settings, the process of urbanization without resilient construction ultimately reinforces existing structures of inequality.

Such structures corroborate a process that segments citizens, leaving those on the margins vulnerable to the effects of urbanization

and industrialization. Speaking in terms of the climate crisis, a report released by the United Nations Human Settlements Programme (UN Habitat) in 2024 highlights that its effects are interconnected with urban systems, including economic, social, ecological, and infrastructure aspects (United Nations Human Settlements Programme, 2024).

Not surprisingly, when the Agenda 2030 pact was signed during the 2015 General Assembly, which advocated 17 Sustainable Development Goals (SDGs) to be achieved by 2030 to foster sustainable development, one of these SDGs, number 11, directly addresses Sustainable Cities and Communities, aiming to “make cities and human settlements inclusive, safe, resilient, and sustainable” (United Nations, 2015). Within SDG 11, given the objective of this work, targets 11.3 and 11.4 are worth highlighting, as they strengthen citizen participation in building a sustainable community.

The target 11.3 states: “By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management in all countries” (United Nations, 2015, p. 21). This reinforces that city planning must necessarily include citizens. One of the indicators for achieving this target even observes the “proportion of cities with a direct participation structure of civil society in urban planning and management that operates regularly and democratically” (United Nations, 2017, p. 13).

In turn, the target 11.4 strengthens the community’s cultural ties by including as an objective the “strengthen efforts to protect and safeguard the world’s cultural and natural heritage” (United Nations, 2015, p. 22).

It is clear, then, that it is globally recognized that cities and communities must be developed horizontally, through bottom-up public policies. A smart city, in a broad sense, must operate transversally,

integrating environmental, social, and economic policies. And the formulation of external public policies for smart cities must respect regional cultures and local wisdom, avoiding “top-down” solutions.

Local core knowledge is necessary to promote adaptations in the design of smart cities. When interconnected with other types of knowledge, such as scientific knowledge, they can drive the desired objectives and create and manage more effective solutions, placing citizens as partners and engaging them in the endeavor (United Nations Human Settlements Programme, 2024).

Urbanization is not a one way process. Each country or region has its own path to development, to industrialization and to urbanization. The same way, the solution toward urban sustainability is different for each one. The urbanization process is closely related to the development process.

Furthermore, urbanization is not necessarily a villain. An empirical research developed by Chen *et al.* (2022, p. 341) found that it can be “one of more effective levers for achieving SDGs”. This happens thanks to synergy between SDG 11 and others SDGs. The key point is how the urbanization process has been developed and how the citizens are included into it.

In that scenario, the discussion about smart cities shows off as an effective tool to achieve socioeconomic inclusion and sustainable development. A smart city is the one that uses information and communication technologies for improving its urban spaces (Andrade, 2023, p. 68).

Sustainable and intelligent cities and communities are the fruit that we intend to reap through the use of urban intelligence. Intelligence, as a concept, is the ability of the individuals to “understand complex ideas, to adapt effectively to the environment, to learn from

experience, to engage in various forms of reasoning, to overcome obstacles by taking thought” (Neisser, 1996, p. 77).

In the knowledge society, where everything is connected through the world wide web, urban intelligence emerges from “a socially integrated context to a spatially contingent one” (Andrade, 2023, p. 24). And, in this context, contingency involves physical space and cyberspace.

Once they are connected, the internet must be a tool for integrating people, not for separating them. Democracy only can exist with active social participation. In a phygital³ society, citizen protagonism is closely linked to access to information and communication technologies. In the words of Lévy (2005, p. 376, our translation), citizens with access to these technologies “may prove to be better informed, more politically active and more socially aware citizens than offline citizens”.

Therefore, a smart city must be able to create management structures, connected by communication webs, that aim at achieving citizen’s needs by putting them in a place of partner and leading figure (Nalini; Levy, 2017, p. 188).

Despite the importance of connecting and accessing the internet to enrich the citizen’s participation in the political conjecture, lots of people around the world are on the margin of physical and digital spaces. According to a report published in February 2025, 5.56 billion people have internet access, representing approximately 67.9% of the world’s population. This means that approximately 32% of the world’s population is still outside the reach of cyberspace connectivity (Datareportal; We Are Social; Meltwater, 2025).

³ Introduced as a concept by Philipp ‘Phill’ Klaus (2021, p. 1).

Developing a smart city idea without taking into account longitudinal aspects of the inhabitants' own characteristics and without a holistic analysis may end up exacerbating existing social inequalities, since not all residents of these cities can benefit from popular participation and the collaborative and sustainable development of urban space (Andrade, 2023, p. 72). "In this perspective, smart cities should be seen from a user-centered view with more emphasis on citizens and other stakeholders than on the technology itself" (Jiang; Geertman; Witte, 2020, p. 1641).

Although public policies for smart cities have been developed on a top-down system, it is possible framing a smart city using bottom-up policies. Actually, that must be the core principle of smart cities. In other words, a smart city must be citizen-centered.

From this perspective, social technologies provide a concrete example of how horizontal practices and diverse forms of knowledge can be valued in urban governance. They illustrate how "intelligence" in cities may also emerge from grassroots solutions and community-based knowledge, rather than exclusively from high-tech infrastructures.

The Brazilian's "Cistern Program" (in Portuguese, *Programa Cisterna*) is an example to illustrate how social technologies are created and how they can become public policies with a wide reach. Instead of relying on corporate infrastructures or digital platforms, it is grounded in local knowledge of rainwater harvesting and developed through community participation in Brazil's semi-arid region (Brasil, 2024; Brasil, 2018).

By valuing traditional practices and enabling co-production between citizens, civil society, and the state, the program demonstrates how social technologies can foster resilience and inclusion. In this sense, it exemplifies an alternative model of "smartness," one that emerges

from bottom-up processes and highlights the plurality of knowledge that should inform sustainable urban governance.

In this regard, the framework described at standard 37106:2018 from International Organization for Standardization (ISO), considered a guideline for smart cities, emphasizes that it “does not describe a one-size-fits-all model for the future of cities” (International Organization for Standardization, 2018, p. vii). Furthermore, the standard recommends “openness and transparency in the governance process, including through digitally enabled public participation models” (International Organization for Standardization, 2018, p. 18).

Although the notion of smart cities has expanded to incorporate ideas of sustainability and participation, the dominant discourse remains strongly shaped by a top-down, technocentric orientation. In practice, cities are often imagined as intelligent because of their infrastructures, not because of their people.

Such a framing restricts the transformative potential of urban innovation and underscores the need to reconfigure the debate toward citizen-centered, inclusive models of governance. The following section develops this critique and explores pathways that value horizontal approaches and social technologies as integral to smart city agendas.

4 OPEN GOVERNMENT AND THE DEMOCRATIC FRAMING OF SMART CITIES

Although technological infrastructures are often presented as the central element of smart cities, a comprehensive understanding of urban intelligence requires looking beyond devices and digital platforms. Technology alone cannot guarantee inclusion, equity, or sustainable development. Top-down approaches, driven primarily

by corporate interests and technocratic solutions, risk reproducing existing inequalities, marginalizing certain groups, and limiting citizen engagement.

In contrast, Open Government principles, including transparency, inclusive participation, accountability, and innovation, provide a framework for embedding democracy into urban governance, ensuring that policies are not merely imposed but co-created with those who inhabit the city (Open Government Partnership, 2022; Jarude, 2023).

Transparency in Open Government is not merely a legal obligation but a tool for active citizenship. While constitutional provisions and access-to-information laws establish a responsive form of transparency, Open Government aims to shift the paradigm toward active transparency, where the publication of relevant information enables society to monitor, evaluate, and participate in policy-making effectively (Zuccolotto; Teixeira, 2019). In this sense, citizen engagement becomes a continuous process rather than a one-off intervention, where feedback loops inform not only administrative decisions but also the design and implementation of urban policies, creating dynamic relationships between citizens and the state.

Integrating local and traditional knowledge into urban planning is crucial to designing smart cities that are both effective and equitable. Policies that ignore regional specificities, cultural practices, and community needs risk producing solutions that are inaccessible or unsustainable. By embedding citizens' knowledge into decision-making, governments can ensure that smart city initiatives address real problems, adapt to local contexts, and foster inclusive development (United Nations Human Settlements Programme, 2024). In this way, bottom-up approaches, exemplified by social technologies, do not merely complement technological innovations; they redefine the very

notion of urban intelligence, placing humans and communities at the core.

Although the dominant narrative of smart cities has been top-down, oriented around corporate infrastructure and centralized management, the integration of Open Government principles and social technologies illustrates an alternative, citizen-centered model. In this model, co-production, transparency, and participatory design are not ancillary features but core components of urban governance. Citizens' experiences, needs, and knowledge are continuously incorporated into policies, creating adaptive systems capable of responding to evolving challenges. By fostering collaboration between citizens, civil society, and government, smart cities can move beyond mere technological sophistication toward inclusive, democratic, and sustainable urban environments.

This democratic framing of smart cities also aligns with Sustainable Development Goal 11, which emphasizes the need for inclusive, safe, resilient, and sustainable urban communities (United Nations, 2015). When combined with Open Government principles, the bottom-up integration of social technologies provides a practical roadmap for achieving these objectives. Urban intelligence, in this perspective, emerges not solely from digital platforms or centralized planning but from plural knowledge networks, combining technological, scientific, and local expertise to generate solutions that are socially relevant, environmentally sustainable, and culturally grounded.

In summary, the democratic framing of smart cities entails rethinking urban governance in a way that prioritizes citizens as partners rather than passive recipients. By connecting digital infrastructures with social innovations and local knowledge, cities can ensure that development is inclusive, participatory, and resilient,

achieving the promise of sustainable urban intelligence while avoiding the pitfalls of purely top-down approaches.

While the prevailing models of smart cities often replicate centralized governance logics, Open Government provides an institutional and normative framework that can disrupt such hierarchies. By embedding the principles of transparency and inclusive participation into digital infrastructures, cities can move beyond the image of “governance by dashboards,” which tends to reduce complex social realities into quantifiable indicators (Kitchin, 2014). Instead, they may cultivate decision-making arenas where citizens, civil society organizations, and local communities play active roles in shaping priorities, assessing trade-offs, and monitoring outcomes.

This perspective requires recognizing that “intelligence” in cities does not emerge solely from technological efficiency but also from the capacity to integrate plural forms of knowledge, including traditional, indigenous, and community-based practices. For instance, studies on “smart urban governance” emphasize that user-centered approaches and the co-production of policies are essential to prevent technocracy and exclusion (Jiang; Geertman; Witte, 2020).

In practice, this means that participatory budgeting, digital deliberative platforms, and open-data initiatives must be designed not only for transparency but also for accessibility, enabling marginalized groups to effectively intervene in governance processes.

Moreover, linking Open Government with smart city agendas enables what some scholars call “collaborative urbanism” – an orientation where policies are built not only for citizens but with citizens (Cardullo; Kitchin, 2018). Such an approach reframes citizenship from passive data provision (through sensors, apps, and platforms) into active political agency, where communities can set goals, demand accountability, and propose locally relevant innovations. In this sense,

smart cities aligned with Open Government are less about surveillance and efficiency and more about co-creation and democratic legitimacy.

Examples such as the Cistern Program in Brazil illustrate how social technologies grounded in local wisdom can be elevated into public policy when supported by state frameworks that value participation. These experiences reveal that Open Government principles can bridge the gap between high-level strategic visions of smart cities and the everyday practices of communities, transforming governance into a dynamic, inclusive process. When combined with digital infrastructures, such grassroots solutions broaden the meaning of “smartness” to encompass resilience, cultural recognition, and distributive justice.

Finally, the democratic framing of smart cities challenges the idea of universality embedded in many technocentric models. As highlighted in ISO 37106, there is no “one-size-fits-all” pathway to urban sustainability (International Organization For Standardization, 2018).

Open Government offers the methodological and ethical compass for this plurality: it demands that each city, while connected to global frameworks like the SDGs, also honors its specific social fabric, cultural traditions, and community-based forms of knowledge. Thus, truly “smart” cities are those that are able to integrate global goals with local realities, balancing innovation with inclusiveness, and efficiency with democratic participation.

5 CONCLUSION

The reflections developed throughout this work demonstrate that the debate about smart cities cannot be restricted to the field

of technological innovation or to the modernization of urban infrastructures. While technology undoubtedly plays a central role in improving efficiency, data processing, and service delivery, it is insufficient to guarantee inclusiveness, equality, and sustainability on its own.

A city that aspires to be considered truly “smart” must go beyond devices, sensors, and platforms, to place its citizens at the core of its governance model. Only in this way will it be possible to articulate technology and democracy in a manner that fosters genuine social participation, cultural recognition, and resilient development.

The analysis revealed that Open Government emerges as a key framework for achieving this integration. By promoting principles such as transparency, accountability, inclusive participation, and innovation, Open Government offers a normative and methodological basis to reconfigure urban governance. Transparency, for example, should not be restricted to the passive obligation of granting access to information upon request, but rather understood as active, proactive, and permanent.

When governments deliberately open their data and share information in accessible formats, they enable society to monitor actions, evaluate policies, and propose improvements. Similarly, participation must not be symbolic or restricted to consultative stages, but continuous and binding, incorporating citizen perspectives into decision-making processes and ensuring that policies reflect real local needs.

Within this context, the Sustainable Development Goals (SDGs), and in particular SDG 11: Sustainable Cities and Communities, gain renewed relevance. This global pact not only emphasizes the need to make cities inclusive, safe, resilient, and sustainable, but also highlights the centrality of citizen involvement in urban planning and

management. Goals such as 11.3 and 11.4 reinforce that sustainable urbanization cannot be achieved without participatory and integrated governance, as well as respect for cultural and natural heritage. Therefore, the connection between SDG 11 and Open Government principles reveals a path toward achieving an urban intelligence that is not only technical, but also social and democratic.

A central point emphasized is that top-down approaches, traditionally dominant in the conception of smart cities, risk reproducing historical inequalities, excluding marginalized groups, and restricting innovation to a technocratic logic. By contrast, bottom-up models value local knowledge, grassroots solutions, and community-based practices. The Brazilian Cistern Program, grounded in traditional knowledge of rainwater harvesting, illustrates how social technologies can emerge from community contexts and be scaled up into public policy with national impact. Such examples demonstrate that intelligence in cities does not reside only in digital platforms but also in the creativity, resilience, and wisdom of their inhabitants.

The democratic framing of smart cities thus implies a profound paradigm shift. Instead of treating citizens as passive recipients of services or mere providers of data, they must be recognized as partners and co-creators of urban solutions. This requires the construction of collaborative arenas where governments, civil society, and local communities share responsibilities and define priorities together. Practices such as participatory budgeting, digital deliberative platforms, and open-data initiatives are important tools, but their effectiveness depends on being designed with accessibility and equity in mind, ensuring that historically excluded groups, such as the poor, women, minorities, and people without internet access, are effectively included.

Another essential element in this debate is the need to redefine the very concept of urban intelligence. Intelligence should not be

measured only by the amount of data processed or by the efficiency of algorithms, but by the capacity to integrate multiple forms of knowledge: scientific, technological, traditional, and community-based.

By valuing this plurality, cities can build solutions that are socially relevant, environmentally sustainable, and culturally grounded. This also means recognizing that there is no “one-size-fits-all” model for smart cities. As highlighted by ISO 37106:2018, each urban context has its own specificities, challenges, and opportunities, requiring tailored approaches that align global frameworks such as the SDGs with local realities.

Therefore, the future of smart cities depends on the ability to balance innovation with inclusiveness, efficiency with democracy, and technology with human values. Open Government offers the ethical and institutional compass for this endeavor, guiding urban governance toward transparency, participation, and accountability. By aligning these principles with the goals of sustainable development, it is possible to overcome the risks of technocratic and exclusionary models, building instead cities that are not only technologically advanced but also socially just and environmentally responsible.

In conclusion, the path toward smart and sustainable cities lies in the democratic reinvention of governance. It is about recognizing that technology is a means, not an end, and that the true intelligence of a city resides in its people—in their ability to participate, innovate, and co-create the future collectively. By fostering citizen-centered governance, valuing local knowledge, and embedding Open Government principles into urban policies, we can advance toward cities that fully realize their promise: spaces where innovation serves citizenship, and where democracy and sustainability are inseparable dimensions of urban intelligence.

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ANTARCTICA AND THE 2030 AGENDA: CHALLENGES AND SOLUTIONS FOR A GLOBAL COMMON GOOD

Erli Schneider Costa¹

1 INTRODUCTION

Antarctica, as a continent covering about 10% of the Earth's surface and containing nearly 70% of the planet's fresh water in its ice sheets, represents one of the most sensitive and strategic global commons for humanity (Kennicutt *et al.*, 2014). Its importance transcends the regional dimension and plays a central role in the global climate system, influencing oceanic circulation, climate, and marine biodiversity (Kennicutt *et al.*, 2015).

The recognition of Antarctica as a common heritage of humanity, embodied in the Antarctic Treaty System (established in 1959) and the Madrid Protocol (1991), reflects the urgent need to protect this territory and its fragile ecosystems against increasing anthropogenic pressures, such as tourism, fishing, and climate change (Kennicutt *et al.*, 2014; Pertierra *et al.*, 2017; Xavier *et al.*, 2016). This unique governance framework makes Antarctica a valuable example of a global commons to be preserved for present and future generations.

The singular character of Antarctica as a global common good imposes specific challenges for sustainability and environmental governance. Unlike other regions subject to national jurisdiction,

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Antarctica is governed by a pioneering international regime that seeks to avoid predatory economic exploitation and territorial conflicts, fostering collaborative scientific research and environmental conservation (Antarctic and Southern Ocean Coalition, 2024; Madani, 2023; Silberberg, 2025). This structure requires the incorporation of environmental justice as a guiding principle, to guarantee socio-environmental protection considering intergenerational equity and global solidarity (Dryzek *et al.*, 2013; Silberberg, 2025).

Additionally, the implementation of the principles of environmental justice and equitable access presents challenges due to disparities in the scientific and logistical capacities of the countries participating in the Treaty (Haward; Jackson, 2023). Nations with greater infrastructure dominate access to research opportunities and sustainable exploration, prompting debates about the need to balance the rights of less developed countries, expanding their participation and ensuring the responsible use of resources (Xavier *et al.*, 2016).

The strengthening of collaborative governance is associated with maintaining an open, inclusive, and strictly regulated space for research, making Antarctica a natural laboratory for understanding global changes and the socio-environmental dynamics interconnected with the 2030 Agenda and the Sustainable Development Goals (Gardiner *et al.*, 2025; Kennicutt *et al.*, 2015;). This chapter contributes to the academic and political debate by advocating a governance model that promotes a balance between science, environmental protection, and social justice, reaffirming the international commitment to the continent as a heritage of humanity.

The increasing geopolitical importance of Antarctica also intensifies debates on sovereignty, mineral and biological resources, and the potential impact of new maritime routes that may emerge with the melting induced by climate change. Such factors stimulate

a scientific and technological race among nations, making the balance between cooperation and competition a central element of contemporary Antarctic governance (Dodds, 2017). In this sense, the role of environmental and scientific diplomacy is highlighted in building consensus to avoid conflicts and strengthening multilateral commitments, which are essential for ensuring the continent's stability and protection.

Furthermore, the valorization of Antarctica as a global natural laboratory has fostered advances in interdisciplinary research, ranging from the biogeochemistry of polar oceans to the effects of large-scale human activities. The active presence of scientists from multiple countries reinforces the relevance of exchange and the inclusion of diverse perspectives in defining research priorities and conservation strategies. Thus, the consolidation of Antarctica as a common heritage of humanity critically depends on the effective integration between science, public policy, and sustainable development (Brooks *et al.*, 2019).]

2 THEORETICAL FOUNDATION

Antarctic governance is framed within the domain of global commons, a concept that refers to resources essential to the collective interests of humanity, which require protection through shared and equitable management. According to Ostrom (1990), commons are natural or social resources whose effective management depends on cooperation among various agents to prevent the “tragedy of the commons,” a phenomenon that occurs when uncontrolled exploitation leads to the degradation and exhaustion of the resource. Antarctica represents an emblematic scenario for these challenges, as its protection demands a balance between scientific use, environmental

conservation, and geopolitical interests (Kennicutt *et al.*, 2014; Madani, 2023; Silberberg, 2025). See also Figure 1.

Figure 1 – Global commons highlighting Antarctica alongside the atmosphere, oceans, and biodiversity. The infographic illustrates the interconnectedness of these essential resources for the planet’s sustainability, emphasizing international cooperation among scientists from more than 20 countries working collectively to protect these shared assets



Fonte: Figure created using Perplexity.ai by the author.

The notion of environmental justice becomes prominent in the Antarctic context from the need to ensure that the benefits and burdens arising from the exploitation and protection of the continent are distributed fairly, both among countries and among generations. Fraser (2009) proposes a tripartite conception of justice, which includes distributive, procedural, and recognition dimensions, which, applied to Antarctica, requires the democratization of scientific access and the consideration of cultural and environmental particularities in decision-making (Gardiner *et al.*, 2025; Silberberg, 2025).

The Antarctic Treaty System (ATS), ratified in 1959 and strengthened by the Madrid Protocol in 1991, forms the legal framework that supports this shared governance. ATS imposes a prohibition on military and commercial mineral activities and establishes commitments of strict environmental protection, while simultaneously promoting international scientific cooperation (Antarctic and Southern Ocean Coalition, 2024; Xavier *et al.*, 2016). However, asymmetries among member countries regarding scientific and logistical capacity call into question the effectiveness of equitable access and environmental justice on the continent (Haward; Jackson, 2023). Therefore, expanding participation and inclusive governance have emerged as priorities for the regime's sustainability.

It is noteworthy that, in recent years, the literature has highlighted the relevance of institutional and ethical dimensions in the collective management of Antarctica's commons. The contemporary debate has expanded beyond environmental issues and now also encompasses cognitive justice and the recognition of diverse knowledge in international decision-making arrangements (Brooks *et al.*, 2019). In particular, the connection between environmental governance, rights of access to information, and public participation has led to enhanced transparency and accountability tools, which are fundamental for the legitimacy of decisions in the Antarctic context (Chown *et al.*, 2022).

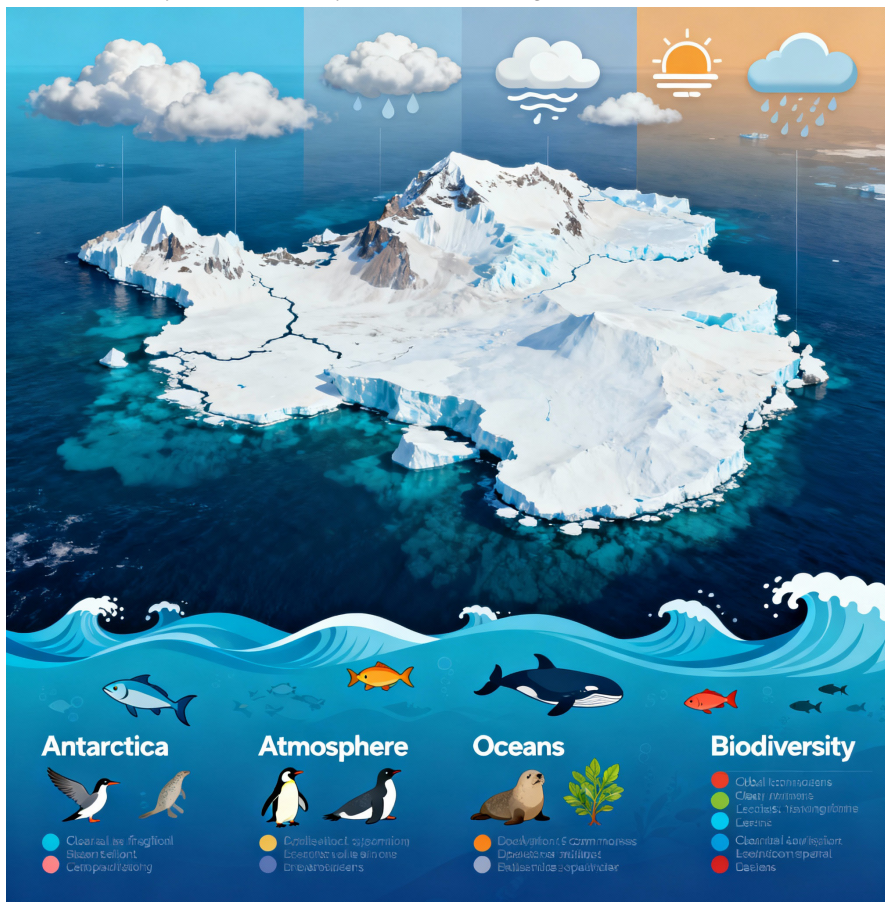
Another key aspect is the dynamic between scientific cooperation and geopolitical competition, which shapes the present multilateral regime. Although Antarctica benefits from the principle of peaceful use and the free exchange of scientific data, latent disputes over resources and strategic influence persist among the most active member countries (Dodds, 2017; Silberberg, 2025). These tensions highlight the need for robust institutional mechanisms to preserve international collaboration in the face of diverging national interests.

Finally, the production of interdisciplinary knowledge on climate change, biodiversity, and the resilience of polar ecosystems has contributed to the development of new paradigms of adaptive management, recognizing the unpredictability and complexity of Antarctic environmental processes. By integrating approaches from governance, participatory science and environmental justice, the literature indicates pathways to strengthen sustainability and inclusion in the future of Antarctica (Hughes *et al.*, 2018).

3 ANTARCTIC TREATY SYSTEM: GOVERNANCE, EQUITABLE ACCESS, AND ENVIRONMENTAL PROTECTION

The Antarctic Treaty System (ATS) forms the legal and political foundation for the governance of the continent, establishing a unique international regime whose pillars are peace, science, and environmental protection (Silberberg, 2025). The Treaty, signed in 1959 and currently endorsed by more than 50 countries, designates Antarctica as a zone exclusively dedicated to scientific research and international cooperation, prohibiting military activities and commercial mineral exploration (Antarctic and Southern Ocean Coalition, 2024; Madani, 2023; Silberberg, 2025).

Figure 2 – This infographic illustrates the concept of global commons, highlighting Antarctica alongside the atmosphere, oceans, and biodiversity as essential shared resources vital for Earth's sustainability. Antarctica represents a unique global commons governed by international cooperation to protect its fragile ecosystems. The atmosphere regulates climate and weather patterns crucial for life. The oceans support marine biodiversity and regulate global climate through circulation. Biodiversity encompasses the varied life forms that maintain ecological balance. Together, these global commons require collective stewardship to ensure environmental justice, equitable access, and preservation for present and future generations



Fonte: Figure created using Perplexity.ai by the author.

In particular, the Madrid Protocol of 1991 strengthens environmental commitments by establishing comprehensive protection of the Antarctic environment, requiring rigorous environmental impact assessments for all activities (Gardiner *et al.*, 2025). This structure seeks to ensure that human impacts are minimized, preserving the continent's fragile ecosystems and guaranteeing that actions remain environmentally sustainable (Kennicutt *et al.*, 2014; Xavier *et al.*, 2016).

However, despite the ATS's success in promoting cooperation and environmental protection, challenges related to equitable access and environmental justice persist. Economic and technological asymmetries among signatory countries are reflected in inequalities in access to research opportunities and influence in Treaty decisions (Haward; Jackson, 2023). These disparities raise questions about true inclusion and representation, especially for developing countries that possess scientific and conservation interests but face logistical and financial limitations.

To address these gaps, recent proposals focus on increasing democratic participation in the ATS, promoting mechanisms that facilitate equitable access, decision transparency, and intergenerational justice, including the preservation of environmental potential for future generations (Madani, 2023; Gardiner *et al.*, 2025; Silberberg, 2025). Additionally, incorporating socio-environmental issues in the global context reinforces the continent's importance in achieving the Sustainable Development Goals of the 2030 Agenda (Kennicutt *et al.*, 2015).

One of the further challenges lies in adapting the system to rapid environmental and technological changes. The need to incorporate new technologies for environmental monitoring, data sharing, and communication among member states has demanded revisions of institutional practices and strengthening of collaborative

networks. The flexibility and resilience of the ATS are fundamental to maintaining its relevance in the face of contemporary challenges (Hughes et al., 2018).

Furthermore, the ATS faces increasing complexity from the interaction between global political and environmental interests, necessitating continuous building of trust and dialogue among parties. Inclusive governance based on scientific evidence emerges as an essential approach to avoid conflict and ensure conservation of the continent for the benefit of humanity as a whole (Chown *et al.*, 2022).

In summary, the ATS offers a remarkable model of international environmental governance that demands constant institutional innovation to balance scientific, political, and environmental interests in a fair and sustainable manner, aligning with contemporary demands for environmental justice and protection of global commons.

4 ENVIRONMENTAL CHALLENGES IN ANTARCTICA

Antarctica faces a series of environmental challenges arising not only from global climate change but also from direct and indirect human activities, which threaten the ecological integrity of one of the planet's most sensitive ecosystems. Global warming has caused accelerated melting of ice sheets, changes in ocean circulation, and shifts in local biodiversity, impacting the stability of biogeochemical systems on the continent and in the adjacent Southern Ocean (Kennicutt *et al.*, 2014; Kennicutt *et al.*, 2015).

In addition to climate change, increasing pressures from polar tourism and commercial fishing also pose significant risks of environmental degradation. Although regulated, the growth of tourism raises the risks of introducing invasive species and local pollution,

while fishing, especially of krill, impacts the marine food chain and can compromise species dependent on these resources (Pertierra *et al.*, 2017; Xavier *et al.*, 2016). This situation demands strengthening of monitoring and environmental regulation measures to ensure that sustainable use prevails over uncontrolled growth.

Another important challenge lies in managing the cumulative impact of these pressures, combined with the need for advances in scientific knowledge to support effective policies. Limited monitoring capacity and logistical difficulties hinder continuous and comprehensive assessments, requiring investments in innovative technologies and expanded international cooperation (Haward; Jackson, 2023; Kennicutt *et al.*, 2015).

The increase in human activity, even if regulated, also demands rigorous control to prevent visitors' temporary presence from causing irreversible impacts on fragile Antarctic habitats. Strict waste management policies, biodiversity monitoring, and protocols to prevent the introduction of exotic species are essential to avoid local degradation (Pertierra *et al.*, 2017). Moreover, the emerging participation of scientific communities from developing countries has shown potential to diversify scientific production and enhance collaborative environmental surveillance (Chown *et al.*, 2022).

Recent studies indicate that Antarctica has undergone abrupt and interconnected changes, such as the collapse of sea ice in parts of West Antarctica, the decline of deep ocean circulation, and reductions in populations of iconic species like the emperor penguin (Abram *et al.*, 2025). These processes point to risks of irreversible ecological tipping points, making effective international measures for adaptive management and climate impact mitigation urgent.

The increasing salinization of surface waters in the Southern Ocean is a surprising and potentially disruptive phenomenon for

marine ecosystems, accelerating the melting of floating sea ice and altering regional and global oceanic dynamics (Silvano *et al.*, 2025). This climatic upheaval reflects the complexity and interconnectedness of Antarctica's natural systems with global climate systems.

These aspects reinforce the need for policies and governance based on environmental justice, capable of promoting a balance between scientific knowledge development, environmental preservation, and equitable access to resources and protected areas for all Antarctic Treaty System member countries (Madani, 2023; Gardiner *et al.*, 2025; Silberberg, 2025).

Thus, Antarctica's environmental sustainability depends on the ATS's capacity to respond to these challenges integrally, planning actions that guarantee the conservation of the Antarctic biome for future generations, aligned with the global commitments of the 2030 Agenda.

5 IMPACTS OF CLIMATE CHANGE ON ANTARCTIC GEOPOLITICS

The rapid environmental transformations caused by climate change in Antarctica have generated direct impacts on the geopolitical dynamics of the continent. The accelerated melting of ice shelves and ice sheets has increased strategic interest in the region, both for its essential role in regulating global climate and for the potential access to natural resources, new navigation routes, and spaces for advanced scientific research (Dodds, 2017; Chown *et al.*, 2022). The reduction of sea ice enables longer navigation periods and intensifies the presence of ships from various countries, raising the need to review international

norms and agreements to prevent conflicts and ensure peace and environmental protection.

The opening of maritime passages and the possibility of future exploration of previously inaccessible areas have sparked diplomatic discussions and discreet rivalries among global powers. Disputes over jurisdiction, suspended territorial claims, and sovereignty over mineral and biological resources become more sensitive in a context of environmental instability. This situation increases pressure on the Antarctic Treaty System (ATS), which is now tested for its capacity to mediate, adapt, and maintain international cooperation in the face of unprecedented challenges (Silberberg, 2025).

Beyond the strategic aspect, climate change is reinforcing the perception of Antarctica as a natural laboratory for multilateral negotiations on global governance, environmental justice, and common security. The role of international organizations, scientific diplomacy, and transnational collaboration becomes fundamental in ensuring transparency, knowledge sharing, and the promotion of robust agreements amidst climate volatility, aiming to prevent the commercialization of the continent and safeguard its status as a common heritage of humanity (Chown *et al.*, 2022).

Recent changes in Antarctic climate and environmental patterns, such as the increasing salinity of surface waters in the Southern Ocean, have the potential to drastically alter oceanic dynamics and regional and global climate. The abrupt change in salinity facilitates sea ice melt and impacts ocean circulation, affecting wind currents that influence distant climate systems and the stability of marine ecosystems (Silvano *et al.*, 2025). These environmental changes could accelerate geopolitical shifts by altering access conditions and strategic interests in the region.

The growing attention of global powers toward natural resources and Antarctica's importance in climate regulation has intensified scientific and military activities in the region, even under the aegis of the ATS. The delicate balance between cooperation and competition requires strengthening multilateral institutions to prevent conflicts, promote data sharing, and ensure the continent remains protected against purely economic and geopolitical interests (Silberberg, 2025).

The continent's increasing vulnerability to climate change also highlights the importance of initiatives promoting global climate justice, recognizing disproportionate impacts on remote communities, especially in tropical and subtropical regions. Collective responsibility and multilingual commitment are essential to ensure Antarctica continues functioning as a climate stabilizer, preventing conflicts and geopolitical disputes from compromising its integrity and planetary environmental health (United Nations Environment Programme, 2023).

6 SCIENTIFIC COOPERATION AND PROTECTION OF THE COMMONS IN ANTARCTICA

Scientific cooperation in Antarctica constitutes the central pillar of the continent's governance, fostering the construction of essential collective knowledge for understanding and protecting its fragile ecosystems. The Antarctic Treaty System (ATS), by promoting the free exchange of information and collaboration among countries, ensures that scientific research is conducted within rigorous parameters of sustainability and socio-environmental responsibility (Kennicutt *et al.*, 2014; Xavier *et al.*, 2016).

This collaborative dynamic is fundamental for managing the global commons represented by Antarctica, which include not only the natural resources preserved in its ice sheets and oceans but also the scientific knowledge generated and shared, an indispensable element for formulating effective public policies at the international level (Kennicutt *et al.*, 2015; Madani, 2023; Silberberg, 2025).

Furthermore, environmental protection in the region is strongly supported by multilateral scientific programs that integrate monitoring activities, impact assessments, and technological development to minimize human interference. This network of joint scientific efforts strengthens environmental governance and activates adaptive mechanisms in response to the rapid climate changes affecting the continent (Gardiner *et al.*, 2025; Haward; Jackson, 2023).

However, justice in access to scientific research opportunities remains a challenge. Countries with greater logistical and financial capacity dominate international projects, while less developed nations face barriers to contributing to and benefiting from these studies, limiting representativity and equity in the use and protection of the commons (Xavier *et al.*, 2016). Thus, discussions and proposals to democratize scientific access and guarantee that knowledge produced in Antarctica is truly global and inclusive are expanding.

Another relevant aspect of scientific cooperation is the direct contribution to the Sustainable Development Goals (SDGs), especially considering the interconnectedness between Antarctic natural systems and global environmental change processes (Kennicutt *et al.*, 2015). The integration of science, policy, and civil society strengthens the international commitment to protect this common heritage of humanity through evidence-based practices and collective responsibility.

7 ENVIRONMENTAL EDUCATION, SCIENTIFIC COMMUNICATION, AND SOCIAL ENGAGEMENT IN ANTARCTICA

Environmental education plays a fundamental role in raising global awareness of Antarctica's importance, contributing to the continent's recognition as a common heritage of humanity (Xavier *et al.*, 2024). Training programs for researchers, tourists, and communicators help internalize good environmental practices and promote a culture of respect for international environmental protection standards and scientific ethics (Brasil, 2025).

Scientific communication is strategic both in bringing Antarctica closer to society and in supporting public debates and global policies, especially in the face of the climate crisis and rapid changes in polar ecosystems (Xavier *et al.*, 2016; Xavier *et al.*, 2024). Reports, audiovisual materials, accessible language articles, and dissemination through digital media increase interdisciplinary engagement and public understanding of the risks and importance of the Antarctic continent (Chown *et al.*, 2022).

Social engagement in Antarctic conservation is also advancing with citizen science projects, educational campaigns, and the integration of school communities, expanding the reach of scientific and environmental actions (Xavier *et al.*, 2016; Xavier *et al.*, 2024). These initiatives enhance environmental monitoring, data collection, and the fight against fake news, legitimizing democratic debate in the context of international governance and promoting equity in access to knowledge.

The development of educational materials, online courses, and immersive experiences (such as live streams and real-time documentaries) allows diverse audiences to build a global collective

identity oriented toward sustainability and the valuing of science, especially on polar topics (Chown *et al.*, 2022). Encouraging the participation of women, youth, and minority groups in Antarctic expeditions, conferences, and projects addresses equity agendas and renews the commitment to epistemic and social justice (Seag *et al.*, 2023).

Communication and environmental education initiatives aligned with the Madrid Protocol and the Antarctic Treaty System stimulate international cooperation, the formation of scientific networks, and collaborative practices in the development of research and public policies (Brasil, 2025; Chown *et al.*, 2022). Strengthening these actions is key to mitigating environmental risks, legitimizing the protection of global commons, and ensuring that the fruits of knowledge generated in Antarctica benefit all of society.

Finally, environmental education and scientific communication around Antarctica must remain continuously integrated with multilateral agendas, ensuring transparency, social inclusion, and the adoption of scientific evidence as the basis for global decisions about the future of the continent and the planet (Chown *et al.*, 2022; Xavier *et al.*, 2016; Xavier *et al.*, 2024).

8 CONCLUSIONS

Antarctica has consolidated its status as a global common good, becoming a symbol of planetary interdependence and international cooperation in science and conservation. Grounded in the principles of environmental justice, its innovative governance enables not only the monitoring of biodiversity but also the development of public policies that integrate science, society, and sustainability.

In the theoretical field, building inclusive governance models and the continuous pursuit of socio-environmental justice show how international management of Antarctica can inspire broader arrangements for other planetary commons. Debates on representation, equity, and transparency reinforce the commitment to innovative solutions amid growing environmental pressures.

The Antarctic Treaty System marks a milestone for environmental diplomacy but faces the constant challenge of adapting to the pace of climate transformations and global political uncertainties. The resilience of the Antarctic regime will depend on the collaborative renewal of institutions and the relentless quest for equity and inclusion among involved nations.

In the face of climate and ecological challenges, environmental preservation and justice in scientific access remain urgent priorities. The current scenario requires strengthening preventive policies, innovation in monitoring, expanded international participation, and respect for local specificities so that Antarctica continues to serve as a laboratory for knowledge and peace.

Climate change reshapes southern geopolitics, redefining interests and risks for the continent and highlighting the importance of multinational alliances, scientific diplomacy, and shared commitments to peace. Only collective and preventive engagement can guarantee that Antarctica maintains its stabilizing function in global environmental systems.

International scientific cooperation is a pillar of a sustainable and inclusive model for Antarctica, integrating practices, data, and innovations for the future of the continent and the planet. Encouraging knowledge exchange, equitable access, and global co-responsibility reinforces the centrality of science as a tool to protect the commons.

Finally, environmental education, scientific communication, and social engagement arise as fundamental mobilizing forces to transform generated knowledge into public action. Only with transparency, inclusion, and collaborative networks will it be possible to maintain Antarctica as a symbol of hope and collective commitment for future generations.

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HEALTH AS THE LAST FRONTIER OF DIGNITY IN PRISION: AN EPIDEMIOLOGICAL ANALYSIS IN CEARÁ

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1 INTRODUCTION

The prison environment represents one of the most socially vulnerable spaces, where the deprivation of liberty often extends to

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the denial of fundamental rights, making health the last frontier for preserving human dignity. Tuberculosis (TB), caused by *Mycobacterium tuberculosis*, emerges as a marker of inequity in these institutions, being the world's leading infectious disease and a serious public health problem.

In Brazil, which in 2014 had the fourth-largest prison population in the world, people deprived of liberty (PDL) face a risk of contracting TB that can be up to 34 times higher compared to the general population. To grasp the scale of the problem, by 2015, the World Health Organization (WHO) was already registering 10.4 million new cases and 1.4 million deaths from TB worldwide. In the same year, the incidence rate in Brazil for the general population was 30.9 cases per 100,000 inhabitants, a baseline figure that helps contextualize the disparity found in the prison system.

This alarming disparity led the National Tuberculosis Control Program (PNCT) to designate the PDL as one of the priority groups for surveillance and care, alongside other vulnerable populations. The living conditions in prison, marked by deprivation, psychosocial issues, and precarious access to health services, intensify risks and deepen inequalities.

Despite a robust Brazilian regulatory framework, which includes the Federal Constitution, the Criminal Execution Law (LEP), and the National Policy for Comprehensive Healthcare for People Deprived of Liberty in the Prison System (PNAISP), the sanitary reality of the Brazilian prison system drastically deviates from legal guarantees. This discrepancy is also reflected at the international level, challenging the fulfillment of treaties such as the «Nelson Mandela Rules» and the goals of the 2030 Agenda, particularly Sustainable Development Goal (SDG) 3, which aims to ensure healthy lives, and SDG 10, which seeks to reduce inequalities.

In the state of Ceará, the subject of this chapter, the epidemiological scenario starkly reflects this crisis. Between 2015 and 2024, 3,544 cases of tuberculosis were reported among the incarcerated population. In 2019, the disease's incidence rate reached a peak of 1,907.2 cases per 100,000 inmates, a value frighteningly higher than the rate of 30.9 cases per 100,000 inhabitants recorded for the general population in Brazil in 2015. This abysmal difference not only quantifies vulnerability but also exposes a systemic failure in the protection of health and life.

Given this context, this chapter's overall objective is to use official national epidemiological data to identify the health situation of the incarcerated population in Ceará, contrasting the reality of the data with the guarantees provided by Brazilian law, international treaties, and the 2030 Agenda goals. The aim is to reveal how the neglect of health in prison perpetuates a cycle of disease, exclusion, and human rights violations that must be discussed based on technical and scientific evidence.

2 THE EPIDEMIOLOGICAL PROFILE OF THE INCARCERATED POPULATION IN CEARÁ

An analysis of the epidemiological profile of the people deprived of liberty (PDL) in Ceará reveals a scenario of extreme vulnerability, where the prison environment acts not only as a reservoir of diseases but also as a powerful catalyst for their dissemination.

The structural conditions of incarceration, marked by overcrowding and unhealthy conditions, turn prison units into incubators for pathogens, with devastating consequences for the health of inmates and, by extension, for public health in general.

Tuberculosis (TB), in particular, emerges as the epicenter of this health crisis, providing quantifiable data that exposes the magnitude of state neglect. Between 2015 and 2024, 3,544 cases of tuberculosis were reported among the PDL in Ceará, a number that, in itself, signals a serious endemic situation (Silva; Santos; Souza, 2025).

The year 2019 represents the peak of this crisis, with 476 cases and an alarming incidence rate of 1,907.2 cases per 100,000 people deprived of liberty (Silva; Santos; Souza, 2025). To contextualize the severity of this indicator, the incidence rate in the general population of Ceará in 2024 was 43.7 per 100,000 inhabitants (Ceará Department of Health, 2025).

The literature establishes an unequivocal causal link between TB transmission and environmental factors such as overcrowding, inadequate ventilation, and poor nutrition, which are endemic conditions in the Brazilian prison system (Human Rights Watch, 1998; Ministry of Health, 2012; Sá; Lima; Martins, 2022; Sanchez; Carcereri, 2015; Sanchez; Santos; Silva, 2013).

Thus, the TB incidence rate ceases to be merely a health statistic and becomes an empirical measure of unsanitary conditions and disregard for human dignity, providing concrete evidence for the legal thesis of an «Unconstitutional State of Affairs» (National Council of Justice, 2023).

The demographic profile of those affected reinforces the image of a disease that impacts a specific and vulnerable population: predominantly male (95.57%) and young, with 71.67% of cases concentrated in the 20-34 age group (Silva; Santos; Souza, 2025). Geographically, the cases are concentrated in municipalities that house large penitentiary complexes, with a focus on Itaitinga, which is responsible for 50.19% of the notifications and holds about 59.3% of the state's prison population (Silva; Santos; Souza, 2025).

Table 1 – Distribution and incidence rate of TB cases in PDL from 2015 to 2024, Ceará

Ano	Frequência	PPL	Incidência
2015	324	24,032	1348.202397
2016	206	24,472	841.7783589
2017	340	26,773	1269.93613
2018	448	29,024	1543.550165
2019	476	24,958	1907.204103
2020	364	22,927	1587.647752
2021	354	23,222	1524.416502
2022	330	22,074	1494.97146
2023	341	21,234	1605.915042
2024	361	*	*
Total	3544	218,716	1620.366137

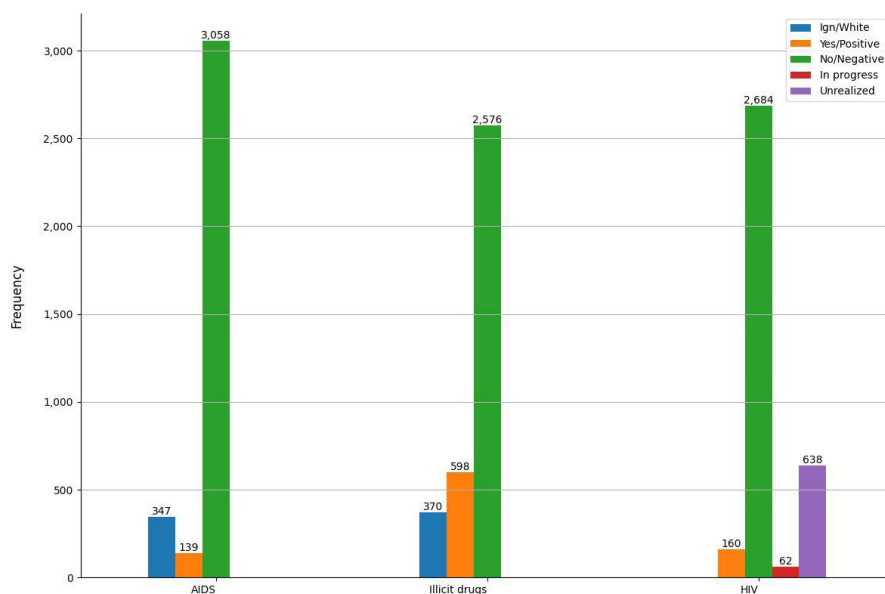
Source: Notifiable Diseases Information System (2025).

*The incidence rate for 2024 could not be calculated due to a lack of reports on the prison population for the year.

The system's failure is not limited to prevention; it extends critically to treatment. The outcomes of TB cases in the Ceará PDL are drastically below the goals established by the Ministry of Health, which recommends a cure rate of at least 85% and a dropout rate of no more than 5% (Ministry of Health, 2020).

These numbers reveal a breakdown in the chain of care, where the administrative and security logistics of the prison system override and nullify the logic of health care, which is essential for therapeutic success and for preventing the development of drug-resistant strains. The high proportion of ignored outcomes also suggests a collapse of the intramural epidemiological surveillance system itself, indicating that the reality may be even more serious than official data record.

Graph 1 – Comorbidities related to TB cases in PDL from 2015 to 2024, Ceará



Source: Notifiable Diseases Information System (2025).

The tuberculosis crisis does not occur in isolation, as it intertwines with other health conditions, forming a systemic complex exacerbated by the prison environment. Among TB cases in the Ceará PDL, 5.23% of individuals tested positive for HIV, and 3.92% had already developed Acquired Immunodeficiency Syndrome (AIDS). Additionally, 16.87% of TB cases were associated with illicit drug use (Silva; Santos; Souza, 2025).

Although there is no specific public data on the prevalence of HIV in the Ceará prison population, national and international studies consistently show that the prevalence of this infection is substantially higher in the prison environment compared to the general population (Gondim; Silva; Andrade, 2015; Prellwitz; Hoffmann; Böttcher, 2013).

Risk factors such as sharing syringes and unprotected sex are exacerbated in an environment of confinement and violence. For

comparison, in the general population of Ceará, the HIV detection rate was 23.5 per 100,000 inhabitants in 2022 (Rodrigues; Farias; Lima, 2024; Ceará Department of Health, 2023).

The occurrence of TB, HIV, and substance use is not a coincidence but the manifestation of a syndemic, where diseases interact synergistically, mutually worsening each other. HIV infection compromises the immune system, drastically increasing the risk that a latent *Mycobacterium tuberculosis* infection will progress to active disease (Silva; Santos; Souza, 2025; Naves; Cruz; Costa, 2024).

Meanwhile, drug use can lead to behaviors that increase the risk of HIV transmission and, at the same time, weaken the body and decrease adherence to tuberculosis treatment (Silva; Santos; Souza, 2025; Gondim; Silva; Andrade, 2015). The prison environment, with its psychosocial stressors, violence, overcrowding, and lack of adequate health services, functions as the social and structural catalyst that unites these epidemics, amplifying their combined negative impact far beyond the sum of their individual effects.

In addition to TB and HIV, a spectrum of other illnesses, although underreported, aggravates the health situation in Ceará's prisons. The lack of specific and localized data on viral hepatitis and dermatological diseases does not indicate the nonexistence of these diseases but rather a systemic failure in intramural surveillance, diagnosis, and notification.

A systematic review of the prevalence of hepatitis C (HCV) in Brazilian prisons found a general rate of 13.6% (Magri; Silva; Santos, 2015), a value dramatically higher than that of the general population. The severity of hepatitis C is underscored by the 2024 Epidemiological Bulletin on Viral Hepatitis, which notes that in Brazil, this infection accounts for 40.6% of viral hepatitis cases and an impressive 75.9% of deaths related to these diseases (Ministry of Health, 2024).

Furthermore, the risk factors for HCV transmission are practically identical to those for HIV and TB, with the sharing of sharp objects (including needles and razor blades) and precarious hygiene conditions (Gondim; Silva; Andrade, 2015; Magri; Silva; Santos, 2015). Therefore, it is epidemiologically implausible that Ceará's prisons, which are hyperendemic for TB, do not also have a high prevalence of viral hepatitis.

Similarly, dermatological conditions, such as scabies (scabies), are direct indicators of overcrowding and deficient hygiene. Scabies outbreaks are recurrent in the prison system and serve as sentinel events, signaling a collapse in basic sanitation and public health measures (Gurgel, 2018; Martins; Oliveira; Souza, 2020; National Secretariat for Penal Policies, 2024).

Thus, the data gap on these illnesses in Ceará is, in itself, a relevant finding. It reveals a «hidden spectrum» of diseases, whose true burden is systematically underestimated due to a lack of active screening, diagnosis, and notification, in direct violation of the fundamental principles of public health surveillance.

3 BETWEEN THE LAW AND THE REALITY OF THE BRAZILIAN PRISON SYSTEM

The epidemiological crisis documented in Ceará's prisons is not due to a gap in legislation but to a profound and persistent chasm between a robust regulatory framework, which guarantees the right to health, and the brutal reality of incarceration in Brazil. An analysis of this challenge reveals a systemic failure of the state to fulfill its most elementary duties of protection, resulting in the institutionalization of rights violations and their consequent legal accountability.

Brazil has one of the most comprehensive sets of rules for protecting the health of the incarcerated population, aligned with the highest international human rights standards. This framework is based on the 1988 Federal Constitution, which in its Article 196 enshrines health as a right for all and a duty of the state, without any kind of discrimination (Brazil, 1988).

This universal principle is detailed for the prison context by the Criminal Execution Law (LEP), which in its Article 14 establishes the mandatory nature of health care for the prisoner and interned person, of a preventive and curative nature, comprising medical, pharmaceutical, and dental care (Brazil, 1984). The LEP also ensures that when the penal establishment is not adequately equipped, assistance must be provided elsewhere (Brazil, 1984).

Meanwhile, the World Health Organization (WHO) frames prison health as an inalienable component of public health, emphasizing the state's responsibility to provide care and maintain healthy living conditions, which are essential for preventing the spread of communicable diseases like tuberculosis (World Health Organization, 2014).

The material reality of the Brazilian prison system represents the antithesis of the normative ideal, as the structural conditions of prisons function as the main vectors of the diseases analyzed in the epidemiological profile. Overcrowding is pointed out by the literature as the primary factor in the spread of tuberculosis, turning cells into high-risk environments for transmission (Alves *et al.*, 2022; Sá; Lima; Martins, 2022; Sanchez; Carcereri, 2015).

This condition is aggravated by the penal architecture, characterized by deficient ventilation and unhealthy conditions, which creates the ideal microclimate for the proliferation of respiratory and dermatological diseases (Human Rights Watch, 1998; c, 2012).

Inspection reports and academic studies describe the food provided as insufficient in quantity and of poor nutritional quality, leading to a state of chronic food insecurity that weakens the inmates' immune systems and makes them more susceptible to infections (National Council of Justice, 2015; Jornal da USP, 2022; National Secretariat for Penal Policies, 2024; Zanchetin; Santos; Gomes, 2016). This situation has been described as a «hunger penalty», an additional and illegal punishment imposed on the incarcerated (Jornal da USP, 2022).

The prison architecture, the management of the prison population, and the allocation of resources are, therefore, not neutral elements. They constitute health determinants that, in their current state, are intrinsically pathogenic. The physical and organizational structure of the prison itself functions as an agent that produces diseases, turning incarceration into a sentence of illness.

It was the convergence of these factors that led the Federal Supreme Court (STF), in the judgment of the Allegation of Non-Compliance with a Fundamental Precept (ADPF) 347, to recognize the situation of the Brazilian prison system as an «Unconstitutional State of Affairs.» This historic decision formalized the finding of a massive, widespread, and persistent violation of fundamental rights, resulting from the systematic omission of public authorities in guaranteeing minimum conditions of dignity (National Council of Justice, 2023; Brazil, 2023; Viola, 2021).

3.1 STATE RESPONSIBILITY AND SYSTEMIC OMISSION

The Court understood that the state has a specific duty of protection, and its failure to guarantee the life and integrity of the

prisoner creates a duty to compensate. This responsibility extends to moral and material damages caused by degrading conditions of incarceration (Barroso, 2023).

Despite the clear legal duty and established legal responsibility, state omission persists. Reports from bodies like the National Council of Justice (CNJ) and human rights organizations like Conectas document the chronic failure to implement the PNAISP, the continuation of inhumane and degrading treatments, and the public authorities' inertia in reversing the «Unconstitutional State of Affairs» (National Council of Justice, 2022; Conectas Direitos Humanos, 2020; 2024; Ministry of Human Rights and Citizenship, 2023).

The health crisis in prisons is, therefore, the direct and measurable result of this documented and legally recognized failure. The persistence of this situation, despite a defined legal framework and a jurisprudence that affirms state responsibility, points to a phenomenon of normalization of illegality.

4 CONCLUSION

The epidemiological and legal analysis of health in the Ceará prison system converges on the understanding that the prison, in its current configuration, operates as an accelerator of health inequities, systematically violating fundamental rights and representing a threat that transcends the walls of prisons. Overcoming this crisis requires a paradigm shift, where public health and human dignity are placed at the center of penal policy.

The data presented demonstrate that the hyperendemicity of infectious diseases, with tuberculosis as its most visible exponent, is the direct result of a prison environment defined by chronic structural

failures: overcrowding, unsanitary conditions, inadequate ventilation, and poor nutrition.

Furthermore, the prison system not only confines individuals who already carry social and health vulnerabilities but subjects them to a process that amplifies these vulnerabilities, transforming social inequality into drastically unequal health outcomes.

In this sense, the denial of the right to health in prison is an intrinsic characteristic of a system that, as recognized by the STF, massively violates constitutional precepts. This reality represents a significant potential obstacle to fulfilling Brazil's commitments in the 2030 Agenda by perpetuating a cycle of disease and marginalization that disproportionately affects the most vulnerable populations.

Finally, health in prison cannot be treated as a marginal issue or a privilege, but as an imperative of justice, a fundamental right, and an indispensable public health strategy. Therefore, the epidemiological lens offers the most forceful critique of public policy design, urging a move beyond a punitive vision that sickens and kills, and toward a penal policy that, while depriving individuals of liberty, does not deprive them of the right to life and dignity.

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THE INVISIBLE FACTOR OF LAW: THE BRAZILIAN ARMY AND (NON) DEMOCRATIC CONSTITUTIONS OF BRAZIL

Germano Schwartz¹

1 INTRODUCTORY REMARKS

From 2012 to 2023, I had the privilege of leading the Work Group in Social and Legal Systems of the Research Committee on the Sociology of Law. Podgórecki (1989) has been the one to provide active support and encouragement to the Work Group, a founder and perhaps the greatest participant of the RCSL.

The Research Committee on the Sociology of Law, according to Podgórecki (1989, p. 11), was created in 1962, at the Congress of the ISA (International Studies Association) in Washington, under the following guidelines: to study the nature of the Law; to enumerate various data on the Sociology of Law that existed at the time; to defend the position of a sociological theory based on comparative studies from different societies; to encourage association between the various centers for sociology dispersed throughout the world.

Since the creation of the Research Committee for the Sociology of Law, Podgórecki has defended the idea that *Law's prestige in a determined society depends on its movements* (Podgórecki, 1989, p. 3) and, in this sense, in agreement with Adam's reflections, the Research Committee for the Sociology of Law has come to be seen as a professional path towards the Sociology of Law.

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The Work Group, as conceived by Podgórecki himself, upon lending its services to the Research Committee for the Sociology of Law (RCSL), follows a distinct thematic specialization. Traditionally, it dedicates itself to discussions on the theoretical bases of the Sociology of Law. The central objective is to strengthen the theoretical-conceptual framework of the discipline. In this sense, the Work Group has always been open to the problematics of multiple theory socio-juridical matrixes, using classical approaches to contemporary ones.

Despite delineating a considerable volume of hypotheses, besides his being one of the giants in the sociology of law,² the grand efforts of Adam Podgórecki have never come within a sniff of “the last flower of Lacio” (the Portuguese language) in terms of translation. The fact that this trajectory for translation has been overlooked is even more uncanny considering how much the course of events in Brazil’s political life mirrors what has happened in Poland. I intend to make room for an exposition of the similarities between countries in this paper, following Podgórecki’s idea that “law is not deprived of the possibility of independent action and influence” (Podgórecki, 1976, p. 2).

From 1988 Brazil began to live its democratic period where the functions of the Army remained linked to those constitutionally adequate for and conforming with the Democratic State of Law foreseen in the constitutional text. The election of Bolsonaro as President of the Brazilian Republic – captain, once upon a time, of the Army that expelled him for inconvenient behaviors - reminded the country that the Army as an institution has never been distant from democratic normality. Quite to the contrary.

² Adam Podgórecki is the name of the greatest prize given by the RCSL to researchers of the sociology of law in the world. More details can be found at RCSL website.

The events of the 8th of January, 2023, when protestors invaded and vandalized the three branches of government in Brasilia, clearly and sadly with reference to the events at the American Capitol, offer a rich opportunity to analyze the operation of invisible factors of Law as proposed by Adam Podgórecki (1997, p. 1). These factors, that include non-encoded social norms and indicate the public perception of the legitimacy of institutions, alongside levels of trust in the legal system, develop a crucial role in the way that Law is seen and applied in a society.

Podgórecki (1963) defended the idea that the prestige and effectiveness of Law are intrinsically linked to these subjacent social movements. In the Brazilian case, political frustration and extreme polarization exposed the fragility of the public's confidence in democratic institutions, showing how Law, although formally robust, can be influenced by invisible elements such as public perception and social legitimacy. January's invasion illustrates in a clear way how the collapse of these invisible factors can lead to a crisis of legitimacy and challenge the established legal order, reflecting the thesis of Podgórecki (2023) that Law is not only a set of norms, but a social phenomenon deeply rooted in and influenced by cultural and political factors.

2 AIM OF THE STUDY AND RESEARCH HYPOTHESIS

The objective of this study is to analyze the concept of Law's invisible factors in Adam Podgórecki, thereby correlating it with Brazilian constitutional sociology and, specifically, with the role of the Army in the democratic pendulum of the country, illustrated by way of its Constitutions. It is understood that there are also possibilities for comparing other concepts made by the Polish author, such as the

Law as a petrifying instrument for oppression (Podgórecki, 1997). However, given the limit of space in this article, observation maintains itself to be connected to the idea of the Brazilian Army as an invisible factor of Law to place democracy at risk and, therefore, the Brazilian Constitution itself.

3 THE INVISIBLE FACTORS OF LAW

It is known that Adam referred to the way “the law operates, shaped by at least three distinct levels, by a series of independent factors that occasionally conjoin or conflict with each other” (Podgórecki, 1997, p. 1). The three dimensions defended by the author coexist in a way that while they can exert a mutual influence, they can additionally operate in their respective spheres without interference from one another.

At the first level, there exist factors linked to the self-image of the law, consisting of invisible determinants associated with a rudimentary perception of Law’s workings. The level of invisible factors is associated with the other two levels, consisting of intuitive law and the sphere of law possessing totalitarian elements.

The dimension of intuitive law, whose expression - that is to say, the mode by which the law expresses itself and becomes visible before society – arises by acceptance of the comprehension of law through the determined areas of social life where it is present or, further still, at a determined social stratum. It is in that dimension where the different distinctions of law operate.

There are, further still, residual forces that operate in a particular society and that influence the society at a specific moment of its development. For Podgórecki (1997, p. 2) it is in that dimension where

post-totalitarian elements operate. These elements reveal themselves, as much as the invisible factors, by way of a highly complex process of abstraction.

It is at the level of invisible factors that I wish to delve into the Brazilian case: namely, to register the Army as an invisible factor in attempts towards the implementations of successive Constitutions – and therefore Democracy – in Brazil. The perspective of a sociology of constitutionalism also surfaces, advocating the premise for the intensity of military latency in Brazil, arising periodically and revealing itself in the sequence of Brazilian Constitutions.

So, this is the reason why I would never classify the question of the Army's as belonging to post-totalitarian elements. It is a clear fact that the Brazilian Army has always been present in the workings and spectrum of social issues surrounding Brazil's collection of constitutions. Therefore, the deal is about a latency. Something that never went away or disappeared. To validate the insertion of "post-totalitarianism" in post-colonial circumstances, at no point was there a rupture or breaking off, or one would say, some moment where a before or after can be defined.

The Polish author's pertinent idea is that invisible forces, like the Army, can influence constitutional structure and democratic practices, creating a dynamic that is not immediately evident yet crucial for the understanding of the relationship between law and society. In this sense, the invisible influence of military institutions is a clear example of how social forces mold juridical practice and the formulation of policies, even in contexts where the recognition of the unseen force does not present itself.

Podgórecki (1997, p. 6) has already pointed us in this direction. If invisible factors challenge the legal procedures of a given social system, and if they lead to an examination of links between the legal and social

systems, that may reveal that the legal system is weakly anchored in social systems. This, in turn, may indicate that its motivational force is weak. Invisible factors, therefore, influence the efficiency of the system as a whole in a hidden manner, contrary to what may seem to be the case.

The invisible factors of Law (Podgórecki, 1979) refer to elements that, although not explicitly encoded by juridical norms, exert a significant influence on the way the Law is perceived and applied in a society. These factors include social norms, cultural values, traditions and expectations that mold the interpretation and efficiency of laws. Podgórecki argues that the operation of Law is profoundly affected by these unseen determinants, by their underground clockwork, influencing the acceptance and legitimacy of juridical norms without their being visible on the surface of the juridical system.

One of the central aspects of invisible factors is their capacity to mold public perception on the legitimacy of juridical institutions. The legitimacy is not only a question of formal conformity with the law, but also involves the social acceptance of norms and trust inside the institutions that apply the rules. When invisible factors are aligned with the expectations and values of the society, they reinforce trust in the juridical system and promote the acceptance of norms. On the other hand, when there is lack of alignment between the invisible factors and formal norms, a crisis in legitimacy can occur, where the juridical norms are seen as inadequate or unjust, undermining their effectiveness.

Besides this, the invisible factors of Law develop a crucial role in the motivation and behavior of individuals in relation to conformity to legal norms. Podgórecki argues that the effectiveness of legal norms depends not only on formal coercion, but also on voluntary adhesion based on social norms and shared values. When invisible factors, such

as morality and social expectations, are aligned with legal norms, they create an intrinsic motivation towards conformity. This means that individuals follow norms not only because of fear of sanctions, but because they see them as just and legitimate.

The analysis of the invisible factors of Law highlights the importance of considering the social, cultural and historical context in which the legal system operates. These factors vary significantly between different societies and over time, influencing the way legal norms are interpreted and applied. In a society where invisible factors are in harmony with formal norms, the legal system tends to be more stable and effective. In contrast, in societies where there is conflict between invisible factors and formal norms, the legal system may confront significant challenges in terms of legitimacy and effectiveness, demanding constant adaptation to align itself with social and cultural changes.

The argument that I will try to defend is clearly based on the ideas of invisible factors in Law that Podógorecki delineated and anchors itself as much in Brazil's January 08 incidents as in the nation's (non) democratic constitutional pendulum itself. In synthesis: in Brazilian constitutional sociology, the Army is sometimes a visible factor, and, at other times, invisible. However, even when hidden, it is there. And, with that, it influences, for various reasons – such as in the case of the 8th of January – Brazil's fragile democracy.

4 THE BRAZILIAN ARMY AND THE (NON) DEMOCRATIC CONSTITUTIONS OF BRAZIL

In a retrospective of Brazilian Constitutions, it is important to remember that Brazil became independent only in 1822, after having

been colonized by Portugal from 1500. During these 322 years, the Manueline, Philippine and Alfonsine Ordinations, under Portuguese reign, prevailed as the set of juridical norms that regulated the Portuguese colony in South America.

The process of Brazilian independence effectively commenced in 1808, when the Portuguese Crown, fleeing from the Napoleonic invasion, transferred the Kingdom to Brazil. In this period, institutions appeared that would shape the Brazilian State, such as *Banco do Brasil* and the Mail Service. The economy strongly based itself on the primary sector and in the exploitation of African slave labor. With the normalization of the situation in Portugal, the Royal Court began to return to the European country, generating feelings of national pride.

On 7th of September 1822, Dom Pedro I declared the independence of Brazil, confronting resistance from the Portuguese in certain regions. Once the resistance had been overcome, the next step would be to organize the powers and the Brazilian State, signed and sealed on the 25th of March 1824 as the Imperial Constitution (Andrade; Bonavides, 1991). The first Brazilian Constitution, bestowed by Dom Pedro I, divided the territory into provinces directed by a President (art. 2^o) and established a monarchic, hereditary, constitutional and representative government. The Moderating Power, exclusive to the monarch, was defined in article 98 as “the key to all political organization and is exclusively delegated to the Emperor”.

This Constitution is not considered to be a democratic text. However, even so, it did introduce the Declaration of Fundamental Rights (art. 179), being the first charter in the world to do so. Even though there was no direct participation from the Army in its elaboration, the military context was relevant, since independence was guaranteed by military force before battalions of Portuguese resistance.

The Constitution of 1891, fruition of the Proclamation of the Republic in 1889 lead by Marechal Deodoro da Fonseca (Rodrigo, 2022), established a republican and federative government inspired by the North American model. As much in the proclamation, as in the maintenance of the initial republican regime, the participation of the Army was crucial. Even though it has introduced democratic elements, such as the tripartite separation of powers, the military influence remained strong, especially in the control of political stability, impeding the implementation of a robust democracy.

In 1934, the new Constitution appeared as a response to the Revolution of 1930, led by Getúlio Vargas, who assumed power with military support (Nervo, 2005). This Constitution incorporated social rights and reflected influences from the Mexican and German constitutions. The role of the Army was significant in both the revolution and in securing the new order, The Constitution of 1934 was the first to include a declaration of rights and social guarantees, being highlighted in article 121, which established fundamental principles such as the right to work and to receive an education. Despite efforts to conciliate democracy with social stability, the latent military presence continued to profoundly influence the political scenario.

The Constitution of 1937, known as the New State or Polish Constitution, was granted by Getulio Vargas and inspired by fascist European regimes. Its proclamation was preceded by the closure of the National Congress and the consolidation of a dictatorship with strong support by the army. The centralization of power in the Executive and the extinction of Electoral Justice, as described in article 14, permitting gratuitous establishment of Decrees, demonstrate the absence of democratic principles. The Constitution oversaw, in its last article, the holding of a plebiscite that never occurred. The army exerted a fundamental role to maintain Vargas' regime, showing that direct

military influence resulted in a significant distancing from democratic values.

After the fall of Getúlio Vargas in 1945, the Constitution of 1946 sought to restore democratic order. Military participation in the fall of Vargas and in the transition to a new constitutional order was decisive. This Constitution represented a conciliatory effort between the liberal State and the social State, restoring democratic principles such as bicameralism and the widening of social rights. The fifth article established freedom of association and expression. Even though military influence was more indirect in the verbiage of this Constitution, the context of democratization was strongly marked by previous military interventions that shaped national politics.

The Constitution of 1967 was elaborated under the direct influence of the military regime, resulting from the coup of 1964 (Pacheco, 2022). It reflected centralizing characteristics like those of the 1937 Constitution, emphasizing a fundamental preoccupation with national security. The powers were amply concentrated in the hands of the chief of the Executive. *Artigo 2º* pushed for the State to be Federal, but in practice the power was centralized. The Constitutional Amendment of 1969, that many consider to be a new Constitution, further solidified military power, undermining democratic principles upon suspending political rights and strengthening the authoritarian regime. Institutional *Act n. 5*, proclaimed in 1968, exemplifies this centralization of power, granting to the president the capacity to close Congress and govern by decrees.

Finally, the Constitution of 1988 that was proclaimed after the transition from the military regime to democracy has become widely known as the Citizen's Constitution (Sarlet, 2001). Elaborated by an elected National Congress, the new Constitution reflected popular will for a new democratic order. The Army, during this

period, developed a minor role in the elaboration of the Constitution, although its presence was crucial for maintaining order during the transition. The Constitution brought with it an analytical and detailed approach, treating rights and fundamental guarantees extensively. *Artigo 5º* guaranteed an ample range of individual rights and liberties. This Constitution marked a clear return to democratic principles, highlighting itself as a historical accomplishment for the Brazilian constitution.

From 1988, Brazil elected presidents based on the democratic character of its Constitution and came to construct a path anchored in democracy for the consolidation of fundamental laws of Brazilian citizens. In 2018, the election of Jair Bolsonaro marked a significant rupture in this trajectory. His government, frequently associated with declarations and actions that challenged democratic principles, weakened key institutions and undermined the respect for fundamental rights.

On average, Axt (2020) recalls that the government with the highest presence of the military was that of Castelo Branco, during the full validity of the Military Coup of 1964. There were 12 ministers, and they insisted on civilian liturgy, dressing in civilian clothes. Bolsonaro's government, in July 2020, has nine ministers and three thousand employees from the armed forces. With a detail: civilian liturgy is not always respected, and military uniforms, in some cases, are worn with pride.

When the government resulting from the Military Coup of 1964 became fully established, Axt (2020) recalls, the presence of the military was at its highest. There were 12 ministers. They insisted on civilian liturgy, dressing in civilian clothes. Bolsonaro's government, in July 2020, had nine ministers and three thousand employees from the armed forces. Military uniforms, in some cases, are worn with pride.

Adopting a polarized and confrontational rhetoric, Bolsonaro generated a climate of distrust and political instability (Nascimento; Torres, 2022). His administration was characterized by frequent attacks on the press, threats to the rights of minorities, and attempts to interfere with the independence of the Judiciary and other democratic institutions. Besides this, his administration was marked by a *laissez-faire* attitude in relation to authoritarian behavior. Heightened militarization of the government (Gomide; Silva; Leopoldi, 2023) placed democratic advances (Hunter; Power, 2019, p. 70), achieved since the proclamation of 1988's constitution, at risk. These factors collectively interrupted the continuity of democratic progress in the country, bringing preoccupations about the resilience of Brazilian democratic institutions to the fore.

Along Brazil's constitutional journey, therefore, the Army has at one moment behaved as a visible factor, as a *trompe l'oeil* at another, shaping and influencing the structure of the State – via Constitutions – and the destiny of national politics. This presence, even when it does not appear in the public space, develops a crucial role between democratic and authoritarian regimes. Adam Podgórecki's theory of invisible factors, in the Brazilian case, helps in the observation of how the Army, by sway of persistent latency, impacts the legitimacy and stability of Brazilian constitutions. The recent context shows how the government of Jair Bolsonaro has managed to temporarily rupture this process of democratic consolidation that has been under construction since 1988. Bolsonaro, with his actions and rhetoric, not only challenged the democratic institutions, but also revived military influence in Brazilian politics, confirming the continuous relevance of the Army in the constitutional dynamics of the country.

5 FINAL CONSIDERATIONS

The article exposes the operation of Law shaped, at three distinct levels, by a series of independent factors that, occasionally, work together or come into conflict. In the Brazilian context, the Army is one of the factors that, even though not always visible, has a latent presence that influences the elaboration and interpretation of constitutions (Podgórecki, 1974, p. 88-90). The first dimension of analysis involves invisible factors that affect the self-image of Law, functioning as hidden determinants that create the perception and effectiveness of juridical norms. Regarding the Brazilian Army, this dimension manifests itself across its subjacent influence in constitutional questions and in its capacity to frame public perception on the legitimacy of democratic institutions.

The Army, through Brazil's history, has developed a crucial role in the maintenance of constitutional order, very often acting as a guardian of the State and, on some occasions, as an agent for change. The dimension of intuitive law, one remembers, reflects social acceptance and the comprehension of the law in specific areas of social life. In Brazil, this dimension is evident in the way the Army is seen as a protective institution that exerts a significant influence over constitutions and democracy, even though this influence is not formally encoded by law. This intuitive understanding of the role of the Army creates a layer of tacit acceptance of its influence in constitutional issues.

Besides this, the residual forces that operate in Brazilian society reveal the continued presence of the Army as an influential factor. Podgórecki highlights that the post-totalitarian elements are revealed through complex processes of abstraction. In the case of Brazil, the influence of the Army does not fit perfectly into this category, since

there is no clear rupture between the totalitarian and post-totalitarian periods. Instead of this, the Army has always been present in the formation and maintenance of Brazilian constitutions, acting as a latent factor that has never completely disappeared from the political and social scenario.

The influence of the Army in Brazilian constitutions is a clear example of how invisible factors can challenge the legitimacy of a social system. When these factors lead to a reevaluation of the connections between the juridical and social systems, this can reveal a weak anchorage for the juridical system in the wider social context. In Brazil, the constant presence of the Army as an influential factor, though masked, indicates a weak motivational force in the juridical system, since the legitimacy of constitutions often depends on the tacit acceptance and veiled influence of the military institution in question.

The presence of the Army in the Brazilian constitution illustrates how invisible factors can operate in a hidden way to influence the effectiveness of the juridical system nationwide. In moments of crisis, such as the events of January 8th, 2023, this presence can become visible, revealing the fragility of Brazilian democracy and highlighting the continuous influence of the Army in constitutional questions. In this way, the Army can be seen as much as a visible as an invisible factor, whose influence shapes public perception of the legitimacy of democratic institutions and the effectiveness of constitutions.

Therefore, the analysis of the influence of the Army in Brazilian constitutions through the lenses of Podgórecki's invisible factors reveals the complexity of the relationship between Law and social and political contexts. The constant presence and latent influence of the Army highlight the importance of considering these invisible factors in the understanding of constitutional dynamics and democracy in Brazil.

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EDUCATION, COLONIALITY, AND INTERCULTURALITY: REFLECTIONS FROM GUINEA-BISSAU AND BRAZIL

Hodávio José Siga¹

1 INTRODUCTION

The intersections between education, coloniality, and interculturality occupy a central place in debates on social justice, cultural diversity, and sustainable development, particularly in contexts marked by the legacy of European colonialism. In pre-colonial African communities, such as those in Guinea-Bissau, ways of life based on reciprocity with nature integrated spiritual, cultural, and social dimensions, considering land an extension of communal existence. This paradigm was disrupted by Portuguese colonization, which, from the 15th century, imposed a logic of exploitation of natural and human resources, treating African peoples as subjugated labor forces. Colonial education, in this context, served as a tool for cultural assimilation, aiming to erase local identities and consolidate dependency by prioritizing the Portuguese language and Eurocentric values. In the Portuguese empire, which resisted decolonization until the 1970s, education was used to legitimize domination, shaping consciousness and reinforcing racial and epistemic hierarchies (Fanon, 1961, p. 45).

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African liberation movements, such as that led by Amílcar Cabral in Guinea-Bissau and Cape Verde, understood that political independence was insufficient without cultural and cognitive liberation. Cabral (1976, p. 78) advocated education as a “weapon” of resistance, capable of countering the alienation imposed by colonial schools, which devalued local knowledges in favor of European content. However, formal independences, achieved amid wars and Cold War instabilities, faced obstacles in consolidating emancipatory educational systems.

Scarce resources, geopolitical pressures, and the persistence of colonial structures limited the development of policies prioritizing African epistemologies, perpetuating inequalities (Davidson, 1989). In recent decades, African and Latin American intellectuals, such as Santos (2014) and Carneiro (2005), have proposed epistemologies of the South as a path to recover silenced knowledges through colonial epistemicide. This movement seeks to reconfigure power relations in knowledge production, promoting an “ecology of knowledges” that engages with global challenges, such as the climate crisis and social inequalities. Brazil, marked by its own coloniality – expressed in structural racism, the marginalization of Afro-Indigenous knowledges, and socioeconomic disparities – positions itself as a partner to African countries through South-South cooperation initiatives, such as the Graduate Student-Exchange Program (PEC-G) and the University for International Integration of Afro-Brazilian Lusophony (Unilab). These programs, though promising, often reproduce Eurocentric paradigms, limiting their emancipatory potential (Gomes, 2017).

This chapter proposes a critical reflection on the intersections between education, coloniality, and interculturality, drawing on the contexts of Guinea-Bissau and Brazil within the framework of the 2030 Agenda and the New Urban Agenda (NUA). Adopting a critical-

theoretical approach based on literature and document review, the chapter explores how colonial legacies permeate educational practices and how international cooperation can contribute to emancipatory alternatives.

The analysis engages with Sustainable Development Goals (SDGs) 4 (quality education), 10 (reduced inequalities), 11 (sustainable cities), 13 (climate action), and 17 (global partnerships), as well as NUA item 36, which emphasizes sustainable urban infrastructure and quality of life. Decolonial education, by promoting multicultural and resilient societies, fosters climate justice and environmental resilience, connecting regional cultural identities to transnational sustainability practices between Guinea-Bissau and Brazil. The choice of Guinea-Bissau and Brazil is strategic. Guinea-Bissau, marked by prolonged colonization and independence in 1973, faces educational challenges such as decontextualized curricula and lack of infrastructure (Unesco, 2023). Brazil, sharing the legacy of Portuguese colonization and the Atlantic slave trade, stands out for intercultural policies, such as Unilab, established in 2010 to promote integration with lusophone African countries (Unilab, 2023).

Comparing these contexts illuminates the continuities of coloniality and the possibilities for rupture through decolonial and intercultural education. The chapter is organized into four sections. The first analyzes education as an instrument of coloniality in the lusophone African context, focusing on Guinea-Bissau. The second explores epistemologies of the South as an alternative to epistemicide, highlighting their potential to reconfigure educational practices. The third examines Brazil-Africa educational cooperation, evaluating initiatives like PEC-G and Unilab through a decolonial lens.

The fourth connects these debates to the challenges of the 2030 Agenda and the NUA, discussing how education can contribute

to social, cognitive, and environmental justice. The conclusion synthesizes the arguments, pointing to pathways for an emancipatory education that honors Cabral's vision: liberating the territory requires, above all, liberating consciousness.

2 COLONIALITY AND EDUCATION IN THE LUSOPHONE AFRICAN CONTEXT

Education in the context of Portuguese colonialism in Africa – particularly in Guinea-Bissau – was a strategic pillar of domination, functioning as a mechanism of cultural assimilation, identity erasure, and the consolidation of subalternization. Far from promoting emancipation, the colonial school was designed to produce docile subjects aligned with the interests of the empire. This section analyzes the role of education in reproducing coloniality, the resistance efforts led by liberation movements such as that of Amílcar Cabral, and the challenges faced in constructing emancipatory educational systems after independence, focusing on Guinea-Bissau. The discussion dialogues with Sustainable Development Goals (SDG) 4 (quality education) and 10 (reduction of inequalities), highlighting how the colonial legacy still shapes educational systems.

2.1 EDUCATION AS AN INSTRUMENT OF COLONIALITY

In the Portuguese Empire – which maintained African colonies such as Guinea-Bissau, Cape Verde, Angola, and Mozambique until the mid-twentieth century – education was an instrument of cultural and political control. The assimilation policy, formalized in the nineteenth

century, assumed that Africans should abandon their languages, customs, and knowledge systems to adopt a Europeanized identity considered “civilized.” As Fanon (1961, p. 45) observes, colonialism was not limited to territorial occupation but invaded consciousness, imposing a worldview that naturalized the inferiority of the colonized.

In Guinea-Bissau, colonial schools were restricted to a small urban elite – often children of colonial officials or co-opted local leaders – while the majority of the population had access only to rudimentary Portuguese and basic notions oriented toward reproducing the colonial order (Davidson, 1989). Mission schools, managed by the Catholic Church, played a central role in this process. According to Havik (2013), in Guinea-Bissau, Catholic missions prioritized catechism and literacy in Portuguese, devaluing local languages such as Creole or Balanta. In 1940, only 1% of the Guinean population had access to formal education, and the curriculum emphasized content disconnected from local realities, such as the history of Portugal and European geography (Mendy, 1994).

This systematic exclusion reinforced inequalities and perpetuated the narrative that Africans were “incapable” of self-government, thereby justifying colonial tutelage. The coloniality of education, as defined by Mignolo (2011), operated in the symbolic field, determining which knowledges were legitimate and who was considered human. The imposition of Portuguese as the sole language of instruction marginalized African languages and cosmologies, constituting what Carneiro (2005, p. 23) calls epistemicide—the deliberate destruction of non-Eurocentric systems of knowledge. This process not only limited access to education but also shaped subjectivities, reinforcing racial and cultural hierarchies that persist to this day.

2.2 EDUCATIONAL RESISTANCE: THE VISION OF AMÍLCAR CABRAL

African liberation movements recognized education as a crucial battleground. Amílcar Cabral, leader of the African Party for the Independence of Guinea and Cape Verde (PAIGC), was a pioneer in proposing that national liberation required the “re-Africanization” of consciousness. In *A arma da teoria* (Cabral, 1976, p. 78), he argues that national culture, rooted in history and popular practices, is the foundation of the anti-colonial struggle. He saw education as a tool to reverse cultural alienation, promoting teaching in local languages and the valorization of community-based knowledge.

During the armed struggle (1963–1973), the PAIGC established schools in the liberated zones of Guinea-Bissau, where Guinean teachers taught in Creole and integrated local knowledge – such as agricultural practices and oral narratives – into the curriculum (Chabal, 2002). However, these initiatives faced significant obstacles. The war consumed human and material resources, and teacher training was limited. In 1973, the year of Guinea-Bissau’s independence, only 10% of the population was literate, and educational infrastructure was precarious, with few schools outside urban areas (Unicef, 1975).

Furthermore, the Cold War context placed the new African states at a crossroads: support from Cuba and the Soviet Union brought resources but also ideological pressures that hindered the construction of autonomous educational policies. As a result, the project of emancipatory education, although visionary, remained unfinished.

2.3 THE PERSISTENCE OF COLONIALITY AFTER INDEPENDENCE

Guinea-Bissau's formal independence in 1973 marked the end of Portuguese domination but not of colonial structures within education. Curricula inherited from the colonial period continued to prioritize Eurocentric content, with Portuguese-language textbooks that ignored the country's cultural and linguistic diversity. According to a Unesco report (2023), by the 2010s, only 45% of Guinean children completed primary education, due to the lack of schools, poorly paid teachers, and inadequate teaching materials.

Creole, spoken by more than 90% of the population, remains marginalized in the educational system, which maintains Portuguese as the official language of instruction – hindering access to education in rural areas (Unesco, 2020). This legacy reflects what Quijano (2000, p. 533) calls the coloniality of power: the persistence of racial and epistemic hierarchies after the end of formal colonialism.

The devaluation of local knowledge – such as the community-based teaching practices of the Balanta or Mandinga peoples – perpetuates inequalities and limits the transformative potential of education. For example, in rural Guinean communities, traditional knowledge about sustainable agriculture is rarely integrated into school curricula, despite its relevance to SDG 13 (climate action) and climate justice, which seeks equity in responding to environmental change (FAO, 2019).

The marginalization of Guinea-Bissau's multicultural heritage, including Balanta and Mandinga knowledge, also undermines item 36 of the New Urban Agenda, which advocates for sustainable urban and rural development and improved quality of life through the appreciation of local cultural practices (Onu-Habitat, 2022). Thus, instead of serving

as a space for emancipation, the school often reproduces cultural and cognitive dependency on the Global North.

3 EPISTEMOLOGIES OF THE SOUTH AND EPISTEMIC ARCHAEOLOGY

The persistence of coloniality in education, discussed in the previous section, highlights the need to question the epistemic foundations that sustain the exclusion of non-Eurocentric knowledge systems. The epistemologies of the South, proposed by Santos (2014) and Mignolo (2011), offer a theoretical framework to confront epistemicide – the systematic destruction of colonized knowledge systems – and to promote emancipatory education. This movement, allied with the idea of an epistemic archaeology, seeks to recover silenced knowledges and articulate responses to global challenges such as educational inequality and the climate crisis. This section analyzes how the epistemologies of the South can reconfigure educational practices in Guinea-Bissau and Brazil, dialoguing with Sustainable Development Goals (SDG) 4 (quality education) and 10 (reduction of inequalities), and highlighting the role of critical interculturality in building fairer educational systems.

3.1 EPISTEMOLOGIES OF THE SOUTH: A PROJECT OF COGNITIVE JUSTICE

The epistemologies of the South, as defined by Santos (2014, p. 45), emerge as a response to the epistemicide perpetrated by colonialism, which delegitimized African, Indigenous, and Afro-

diasporic knowledges in favor of a Eurocentric epistemic monoculture. For Santos, “there is no social justice without cognitive justice,” which requires recognizing the diversity of knowledges as equally valid in confronting global challenges. In Guinea-Bissau, epistemicide has manifested in the marginalization of languages such as Creole and cultural practices such as the oral narratives of griots, replaced by colonial curricula centered on European history and values. In Brazil, the exclusion of Afro-Brazilian and Indigenous knowledge from educational systems reflects the same logic, perpetuating racial and cultural inequalities (Carneiro, 2005).

Mignolo (2011) complements this analysis by proposing the concept of “border thinking” which connects marginalized experiences with a critique of modernity/coloniality. This perspective challenges the notion that only Western science is valid, opening space for intercultural dialogues. For example, in Guinea-Bissau, traditional conflict-resolution practices based on community assemblies offer lessons in participatory democracy that could enrich school curricula but are rarely integrated (Havik, 2013). In Brazil, Law 10.639/2003, which makes the teaching of Afro-Brazilian history and culture mandatory, represents a step toward cognitive justice, but its implementation faces resistance due to the hegemony of Eurocentric frameworks (Gomes, 2017).

3.2 EPISTEMIC ARCHAEOLOGY: RECOVERING SILENCED KNOWLEDGES

Epistemic archaeology, inspired by authors such as Escobar (2014), is an effort to recover and reinvent marginalized knowledge – not as folklore, but as viable responses to contemporary dilemmas. In Guinea-Bissau, this means valuing traditional knowledge, such as

the sustainable agricultural practices of the Balanta people, who use crop rotation techniques adapted to local climates. A study by FAO (2019) highlights that these practices could contribute to SDG 13 (climate action) but remain underused due to the emphasis on Western agricultural models in school curricula. In Brazil, initiatives such as contemporary quilombos, which preserve agroecological knowledges, offer examples of epistemic resistance but face barriers to integration into formal education (Escobar, 2014).

The appreciation of Guinea-Bissau's multicultural heritage – such as Mandinga oral narratives – and Brazil's quilombola practices aligns with item 36 of the New Urban Agenda, which promotes sustainable urban and rural development through local cultural practices, strengthening transnational knowledge networks and contributing to climate justice (Onu-Habitat, 2022).

Mbembe (2013) reinforces the importance of overcoming the “Black reason” imposed by modernity, which constructed Africa as a space of backwardness. In Guinea-Bissau, recovering oral narratives and local cosmologies – such as those of the Mandinga people – can strengthen cultural identity and promote more inclusive education. For example, the “Forest School” project in Cacheu, implemented by local NGOs, integrates traditional knowledges into basic education, teaching children in both Creole and Portuguese about agricultural practices and community histories (Inep, 2021). In Brazil, experiences such as the Southern and Southeastern Popular Education Network (REPS) articulate Indigenous and Afro-Brazilian knowledges in pedagogical practices, but these remain isolated initiatives (Freire, 1970).

3.3 CRITICAL INTERCULTURALITY AS PEDAGOGICAL PRACTICE

Critical interculturality, as proposed by Walsh (2009), goes beyond mere coexistence between cultures; it is a political-pedagogical project that confronts coloniality and promotes new horizons of existence. In education, this means breaking with the banking logic criticized by Freire (1970, p. 67), in which the student is a passive recipient of knowledge. Instead, Freire advocates a dialogical pedagogy in which educators and students co-create knowledge based on their lived realities.

In Guinea-Bissau, the lack of teacher training in intercultural approaches remains an obstacle: only 20% of primary school teachers have adequate training, and curricula rarely reflect the country's cultural diversity (Unesco, 2020). Projects such as the "Bilingual Education Program" (2018–2022), which introduces Creole as a language of instruction in rural schools, are promising but lack scale (Ministério Da Educação da Guiné-Bissau, 2022).

In Brazil, critical interculturality faces similar challenges. Although Law 10.639/2003 is mandatory, its implementation is inconsistent: a study by (Ministério da Educação, 2020a) shows that only 30% of public schools systematically incorporate Afro-Brazilian content. Initiatives such as continuing education courses for teachers at Unilab, which address Afro-diasporic epistemologies, represent a positive step but are limited by insufficient funding (Gomes, 2017). These examples illustrate the potential of critical interculturality but also the need for more robust public policies.

3.4 CONTRIBUTIONS TO THE 2030 AGENDA

The epistemologies of the South and critical interculturality offer pathways toward achieving SDGs 4 and 10. Quality education (SDG 4) requires curricula that value local knowledges – such as Guinean agricultural practices or Brazilian quilombola knowledge – promoting inclusion and cultural relevance. Reducing inequalities (SDG 10) depends on confronting structural racism and epistemic marginalization by recognizing African and Afro-Brazilian peoples as producers of knowledge. As Santos (2018) emphasizes, an “ecology of knowledges” can transform education into an instrument of social justice, connecting Guinea-Bissau and Brazil in a South–South dialogue that challenges the hegemony of the Global North.

4 **BRAZIL, AFRICA, AND THE INTERNATIONALIZATION OF SCIENCE**

Educational cooperation between Brazil and Africa, particularly with Portuguese-speaking countries such as Guinea-Bissau, has gained momentum in recent decades as part of a broader South–South internationalization agenda. Initiatives such as the Programa de Estudantes-Convênio de Graduação (PEC-G), the Universidade da Integração Internacional da Lusofonia Afro-Brasileira (Unilab), and the Grupo de Cooperação Internacional de Universidades Brasileiras (Gcub) aim to promote academic mobility and professional training, yet they often face contradictions by reproducing, in some cases, Eurocentric paradigms. This section analyzes the potential and limitations of these initiatives, with an emphasis on the Brazil–Guinea-Bissau relationship, in light of the epistemologies of the South and

the Sustainable Development Goals (SDGs) 4 (quality education), 10 (reduction of inequalities), and 17 (global partnerships). The discussion highlights how the internationalization of science can serve either as a space of resistance to coloniality or, alternatively, as an arena for its perpetuation.

4.1 SOUTH-SOUTH COOPERATION AND BRAZIL'S ROLE

Educational cooperation between Brazil and Africa has roots in the 1960s and 1970s but was intensified in the 2000s, during the Lula administration (2003–2010), as part of a foreign policy oriented toward strengthening the Global South. Sharing with Lusophone African countries the legacy of Portuguese colonization and the Atlantic slave trade, Brazil positioned itself as a strategic partner, promoting initiatives aimed at overcoming North–South asymmetries. Nascimento (1978, p. 32) observed, “without Africa, there would be no Brazil”, a historical connection that underpins the relevance of South-South dialogue.

The PEC-G, created in 1965, is one of the oldest initiatives, offering scholarships to students from developing countries – including Guinea-Bissau – to pursue undergraduate studies at Brazilian universities. By 2020, around 1,500 Guinean students had participated in the program. However, the requirement that students return to their country of origin after graduation limits integration and reinforces logics of state control (Valente, 2008). While expanding access to higher education, the PEC-G often operates within a unidirectional model, with Brazilian curricula that rarely incorporate African knowledge systems, thus perpetuating the coloniality of knowledge (Mignolo, 2011).

4.2 UNILAB: A PROJECT OF INTERCULTURAL INTEGRATION?

The creation of Unilab in 2010 marked a significant step in educational cooperation, with the mission of promoting academic integration between Brazil and Portuguese-speaking African countries, including Guinea-Bissau. Located in Ceará and Bahia, Unilab reserves 50% of its enrollment slots for international students, with about 600 Guineans enrolled as of 2023 (Unilab, 2023). Programs such as Pedagogy and Agronomy seek to engage with African realities but face challenges such as the lack of interculturally oriented curricula and insufficient funding.

Gomes (2017, p. 89) highlights that Unilab has the potential to construct a decolonial education, yet the persistence of Eurocentric references within the faculty and teaching materials limits this goal. A concrete example is the Pedagogy degree at UNILAB, which includes courses on African history but lacks the systematic integration of local epistemologies, such as Guinean community-based pedagogical practices. Testimonies from Guinean students, collected in university reports, reveal the difficulty of adapting to an educational system that prioritizes formal Portuguese while ignoring Creole, thus reinforcing linguistic and cultural barriers (Unilab, 2021).

These challenges suggest that, without an epistemological reorientation, Unilab risks remaining within a conventional model of internationalization, rather than promoting an ecology of knowledges, as proposed by Santos (2018). Unilab could, for instance, integrate sustainability modules based on Guinean agroecological practices, fostering environmental transversality and contextualized learning.

4.3 LIMITS AND POTENTIALITIES OF INTERNATIONALIZATION

The Gcub, which brings together more than 80 Brazilian universities, also plays a significant role, coordinating mobility programs that benefited around 200 Guinean students between 2010 and 2020 (Gcub, 2022). However, as Morosini (2014) observes, internationalization is often reduced to quantitative indicators – such as the number of agreements – without questioning which epistemologies are circulating. For example, mobility programs rarely include courses that value Afro-diasporic or Guinean knowledge, perpetuating the hegemony of Western epistemology.

Initiatives such as Unilab's Afro-Lusophone Dialogues workshops, which promote intercultural exchanges between Brazilian and Guinean students, align with item 36 of the New Urban Agenda, which advocates for sustainable urban communities through multicultural practices, strengthening both quality of life and transnational knowledge networks (Onu-Habitat, 2022).

Despite these limitations, there are promising initiatives. At Unilab, the Afro-Lusophone Dialogues project fosters intercultural workshops where Brazilian and Guinean students share knowledge about agricultural practices and oral traditions, aligning with SDG 17 (global partnerships). In Guinea-Bissau, cooperation with Brazil has resulted in teacher training programs through distance-learning courses offered by the Universidade Aberta do Brasil, benefiting around 300 educators between 2015 and 2020 (Ministério da Educação, 2020b). Although still incipient, these experiences reveal the potential for a decolonial internationalization that values local knowledge and promotes horizontal exchanges.

4.4 INTERNATIONALIZATION AND THE 2030 AGENDA

Brazil–Africa cooperation can contribute significantly to SDGs 4, 10, and 17, but doing so requires overcoming the assistance-based logic that characterizes many current initiatives. Quality education (SDG 4) depends on curricula that integrate African and Afro-Brazilian epistemologies, while reducing inequalities (SDG 10) demands confronting structural racism within educational systems. Global partnerships (SDG 17) must prioritize reciprocity, as Santos (2018) argues, avoiding the reproduction of epistemic hierarchies.

Given its history of both coloniality and resistance, Brazil occupies a privileged position to lead this process—provided it adopts a critical and intercultural approach that recognizes the epistemological richness of its South-South relations.

5 AGENDA 2030 AND CONTEMPORARY CHALLENGES

The 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015, establishes 17 Sustainable Development Goals (SDGs) to address global challenges such as poverty, inequality, climate crisis, and social exclusion. However, its implementation in contexts marked by coloniality – such as Guinea-Bissau and Brazil – requires a critical approach that acknowledges the colonial legacies embedded in educational and social systems. This section examines how SDGs 4 (quality education), 10 (reduced inequalities), 11 (sustainable cities), 13 (climate action), and 17 (global partnerships) can guide the construction of an emancipatory education. It highlights concrete initiatives and the challenges of overcoming coloniality, engaging with

the Epistemologies of the South and proposing that the 2030 Agenda be appropriated as a space for the pursuit of social, cognitive, and environmental justice.

5.1 SDG 4: QUALITY EDUCATION AND CURRICULAR DECOLONIZATION

SDG 4 seeks to ensure inclusive and equitable education for all. In Guinea-Bissau, where only 45% of children complete primary school (Unesco, 2023), education faces barriers such as lack of infrastructure and decontextualized curricula. The National Education for All Program (2015–2025) aims to increase school access, but only 4.2% of GDP was invested in education in 2022, below the 7% recommended by UNESCO (World Bank, 2018). The predominance of Portuguese as the language of instruction, to the detriment of Creole – spoken by 90% of the population – perpetuates exclusion and reflects the coloniality of knowledge (Quijano, 2000). Initiatives such as the Bilingual Education Program (2018–2022), which introduced Creole in 50 rural schools, show progress but lack scale and adequate teacher training (Ministério da Educação da Guiné-Bissau, 2022).

In Brazil, Law 10.639/2003, which mandates the teaching of Afro-Brazilian history and culture, is a milestone in curricular decolonization, but its implementation remains limited: only 35% of public schools consistently include these contents (Ministério da Educação, 2020a). Unilab, with teacher training programs focused on Afro-diasporic epistemologies, benefited about 200 Guinean teachers between 2015 and 2022 but faces budget cuts (Unilab, 2023). Freire (1970) emphasizes, quality education is never neutral; it must foster critical consciousness, breaking with the colonial banking model.

5.2 SDG 10: REDUCING EPISTEMIC AND RACIAL INEQUALITIES

SDG 10 aims to reduce inequalities, including racial and epistemic ones. In Guinea-Bissau, structural racism inherited from colonialism manifests in the marginalization of ethnic groups such as the Balanta, whose agricultural knowledge is rarely integrated into school curricula (FAO, 2019). In Brazil, structural racism persists: Black students represent 56% of the public school population but only 13% of university faculty (IBGE, 2022). Achille Mbembe (2013) argues that overcoming these inequalities requires dismantling the racial hierarchies constructed by modernity. Initiatives such as racial quotas in Brazilian universities, which have benefited more than one million Black students since 2012, represent significant progress but remain insufficient without a decolonial curricular reform (Ministério da Educação, 2020a).

5.3 SDGS 11 AND 13: SUSTAINABILITY AND LOCAL KNOWLEDGE

SDGs 11 (sustainable cities) and 13 (climate action) emphasize the importance of integrating local knowledge to address the climate crisis. In Guinea-Bissau, traditional agricultural practices – such as the Balanta’s mangrove rice cultivation – offer sustainable solutions but are often undervalued in favor of Western models (FAO, 2019). In Bissau, unplanned urban growth exacerbates precariousness, with only 20% of the population having access to basic sanitation (Onu-Habitat, 2022), and in remote areas, such access is virtually nonexistent. In Brazil, quilombola communities such as Kalunga preserve agroecological

practices that could inform sustainable urban policies but receive little governmental support (Escobar, 2014). These examples demonstrate how local knowledge, aligned with the Epistemologies of the South, can contribute to SDGs 11 and 13, provided they are institutionally recognized. For instance, agroecology courses could incorporate Balanta techniques of mangrove cultivation, fostering contextualized and sustainable education.

5.4 SDG 17: GLOBAL PARTNERSHIPS AND SOUTH–SOUTH DIALOGUE

SDG 17 emphasizes global partnerships to achieve the 2030 Agenda’s goals. Brazil–Guinea-Bissau cooperation, through programs such as PEC-G and Unilab, has benefited approximately 2,000 Guinean students since 2010, yet it often reproduces vertical knowledge-transfer dynamics (Valente, 2008). Santos (2018) argues that truly transformative partnerships must promote an ecology of knowledges, valuing African and Afro-Brazilian epistemologies. The “Afro-Lusophone Dialogues” project at Unilab, which brings together students from both countries for workshops on cultural practices, is a promising example but needs broader implementation (Unilab, 2023). Such partnerships can strengthen cognitive justice, provided reciprocity remains central.

The 2030 Agenda is not neutral – it can reinforce coloniality if implemented technocratically or become a site of struggle for social justice, as Escobar (2014) suggests. In Guinea-Bissau and Brazil, its success depends on policies that value local knowledge, confront structural racism, and promote critical interculturality. Without such measures, the SDGs risk becoming empty rhetoric, incapable of addressing historical inequalities.

5.6 RECOMMENDATIONS FOR A DECOLONIAL EDUCATION

To overcome coloniality in education and align with the 2030 Agenda and the New Urban Agenda (NUA), concrete actions are recommended for Guinea-Bissau and Brazil, promoting critical interculturality and multiculturalism.

In Guinea-Bissau, priority should be given to expanding the Bilingual Education Program, integrating Creole as the main language in rural curricula, with investment of at least 6% of GDP in education (Unesco, 2023). This would strengthen SDG 4 (quality education) and SDG 10 (reduced inequalities), while valuing local knowledge – such as Balanta agricultural practices – to foster environmental resilience and climate justice (FAO, 2019). Partnerships with NGOs are recommended to train teachers in dialogical pedagogy (Freire, 1970), aiming for 80% intercultural training coverage by 2030.

In Brazil, it is necessary to expand the implementation of Law 10.639/2003, with mandatory monitoring by the Ministry of Education (MEC), ensuring the inclusion of Afro-Brazilian and Indigenous content in 100% of public schools (Ministério da Educação, 2020a). Unilab should develop South–South exchange modules focused on quilombola knowledge for urban sustainability, aligned with item 36 of the NUA (sustainable infrastructure and quality of life) (Onu-Habitat, 2022). Globally, transnational networks should be created between Guinean and Brazilian institutions, funded through SDG 17 (global partnerships), to exchange decolonial pedagogical practices and promote an ecology of knowledges (Santos, 2014). If implemented,

these recommendations could transform education into an instrument of emancipation, building multicultural and resilient societies.

Table 1 – Relationship between the SDGs of the 2030 Agenda, Educational Initiatives, and Guiding Axes of the Call

SDG	Initiative/Example	Guiding Axis	Main Contribution
4 (Quality Education)	Bilingual Education Program (Guinea-Bissau); Law 10.639/2003 (Brazil)	Interculturality and Multiculturalism	Curricular decolonization, valuing languages and local knowledge for inclusion (UNESCO, 2023; MEC, 2023).
10 (Reduced Inequalities)	Racial quotas in Brazilian universities; Teacher training at UNILAB	Climate Justice and Cultural Regionalities	Confronting structural racism and epistemic marginalization (IBGE, 2022).
11 (Sustainable Cities)	Quilombola practices (Brazil); Urban growth in Bissau (Guinea-Bissau)	Environmental Transversality and Local Cultures	Sustainable infrastructure and quality of life, as per item 36 of the NUA (UN-Habitat, 2022).
13 (Climate Action)	Quilombola practices (Brazil); Urban growth in Bissau (Guinea-Bissau)	Environmental Resilience and Interculturality	Integration of traditional practices for climate justice (FAO, 2021).
17 (Global Partnerships)	PEC-G and UNILAB (Brazil–Africa cooperation)	Society, Culture, and Nature in 21st-Century Constitutionalism	Redes transnacionais Transnational networks for an ecology of knowledges and South–South dialogue (Santos, 2018).

Source: own elaboration.

6 CONCLUSION

This chapter explored the intersections between education, coloniality, and interculturality, focusing on the contexts of Guinea-Bissau and Brazil, and examining how colonial legacies continue to shape educational systems, while South–South cooperation and the epistemologies of the South may offer emancipatory pathways. Colonial education, as an instrument of cultural assimilation, devalued African and Afro-Brazilian knowledge systems, perpetuating epistemic and racial inequalities (Fanon, 1961; Quijano, 2000). In Guinea-Bissau, the predominance of Portuguese over Creole and the exclusion of traditional practices – such as Balanta agricultural methods –illustrate the persistence of coloniality (Unesco, 2023). In Brazil, the partial implementation of Law 10.639/2003 reflects similar challenges, despite progress achieved through racial quota policies (Ministério da Educação, 2020a).

The epistemologies of the South, proposed by Santos (2014) and Mignolo (2011), offer an alternative to epistemicide by promoting an ecology of knowledges that values local wisdom. Projects such as the Bilingual Education Program in Guinea-Bissau and the intercultural workshops at Unilab in Brazil demonstrate the potential of decolonial pedagogical practices, although they face limitations in scale and funding (Ministério da Educação da Guiné-Bissau, 2022; Unilab, 2023).

Brazil–Africa cooperation, through initiatives such as PEC-G and UNILAB, opens promising paths for South–South dialogue but must move beyond assistentialist logics to prioritize horizontal exchanges (Santos, 2018). The 2030 Agenda – with its SDGs 4, 10, 11, 13, and 17 – represents a horizon of transformation, but it requires critical appropriation to prevent the reproduction of coloniality. In Guinea-Bissau, investing in bilingual education and traditional

knowledge can align SDG 4 (quality education) with SDG 13 (climate action), by valuing sustainable practices such as Balanta rice cultivation (FAO, 2019). In Brazil, strengthening policies such as Law 10.639/2003 and supporting quilombola communities advance SDG 10 (reduced inequalities) and SDG 11 (sustainable cities), contributing to item 36 of the New Urban Agenda, which promotes sustainable urban infrastructure and quality of life (Onu-HabitaT, 2022).

Global partnerships (SDG 17) must be guided by critical interculturality, as suggested by Walsh (2009), in order to promote cognitive justice. Education, as a transversal practice, connects culture and nature, fostering multicultural and resilient societies that embody the vision of the 2030 Agenda for a sustainable future. Cabral (1976, p. 78) stated that “it is not enough to liberate the territory; it is necessary to liberate consciousness.” Education, as a site of struggle, must be reinvented to honor this vision by articulating ancestral knowledge, community practices, and critical epistemologies. Guinea-Bissau and Brazil, with their shared histories of resistance, have the potential to lead this process—building a future in which education truly becomes a practice of freedom (Freire, 1970).

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COUNTING UNPAID WORK, SUSTAINING INEQUALITY: THE 2030 AGENDA AND THE POLITICS OF SOCIAL REPRODUCTION

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1 INTRODUCTION

This chapter analyses the incorporation of unpaid work into the United Nations 2030 Agenda for Sustainable Development, focusing on Target 5.4, which calls for the recognition and valuation of unpaid domestic and care work through public services, infrastructure, and social protection policies, measured by time-use statistics. Drawing on Marxist feminist Social Reproduction Theory (SRT), the analysis moves beyond distributive concerns about the sexual division of labor to address the structural role of reproductive labor in sustaining capitalist economies. From this perspective, it argues that time-use measurement represents a necessary step in rendering unpaid work statistically visible, yet remains insufficient for transforming the underlying social relations that organize and devalue unpaid work along gendered and racialized lines.

The theoretical framework is grounded in SRT's critique of the capitalist appropriation of unpaid labor and its crucial role in sustaining the social order. Unpaid domestic and care work is conceptualized not merely as a set of household tasks but as a set of essential processes

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for the reproduction of the labour force, historically excluded from economic valuation and public policy agendas. Methodologically, the chapter employs documentary analysis to trace the trajectory of women's rights as human rights, with emphasis on how reproductive and unpaid work have been framed in foundational international instruments, conventions, and political commitments.

The chapter is structured in three sections. It begins by outlining the theoretical foundations of SRT. It then examines the treatment of reproductive and unpaid work in core human rights and women's rights instruments, followed by an analysis of the trajectory of women's rights in the United Nations system. The third section situates reproductive labor within the 2030 Agenda, analyzing Target 5.4, its reliance on time-use statistics, and the development of its indicators. It then presents the progress in the implementation of this indicator and offers a critical assessment of this approach, arguing that while statistical recognition advances visibility, it does not, in itself, dismantle the structural foundations of the sexual division of labor, requiring more profound transformations in economic and social organization.

2 THE FEMINIST CONCEPT OF SOCIAL REPRODUCTION

Women's unpaid reproductive labor has long been undervalued and invisible. In feminist political economy, omitting domestic and family work reinforces rigid dichotomies such as public–private, market–domestic labor, and firm–family (Carrasco, 1998). Recognizing domestic and care work exposes the vast unpaid labor women perform, whose meaning and economic value are excluded (Orozco,

2005). Feminist economics challenges market centrality, advocating recognition of both productive and reproductive work as part of value generation.

Since the emergence of the capitalist mode of production, market-oriented production has been separated from domestic production, leading economic, political, and social thought to disregard the sexual division of labor and to obscure reproductive work, as well as their relationship to the reproduction of the capitalist system. The sexual division of labor is understood as the form of division of social labor arising from social relations of sex, historically adapted to each society (Kergoat, 2009). This division is characterized by the prioritization of men's participation in the productive sphere and women's in the reproductive-domestic sphere, and by the institutionalization of two organizing principles: the separation between what are considered "men's work" and "women's work," and the hierarchy whereby men's work is valued more highly than women's. As a result, the sexual division of labor reduces gender to biological sex and constrains social practices to gendered social roles (Hirata; Kergoat, 2007).

The concept of the sexual division of labor reveals the socially constructed power relations that define women's work and its conditions. The home-work divide did not result from an objective sequence of events but from gendered processes that organize discourses and practices reinforcing the idea of biological and functional differences between men and women. These differences are legitimized and embedded in the medical, scientific, political, and moral foundations of social organization (Scott, 1994). With the rise of the nuclear family and state appropriation of women's reproductive capacity came the notion that a man's wage should sustain the household, while a woman's earnings merely supplemented it. Feminists argue that prioritizing domestic and reproductive duties has

confined women to low-wage or unskilled jobs, monopolizing their time for the (re)production of life. Reproductive work thus became a mode of family production under patriarchal logic, shaping private-sphere relations and limiting women's autonomy.

In engaging with Marxism, feminists have gone beyond merely identifying the sexual division of labor to interrogate its roots and its relationship to the social totality. By the mid-1980s, they articulated the Marxist-inspired Social Reproduction Theory (SRT), through which they criticized the concept of socially necessary production for excluding reproductive labor, and argued that women's unpaid labor constitutes one of the pillars of capitalist production, insofar as it is the labor that (re)produces the very labor force itself (Bhattacharya, 2017). SRT innovates by making two significant contributions to Marxist historical materialism: expanding the theory of value to account for the diverse forms of oppression and differentiation within the working class, and renewing the conception of the social totality to encompass both the productive and reproductive spheres.

From this perspective, the separation between public and private spheres, and between paid productive and unpaid reproductive work, conceals the interdependence of these divisions. Under capitalism, social reproduction has historically been assigned to women, covering domestic tasks and all labor essential for human survival. By recognizing only productive labor as legitimate and paid, capitalism devalues and renders reproductive labor invisible, placing women in subordination, dependency, and precarity. Taking the labor force as a starting point, SRT addresses gender, race, and sexuality oppression in a non-functionalist way, acknowledging their role in the precarization and undervaluation of labor power while emphasizing they are structuring elements of capitalism itself.

3 SOCIAL REPRODUCTION AND HUMAN RIGHTS WITHIN THE UNITED NATIONS FRAMEWORK

In dialogue with human rights, SRT finds an ethical framework for assessing economic and social policies that goes beyond narrow indicators like gross domestic product, valuing civil, political, economic, social, and cultural rights as universal and indivisible. This approach stresses substantive equality, non-discrimination, and social participation, ensuring benefits for all regardless of identity or status. International instruments impose clear obligations to eliminate formal and practical discrimination, affirming that legal equality is insufficient without tangible results. Among the core principles of this approach are: progressive realization, which presupposes the continuous advancement of rights even in the face of resource constraints; the prohibition of retrogression, which prevents the reduction of already achieved levels of protection and promotion of rights; transparency, participation, and accountability, which ensure social involvement in policy design and monitoring; and the use of the maximum available resources, which entails actively mobilizing revenue through tax reforms, combating tax evasion, and reassessing budgetary priorities (Balakrishnan; Heintz, 2021).

Historically, social reproduction has not appeared as a category in its own right within human rights instruments. However, this conception emerges implicitly and in fragmented form across various documents and norms, particularly in the areas of labor, social protection, gender equality, and care. This section offers a brief overview of the main human rights instruments that address this normative dimension.

The Charter of the United Nations (1945) enshrines, in its Preamble, the principle of equal rights for men and women and the

commitment to social progress and better standards of life in larger freedom. Article 1(3) includes among the purposes of the Organization the promotion and encouragement of respect for human rights and fundamental freedoms without distinction as to sex, while Articles 55(b) and (c) link economic and social progress to full employment and a higher standard of living (United Nations, 1948). These provisions legitimize the understanding that care, the maintenance of life, and equality in economic participation must be treated as matters of public policy and as international commitments.

The Universal Declaration of Human Rights (United Nations, 1948) reinforces gender equality and explicitly sets out rights relevant to social reproduction, such as the prohibition of slavery (Art. 4), equality in marriage and its dissolution (Art. 16), political participation (Art. 21), the right to work and to equal pay (Art. 23), maternity protection (Art. 25), and equality in access to education (Art. 26). By recognizing the family as the “natural and fundamental group unit of society” (Art. 16, §3), the text preserves the separation between the public and private spheres, thereby rendering invisible the unpaid work performed largely by women. It also provides for just remuneration (Art. 23, §3) and an adequate standard of living to ensure health and well-being (Art. 25), with special protection for motherhood and childhood (United Nations, 1948).

The International Covenant on Economic, Social and Cultural Rights (ICESCR) (United Nations, 1966) is a key normative framework for recognizing rights linked to social reproduction, explicitly assigning the State responsibility for their guarantee, particularly through social protection. It stipulates that all work must ensure fair wages, equal pay for work of equal value, decent living conditions, and equal opportunity (Art. 6), establishes the right to social security (Art. 9), and reaffirms UDHR provisions, such as recognition of the family as the

natural and fundamental group unit of society (Art. 10) and the right to an adequate standard of living (Art. 11) (United Nations, 1966). The ICESCR General Comments expand these guarantees. General Comment n. 4 (Committee on Economic, Social and Cultural Rights, 1991) on adequate housing adopts a broad definition of family beyond restrictive nuclear models. No. 19 (Committee on Economic, Social and Cultural Rights, 2008) defines social security as universal, focusing on marginalized groups, including women, and mandates measures such as equal retirement rights, maternity protection, and inclusion of care periods in benefit calculations, while recognizing gender equality as a cross-cutting principle. No. 23 (Committee on Economic, Social and Cultural Rights, 2016) addresses workplace gender inequalities such as structural barriers, occupational segregation, and the pay gap proposing equitable parental leave, accessible childcare, and anti-harassment measures. Both stress that unpaid work, essential to social reproduction, must be integral to public policy.

The International Labour Organization (ILO) has been key in setting norms on social reproduction. Convention No. 102 (International Labour Organization, 1952) established minimum social security standards in health, unemployment, maternity, and family, framing childcare and family care as collective responsibilities and shifting their burden from households to public or regulated systems. Convention n. 156 (International Labour Organization, 1981) recognized that family responsibilities restrict employment access and permanence, especially for women, and mandated equal opportunity measures, including protection against dismissal and provision of care services. This broke with the view of reconciling work and family as an individual or solely female issue, linking equal treatment to concrete measures such as labor reintegration and care access, and affirming the need to reorganize production to include social reproduction. Convention n. 189 (International Labour Organization, 2011) formalized domestic

and care work, acknowledged its feminized and historically unequal conditions, and guaranteed labor rights and social security coverage, addressing structural inequalities in the sector.

3.1 WOMEN'S HUMAN RIGHTS AND SOCIAL REPRODUCTION WITHIN THE UN SYSTEM

Between 1975 and 1995, the United Nations world conferences on women advanced the international gender equality agenda. At the Mexico City Conference (United Nations, 1975), held during the International Women's Year, the central themes were equality between men and women, integration into development, and contribution to peace. From the perspective of social reproduction, the conference highlighted demands for the recognition of women's double workday and the unequal distribution of domestic and care work, as well as the expansion of childcare services, maternal and child health care, and maternity leave to facilitate women's participation in the labor market (United Nations, 1976). Nonetheless, the prevailing approach remained oriented toward productive integration, without a structural critique of reproductive labor. At the Copenhagen Conference (United Nations, 1980), which focused on employment, health, and education, it was acknowledged that family responsibilities limit women's economic participation. This acknowledgment spurred debates on the redistribution of domestic tasks and the strengthening of social infrastructure, identifying unpaid work as a key barrier to gender equality (United Nations, 1981).

The most emblematic international instrument for the recognition of women's rights is the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted

in 1979. In its preamble, it acknowledges that full equality between men and women requires the transformation of traditional roles in society and that the expansion of women's participation is essential for social progress and development. The Convention links the elimination of gender discrimination to the eradication of racism, racial discrimination, and colonialism, situating women's emancipation as part of a broader process of social transformation. With regard to social reproduction, Article 11 guarantees the right to work and to equality of conditions, providing for support services, parental leave, and social benefits to reconcile family and professional responsibilities. This provision is grounded in the sexual division of labor, in which women disproportionately perform social reproduction activities that remain invisible within legal and economic structures (United Nations, 1979). General Recommendation No. 17 (Committee on Economic, Social and Cultural Rights, 1991) of the Convention complements this perspective by urging the measurement and valuation of unpaid domestic work, incorporating it into the gross national product through time-use statistics (Committee on the Elimination of Discrimination Against Women, 1991). This guideline derives from the Nairobi Strategy (United Nations, 1986), which challenged the notion that economic growth alone would guarantee equality between men and women and advocated for the recognition of invisible work as a central element of equality and sustainable development (United Nations, 1986).

Between the Mexico City Conference (United Nations, 1975) and the Beijing Conference (United Nations, 1996), the focus shifted from reconciling maternity and employment, predominant in the 1970s-1980s, to a more structural approach in the 1990s. Two changes marked the UN's action on women's rights. First was the adoption of the concept of gender: the initial conferences addressed eliminating sex-based discrimination in a binary, legalistic way, while incorporating gender – driven by feminist debates and transnational

networks – enabled understanding of power relations across social markers. Its broader use began with the Vienna Declaration (1993), which recognized women’s rights as human rights and addressed gender-based violence. The Beijing Platform for Action (United Nations, 1996) consolidated the term, promoting “gender equality” and gender mainstreaming across all policies and decision-making. Second was the adoption of empowerment in the Beijing Declaration (United Nations, 1996), defined as creating conditions for women to develop their potential and shape their lives (United Nations, 1996). Empowerment became central to combating inequality, linked to economic autonomy, political participation, and sexual and reproductive rights.

Beijing also broke with the homogeneous conception of “women”, recognizing that gender inequalities affect Black, Indigenous, migrant, rural, and poor women differently, as they face distinct barriers. Consequently, it determined that social reproduction policies should be adapted to the concrete living conditions of women. The post-Beijing period stimulated studies, programs, and initiatives within the UN and multilateral forums, and the gender perspective came to be increasingly incorporated into international and national policies, influencing debate and policy-making in the domestic sphere of states (Peterson; Runyan, 2014).

The post-Beijing agenda was incorporated into broader frameworks such as the MDGs, a set of eight goals established by the UN in 2000 during the Millennium Summit to be achieved by 2015. Originating from the Millennium Declaration adopted by 189 Member States, they aimed to eradicate extreme poverty and promote human development globally, linking action in both developed and developing countries (Fukuda-Parr, 2004). The MDGs transformed broad political commitments from earlier multilateral conferences into a reduced set of goals and numerical indicators. This quantification made

development technical and monitorable but also reductionist, focusing on standardized outcomes. The process was centralized among a small group of UN technocrats and development agencies, without broad consultation with states, civil society, or experts, imposing universal standards regardless of national contexts (Fukuda-Parr, 2016).

Inspired by the human development approach of the Human Development Report since 1990, the MDGs sought to translate international commitments into measurable goals, emphasizing poverty reduction and well-being (Fukuda-Parr, 2004). Their scope was narrow, omitting governance, human rights, climate change, employment, and inequality. Gender equality in MDG 3 was assessed only through education, employment, and political participation, excluding sexual and reproductive rights and gender-based violence, in contrast to the Beijing Platform for Action. The link to social reproduction was limited to MDG 3 and MDG 5 (maternal health), without recognizing unpaid care work as strategic. Indicators focused on maternal mortality and educational parity, avoiding reforms to redistribute care among state, market, and families. This technocratic logic ignored Cairo and Beijing debates on rights, autonomy, and universal social protection, reaffirming the private, largely female, responsibility for social reproduction. By prioritizing “social minima” and avoiding challenges to neoliberalism’s impact on reproductive labor, the MDGs consolidated a limited, depoliticized vision of development, disconnected from a human rights-based approach that sees social reproduction as central to equality and well-being.

4 SOCIAL REPRODUCTION IN THE 2030 AGENDA

The experience of the MDGs and feminist critiques of their design and implementation, particularly from organizations such as UN Women, DAWN, and other Global South feminist networks, pressured the post-2015 agenda to adopt a more intersectional and structural approach. Responding to this context and civil society demands, the 2030 Agenda, launched with the Sustainable Development Goals (SDGs) in 2015, aimed to “transform the world” through global solidarity focused on the poorest and most vulnerable, expressed in the principle “leave no one behind” (United Nations, 2015). It advanced by explicitly recognizing reproductive labor, linking gender equality to the redistribution of care responsibilities, and introducing broader indicators and targets to monitor structural change, addressing limitations of the MDG paradigm.

Unpaid work, especially domestic and care work, came to be explicitly recognized in the 2030 Agenda, marking a rupture from the MDGs, where it had been absent. This recognition is centrally reflected in SDG 5 on gender equality, particularly in Target 5.4, which calls to “recognize and value unpaid care and domestic work through the provision of public services, infrastructure, and social protection policies, and the promotion of shared responsibility within the household and the family, as nationally appropriate” (United Nations, 2015). This formulation articulates three complementary dimensions: the recognition of the economic and social value of unpaid work; the redistribution of care responsibilities among the state, the market, and families, and between men and women; and the reduction of care burdens through the provision of adequate infrastructure and public services. According to some feminists, such as Razavi (2021), feminist demands were diluted in the final text with the addition of the phrase

“as nationally appropriate,” as it creates room for each government to interpret and apply the target unevenly, potentially claiming that national circumstances or priorities do not justify certain measures.

Although Target 5.4 is the most explicit reference, the issue of unpaid work is indirectly related to other SDGs. In SDG 1 (No Poverty), targets such as 1.3 (universal social protection) and 1.4 (access to resources and basic services) help reduce vulnerabilities that increase the burden of unpaid care work. SDG 3 (Good Health and Well-being), by strengthening public health infrastructure and services, alleviates the domestic care workload associated with illness, dependency, and maternity. SDG 4 (Quality Education), in Target 4.2, by providing for free, quality early childhood education, helps free the time of those engaged in caregiving functions. SDG 6 (Clean Water and Sanitation), through targets 6.1 and 6.2, by ensuring access to safe drinking water and sanitation, reduces the time spent, especially by women and girls, on domestic tasks related to water collection and hygiene.

Unpaid work is also connected to SDG 8 (Decent Work and Economic Growth), as policies for reconciling work and family responsibilities, provided for in targets 8.5 and 8.8, expand women’s participation in the paid labor market. SDG 10 (Reduced Inequalities), by proposing strategies for social and economic inclusion (targets 10.2 and 10.3), should take into account the redistribution of care time as a component for reducing gender inequalities. Finally, SDG 11 (Sustainable Cities and Communities), with targets such as 11.1 (safe housing and basic services) and 11.2 (accessible and sustainable transportation), contributes to reducing the time spent on travel related to care tasks.

In this way, the 2030 Agenda not only incorporates unpaid work as a strategic dimension of sustainable development but also articulates it transversally with policies and targets across different

goals, reinforcing the need to integrate the care perspective into the formulation and implementation of public policies.

4.1 MEASURING UNPAID WORK IN THE 2030 AGENDA

Unpaid domestic and care work is officially measured through Indicator 5.4.1, linked to SDG 5, which tracks the proportion of time spent on these activities, disaggregated by sex, age, and location. Indicator 5.4.1 is calculated using Time Use Surveys (TUS) or equivalent modules incorporated into household surveys. Its methodology follows the International Classification of Activities for Time Use Statistics (ICATUS) (United Nations, 2019). Time-use data are essential for formulating, implementing, monitoring, and evaluating policies aligned with the 2030 Agenda.

The UN began formally advocating for time-use surveys with the Beijing Platform for Action, which recommended the development of methods to account for unpaid work, particularly domestic and care work, through time-use data collection (United Nations, 1996). Since then, agencies such as the UN Statistics Division (UNSD) and UN Women have promoted methodological standardization of these surveys, culminating in the publication of the Guide to Producing Statistics on Time Use in 2003 and the International Classification of Activities for Time Use Statistics (ICATUS) in 2016 (United Nations, 2019). The 2030 Agenda consolidated this guideline by including Indicator 5.4.1 under Target 5.4 of SDG 5 on gender equality.

The indicator refers to the proportion of daily time spent on unpaid domestic and care work by men and women. This type of work involves activities carried out for the benefit of household members or relatives living in other households and encompasses two

main groups: “unpaid domestic services” and “unpaid care services” for family members. Unpaid domestic work includes tasks such as food preparation and management, cleaning and home maintenance, repairs, care of clothing and footwear, household administration, care of animals, shopping for the family, and travel related to these activities. Unpaid care work covers the care and instruction of children, assistance to people who are ill, elderly, or with disabilities, as well as travel related to these functions (United Nations, 2020).

Data collection is carried out primarily through dedicated time-use surveys or specific modules incorporated into multipurpose household surveys. The most common methods are the 24-hour diary, in which respondents record activities and their timing throughout the day, and stylized questionnaires, which ask respondents to estimate the time spent on specific activities over defined periods. Compilation and validation are undertaken by the UNSD (United Nations, 2019).

The purpose of the indicator is to measure the time that women and men dedicate to unpaid work, ensuring that all work, paid or unpaid, is duly valued. It also serves to assess gender equality by highlighting disparities in the time spent on activities such as cooking, cleaning, or caring for children. Measurement is expressed as a proportion of the day: for example, if women aged 15 and over spend 10 percent of the day on such tasks and men spend 1 percent, this corresponds, on average, to 2 hours and 24 minutes for women and 14 minutes for men. The daily value is calculated as an average over the survey’s reference period, meaning these times are not necessarily identical each day (United Nations, 2020).

Time-use statistics are employed to measure the quality of life and well-being of individuals and families, to provide a comprehensive view of all forms of work, including unpaid domestic work, and to generate essential data for monitoring gender equality and the

empowerment of women and girls, thereby informing policies and debates on the subject. By measuring the percentage of the day devoted to these activities, the indicator makes it possible to objectively capture the disproportionate burden borne by women.

Beyond the gender dimension, time-use data help analyze habits that affect health (such as sleep, diet, and physical activity), participation in educational activities, access to health and education services (including travel and waiting times), and the availability of infrastructure such as safe drinking water and energy. They also provide information on commuting, screen time, and well-being impacts, allowing for the identification of risks such as the negative effects of excessive use of electronic devices by children. These statistics have specific applications for certain population groups, such as children, the elderly, and persons with disabilities. For children, they can be used to assess involvement in child labor, school attendance, study time, and leisure activities. For the elderly, they reveal patterns of social interaction, care needs, and preferred activities. For persons with disabilities, they help identify barriers to social inclusion. In this way, time-use data serve as a cross-cutting tool for understanding social dynamics and guiding public policy across multiple sectors (United Nations, 2021).

Time-use surveys are fundamental for articulating the interrelationships between different SDGs, showing how the unequal distribution of time affects economic, social, and environmental dimensions. In SDG 1 (No Poverty), they demonstrate the link between monetary and time poverty, which particularly affects women in low-income households. In SDG 3 (Good Health and Well-being), they reveal that home-based care is predominantly performed by women, a critical insight for policies aimed at preventing care overload among women. Under SDG 4 (Quality Education), they show how care overload,

child marriage, and early pregnancy undermine girls' school retention, while also guiding strategies for early childhood education that free time for caregivers. The sexual division of labor, addressed in SDG 5 (Gender Equality), also impacts SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities) by limiting women's participation in the labor market and identifying situations of child domestic labor (SDG 8.7.1). SDGs 6 (clean water and sanitation), 7 (affordable clean energy), 9 (industry, innovation and infrastructure), and 11 (sustainable cities and communities) demonstrate that the lack of basic infrastructure increases the time spent on unpaid work, disproportionately affecting women and girls. Under SDG 10.7, time-use data help to understand the global care chains associated with female migration. In SDG 13 (climate action), they highlight the disproportionate impact of extreme climate events on women and their role in the management of natural resources. Finally, under SDG 17.19, they provide a means to assign economic value to the care economy through satellite accounts, creating a basis for policies aimed at recognizing, redistributing, and remunerating unpaid work.

4.2 MONITORING INDICATOR 5.4.1: PROGRESS, OBSTACLES, AND CRITICS

Despite its relevance, monitoring of the indicator faces significant challenges. Conducting time-use surveys is costly and infrequent, and many countries still do not produce regular and comparable data. This gap hinders the assessment of progress and limits the development of evidence-based policies, such as the expansion of public care services or the promotion of measures to reconcile professional and family responsibilities. Strengthening the collection and analysis of data for

Indicator 5.4.1 is therefore essential to fully implement Target 5.4 and to ensure that the recognition of unpaid work translates into structural changes in the social organization of care.

According to the United Nations (2025), 96 countries currently report data on Indicator 5.4.1. However, significant regional disparities persist. Globally, 78 percent of the population is covered by available data, with over 90 percent coverage in Central and Southern Asia, Latin America and the Caribbean, and Europe and Northern America. In contrast, substantial gaps remain in Sub-Saharan Africa, where coverage extends to only 42 percent of the population. Moreover, data collection is often sporadic: since 2000, 46 countries have reported the indicator only once, and only six have done so at least five times, enabling meaningful trend analysis. In response to the shortage of this vital data, the Statistical Commission approved the Guide to Producing Statistics on Time Use, as mentioned before. This technical document presents a range of options and methodologies to facilitate the production of high-quality time-use statistics and indicators, in support of SDG monitoring (United Nations, 2025).

Another challenge is that the international comparability of these statistics is limited by factors such as: methodological differences between 24-hour diaries and stylized questionnaires, which may generate non-comparable data; variations between national or regional classifications and the international ICATUS 2016 classification; the presentation of only the “primary activity,” which ignores simultaneous activities (potentially underestimating, for example, time spent on childcare); and differences in the age groups considered in surveys, which hinder cross-country comparisons (United Nations, 2020).

In Latin America, countries such as Mexico, Ecuador, and Venezuela were pioneers in conducting national time-use surveys. Given the different methodological and theoretical approaches,

the *Clasificación de Actividades de Uso del Tiempo en América Latina y el Caribe* (CAUTAL) was developed with the aim of promoting the standardization of information. In addition to national experiences from countries in the region, the Beijing Platform for Action and the ICATUS classification were also taken into account (Barajas, 2016). Despite these advances, the production of information on this subject is still not institutionalized in the region, which hinders the effective use of such data to inform public policy.

In Brazil, the Brazilian Institute of Geography and Statistics (IBGE) is the main body monitoring time-use statistics. Since 2000, it has collected data through the National Household Sample Survey (PNAD) on commuting time and domestic tasks. In 2009, IBGE conducted a pilot daily time-use survey in five states (Moreira; Moser, 2019). The agenda stalled, and statistical production in the country remains insufficient to support policies to reduce gender inequality or advance methodologies for accounting reproductive labor in the national economy.

In its 2024 national report on SDG targets, Brazil noted that between 2016 and 2022 the proportion of daily time women spent on domestic and care work rose from 11.4% to 11.7%, a trend also seen internationally and attributed to the COVID-19 pandemic. Racial inequality deepened: in 2022, Black women spent 12.2% of daily hours on these tasks, versus 11.1% for white women. Among men, rates were balanced but low (5.7% for white men and 5.6% for Black men). Income disparities also grew: women in the poorest quintile spent 24.9 hours weekly on such work, compared to 17.6 in the richest – a wider gap than in 2016 (Brazil, 2024). According to Brazil (2024, p. 150), eliminating inequality in the sexual division of labor requires confronting patriarchal and colonial structures rooted in gender and racial disparities. Women, especially Black and poor, devote more time

to unpaid work, limiting labor market participation, generating wage gaps, harming health, and reducing political representation.

In its SDG 5 monitoring report, the United Nations (2025) stated that, on average, women dedicate two and a half times more hours per day to these activities than men, with sharp regional variations: in Northern Africa and Western Asia, women spend more than four times the amount of time as men; in Oceania, Europe, and Northern America, about twice as much. This inequality limits women's economic opportunities and perpetuates their social, political, and economic marginalization, particularly in poorer households where the lack of resources prevents outsourcing tasks or acquiring time-saving household technologies.

Experiences from various countries show the strategic use of these data to reform care policies: Uruguay established and monitors its National Integrated Care System (SNIC); Argentina, Chile, Colombia, Costa Rica, Mexico, Paraguay, Cambodia, and Kenya have developed co-responsibility programs; Finland, Moldova, and Albania have extended parental leave to encourage men's participation in caregiving; and in South Korea, the data have informed debates on care services, women's participation in the labor market, and economic growth.

Time-use surveys make visible, in statistical terms, the time spent on care, domestic tasks, and other essential activities, removing them from invisibility. They also help politicize unpaid work and place it at the center of debates on social justice, resource distribution, and collective well-being. However, viewing social reproduction work mainly through time-use metrics draws criticism from feminist social reproduction theory, as it reduces a structural and relational phenomenon to a quantitative indicator and overlooks key elements of the feminist critique. Counting hours spent on certain activities does not explain the social and economic mechanisms that shape

their organization or their historical and political roots. From SRT perspective, unpaid work exceeds domestic tasks, encompassing processes essential to reproducing the labor force and, therefore, to social reproduction as a whole.

A narrow focus on time spent can obscure the links between this work, the capitalist system, and other inequalities such as gender, race, and class. Although the human rights debate has identified reproductive work as predominantly female and rooted in the sexual division of labor, overcoming this condition requires examining the causes of its feminization and precarization. This demands moving beyond quantifying hours to analyze the structural position of such labor within the logic of value production and accumulation. When framed only as a technical matter of task redistribution or time optimization, the debate is easily absorbed by neoliberal policies that preserve structural exploitation. The assumption that the sexual division of labor can be eliminated solely by redistributing tasks ignores its persistence and even worsening during crises. The Brazilian case during the Covid-19 pandemic illustrates this, with a rise in women's unpaid work. More broadly, crises such as the 2008 financial crash have disproportionately affected women, as has neoliberalism, whose austerity measures have privatized social welfare and shifted its costs to families (Fraser, 2017).

From the standpoint of SRT, the central issue lies not merely in the workload or distribution of labor but in identifying who benefits from it, who controls it, and how it is sustained by gender-based relations of oppression intertwined with other markers of difference such as race and class. Under this logic, recognizing reproductive labor entails conceiving it as a collective and socially necessary activity, linked to proposals for the decommodification of life and a rupture with the capitalist logic of exploitation and the privatization of reproduction.

5 CONCLUSION

In examining the incorporation of unpaid domestic and care work into the 2030 Agenda, this chapter has shown that Target 5.4 represents a significant, yet limited, advance in the recognition of reproductive labor within global development frameworks. By establishing a measurable indicator through time-use statistics, the Agenda addresses the historical invisibility of unpaid work and creates a basis for policy monitoring and cross-national comparison. However, as argued throughout, statistical visibility alone cannot alter the structural conditions that underpin the sexual division of labor, nor can it dismantle the gendered and racialized hierarchies that organize and devalue reproductive work. Recognition, while necessary, risks becoming a purely formal achievement if not accompanied by transformative measures that redistribute power and resources.

The analysis has demonstrated that SRT provides a critical lens for understanding both the achievements and the shortcomings of this international commitment. By situating unpaid work within the broader processes of capitalist production and reproduction, this perspective reveals how economic systems depend on, yet systematically devalue, reproductive labor. The documentary analysis of foundational human rights and women's rights instruments traced a trajectory in which the treatment of unpaid work evolved from omission, to partial acknowledgment, to measurable inclusion within the SDGs. Nevertheless, this evolution remains constrained by a policy logic that tends to individualize and privatize responsibility for reproductive tasks, rather than reframing it as a collective and structural concern.

Incorporating unpaid work into the development agenda must move beyond counting hours toward transforming the social and economic relations that produce inequality in the first place. This requires integrating social reproduction into the heart of economic policy, expanding public investment in care infrastructure, and ensuring that redistribution of responsibilities is embedded in labor, welfare, and gender policies. Without such structural reforms, the recognition achieved through the 2030 Agenda will remain an important but insufficient milestone, leaving intact the very arrangements that sustain the undervaluation of reproductive labor.

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EDUCATION AS A HUMAN AND FUNDAMENTAL RIGHT: THE SPECIFICITIES OF EDUCATION IN CHINA IN THE JIANGSU-ZHEJIANG-SHANGHAI REGION IN CONTRAST TO BRAZILIAN EDUCATION BETWEEN THE UNIVERSALIZING PATRIARCHAL STRUCTURE AND ETHNIC AND CULTURAL EDUCATION

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1 INTRODUCTION

Education, as a fundamental human right, is an indispensable condition for citizenship and social justice, and represents a strategic

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space for human interaction. This paper is qualitative, bibliographical, and investigative in nature, with a comparative analysis of the education system in the Jiangsu-Zhejiang-Shanghai region of China and the Brazilian model, focusing on the central tensions between a universalizing patriarchal culture and ethnic-cultural education rooted in the cultural diversity of the Brazilian people. The discussion becomes relevant in the context of contemporary global agendas, where gender issues occupy an emerging and cross-cutting place. The role of education in reproducing or overcoming oppressive patriarchal structures is widely discussed by international organizations, social movements, and researchers committed to equity and human rights. In this context, analyzing how educational systems address social roles and the invisibility of women's knowledge, especially cultural knowledge, proves crucial to understanding the power dynamics that shape the educational field.

In the Chinese region under consideration, we observe a system guided by standards of academic excellence, state centralization, and collectivist values, strongly influenced by Confucianism and national development policy. Although efficient in terms of performance, this model also presents challenges regarding cultural plurality and the approach to gender issues. In Brazil, in turn, education is marked by a profound duality: on the one hand, it remains strongly anchored in a patriarchal, Eurocentric, and exclusionary rationality; on the other, counter-hegemonic knowledge emerges in ethnocultural education, legitimizing plural knowledge. Therefore, it is imperative to combat structural racism and promote cognitive and social justice. In this context, pluriepistemology and Epistemologies of the South offer a critical theoretical basis for rethinking the educational field.

This perspective denounces the imposition of a modern cognitive standard in the proposition of valuing plural knowledge and

gender identification on a global scale. By articulating knowledge and emancipation, Epistemologies of the South challenge the monoculture of knowledge and highlight the urgency of building an education that engages with the realities of global peoples, without universalist imposition. The analysis proposed in this study therefore seeks to reflect on how educational systems can both consolidate inequalities and become tools of resistance and transformation. By contrasting the models of China and Brazil, and by incorporating a critical perspective on gender, race, and cultural relations, the work contributes to contemporary debates on truly democratic education.

Given this context, a central question arises: is the behavior of the male parent considered «absent» naturalized? This question guides the focus of the writing, which seeks to highlight the tensions between traditional parenting practices and the new family dynamics arising from China's one-child policy in the face of gender issues. On the other hand, moving to the other global meridian of Latin America, in the Brazilian context, gender dynamics have deep-rooted cultural and social influences just as deeply rooted in Asia. In this regard, global strengthening at the international level is proposed as a mechanism for overcoming internal social obstacles, such as gender issues, which can be overcome through the joint efforts of Brazil and China. The two countries are agricultural powers with complementary profiles and common interests regarding food security and sustainability (China; Wachhol, 2021 p. 98).

2 TRADITIONAL PRACTICES: THE ONE-CHILD POLICY AND ITS GENDER IMPLICATIONS

It's common for girls raised in the Yangtze Delta region, which encompasses the provinces of Jiangsu, Zhejiang, and the city of Shanghai, daughters of traditional families, to be encouraged to participate in essay competitions from primary school onwards, often resulting in awards. Such achievements are attributed by family members who refer to themselves as having a «talented girl» in the family. The state's one-child policy poses a social challenge, especially in terms of gender.

This policy sparked controversy and a wave of protests because, although initially intended as a coercive measure to control population growth, the negative effects of its implementation outweighed the positive ones. In turn, it is because of this policy, implemented "imperatively," that contemporary Chinese society is destined to be unique and worthy of study (Liao, 2018 p. 28).

However, there is a discrepancy between the praise given to father figures and their actual presence in their daughters' daily lives. Although the father is considered affectionate, his practical and daily participation in the lives of his daughters is limited. The mother figure, in turn, assumes most of the caregiving and support responsibilities, even though her dedication is rarely recognized socially. This asymmetry contributes to the perception that society naturalizes the woman's role as primary caregiver, while paternal absence is considered normal or acceptable.

The one-child policy, which has been at the core of China's family planning policy for several decades, has gone through different phases since its introduction in the 1980s until the implementation of the «second-child» policy in 2016. Its main phases are: a phase of strict control in the 1980s, the 1990s, a phase of adjustment and relaxation from 2001 to 2013, and finally, an opening-up phase from 2014 to 2016. (China, 2013). In 2015, during the Fifth Plenary Session of the 18th Central Committee of the Communist Party of China, the full implementation of the «second-child» policy was announced, marking the end of the one-child era (Christoph Ricking, 2015). In 2016, the new version of the Population and Family Planning Law came into effect, extending this new policy nationwide.

Rapid population growth in the second half of the 20th century and the increase in human longevity in general created challenges that led some countries to create national birth control policies. Two main methods were applied by these countries: the first was based on birth control through the provision of contraceptives as an optional use without government interference in choice; the second was the restriction of individual reproductive freedom to curb population growth (Menin; Billig, 2022 p. 608).

In the early years of the founding of the People's Republic of China, the government's focus was on political stabilization and economic development. In this context, there was little attention paid to the relationship between population growth and economic development, with the national economic structure dominated by the agricultural and rural economy. At that time, the traditional view that "more population means more labor" prevailed. Thus, both the Communist Party and the country's leaders demonstrated a favorable

stance toward population growth. Even before the founding of the Republic, Historical Idealism already advocated that “the more population, the better” (Mao Zedong, 1949). In 1949, a commentary by the Xinhua news agency also highlighted the importance of human beings as the primary force in achieving development “miracles” (China, 2021).

After the first national census in 1953, which revealed a population of over 600 million, rapid population growth led to resource scarcity and pressure on survival (Observatory Of China Political, 2010). This situation led leaders to reevaluate the need for birth control. In September 1956, Zhou Enlai proposed measures to control population growth in the context of the Second Five-Year Plan, which culminated in the publication of Ma Yinchu's "New Theory of Population" in 1957, which advocated reducing population growth and improving the quality of life of the population (Morillas, 2022).

In the eyes of the people, the Communist Party of China (CPC) is a party dedicated to serving the people, which has led the Chinese nation through difficult times, blazing new paths for the nation's independence, freedom, and emancipation, and achieved great successes in the country's construction and development. The miracles of the CPC combine the revitalization of ancient Chinese civilization with the inauguration of an innovative path of development (China; Carvalho, 2021, p. 9).

In the 1970s, demographic problems intensified, with major natural famines between 1959 and 1961, followed by a surge in birth rates. In 1973, the Communist Party and the State Council removed the Ministry of Health's family planning function and created a national leadership group. That same year, the slogan "late, spaced,

and few births" was adopted, introducing a stricter population control policy (Menin; Billig, 2022). In 1980, the Communist Party Central Committee published an open letter proposing that each family have only one child, beginning the formal implementation of the one-child policy (Silva, 2023).

In 1982, family planning was incorporated into the Constitution as a basic national policy and legally established. However, the inflexible policy failed to consider the needs of rural areas, where having more children was seen as essential to ensuring a workforce and security in old age, as well as continuing the family line. Therefore, in 1984, the central government relaxed the rules to allow rural families to have a second child if the first was a girl (China, 2021). This relaxation, known as the "one-and-a-half-child" policy, helped alleviate the pressure to have few children, but it also reflected the cultural preference for sons.

Until the end of the 20th century, population growth was effectively controlled, but new demographic challenges emerged, such as population aging and labor shortages. This led to a transition to a phase of "low birthrate, low mortality, and low natural growth," with growing concern about the imbalance in population structure. In 2010, the Chinese government implemented a measure allowing couples with one spouse being an only child to have a second child. This resulted in an immediate increase in the natural population growth rate, and in 2012, the declaration of the 18th National Congress of the Communist Party of China removed the goal of "maintaining a low and stable fertility level," paving the way for the relaxation of the natalist policy (Menin; Billig, 2022).

3 REGIONAL DIFFERENCES IN THE IMPLEMENTATION OF THE ONE-CHILD POLICY: THE SPECIFICITY OF THE JIANGSU-ZHEJIANG- SHANGHAI AREA

The implementation of the one-child policy varied substantially by region, including differences between urban and rural areas, ethnic groups, special economic zones, and local pilot programs. In large, economically developed cities like Shanghai, the policy was strictly enforced, with severe penalties for having more than one child. Conversely, in rural areas with strong patriarchal traditions, the possibility of having a second child was permitted if the first was a girl. This phenomenon became known as the "one-and-a-half child" policy and sought to address both labor needs and the preference for sons.

In border regions, where ethnic minorities such as the Uyghurs and Tibetans existed, policies were more flexible, allowing these groups to have up to two or three children. Furthermore, in areas such as Shenzhen and Zhuhai, where population growth was younger, economic and structural conditions facilitated more relaxed policy implementation. These regional variations reflect the need to consider local cultural and social characteristics when implementing universal policies, highlighting how the specific context influences implementation methods and impacts on families.

The impact of the one-child policy on family structure and parent-child relationships resulted in a reduction in family size and nuclearization. The one-child policy transformed the traditional family structure of an "extended family with several children" into a "nuclear family" consisting of two parents and one child. The average family size decreased from 4 people in 1982 to 3 people in 2010 (Rui, 2011). Contemporary women witnessed these structural changes in state

policy. However, others lived in times when birth rates were promoted and encouraged, which is why they had multiple children. There were times when most families followed the extended family model, and women devoted much more time and effort to raising and caring for the home.

As their children grew older, they were encouraged to join collective labor. Many women entered factories such as textile mills. Following political changes, family planning was implemented. With the rise of urbanization, many young parents took out loans to buy homes and moved from their hometowns to other cities. Thus, the reduction in family size was not only population-based but also geographic. This made the separation even more evident in kinship relationships. This separation was not only due to birth control policies, but also to the impetus of economic development, which increasingly fragmented people into smaller family units, weakening traditional interpersonal bonds.

The family model can be summarized as: 4-2-1, an intergenerational structure, "4 (grandparents) + 2 (parents) + 1 (son/daughter)." When an only child reaches adulthood, they face intense pressure to care for both their parents and their own children. Many people express that much of their age-related anxiety stems precisely from the responsibilities of caring for their parents. This drives them to marry early and start their own families as a way to alleviate this pressure. In generations of multi-child families, responsibilities could be shared. However, even so, everyday and social experiences indicate that «female» daughters take on more caregiving responsibilities. While female family members care for sick parents, male children consider «this to be their job.»

Regarding social organization in ancient China, it is observed that there were significant differences between the sexes in terms of education, as girls rarely learned to read and write, as schools were exclusive to boys. However, girls from wealthy families had the opportunity to learn calligraphy with private tutors in their homes, although they were still primarily taught all areas of household management and good manners by their future husbands and in-laws (Dios, 2021, p. 6).

This is the reality that represents a gendered burden. Due to the lack of specific state support, young women face significant pressure to fulfill responsibilities and care. However, an important change brought about by the one-child policy is that, for the first time in China, women were recognized as formal members of their families of origin. There was no longer the possibility of their parents having another child. A popular saying in China was that «a married daughter is like spilled water,» meaning that upon marriage, women lost the right to material or emotional support from their families of origin. But with the one-child policy, despite the gendered burden, the importance and necessity of a single daughter was accidentally changed. If previously, sons were the heirs to family assets and daughters were destined to marry and leave home, now this distinction no longer exists precisely because the fact that a daughter is the only alternative.

Furthermore, during the parenting process, tragedies also arose: the loss of an only child became a sensitive social issue. In hospitals, the times of families who have lost their only child are particularly sensitive. Even in a city like Shanghai, the support offered is limited to a phone call to check on the parents' physical or emotional well-being. This fails to provide substantial, human, and fundamental help. Bereaved families and community workers become polar opposites: this is the result of a policy that completely controlled the right to

have children but lacked subsequent support. At the same time, social judgment also influences. The social environment evaluates these families with compassion, but from a condescending position. This reinforces the marginalization of these families, both emotionally and relationally, in society.

Chinese society highly values the concept of "descendants," to the point that many parents forget themselves for their children. Children often hear, "We sacrificed ourselves for you." These words only make children feel guilty. The sentimental memory many Chinese share is that: our entire lives are hijacked by various state values imposed on the private family space. Also, many collateral processes imbalance the gender ratio due to the cultural preference for boys, and family planning policies have led to selective abortions and a typically high proportion of male births, generating the phenomenon of tens of millions of "surplus males."

With the expansion of information networks and the internet, many secrets previously hidden over time have come to light. In Jiangxi province, for example, the phenomenon of infanticide, which consisted of killing newborns, usually by drowning, has existed since ancient times. This practice, known as *nè yīng*, includes all actions committed by parents or other family members responsible for care that endanger the baby's life (Yu; Liang, 2023). Traditionally, women had no right to inheritance and could only access family assets through the dowry.

[...] in China, a country with a hyper population and deep-rooted culture, where this phenomenon also occurs, killing a child after birth or simply aborting it, simply because it is a girl, is a much more common occurrence than one might imagine in other cultures, especially in Brazil [...] (Argachof, 2011, p. 95).

Also, in ancient times, there was a popular saying in China: "If a boy is born, he's raised; if a girl is born, she's abandoned," meaning that only sons deserved to be raised, while daughters were discarded. This is a clear manifestation of patriarchal thinking, and at the same time, a painful social reality. With the implementation of the one-child policy, many girls born in Jiangxi were murdered or abandoned at birth, resulting in a very low survival rate for girls. This directly contributed to the existence of "surplus men." Many courageous women denounced: "Looking for a wife? Go look in hell!" They should have lived, but they were murdered by their parents (Xinran, 2011).

In contrast, in the Yangtze Delta regions, such as Jiangsu, Zhejiang, and Shanghai, the problem of gender imbalance is not as extreme. This is mainly due to economic development and high employment levels. Beyond institutional constraints, people in these regions tend to be more accepting of new ideas, and the concept of gender equality has become more readily integrated into everyday life. Women participate in the labor market, although they also take on domestic tasks, and have more career options than in economically disadvantaged areas.

Intergenerational Relationships and the Eldercare Crisis Families with one child have a low risk-taking capacity, which has made so-called "households without surviving children" (shidu families) a painful and worrying social issue. At the same time, the traditional model of family care for the elderly is becoming increasingly unsustainable, and the demand for socialized care services is increasing. The one-child family model has become the norm in many regions of China. This configuration has created significant pressure on the care of elderly parents, especially when children face hardship or pass away. In these cases, many families inevitably turn to the market to meet their care needs.

In large cities, services such as «medical care» or «tourism trips for the elderly» have gained popularity. For seniors with time and financial resources, these lifestyles are well-accepted and valued. However, this trend reflects social inequality. As mentioned previously, only seniors with «money» can access these services, while other groups, especially those with fewer resources, are excluded. Many Chinese have reported that their parents do not want to be a burden on their children. Still, it is important to emphasize that this «self-care» decision is only possible when there is a sufficient economic base. In families with more limited economic conditions or in less developed regions, elderly care still falls primarily on the children. And when there is only one child, the pressure is even greater. Given this social reality, the most reasonable approach would be to resort to state support and a strengthening of the social welfare system. However, the results in contemporary times are limited. The difficulty of separating elderly care from the family environment is one of the greatest challenges for young Chinese today.

In China, especially after the Reform and Opening-up policy, rapid economic development and the continuous improvement of medical and health conditions in urban areas have contributed significantly to the rise in the population's standard of living and the increase in average life expectancy (Yuan & Gao, 2020). However, a major challenge also looms: population aging is intensifying. According to the World Health Organization, China is among the countries with the fastest population growth in the world. Due to increased longevity and declining fertility rates, it is estimated that by 2040, the Chinese population aged 60 and over will represent 28% of the total. Despite the various policies implemented by the Chinese government to address the challenges of aging, significant problems remain, such as disparities in the pension system (Meiyun, 2024, p. 2).

Thus, the concentration of family resources and educational competition in families with one child, all family resources tend to be concentrated on that child, giving rise to the phenomenon known as "jiwa" (鸡娃), meaning obsessive education, and increasing educational competition. The more economically developed a region, the more parents want their children to use education as a means of achieving social mobility. To this end, they enroll their children in extracurricular classes in music, dance, programming, advanced mathematics, among others, hoping that they will accumulate skills from a very early age. However, the more «utilitarian» the parents are, the greater the pressure their children feel. In families where the parents are successful doctors or businesspeople, parents have high expectations for their children's performance and tend to constantly compare them to other children their age.

Judging children's worth solely by their grades is clearly unfair, and this type of education can also lead to emotional problems. In large cities, children suffer from anxiety, depression, or other disorders due to their parents' excessive expectations. Only children are frequently diagnosed with depression. Therefore, when family resources are concentrated on a single son or daughter, extreme phenomena can also arise. Given the culture in which children become simply a tool for parents to showcase their educational achievements to others, it's not surprising that many adolescents exhibit rebellious behavior or depression. Only healthy and positive family interaction can lead to balanced and satisfying development, regardless of culture or gender. Given this emerging theme in a global context, this article unites ties between Brazil and China to open up the topic to social issues, human rights, and fundamental cultural and gender issues.

4 COLONIAL AND PATRIARCHAL HERITAGE IN BRAZILIAN EDUCATION: PATRIARCHAL CULTURE AND GENDER RELATIONS IN BRAZILIAN SCHOOLS

Brazil is one of the most culturally diverse countries in the world. This plurality, often seen as a challenge, should be understood as a pedagogical asset. The different ways of living, speaking, thinking, and celebrating the world represent incredibly rich pedagogical possibilities. When schools recognize and value this diversity, they foster students' self-esteem and strengthen community ties. Despite this, the colonial and patriarchal legacy is crucial to the formation of Brazilian education, shaped by the structures and practices that persist in educational institutions since the hegemonic ideological fixation in Brazil.

Brazil stands out for seeking to develop specific policies to recognize and value its cultural diversity. Despite the significant limitations that these policies still have, they impact, to varying degrees, at least four areas of the relationship between culture and development: the rights of ethnic and racial groups; historical and cultural heritage; cultural industries; education; and television (Cardoso; Muzzeti, 2007, p. 5).

Brazil was structured by the colonial period and its ideology. Colonialism denotes a political and economic relationship in which the sovereignty of one people resides in the power of another people or nation, which constitutes that nation as an empire (Maldonado-Torres, 2007, p. 31). During this period, education was restricted to white, male elites, strongly influenced by the Catholic Church, which imposed conservative and hierarchical values. Women, Black

people, and Indigenous people were excluded from formal education, reinforcing an unequal and exclusionary system that persisted even after Brazil's independence. Brazilian social culture was forged within this system, and in contemporary times, colonialism continues to maintain and reinforce the pre-established pattern.

The concept of the colonality of being emerged from conversations about the implications of the colonality of power in different areas of society. The idea was that if, in addition to the colonality of power, there also existed a colonality of knowledge, then it could very well exist. If the colonality of power refers to the interrelationship between modern forms of exploitation and domination, and the colonality of knowledge concerns the role of epistemology and the general tasks of knowledge production in the reproduction of colonial regimes of thought, the colonality of being refers, then, to the lived experience of colonization and its impact on language (Maldonado-Torres, 2007, p.130).

One of the pillars of this structure of domination is the patriarchal foundation that has cemented an educational culture that naturalizes gender roles and inequalities between men and women. From the earliest years of school, boys and girls are often encouraged to follow different paths, with different expectations regarding behavior, career choices, and the occupation of positions of power. This model reinforces stereotypes that limit the possibilities for individual development, especially for girls and women, who face resistance in fields such as the exact sciences and leadership.

In contemporary Brazilian schools, despite legal changes and public policies aimed at gender equality, many remnants of this legacy persist. Conservative patriarchal culture manifests itself in textbooks

and in the language used within educational institutions. In this sense, it is imperative to transform reality through epistemological practices of critical and inclusive education, which question historically imposed standards and value the diversity of identities and experiences of all students. The effects of the "modern" process of "progress" rooted in colonization are known as ongoing globalization,

The ongoing globalization is, first and foremost, the culmination of a process that began with the establishment of America and colonial/modern and Eurocentric capitalism as a new model of global power. One of the fundamental axes of this model of power is the social classification of the world's population according to the idea of race, a mental construct that expresses the basic experience of colonial domination and that has since permeated the most important dimensions of global power, including its specific rationale, Eurocentrism. This axis, therefore, has colonial origins and character, but it has proven to be more enduring and stable than the colonialism on whose matrix it was established. Consequently, it implies an element of coloniality in the current hegemonic model of power (Quijano, 2005).

Another relevant aspect of the structure of domination is revealed in the sexual division of labor, which associates certain tasks with the female universe and others with the male. This logic extends to the school environment, where activities considered "delicate" or "caring" are assigned to girls, while boys are directed to roles related to leadership and logical reasoning. This segmentation ultimately reinforces inequalities of opportunity and limits women's access to spaces traditionally ideologically reserved for the male gender, even though they currently represent the majority in schools at all levels.

However, in the Brazilian legal system, as enshrined in the Federal Constitution (CF/88), education is a fundamental right,

[...]Art. 6º Education is a social right, [...] Art. 205. Education, a right of all and a duty of the State and the family, will be promoted and encouraged with the collaboration of society, aiming at the full development of the person, their preparation for the exercise of citizenship and their qualification for work [...] (Brazil, 1988).

In this context, schools act as agents for the reproduction of social norms that marginalize certain groups. This practice contributes to the perpetuation of an unequal system that masquerades as neutrality. The lack of a critical approach to these issues deepens the invisibility of women in science, technology, and politics. To break this cycle, it is essential that education promotes cross-disciplinary and ongoing debates on gender. Valuing all forms of knowledge and action must be a basic principle for a democratic and fair education. Furthermore, the language used in schools also reinforces structural inequalities, even when it appears neutral or universal.

Common expressions in textbooks, tests, and pedagogical discourses place masculinity as the standard, erasing the diversity of existences and experiences of women, non-binary people, and other subalternized groups. This invisibility becomes a symbolic violence that operates silently yet effectively in a Brazil composed of multiple identities, races, and cultures. The 2022 IBGE Census demonstrates that the diversity of the Brazilian population is comprised of people who self-identify as brown, white, black, indigenous, and Asian (IBGE, 2022). Therefore, the way school content is presented can legitimize a hierarchy of knowledge that excludes dissenting voices. The lack

of representation in taught narratives reinforces a homogeneous and exclusionary worldview.

Schools, as spaces for developing citizenship, need to reevaluate their materials and practices to ensure a more pluralistic education. Combating inequalities involves valuing language as an instrument of inclusion. Transformative education arises from attentive listening and recognition of the multiple identities present in everyday school and social life. Brazil is a vast geographic space composed of a multicultural and ethnic population, a characteristic that imposes the need for intercultural education. Intercultural educational training is essential to consistently incorporate themes related to equity, based on critical studies and inclusive pedagogical practices.

A commitment to social justice must guide planning, assessment, and relationships within the school environment. Transformation requires a collective and ongoing effort from the entire educational community. Ensuring an emancipatory education depends on the courage to break with traditional patterns. Only then will it be possible to build a school that welcomes, respects, and empowers all individuals. It is important to emphasize the fundamental role of education professionals in deconstructing these structures of domination. Teachers and school administrators occupy a strategic position to promote effective changes in how schools address gender and diversity issues. When these educational agents reproduce conservative discourses or ignore discriminatory situations, they contribute to the maintenance of racial, cultural, and gender inequalities.

5 ETHNIC-RACIAL EXCLUSION IN THE EDUCATIONAL SYSTEM: LEGAL WALK: UNIVERSALIZING LOGIC IN BRAZIL

Brazilian education is marked by profound historical and social contradictions. Since colonial times, the educational structure has served the interests of the dominant elites, reproducing Eurocentric, white, Christian, and patriarchal values. This is why ethnic-racial exclusion in the Brazilian education system is not only a legacy of the past, but a persistent reality, reflected in school dropout rates, unequal access to higher education, and the low representation of Black and Indigenous people in educational decision-making spaces. Children and young people belonging to these groups often face hostile school environments, where the curriculum ignores or marginalizes their histories, cultures, and contributions. The absence of an anti-racist pedagogical approach reinforces stigmas, generates identity erasure, and compromises the right to education and cognitive justice.⁴

Decency and beauty go hand in hand. I am increasingly convinced that, aware of the possibility of going down the wrong path of puritanism, educational practice must be, in itself, a rigorous testimony of decency and purity. A constant critique of the easy deviations that sometimes, or almost always, tempt us to abandon the difficulties that true paths can present us. Women and men, historical-social beings, become capable of comparing, valuing, intervening, choosing, deciding, and breaking away; all of this makes us ethical beings (Freire, 1996, p. 18).

⁴ Cognitive Justice: Dialogue with modern Western science, and the various knowledges, cognitive justice and the border space of translation (Valença, 2014 p. 10).

Despite legal changes in recent decades, the enactment of Laws 10.639/2003 and 11.645/08, which make the teaching of African, Afro-Brazilian, and Indigenous history and culture mandatory in schools, has not been successful. The implementation of these policies faces numerous obstacles (Brazil, 2003; 2008). In many cases, compliance with the legislation remains merely symbolic, without bringing about significant changes in daily pedagogical practice. Furthermore, Indigenous culture is recognized by the Federal Constitution of 1988 in Article 231, which guarantees: "Indigenous peoples are recognized for their social organization, customs, languages, beliefs, and traditions, as well as their original rights to the lands they traditionally occupy. It is the responsibility of the Union to demarcate, protect, and ensure respect for all their assets.» However, the ideology entrenched in Brazilian society creates many obstacles to the implementation of the right to intercultural education. To ensure that the legal process is not limited to empty rhetoric, it is essential to invest in public policies that promote racial equity in the school environment.

The Brazilian school curriculum has historically been based on a universalizing logic, which seeks to homogenize knowledge and cultures. This universalization is selective: it privileges Western, white, male, and urban knowledge. The traditional knowledge of indigenous peoples, quilombolas, riverside communities, and others is often disregarded or presented in a folkloric manner. This approach is a cultural denial to students of diverse cultural, racial, and ethnic backgrounds who do not feel and learn that their identities and realities have no central role in society and in school. This contributes to academic failure, dropout rates, and feelings of devaluation among subordinated groups. By ignoring Brazil's cultural plurality, schools reinforce a narrow worldview.

6 BETWEEN THE PAST AND THE FUTURE OF BRAZILIAN EDUCATION: NECESSARY INTERCULTURAL EDUCATION

Education, as a social and individual tool, promotes inclusion, liberation, and the emergence of identities; otherwise, it can be a tool that reinforces exclusions. Between a universalizing patriarchal culture and the construction of a democratic and pluralistic school, an educational transformation is necessary. School, as a social institution, reflects and reproduces traditional gender roles, hierarchizing men and women. It is still common to associate girls with caregiving and boys with technical fields, limiting their future possibilities. Furthermore, textbooks and pedagogical practices reproduce gender stereotypes, often subtly. School sometimes becomes a place of suffering for Black and Indigenous children. Meritocracy is used to justify historical inequalities, ignoring structural racism.

The lack of representation in school practices is a subtle but powerful form of exclusion. When students don't see themselves reflected in books, images, examples, and authority figures, the message is clear: their culture and identity don't matter. Education in contemporary times is still guided by the integrationism of social individuals considered different from the dominant ideology that promotes epistemicide⁵. To understand the dynamics of exclusion in Brazilian education, it is essential to adopt an intersectional approach. Intersectionality allows us to analyze how different forms of oppression, such as racism, patriarchy, and economic inequality, interact and reinforce each other. A Black or Indigenous girl, stereotyped

⁵ Epistemicide: Theoretical perspective that conceives the existence of a raciality/biopower device operating in Brazilian society to produce and reproduce a system of racial supremacy and subordination, supported by knowledge and educational practices (Carneiro, 2005, p. 325).

as "financially needy," experiences multiple barriers in the school environment, from structural racism to gender expectations that limit her possibilities. The universalizing logic of the curriculum ignores these intersectional experiences and treats students as a homogeneous group. This view prevents us from recognizing the real inequalities faced by millions of children and adolescents in Brazil.

A plural and intercultural education means including the ancestral wisdom of Indigenous peoples, Africans, and traditional communities in the curriculum. By valuing epistemological pluralism, it allows for the construction of an inclusive, critical, and representative school. This perspective breaks with the colonizing vision of the curriculum, which imposes single truths and delegitimizes other forms of knowledge. Exposure to different worldviews contributes to the formation of empathetic, critical, and democratic adults. Cultural plurality must be understood as a fundamental pillar for transformative education. The school must engage with the territory and the cultures that inhabit it, promoting emancipatory pedagogy. Indigenous education values ancestral knowledge, native languages, and the ways of life unique to each people.

However, the implementation of intercultural education still faces barriers within state structures. Valuing Indigenous education means recognizing diversity as a principle of democracy and breaking with the notion that there is only one valid school model. Indigenous peoples have led important struggles for differentiated, bilingual, and intercultural education. These mobilizations strengthen the identity and autonomy of these communities while challenging the colonial logic present in the traditional school structure. In doing so, we also recognize the historical role of indigenous peoples in the construction of Brazil, in addition to their resistance and resilience being at the

forefront of the struggles for environmental sustainability and gender issues (Brazil, 2025).

Similarly, quilombola education is based on principles such as territoriality, ancestry, and resistance, opposing the homogeneous logic of a universalizing education. Its pedagogical practices seek connection with local reality and Afro-Brazilian traditions. Despite its relevance, cultural affirmation in the school curriculum is a struggle for citizenship. Although it is a right guaranteed by law, it lacks effective implementation. Including a pluralistic cultural perspective in the educational curriculum is a measure of justice and historical reparation. In a country plagued by profound racial inequalities, anti-racist education is an urgent necessity. It is not enough to adopt a passive stance of «not being racist»: it is necessary to act actively to deconstruct racism in all its expressions. Schools play a central role in the process of overcoming colonialism and colonality, as they are one of the first spaces for children's social development. An anti-racist approach demands curricular revision, adequate teacher training, combating institutional racism, and promoting respect for differences. More than inclusion, we must transform schools into spaces of cognitive justice, acceptance, and freedom of gender, race, and ethnicity. Recognizing plural identities is recognizing humanity.

7 CONCLUSION

The comparative analysis between gender issues and the educational systems of China and Brazil has enabled an understanding of how education, as a fundamental human right, can both reproduce structures of domination and serve as a tool for social transformation. In both contexts, education is intrinsically linked to cultural, historical,

and political frameworks that influence pedagogical practices, social, familial, and gender relations, as well as the recognition (or lack thereof) of cultural diversities. From this perspective, it becomes evident that the school is not a neutral space, but rather a field of symbolic dispute, where different rationalities coexist and are in constant tension – whether in China or Brazil – even within different structures. In both cases, however, education, through social imposition, shapes life and the realization of rights – from the very preservation of life in China to its maintenance in Brazil.

In the Chinese case, the educational system is strongly marked by a logic of performance, discipline, and obedience to state guidelines. The centralized curriculum, combined with collectivist values inspired by Confucianism, produces an efficient model in terms of academic outcomes, but it is limited in promoting cultural diversity and overcoming gender inequalities. The one-child policy, historically implemented in recent decades, contributed to naturalizing absences and overloads within the family structure, especially in relation to the responsibilities placed on women. In this regard, social roles have been reinforced based on rigid behavioral norms and privileges granted to the male gender.

The Brazilian educational system bears the legacy of a patriarchal and Eurocentric colonial formation, reflected in the historical exclusion of Indigenous, Afro-Brazilian, and other cultural knowledge systems. In the Brazilian context, contradictions manifest in distinct but equally structural ways. The patriarchal pattern, both within families and schools, heavily influences the lives of girls and women, especially those belonging to Black and Indigenous ethnic groups. These aspects directly impact the educational field, revealing the difficulty in building an education that is sensitive to new social and identity dynamics, and in implementing an emancipatory pedagogy. Despite the formalized

legal frameworks, there are significant challenges in realizing an education that recognizes and values Brazil's cultural plurality. For this reason, the Epistemologies of the South offer an important lens for criticizing the monoculture of Western knowledge and the imposition of a single rationality over diverse ways of knowing and living.

Finally, by contrasting the educational models of China and Brazil, this study highlights that the construction of a democratic and plural education requires confronting the conservative and patriarchal structures that persist in both contexts. Overcoming these barriers does not depend solely on institutional reforms, but on transforming how knowledge, culture, and justice are understood. Strengthening alliances between Global South countries, such as Brazil and China, can contribute to the development of pedagogical alternatives that break away from domination logics, fostering practices and policies centered on human dignity, identity recognition, and social justice.

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INVISIBLE INFRASTRUCTURES AND ENVIRONMENTAL JUSTICE: THE HIDDEN FACE OF DIGITAL CITIZENSHIP

Nicolò Basigli¹

1 INTRODUCTION

In recent decades, the rise of digital technologies has profoundly transformed forms of participation, communication, and social organization, giving rise to a new field of disputes: digital citizenship. Promoted as a vector of democratization, empowerment, and inclusion, digital citizenship has established itself as a key concept in contemporary political and academic discourse. However, behind this promise lie structural contradictions that demand critical and interdisciplinary analysis.

The information society, far from representing a neutral or universal space, has reproduced and intensified historical inequalities, both on social and ecological levels (Castells, 1999). The rhetoric of digital inclusion, by emphasizing internet access as a synonym for civic participation, often ignores the material effects of technological infrastructures, the environmental costs of digitalization, and the new forms of coloniality emerging in the algorithmic age (Crawford, 2021; Zuboff, 2019).

In this chapter, we propose a critical approach to digital citizenship based on three analytical axes. First, we investigate the

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origins and limits of the concept amid the expansion of information technologies and the imaginary of technical neutrality. Second, we examine the invisible infrastructures that sustain the digital world, highlighting their territorial and socio-environmental impacts, especially in the Global South. Finally, in the third axis, we reflect on possible pathways for an ecologically situated digital citizenship, grounded in paradigms of environmental justice, epistemologies of the South, and transnational ethics.

The methodological pathway is based on an interdisciplinary literature review conducted between February and June 2025, using databases such as Scopus, Web of Science, and Google Scholar, in addition to specialized publishers' catalogues (PUC-Rio, PUCPress, Zahar, Paidós). The following keywords were used in Portuguese and English: 2030 Agenda; digital citizenship; infosphere; environmental justice; technology. The inclusion criteria prioritized scientific publications (peer-reviewed articles, books, and book chapters) published between 2010 and 2025, as well as relevant institutional documents (UN, Unesco, reports from environmental organizations). Exclusion criteria included opinion pieces lacking empirical basis and non-scientific outreach materials.

The analysis followed a qualitative approach, guided by the identification of central categories – technological neutrality, digital extractivism, socio-environmental invisibilities, situated digital citizenship, and technopolitics. These categories structured the chapter into three axes, enabling not only a discussion of the normative discourses on digital citizenship but also of its ecological and geopolitical impacts.

Our objective is to unsettle the dominant narrative about the digital by unveiling the invisible layers of power, extraction, and exclusion that permeate current technological dynamics. We argue

that digital citizenship can only fulfill its democratic promise if it integrates the ecological and social costs of digitalization, recognizing the multiple dimensions of justice in a connected world.

2 DIGITAL CITIZENSHIP: DEMOCRATIC PROMISE AND ITS LIMITS IN THE CONNECTED WORLD

2.1 THE EMERGENCE OF DIGITAL CITIZENSHIP IN THE INFORMATION AGE

The advent of the information society reshaped forms of civic participation and political engagement, creating what many began to call “digital citizenship”. This concept emerges in the context of a profound transformation in social, cultural, and institutional dynamics mediated by digital technologies. From the moment the internet became consolidated as a space for social interaction and political organization, new formats of expression and participation were recognized as components of civic practice (Castells, 2003).

Digital citizenship, in this sense, is understood as the ability of individuals to access, understand, and use information and communication technologies (ICTs) for the full exercise of their rights and duties in a connected society. It is therefore a concept that transcends mere technical connectivity and is anchored in the possibility of meaningful interaction in digital public spaces (Stelzer, 2021).

As a result, the digital sphere came to be considered an extension of the traditional public sphere, where demonstrations, debates, and mobilizations take place. Platforms such as social networks,

forums, and online petitions became instruments of pressure and collective interest-building. However, the promise of a more direct and participatory democracy through the digital medium soon revealed its structural and material limits.

Although digital citizenship is often presented as a pathway to greater political inclusion and institutional transparency, in practice it is deeply marked by inequalities of access, digital literacy, and infrastructure. The supposed universality of the internet contrasts with the reality of millions of people who still lack stable, secure, and high-quality access to the network, particularly in regions of the Global South (Basalla, 1988).

Moreover, the concept of digital citizenship cannot be dissociated from the historical evolution of citizenship itself, traditionally associated with active participation in public life, the achievement of civil, political, and social rights, and the formation of autonomous and conscious subjects. With digital technologies, new forms of subjugation, control, and segmentation of the individual also emerge, calling into question the emancipatory character of citizenship (Rodotà, 2004).

The digitalization of social life, therefore, reconfigures the terms of the contemporary social contract. On the one hand, it enhances access to information and broadens channels of public expression; on the other, it produces new forms of exclusion and dependency, based on opaque infrastructures, selective algorithms, and data-extractive logics (Crawford, 2021). Digital citizenship, far from being a consolidated reality, is a contested field where promises of empowerment confront practices of control and inequality.

In this scenario, a critical and interdisciplinary approach becomes urgent, one that considers digital citizenship as a concept shaped by historical, material, technological, and epistemological

conditions. More than a mere transposition of classical citizenship into the digital sphere, it demands the reinvention of its normative and institutional foundations, guided by principles of social justice, equity, and sustainability.

2.2 THE MYTH OF TECHNOLOGICAL NEUTRALITY AND POWER RELATIONS

The idea that technology is neutral – that is, devoid of values, interests, or ideologies – is one of the most persistent myths of technological modernity. Such a conception ignores the fact that all technology is developed, implemented, and used within specific social, political, and economic contexts, reflecting and reproducing the structures of power that shape them (Pinto, 2005). The alleged neutrality of technology often serves to naturalize inequalities and legitimize hegemonic models of development that benefit certain groups to the detriment of others.

As Stelzer (2020a) points out, technology must be understood as a historical and cultural product, endowed with intentionalities that reveal themselves in the ways knowledge is produced and circulated. Digital technology, especially in the context of artificial intelligence, reflects patterns of exclusion and discrimination embedded in the very data and algorithms that sustain its operations. Far from being impartial, algorithmic systems operate on inferences and statistical generalizations that tend to reproduce structural biases in society.

Basalla (1988) also warns against the false dichotomy between technology and culture. For him, there is no “pure” technology, isolated from the social fabric. Every technical innovation is, in some way, an extension of prevailing social practices and values. The conception of

neutrality disregards this bond, reinforcing the belief that technical progress in itself represents progress and rationality.

In the field of digital surveillance, Zuboff (2019) shows how large technology corporations exploit the rhetoric of efficiency and innovation to conceal their true interests: the massive collection of personal data for profit. What is presented as the inevitable advance of computer science is, in fact, an economic model based on informational asymmetry and behavioral control, which jeopardizes the democratic foundations of citizenship.

Zuboff (2019) names this phenomenon “surveillance capitalism,” in which control over data grants not only economic advantages but also unprecedented capacities for social manipulation. Monitoring and behavioral prediction systems are marketed as neutral and technical tools, when in reality they operate with clear ideological biases and corporate interests.

Furthermore, the notion of technological neutrality obscures the socio-environmental impacts of digital infrastructures. Crawford (2021) argues that AI systems do not exist in an abstract vacuum but depend on material resources extracted from specific territories, often located in marginalized regions of the planet. The invisibilization of these processes contributes to a depoliticized perception of technology, hindering public scrutiny of its costs and consequences.

Therefore, deconstructing the myth of technological neutrality is essential to reorient the debate on digital citizenship and democracy. This requires recognizing the intentionality embedded in technological artifacts and the need to subject them to ethical, political, and environmental scrutiny. Citizenship in the connected world demands more than access to devices: it requires active participation in defining the directions of technology and in controlling its impacts.

2.3 INVISIBLE EXCLUSIONS: FROM DIGITAL INCLUSION TO ECOLOGICAL INJUSTICE

The rhetoric of digital inclusion is often presented as a democratic solution to reduce inequalities in access to information and citizenship. However, behind this optimistic narrative lies a set of invisible exclusions that challenge the very promise of equity promoted by the digital age. The logic of connectivity, while promising emancipation, also expands forms of domination and precarization, especially when viewed through the lenses of environmental justice and technological sustainability.

As Rifkin (2010) points out, the convergence of the internet, energy, and the environment inaugurates a new civilizational logic in which the digital can no longer be dissociated from the material. Every click, every search, every computational operation entails an environmental cost, represented by energy consumption, the extraction of rare minerals, and the intensive use of water in data centers. This accelerated process of digitalization, seemingly clean and abstract, depends on a physical infrastructure with high ecological impact, which remains invisible to most users (Crawford, 2021).

Zuboff's work (2019) offers a powerful critique of surveillance capitalism, in which personal data become the main raw material of the new digital economy. This model operates through behavioral extractivism that, in addition to violating privacy, deepens social and ecological inequalities, especially in peripheral regions. By prioritizing market logic over fundamental rights, data capitalism perpetuates subtle forms of digital colonization, transferring social and environmental

costs to the most disadvantaged populations – often in countries of the Global South.

Moreover, as Pinto (2005) observes, the concept of technology must be understood in its ethical and political dimensions. Technique is not neutral: it carries within itself world projects and forms of social organization. When technologies are implemented without considering the social and environmental contexts in which they are embedded, they generate not inclusion but dependency, degradation, and marginalization.

This invisibility of the infrastructures and socio-environmental impacts of digital technology is also denounced by Basalla (1988), who reminds us that human artifacts are never neutral or devoid of consequences. “Digital inclusion,” understood only as access to devices or connectivity, ignores the profound interdependence among environment, economy, and technological politics.

The critique of inclusion without justice becomes even more urgent in light of the fact that public policies often fail to incorporate a systemic view of the ecological effects of digitalization. Crawford (2021) emphasizes that artificial intelligence systems are, in fact, ecological systems: they consume resources, affect territories, and generate waste. To speak of digital citizenship without considering these elements means reinforcing a model of exclusionary inclusion, which integrates some at the cost of sacrificing many others.

Therefore, the debate must be shifted from mere digital inclusion to a profound critique of the structures that sustain the connected world. This implies recognizing the global asymmetries in the distribution of environmental and social damages of technology, as well as proposing alternative models based on environmental justice, plural epistemologies, and informational sovereignty.

3 DIGITAL INFRASTRUCTURES AND SOCIO- ENVIRONMENTAL INVISIBILITIES

3.1 FROM MATERIALITY TO ABSTRACTION: DATA CENTERS, ENERGY, AND WATER

Digital infrastructure, often treated as ethereal and immaterial, is in fact deeply rooted in a complex physical reality made up of cable networks, devices, servers, and, above all, data centers. Yet this materiality remains invisible to most users and digital citizens, hindering the development of a critical awareness of the ecological and social costs of digitalization.

Data centers – the true power plants of the connected world – are responsible for storing, processing, and distributing massive volumes of data. Their operation requires a robust infrastructure of constant electricity supply and intensive cooling systems, which in turn consume large amounts of water. Crawford (2021), in her critical analysis of artificial intelligence, emphasizes that the growth of AI and machine learning has significantly increased energy and water consumption, creating new challenges for environmental sustainability.

Moreover, the location of these data centers is far from arbitrary. They respond to geopolitical and economic logics that favor regions with tax incentives, climates conducive to cooling, and an abundance of natural resources – often situated in the Global South or in peripheral areas of the Global North. This choice generates adverse effects for local communities, which face water scarcity, energy disputes, and environmental degradation (Crawford, 2021).

Digital infrastructures also depend on material production chains based on mineral extraction and the exploitation of human labor. Basalla (1988) had already pointed out that technological development is far from clean or autonomous: it relies on natural resources and on historical contexts of inequality and domination. This observation is reinforced by authors such as Pinto (2005), who argue that every technology is historically situated and politically conditioned.

The materiality of the digital therefore dismantles the myth of the “cloud” as a clean, floating space. As Crawford (2021) notes, every byte of stored information carries a concrete ecological footprint. In this context, the cloud metaphor functions as a tool of obfuscation, diverting public debate away from the real costs of the digital ecosystem.

Beyond direct environmental impacts, there is also a social cost associated with maintaining these infrastructures. The choice of sites for the installation of data centers often disregards the interests and rights of local populations, leading to processes of dispossession, real estate speculation, and territorial transformation. Added to this is the precarization of labor within digital production chains, frequently outsourced and invisible to the final consumer.

Zuboff (2019) adds an economic and political dimension to this critique: the logic of surveillance capitalism, based on the capture of behavioral data, requires a material architecture that is energy-intensive and computationally powerful. Thus, the business model of big techs rests on an environmentally unsustainable and socially unequal foundation.

Unveiling this materiality is therefore an essential step toward reframing the debate on digital citizenship and environmental justice. Recognizing that every digital interaction depends on a physical infrastructure with real impacts makes it possible to articulate forms

of resistance and alternatives that account not only for digital rights but also for territorial, ecological, and labor rights.

In this sense, it is crucial to adopt a critical and interdisciplinary approach that integrates the fields of philosophy of technology, transnational law, and political ecology. Only then will it be possible to overcome the dominant abstraction and build a truly situated digital citizenship, one that is conscious of its costs and committed to sustainability in all its dimensions.

3.2 TERRITORIAL IMPACTS AND SOCIO- ENVIRONMENTAL INEQUALITIES IN THE GLOBAL SOUTH

When observing the territories affected by the expansion of digital infrastructures, we notice a reproduction of historical patterns of inequality and domination that date back to colonial structures. Several countries in the Global South have progressively been turned into environmental sacrifice zones, to a greater or lesser extent, in order to sustain the data economy of large digital platforms. The cases of lithium mining in South America, cobalt extraction in Africa, and rare earth exploitation in Asia demonstrate how the extractivist logic remains alive, now driven by the so-called “digital transition” (Crawford, 2021; Zuboff, 2019).

A striking example of this dynamic occurs in Chile, where the installation of large data centers in the metropolitan region of Santiago has begun to compete with the basic needs of the population amid a prolonged water crisis. Estimates indicate that a single complex can consume up to 169 million liters of water per year solely for cooling (Environmental and Energy Study Institute, 2025). It thus becomes

evident that the promise of global connectivity conceals dynamics of expropriation of vital resources, deepening local inequalities.

The same pattern can be observed in the Salar de Atacama, also in Chile, where lithium mining—an essential mineral for digital devices and batteries—threatens fragile ecosystems and traditional ways of life. Research indicates that for each ton of lithium extracted, about 2.2 million liters of water are required (Observatorio Plurinacional de Salares Andinos, 2024). The intensive exploitation of underground aquifers reveals how the digital transition, when guided by the logic of extractivism, tends to displace socio-environmental costs disproportionately onto the territories of the Global South, even though similar effects can also be observed elsewhere.

This is not only about environmental impacts but also about unequal political ecologies, where decisions on the location of infrastructures or the exploitation of resources are not taken democratically. Affected populations are often unaware of the risks, excluded from decision-making processes, and left to bear the collateral effects of a development model imposed upon them. As Rifkin (2010) highlights, the new technological paradigm may deepen territorial divides if it is not accompanied by ethical and inclusive governance.

This power asymmetry also manifests itself in the unequal access to the benefits of the digital world. While big tech companies capture value through data exploitation, countries in the Global South remain at the periphery of the technological production chain. Most of the infrastructures for storage, processing, and surveillance continue to be designed and controlled by companies headquartered in the Global North, reinforcing a center-periphery model within the digital space (Castells, 1999).

Moreover, as Stelzer (2021) notes, transnational law still lacks effective instruments to address these global ecological externalities.

The normative fragmentation among states and the absence of binding supranational mechanisms make it difficult to hold digital corporations accountable for socio-environmental damages. This allows companies to circumvent stricter environmental regulations by establishing operations in territories with more permissive laws or weaker oversight.

The result is an asymmetric digital citizenship: while some individuals benefit from connectivity, automation, and convenience, others bear the invisible costs of digitalization. This inequality echoes the concept of “environmental apartheid” – where environmental rights are unequally distributed among human populations, based on economic, racial, and geopolitical criteria.

Therefore, as Santos (2010a) proposes, it is crucial to adopt an “ecology of knowledges” that amplifies the voices of affected communities and enables the construction of situated knowledge, sensitive to local dynamics and to the forms of resistance emerging in these territories. Initiatives such as popular consultations, community protocols, and legal practices based on epistemologies of the South can contribute to redefining what we mean by digital citizenship, shifting the focus from connectivity to territorial and ecological justice.

Deepening this debate requires recognizing the interdependence between technology and nature, between innovation and equity, between data and territories. Claiming an ecologically situated digital citizenship is thus an ethical imperative in the face of the socio-environmental threats made invisible by a digital modernity that still insists on presenting itself as neutral, clean, and universal.

3.3 THE GEOPOLITICS OF ARTIFICIAL INTELLIGENCE AND THE COLONIALITY OF DATA

The rise of artificial intelligence (AI) in the 21st century cannot be understood merely as a technical-scientific advance but must be situated within a geopolitical dynamic marked by historical asymmetries and persistent power structures. The production, collection, storage, and processing of data – essential inputs for the operation of AI systems – take place unevenly, reflecting and deepening colonial logics of exploitation, subalternization, and epistemic expropriation (Stelzer, 2021).

Crawford (2021) emphasizes that AI is not simply a set of neutral algorithms but rather a “global sociotechnical infrastructure” shaped by economic, political, and military interests. The major technology corporations, almost all headquartered in the United States or China, concentrate the technical, financial, and computational resources needed to train and operate the most advanced AI models. This technological concentration produces a new form of informational imperialism, in which access to the “oil of the 21st century” – data – remains deeply marked by global asymmetries.

Such a structure fuels a data-extractive logic that resembles, in many respects, traditional colonialism. As Zuboff (2019) denounces, surveillance capitalism unilaterally appropriates human behavior, transforming it into proprietary data without informed consent or fair compensation. This model imposes on individuals and communities in the Global South a new form of colonization: the expropriation of their subjectivities and everyday practices through digital platforms controlled by actors in the Global North.

This logic also manifests itself at the energy and territorial level. Brazil, for example, now hosts one of the largest concentrations of

submarine cables and data centers in South America, located primarily in the Southeast corridor, especially São Paulo. In 2023, it was estimated that Brazilian data centers consumed more than 2.5 TWh per year – an amount of energy equivalent to that used by a city of one million inhabitants (Empresa De Pesquisa Energetica, 2024). The centralization of this infrastructure reinforces regional inequalities: while certain territories concentrate connectivity, jobs, and investment, vast areas of the country remain marked by digital exclusion and precarious access to clean and stable energy. This scenario suggests that digital coloniality is not limited to the relationship between the Global North and South but may also manifest within countries of the South themselves, reproducing regional hierarchies.

The coloniality of data, therefore, is not confined to collection but extends to how data are interpreted, classified, and used. Santos (2010b) warns that hegemonic Western knowledge tends to render invisible local, traditional, and non-Eurocentric forms of knowing, perpetuating an exclusionary epistemology. When algorithms trained on biased databases are globally implemented, they impose categories, values, and criteria that fail to engage with the cultural and epistemological plurality of peoples.

This epistemic asymmetry also reveals itself in the distribution of risks and harms. Numerous communities in the Global South have been used as “testing grounds” for experimental technologies, surveillance systems, or algorithmic platforms of social control, without transparency, prior consultation, or adequate legal safeguards (Stelzer, 2021). The result is a perpetuation of the colonial logic: while the North profits from innovation, the South bears the social, environmental, and democratic costs of accelerated digitalization.

4 TOWARDS AN ECOLOGICALLY SITUATED DIGITAL CITIZENSHIP

4.1. ALTERNATIVE PARADIGMS: ENVIRONMENTAL JUSTICE AND TECHNOPOLITICS

Given the structural asymmetries revealed by global digital infrastructures, there arises a need to break with technocentric paradigms and to develop new frameworks capable of articulating both environmental and digital justice. These alternative paradigms seek to rethink not only the socio-environmental impacts of technology but also the ways in which it is conceived, governed, and appropriated by social actors.

Environmental justice, understood in its broadest sense, is not limited to the equitable distribution of ecological risks and harms. It incorporates an epistemic and participatory dimension, requiring the recognition of local knowledge and the effective inclusion of communities in decision-making processes that affect their territories and ways of life (Acselrad, 2004). Applied to the digital context, this perspective entails questioning who defines technological priorities, on the basis of which values, and for whose benefit.

It is at this juncture that technopolitics becomes central. Contrary to views that understand the politics of technology as a phenomenon confined to institutional spaces or corporations, technopolitics emphasizes the collective agency of social actors in the struggle over the meaning, use, and function of technologies (Amaral, 2022). It is an approach that values community experiences of resistance and innovation, often developed on the margins of dominant technological centers of power.

In Latin America, several initiatives have demonstrated that it is possible to build alternatives from the ground up. Experiences such as community internet networks, participatory databases, free software tailored to local needs, and technological ecosystems organized around care are examples of technopolitics committed to sustainability and self-determination (Stelzer, 2020b). These practices not only respond to concrete problems but also propose new ways of conceiving the digital – more inclusive, plural, and rooted in socio-territorial contexts.

Moreover, these alternative paradigms are grounded in a profound critique of the extractivist model of innovation, which turns data, territories, and subjectivities into exploitable resources. Digital environmental justice is thus articulated with an ecological view of sociotechnical systems, recognizing that all technology is also an ecotechnology, with concrete impacts on the environment and on forms of life.

Floridi (2013), in proposing a philosophy of information, suggests that rethinking digital ethics requires an expanded understanding of the “infosphere” as a shared environment, one that must be cared for and governed according to principles of justice and sustainability. This idea resonates with proposals for institutionalizing ethics within fragmented transnational contexts, which call for new political compacts to guarantee digital and environmental rights in an integrated manner (Rodotà, 2014a).

Ultimately, the alternative paradigms proposed here do not seek to reject technology but to decolonize it. The goal is to recover its political, historical, and material dimensions so as to place technique in the service of life – not accumulation, control, or destruction. Environmental justice is thus also a technological justice, one that recognizes planetary limits, values interdependencies, and advances an ecologically situated digital citizenship

4.2 EPISTEMOLOGIES OF THE SOUTH AND THE RIGHT TO ENVIRONMENTAL REPARATION

The critique of the hegemonic model of technological development, centered in the Global North, has found in the Epistemologies of the South an important pathway for theoretical and political reconstruction. This approach, proposed by Boaventura de Sousa Santos, is grounded in the recognition of a profound epistemic inequality between Eurocentric knowledge, institutionalized as “scientific,” and the subalternized knowledge of Indigenous peoples, traditional communities, social movements, and peripheral cultures (Santos, 2010a).

The Epistemologies of the South do not merely seek to legitimize marginalized forms of knowledge but propose a profound reorientation of the very foundations of knowledge and politics. In the context of digital citizenship and the ecological crisis, this means questioning the dominant criteria of technical rationality that sustain digital extractivism and obscure its impacts on the territories of the Global South. The revalorization of traditional ecological knowledge and of practices of coexistence with natural cycles thus emerges as a counterpoint to the instrumental logic of the major technological platforms.

Environmental reparation, in this scenario, cannot be understood solely as financial compensation or technical mitigation of damages. It is a collective and transgenerational right that demands historical recognition of environmental injustices and the restoration of living conditions and dignity for affected peoples. The notion of the “right to reparation” involves symbolic, territorial, legal, and cultural

dimensions that can only be fully grasped through intercultural dialogue among distinct epistemologies (Stelzer, 2020a).

This perspective also challenges traditional legal categories, forged within the modern Western paradigm. Transnational law, in this sense, offers tools for the construction of normative instruments that recognize the plurality of collective subjects, the centrality of ecosystems, and the interdependence between environmental and digital dimensions (Stelzer, 2020a; Rodotà, 2014b). By bringing forth other ways of understanding the world and relating to technology, the Epistemologies of the South broaden the horizon of possibilities for a digital citizenship committed to ecological justice and epistemic redistribution.

The critique of the colonality of knowledge also requires revisiting educational models and scientific production. As Santos (2010b) argues, it is necessary to move beyond the monoculture of scientific knowledge and to promote a “dialogue of knowledges” that recognizes the legitimacy of other forms of knowing. This entails reformulating curricula, research practices, and criteria of validation, incorporating perspectives that emerge from local contexts and popular resistances.

The construction of public policies and legal frameworks based on this epistemic plurality requires articulation among academia, social movements, traditional communities, and public institutions. Environmental justice, when anchored in the Epistemologies of the South, is not limited to denouncing inequalities but becomes a project of institutional and ethical transformation. The recognition of the right to environmental reparation is, in this sense, a decisive step toward addressing the harms produced by extractivist digital infrastructures and envisioning sustainable, plural, and territorially rooted futures

4.3 TRANSNATIONAL ETHICS AND THE INSTITUTIONALIZATION OF DIGITAL GUARANTEES

In the face of the global challenges posed by the expansion of digital infrastructures and the power asymmetries between states, corporations, and citizens, it has become urgent to construct a transnational ethic that transcends state borders and addresses the ethical-legal dilemmas of the digital age. Such an ethic must be committed to the defense of fundamental rights on a global scale, taking into account the social, environmental, and cultural impacts of technology on different populations.

The fragmentation of regulatory frameworks and the slowness of traditional mechanisms of international law reveal their insufficiency in dealing with the transnational power of big techs. As Stelzer (2020b) highlights, digital governance requires a legal architecture that recognizes the interdependence of normative systems and promotes effective articulation between the local and the global, the state and the transnational. This entails strengthening plural institutions that are open to social participation and epistemic diversity.

Moreover, as Rodotà (2014b) argues, it is necessary to affirm a new grammar of rights in the digital society, one that recognizes the centrality of personal data, the protection of privacy, and the autonomy of subjects in relation to machines. Human dignity, in this context, must function as the guiding principle of algorithmic regulation, reaffirming the primacy of the human over the logic of technical efficiency.

The institutionalization of digital guarantees therefore depends on the creation of legal frameworks capable of curbing abuses of power, ensuring transparency, and establishing mechanisms of accountability. Brazil's General Data Protection Law (LGPD) and the European Union's

General Data Protection Regulation (GDPR) represent significant advances, but they remain insufficient given the speed and complexity of technological transformations. Emerging regulatory approaches – such as auditable algorithms, ethical compliance seals, and public councils for AI governance – are expanding proposals that deserve further exploration in both political and academic debates.

Transnational ethics also demands a preventive approach, guided by principles such as precaution, intergenerational justice, and respect for diversity. As Crawford (2021) emphasizes, artificial intelligence is neither neutral nor universal: it reflects the social, political, and environmental conditions of its production. For this reason, the construction of digital guarantees must consider local contexts, diffuse risks, and the structural inequalities of the connected world.

Finally, the institutionalization of digital ethics must be linked to an emancipatory political project that recognizes citizenship as an active and situated practice. The ideal of an ecologically informed digital citizenship, as we propose in this work, depends on the articulation between legal norms, institutional mechanisms, and political cultures attentive to planetary interdependencies. Only within this entanglement will it be possible to confront new forms of algorithmic coloniality and to build a more just, transparent, and sustainable digital future.

5 CONCLUSION

The reflection developed in this chapter sought to problematize the normative and political meanings of digital citizenship, shifting the focus from access to technology to the structures that sustain it and

to the impacts it generates. By articulating elements of the philosophy of technology, transnational law, and political ecology, we sought to demonstrate that the exercise of citizenship in the 21st century is profoundly conditioned by the invisible dynamics of the digital – whether in the ways data are extracted or in the territories affected by the infrastructures that enable global connectivity.

It has proven essential to denaturalize the imaginary of technological neutrality, to recognize the links between digitalization and coloniality, and to rethink notions of participation and justice through environmental and intersectional lenses. In this sense, it is urgent to construct a transnational ethic that not only protects individuals' digital rights but also safeguards the ecological and collective rights of peoples and territories impacted by contemporary technologies.

The ecologically situated digital citizenship we defend is, above all, a political project: it demands institutions sensitive to cultural plurality, regulatory mechanisms capable of confronting platform power, and technopolitical practices that place human dignity and sustainability at their core. Overcoming invisible exclusions and reversing the effects of harmful infrastructures will not be a simple task, but it is an indispensable condition for ensuring that the digital future becomes a genuine common good rather than merely an algorithmic privilege.

At the same time, this critical horizon cannot be dissociated from existing international commitments. Both the 2030 Agenda and the New Urban Agenda (NUA) – especially in its item 36 – point to the need to integrate technological innovation, social justice, and environmental sustainability into a shared civilizational pact. From this perspective, the chapter aims to contribute to the contemporary debate by showing that digital citizenship will only be fully realized if it can

incorporate these principles, reconciling democracy, cultural diversity, and socio-environmental justice as non-negotiable foundations of a truly inclusive infosphere.

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SUSTAINABLE DEVELOPMENT AND ARCTIC SHIPPING TRAFFIC: SAFEGUARDING THE SEA GOVERNANCE, INDIGENOUS COMMUNITIES' RIGHTS AND MARINE ECOSYSTEM

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1 INTRODUCTION

Arctic shipping is considered as the most referred route for the transit of goods and carrying passengers through the Arctic region. It covers Northern passage through Canadian Arctic Archipelago along with Russia's northern coastal areas (Arctic Today, 2023). Undoubtedly, the melting of ice on the sea shores gained increased attention in recent years that has opened up new opportunities and challenges for maritime, attracted interest from governments, economies, and the public alike (Huntington *et al.*, 2023). The Polar ice caps are melting as global warming causes climate change (World Wild Life Fund, 2025c). There is loss of Arctic sea ice at a rate of almost 13% per decade, and over the past 30 years, the oldest and thickest ice in the Arctic has declined by a stunning 95% (World Wild Life Fund, 2025b). If emissions continue to rise unchecked, the Arctic could be ice-free in the summer by 2040.

Furthermore, the economic benefits of Arctic routes are another glowering attention as they integrate into the global marine

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transportation system despite the loss of the Arctic Sea Ice and its global costs persist. The release of the Arctic Marine Shipping Assessment (AMSA) in 2009 had also highlighted this subject (Arctic Council, 2009). These environmental shifts and climate change driven by anthropogenic factors, have transformed the Arctic into a region of increasing importance for various economic activities, particularly shipping. The opening of new courses and the potential access to untapped natural resources have raised the legal, environmental, and geopolitical challenges. These human interfered natural changes in Arctic shipping has affected the sustainability and living of various indigenous communities of Norway, Russia, USA and Canada (Arctic Portal, 2025b). In order to handle these challenges, the vessels like cargo ships and bulk carriers operate in close proximity to coastal areas, routing through ecologically significant regions. On the other hand, as pointed in abstract the accidents like oil spillage, groundings and collision with ice damaging the marine ecosystem in these vulnerable Arctic environments can have profound consequences for local communities impacting their livelihoods and well-being. The potential for further growth in Arctic shipping raises concerns about additional socio-cultural effects on Arctic populations and environmental impacts on Arctic ecosystems, even under normal operational conditions (Arctic Portal, 2025d).

2 RESEARCH METHODOLOGY

This study employs a qualitative, doctrinal, and analytical methodology to investigate the legal, environmental, and governance ramifications of Arctic shipping. It is depended on the primary sources like Unclos provisions in relation to marine environment and arctic

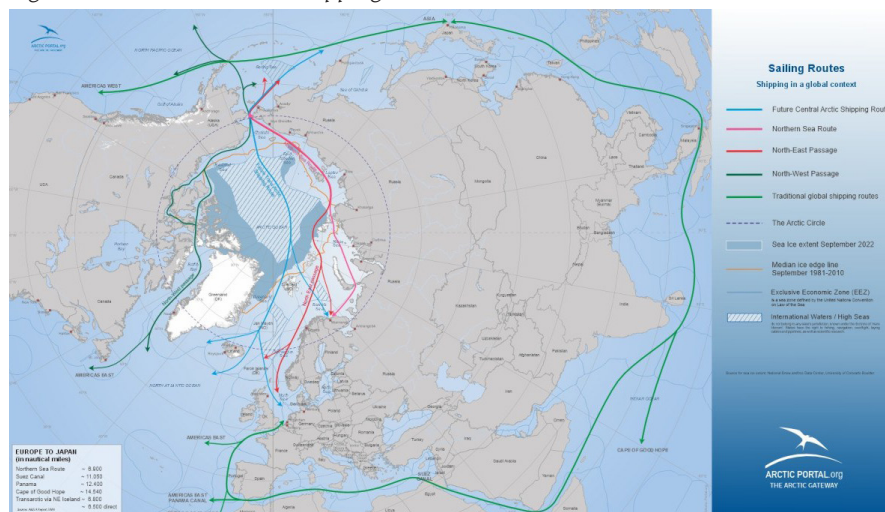
traffic, agreements from the Arctic Council dealing with indigenous communities rights and international organisations, national marine laws of Canada, Russia and China etc were also considered. The government reports, and policy documents mentioned in the Arctic today 2019, and 2023 were studied developing the research paper. This research also used secondary sources like academic journals of *Marine Policy*, *Transportation Research D: Transport and Environment*, *Politics and Governance* books (Martínez-Alier; Hanacjek, 2023; Mossop, 2016; Weidemann, 2014) and think-tank publications as briefed in the references and footnoting. The study utilises doctrinal analysis to analyse legal documents, content analysis to discern recurring themes in scholarly and policy literature, and comparative analysis to assess regulatory measures among Arctic states, emphasising disparities in governance efficacy. The scope concentrates on legal and environmental concerns pertaining to shipping, encompassing maritime sovereignty, ecological preservation, and effects on coastal and indigenous people, whereas other Arctic activities are examined solely to the extent that they connect with shipping.

3 HYPOTHESIS

The lack of comprehensive global regulatory governance framework for Arctic shipping traffic and indistinct environmental regulations and conflicting policies led to the abuse of natural resources and indigenous communities' rights and violating the basic agendas of sustainable development (Arctic Council, 2009).

3.1 ARCTIC SHIPPING ROUTES AND ABUSE

Figure 1 – Routes in Arctic Shipping



Fonte: Arctic Portal, 2025d.

Arctic shipping routes are maritime pathways through the Arctic region that connect various parts of the Northern Hemisphere. As mentioned above, the reduction of sea ice due to global warming has unbolted new promises for shipping in the Arctic, allowing vessels to navigate through previously impassable waters. Presently, there are four major shipping routes through which the supply chain is navigated in the arctic.

The Northeast Passage or the NEP which extends from the Bering Sea to Norway across Russia. It has been noted that the Arctic ice cap is 50% less in comparison to other areas as a result of climate change (World Wild Life Fund, 2025c). Therefore, while the route is currently available for limited use with efficiency only during summer months, if the climate change effects continue, this route is likely to be free of ice first and represents the highest commercial potential

thereby shortening the distance from Europe to Asia by up to three times (Otsuka, 2023). The second is the Northwest Passage which goes from the Davis Strait through Canada and Alaska towards the Bering Strait. The route which is a combination of several passages leads the straits of Arctic Archipelago is a subject of United States – Canada dispute. While Canada claimed the passage is a part of its internal waters. The US Government regards it as an international passage owing to the international traffic it witnesses. It argues that the opening of the Arctic Routes due to ice melting would cause the Northwest Passage to become the primary commercial Arctic Shipping Route to and from Asia. It intends to reduce the maritime journey between western Europe and East Asia by 13,600 km (Polar Shipping Routes, 2017).

However, introduction of new routes does not imply towards the closure of the traditional shipping routes. The Suez Canal Route most commonly known as the Traditional Shipping Route which stretches from Rotterdam to Shanghai across Egypt and the Arabian Sea connects Europe and Asia. While the NSR is the shortest route at present connecting Asia and Europe, Suez Canal is still irreplaceable for traders in Far East and Southeast Asia (Arctic Portal, 2025e).

The Central Route which is emerging as a result of ice melting also known as the Transpolar Sea Route. It goes straight from the Bering Strait through the Arctic Ocean to the North Atlantic. It is estimated that by 2050, the overall temperature would increase from 3.6 to 6.2 degrees Fahrenheit and an even sharper would be from 7.2 to 10.8 degrees Fahrenheit in the winter, would dramatically effects in the Arctic than anywhere on Earth (Arctic Portal, 2025b). The sectors that may benefit from the impacts of climate change primarily include the northern coastal communities. As a result of the ice melting and opening up of new routes, the increase in transportation will make

the northern communities an important stop-over, not only for the commercial vehicles but also for tourism and travel. Maritime traffic and its growth are the reality of the today and the future. It was estimated since 32.97 million tonnes of cargo has already moved along the Northern Sea Route in 2020 which has marked the increase of 1.5 million tonnes, and this number is set to boost to 130 million tonnes by 2035 (Baddeley, 2021).

4 INTERNATIONAL GOVERNANCE AND RIGHTS OF INDIGENOUS COMMUNITIES

The Arctic Council (AC) was established on the foundation of the Arctic Environmental Protection Strategy in the year of 1996 (Arctic Portal, 2025c). It emerged as the most significant institutional recognition of Indigenous Peoples voices in Arctic governance. The governance in Arctic region is actually handled by Indigenous peoples residing near the transborder regions. The problem faced by indigenous people due to this transition has already been showcased by various international reports and papers like Europe's iron production (OECD, 2021) which reported that arctic traffic has created conflicts between extractive industries—responsible for nearly 90% affecting the traditional practices of the Sámis. It restricts their regular practices such as reindeer herding, fishing, and sheep herding and many more. In contrast, indigenous struggles in Russia remain largely invisible. In support, Vladimirova (2023) contributes towards indigenous participation too. He discusses that transborder governance is actually maintained by the Pasvik-Inari Trilateral Park, spanning Finland, Norway, and Russia, where cooperation and conflicts illustrate the complexities of managing indigenous rights across national borders.

The non-democratic states were also the site of socio-environmental conflicts involving indigenous people in the Arctic where the costs of losses are actually borne by local populations there (Hanaček; Smith; Barša, 2022), and these challenges have deepened due to the geopolitical shifts for example Russia's invasion of Ukraine in 2022 (Vladimirova 2023) was also the significant reason. This conflict led to the suspension of Russia's membership in the Arctic Council (AC). It has effectively cut the indigenous communities in the Russian Arctic off from a vital international platform. This is how their legal and institutional support was curtailed tinted by cross-border indigenous networks such as the *Inuit Circumpolar Council* (ICC), the *Russian Association of Indigenous Peoples of the North* (RAIPON), the *Saami Council*, and the *Aleut International Association* (AIA) (Martínez-Alier; Hanaček, 2023). The ICC, Raipon, and the AIA are permanent participants in the AC. But Russia's exclusion has left its indigenous groups increasingly vulnerable. Simultaneously, their freedoms of speech and access to information have also been contracted with independent media shut down and international NGOs, environmental groups, and climate organizations either leaving Russia or being branded as “externals” or “undesirable organizations” (Davydova, 2024; Tysiachniouk; Henry, 2024; Franceschelli 2024). In contrast, indigenous peoples in democratic Arctic states such as the United States, Canada, and Finland continue to have their needs addressed through various forums. With post-2022 challenges being incorporated into the agendas of governments and indigenous organizations alike (Rodrigues 2024; Tysiachniouk; Henry, 2024). On the other hand, the international governance of Arctic shipping involves a complex interplay of international agreements, organizations, and legal frameworks due to the stubborn challenges and opportunities (Boylan, 2021). However, there is no specific legislation or international regulatory organisation that governs international trade and issues arising out of Arctic Shipping. Following

above discussion on Arctic Council, which was established by the eight Arctic countries, namely, *Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America* is considered key intergovernmental forum that facilitates cooperation among Arctic states and indigenous communities. The Arctic Council itself does not have regulatory authority. It plays a vital role in promoting dialogue and cooperation on environmental protection. The sustainable development, and emergency response are also the agendas to be achieved (Runnalls, 2014). The working groups also prepares reports on *Protection of the Arctic Marine Environment* (PAME) and the *Emergency Prevention, Preparedness, and Response* (EPPR) groups focusing on specific aspects of Arctic governance. Therefore, the Arctic Council has prepared assessments and formulated strategies to further its objectives. However, the same are not legally binding upon the international trade activities (Arctic Portal, 2025a).

Furthermore, the International Maritime Organisation (IMO) which was established in the Geneva Convention 1948 regulates the international trade through sea areas. It aims at creating a comprehensive framework for regulating the international shipping. With the objective of ensuring maritime safety and cooperation, the IMO has created legal regimes and conventions dealing with standards applicable to every aspect of maritime shipping (Weidemann, 2014). The IMO has also developed the Polar Code, which came into effect in 2017. It specifically pacts with safety standard and environmental standards for shipping in polar waters. The Polar Code deals with ship design, equipment, and operational measures. The purpose is to enhance the safety of vessels operating in the Arctic and Antarctic regions (Ali *et al.*, 2022). Therefore, with its global application, the legally binding standards of IMO apply to Arctic Shipping as well (Arctic Council, 2020).

Apart from this, the maritime water jurisdiction is governed by United Nations Convention on Law of the Sea (UNCLOS) which serves as the primary international legal framework balancing the industrial growth with marine environment. This law deals with Arctic shipping and related issues of jurisdiction. All the coastal states are members to the Convention barring the USA. The Convention defines and interprets the rights and responsibilities of the states on Ocean water jurisdiction providing a basis for regulating the routes of sea for not only trade but for disputes as well with the help of territorial seas, exclusive economic zones (EEZ), and the continental shelf zones. In fact, more than 100 countries following UNCLOS resolve their issues related to territorial claims, navigation rights, and jurisdiction in the Arctic shipping (Arctic Portal, 2025g). The following provisions of UNCLOS are considered in case of any dispute of Arctic shipping.

a) Article 3³ of the UNCLOS covers upto 12 nautical miles of territorial sea and coastal waters from the baseline. Coastal states have sovereignty over this area. It regulates shipping and other activities, subject to the right of innocent passageway.

b) Article 33⁴ provides coastal rights upto 24 nautical miles from the baseline. This continental zone is meant to control, prevent the crimes and punish the culprits according to the coastal States's customs, fiscal, immigration, or sanitary laws.

c) Article 56⁵ of the UNCLOS extends up to 200 nautical miles from the baseline. This Exclusive Economic Zone covers the Coastal states which have sovereign rights over the exploration and exploitation of living and non-living resources. But other states can enjoy the right

³ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 3 (1980).

⁴ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 33 (1980).

⁵ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 56 (1980).

of navigation and overflight, as well as the laying of submarine cables and pipelines over the EEZs.⁶

d) Article 76,⁷ provides the Coastal States's sovereign right to establish the outer limits of their continental shelf beyond 200 nautical miles subject to conditions prescribed in UNCLOS. The 200 nautical miles is particularly relevant to Arctic coastal states while determining the extent of their continental shelves. These coastal states's rights are significant for exploring and exploiting natural resources of the continental shelf while other states enjoy the right to conduct marine scientific research on the shelf.⁸ The right of innocent passage through territorial seas is also established. While doing so, the continuous and expeditious passage of foreign ships should not be prejudicial to the peace, culture, good practices, or security of the coastal states. The right of transit passage has also been granted through international straits, ensuring the freedom of navigation and overflight for both military and civilian ships (Baumert, 2024).

Within the boundaries of the given zones, UNCLOS protects the marine life. There were significant efforts before 1982 (UNCLOS) dealing with marine ecosystem. One of these efforts was the 1972 London Convention, addressed as the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (Masdin, 2016) dealing with the dumping of garbage, wastes and spoiling the marine health of the species. Later on, UNCLOS 1982 drafted specific rules absorbing the provisions of London Convention. Chapter XII of UNCLOS is dealing with various role and responsibilities of coastal states in relation to protecting, preserving, reducing, and controlling

⁶ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 58 (1980).

⁷ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 76 (1980).

⁸ United Nations Convention on Law of the Sea, U.N.C.L.O.S. art. 77 (1980).

pollution in the ocean. This chapter talks about some important things that are necessary to protect the marine ecosystem in order to achieve sustainable development. With the help of this specific chapter, UNCLOS deals with the following tasks:

a) The States must take the necessary steps to protect the marine environment preventing the bad effects that may come from certain trade activities. This involves stopping, reducing the dumping and controlling pollution and other dangers to the marine environment while preserving marine natural resources.

b) The States must take the steps needed to preserve human life. While doing so, the suitable laws, rules, and processes are to be complemented to the pertinent international laws specified in the treaty in question.

c) Trade or activities in the region must be done in systematic way ensuring the fairness taking into consideration and respect to other activities in the marine environment. The authorities can prepare laws, rules, and procedures that can establish, find, and remove installations that are used to do operations in the area. The purpose of this framework is to stop marine pollution and act fairly in their activities. This is based on polluter pays principle along with reactive measures, like paying for damages, and proactive steps, like working together and following international rules.

This law makes it even clearer that every coastal state has a duty. It says that these countries must use their sovereign rights over their exclusive economic zones in a way that protects and uses natural resources for a long term. The Coastal states are also responsible for keeping an eye on and stopping actions in these areas that could lead to marine pollution. The countries who are impacted by pollution, like

Japan's nuclear waste disposal in Fukushima recently had disturbed the marine ecosystem. Consequently, they have the right to ask for the compensation as per Polluter pays principle. (Hajriyanti, 2022). Some of the duties and responsibilities of states in protecting the international marine environment are:

a) the states must stop the marine pollution primarily, using marine resources in a way that is good for the environment with the help of some advanced technology.

b) the states must follow the international rules about the marine environment, such as UNCLOS.

c) Priority must be given to conserve and preserve the maritime environment and deal with its bad effects if any.

d) Assess the damage happened due to human activity, such as nuclear waste polluting the ocean

5 JURISDICTION DILEMMA AND EXPLOITATION OF RIGHTS IN ARCTIC ZONES

The countries like Russia, Canada, Norway, Denmark (via Greenland), and the United States are among the Arctic nations with overlapping industrial claims to exclusive economic zones and maritime regions in the Arctic Ocean. These disagreements frequently result from different interpretations of international law, especially the UNCLOS, with regard to the demarcation of EEZs and the expansion of continental shelves. The growing number of claims to the region's resources suggests that defining nations' rights and obligations with regard to the Arctic will become more difficult, even though UNCLOS

is the recognised legal framework for establishing boundaries in the region (Todorov, 2023). Furthermore, the Convention's standing as a means of settling boundary disputes in the Arctic has diminished as a result of the US's crucial role in Arctic maritime operations and its exclusion from the Convention (Shusterich, 1984).

There are conflicting claims to sovereignty over the Northwest Passage (NWP) as well. As previously mentioned, Canada claims that the passage is located within its domestic seas, but other nations – including the US and EU members – assert that it is an international strait that is accessible by transit.⁹ Canada has complete sovereignty and control over the passage, including the power to govern navigation, collect shipping fees, and enforce its rules and regulations, in accordance with its understanding of international law, including the UNCLOS (Pharand, 1988; Kim, 2013). The others, however, argue that, independent of coastline state sovereignty, it should be accessible to all countries for transit passage due to its historical use and international practice as a crucial maritime route connecting the Atlantic and Pacific Oceans (Belfer Center, 2025).

Similarly, Russia claims control over the Northern Sea Route (NSR), which crosses the Russian Arctic along the Siberian coast. By citing the route's international reputation and the principle of freedom of navigation, other countries refute Russia's assertion that it has the authority to regulate shipping activities and impose tariffs along the NSR. Similar to the Northwest Passage, the Northeast Passage is a controversial legal matter that is contingent upon the interpretation of UNCLOS (Pham, J., 2020). The classification of the Northeast Passage has significant implications for marine traffic, resource extraction, exploitation of rights of the indigenous communities and geopolitical

⁹ *The Northwest Passage as a question of sovereignty* (Environment & Society Portal, 2017).

conflicts in the Arctic. If its position is upheld, Russia would have significant authority to regulate shipping, enforce environmental laws, and impose fines on passing ships. However, if it is regarded as an international strait, ships might cross it without requesting Russia's permission, thereby endangering Russia's sovereignty claims (Arctic Council, 2020).

A further contention arises from the discord between Russia and Norway. It concerns with the delineation of their maritime boundaries in the Barents Sea and the Arctic Ocean. This issue fundamentally centres on the demarcation of their respective continental shelves encompasses the issues of natural resources located within those regions. The Barents Sea drives the substantial oil and gas reserves, rendering it a region of considerable strategic importance for both Russia and Norway. The point of dispute extends beyond the 200-nautical-mile boundary of each nation's exclusive economic zone (EEZ) and pertains to the delineation of their extended continental shelves. Russia has put forth assertions to broaden its continental shelf in the Arctic Ocean, encompassing the Barents Sea, grounded in the geological criteria specified in UNCLOS. Russia maintains that its continental shelf reaches well beyond the limits of its exclusive economic zone, covering extensive regions of the Arctic seabed, such as the Lomonosov Ridge and various other underwater formations. In a similar vein, Norway has put forth claims to broaden its continental shelf in the Arctic Ocean, with a specific focus on the Barents Sea (Zilanov, 2017). The assertions made by Norway are grounded in analogous geological parameters to those of Russia, encompassing the demarcation of the continental shelf extending beyond its exclusive economic zone boundary. Consequently, both nations endeavour to establish sovereign rights over the seabed resources, encompassing oil, gas, and minerals, within the contested region.

Moreover, indigenous communities land rights in the Arctic region are central to many issues. The discussions about sovereignty, resource management, and environmental stewardship are connected to the exploitation of indigenous communities living near the coastal areas. Indigenous peoples, including the Inuit, Saami, and indigenous communities in Alaska, have inhabited the Arctic for thousands of years and have distinct cultural, social, and economic inherent ties to the land. Their ancestral lands often extend across vast areas of the Arctic, encompassing diverse ecosystems and natural resources. Indigenous communities have maintained close connections to the land through subsistence activities such as hunting, fishing, and gathering. The claims to land by Indigenous peoples in the Arctic are fundamentally attached in the acknowledgement of their rights and established systems of land tenure. Global frameworks, including the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), recognise the entitlements of indigenous communities to lands, territories, and resources that they have historically owned, occupied, or utilised. In certain regions of the Arctic, the land claims of indigenous populations have been resolved via treaties and agreements forged between these communities and colonial authorities. In Canada, the Inuit and First Nations have engaged in negotiations resulting in modern treaties, referred to as land claim agreements or comprehensive land claims, which acknowledge indigenous rights pertaining to land, self-governance, and the management of resources. In light of advancements in acknowledging the rights of indigenous lands, indigenous communities in the Arctic persist in encountering legal obstacles and disagreements regarding the scope of their ancestral territories, the implementation of land claims agreements, and tensions arising from governmental policies and development initiatives. Legal pathways, encompassing litigation and advocacy, are frequently

employed to confront these challenges and uphold indigenous rights (White, 2002).

6 CHALLENGES AND EMERGING ISSUES FOR SUSTAINABLE DEVELOPMENT

Following the above discussions, the Arctic zones, undoubtedly, provides quicker routes between Asia and Europe so shipping is becoming an increasingly important part of global trade. However, it also poses serious issues that relate to sustainable development goals. The infrastructure improvement, environmental preservation, and the inclusion of Indigenous communities are the central issues in the sustainable growth of arctic shipping zones (Mossop, 2016). Climate change-related sea ice loss in the Arctic has created new shipping lanes, most notably the Northern Sea Route. It has shortened the travel times but increases environmental risks like oil spills, disruptions to marine ecosystems, and elevated emissions of black carbon, which hasten ice melt. The potential of Arctic shipping is limited by a lack of proper infrastructure. It is very much related to ports, navigational aids, and icebreaking vessels. Therefore, heavy investments is required in strong infrastructure which is crucial to ensuring safe and effective operations while promoting economic growth. Keeping in view, the preservation of cultural and natural values, Arctic development must simultaneously respect the rights and means of subsistence of Indigenous groups. It will provide meaningful consultation, and coordinate expansion with inclusive and equitable and sustainable development. Addressing common issues and advancing sustainable practices across Arctic states require harmonising rules, strengthening enforcement systems, and fostering international cooperation. These

all were highlighted by the Arctic Council's people-first approach also. Achieving sustainable development in these region and fulfilling its potential is a centre for ethical maritime trade. It requires striking a balance between the expansion of Arctic shipping and environmental sustainability, infrastructure development, and Indigenous rights (Celik; Hassel, 2023).

6.1 CASE STUDY: THE SUEZ CANAL BLOCKAGE

A significant occurrence that interrupted international maritime trade and brought attention to the dangers of vital shipping routes was the cargo ship *Ever Given's* blockade of the Suez Canal in March 2021. One of the biggest container ships in the world, the *Ever Given*, which is more than 1,300 feet long and can hold up to 20,000 containers, was travelling from China to the Netherlands on March 23, 2021, when it became stuck crosswise across the canal, obstructing the crucial waterway for six days. According to Mao; Wang; Zhang (2024), the event happened during a sandstorm, which decreased visibility and could have led to navigational mistakes. Refloating the ship required intricate salvage procedures and the cooperation of dredgers, tugboats, and maritime specialists (Blockage of the Suez Canal, 2021). The blockage of the Suez Canal had significant repercussions for global trade. It had disrupted the flow of goods and commodities between Europe and Asia. Approximately 12% of global trade passes through the Suez Canal, making it a critical artery for maritime commerce.¹⁰ For sectors that depend on just-in-time inventory management, the event resulted in logistical difficulties, higher transportation costs, and shipment delays. The event resulted in over 400 boats being delayed or

¹⁰ Chapter 1.1 – Maritime Shipping and International Trade (2019).

stranded. The backlog of ships awaiting passage through the canal made port and terminal congestion worse globally, which had an impact on the whole supply chain. The event sparked concerns about the safety of navigation on crowded rivers and inclement weather. It was emphasised how crucial pilotage services, navigational aids, and risk management strategies are to averting such occurrences. Additionally, the efficiency of coordination systems and emergency response strategies in marine mishaps was examined. Resolving the obstruction and minimising interruptions to marine traffic required the prompt deployment of resources and the coordination of salvage activities (Stevens, 2021). The tragedy also demonstrated how susceptible vital marine infrastructure is to environmental risks and operating difficulties. To improve the dependability and effectiveness of networks for marine transport, it was underlined that investments in infrastructure resilience, such as dredging, channel widening, and emergency berthing facilities, were necessary. The Suez Canal closure brought to light how susceptible global supply lines are to interruptions and bottlenecks. Discussions about supply chain risk management, shipping route diversity, and the use of digital technology to improve supply chain coordination and visibility were spurred by the occurrence.

6.2 IMPLICATIONS FOR THE ARCTIC

As mentioned above, the obstruction of the Suez Canal highlighted the dangers of travelling via small waterways, especially during inclement weather. Similarly, because of ice, erratic weather, and shallow seas, Arctic commercial routes like the Northern Sea Route and the Northwest Passage provide particular navigating difficulties. Ships passing through the Arctic need icebreaker support and specialised

navigation abilities since they must deal with icebergs, ice floes, and changing ice conditions. In order to reduce navigational dangers in Arctic seas, lessons learnt from the Suez Canal tragedy highlight the significance of thorough risk assessment, backup plans, and real-time monitoring. The interruption brought about by the closure of the Suez Canal brought to light how important marine infrastructure is to supporting international supply chains and trade. By contrast, the Arctic does not have enough port infrastructure, navigational aids, or support services to handle a rise in shipping. The infrastructure issues that Arctic shipping faces are made worse by the scarcity of icebreakers, search and rescue equipment, and emergency response systems. To overcome these constraints and improve accessibility, dependability, and safety along Arctic commercial routes, investments in port expansion, icebreaker fleets, and marine infrastructure are needed. Discussions over regulatory supervision, ship safety requirements, and navigational procedures in international marine traffic were sparked by the Suez Canal event. Similarly, a complicated regulatory system governs shipping in the Arctic. For Arctic shipping to be safe, environmentally friendly, and develop sustainably, laws must be harmonised, enforcement systems must be strengthened, and stakeholder cooperation must be encouraged. The Suez Canal blockage has shown us how crucial regulatory compliance, responsibility, and openness are to reducing risks and encouraging safe marine activities in the Arctic.

7 CONCLUSION

On the basis of above discussion and hypothesis, though Ice melting has opened new courses for trading simultaneously created

problems of mismanagement, disbursement of natural resources, equal sharing principles, maritime ethics and responsibilities. In addition, the harsh and unpredictable weather conditions are other reasons for the complex issues of these sea states. Ships traversing these routes are creating risk not only to the goods or passengers but the decay of natural resources also. Apart from above, the consequences are astonishing since there is no comprehensive law impacting which can monitor and assess the Arctic shipping data. This is actually causing voyage delays and, more critically, compromising the safety and emergency response capabilities of Arctic maritime operations. Thus, keeping in view the hypothesis, a comprehensive strategy for sustainable development in the arctic shipping areas is desperately needed. Due to the sharp rise in Arctic shipping traffic, there is Longer navigable seasons and melting glaciers which have opened up unheard-of possibilities for resource exploitation and trade. They are increasing the hazards of environmental damage, maritime conflicts, and geopolitical issues. On the basis of reports discussed in detail through China, Russia and other arctic regions, the governments and international organisations are not able to resolve the conflicting claims especially the issues of indigenous communities who are safeguarding the coastal areas. The UNCLOS 1982 is also required to be revised. The sustainable management of Arctic maritime routes is made more difficult due to security issues. However, there are various unreported risks to the environment at the cost of unethical trading. The shipping operations are to be regulated properly controlled, otherwise, it may create risk on delicate maritime habitats, endangered fauna, and fragile ecosystems. Thus, keeping in view these unclear and hazy environmental regulations, the cutting-edge shipping technologies, and multilateral collaboration between Arctic and non-Arctic states via bilateral and multi-lateral treaties safeguarding indigenous communities' views are all necessary to address these interconnected issues. Thus, the sustainable development

is needed that strikes a balance between economic opportunity and ecological and social responsibility through proactive governance, open regulation, and concerted international efforts.

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DISRUPTIVE LAW AND DISRUPTIVE TECHNOLOGY: THE DIMENSION OF NEW TECHNOLOGIES OR OF ENHANCED TECHNÉ¹

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1 INTRODUCTION

La ambición tecnológica nos lleva a rigidizar el mundo para asegurar su efectividad, la disposición científica nos lleva a aceptar la fluidez de la existencia para asegurar su continua oportunidad (Maturana, 1997, p. 136).

New technologies affect both the human *psyché* and *techné* (Galimberti, 2006), that is, they transform the way humans act upon

¹ This text is partially based on a previously published article in the journal “Direito e Práxis” of the Federal University of Rio de Janeiro (UFRJ), authored by Trindade dos Santos, P. J.; Moller, G. S.; and Marco, C. M., entitled “Disruptive Technology and Disruptive Law: Understanding Law in a Scenario of New Technologies” (Direito e Práxis, vol. 1, p. 275, 2019). For the present version, substantial modifications have been made, including conceptual updates and the translation and critical adaptation of selected excerpts by the author.

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the world and how they cognitively process it. Moreover, they push humanity into previously unexplored territories, thereby reshaping society, individuals, and intercultural relations (Rodotà, 2014, p. 73). These technologies are inevitable (Kelly, 2011, p. 176-177), and their effects – both invariable and unpredictable – reveal the high degree of complexity inherent to this phenomenon. Within this context, Law becomes essential as a tool for risk prevention and management. Thus, its epistemological framework must be rooted in a Scientific Paradigm capable of apprehending the phenomenon of emerging technologies and offering legal responses that align with the inherent nature of technological transformation. It is in this sense that the concept of *Disruptive Law* is proposed as a legal response to *Disruptive Technologies*.

This research seeks to address questions such as: “Can Disruptive Law, grounded in a Complex-Reflective Scientific Paradigm, develop effective legal strategies to deal with the complexities generated by New Technologies?” and “How can Law better understand Disruptive Technologies through its own epistemology?” The primary objective of this work is to understand new technologies from the perspective of their social impacts and the complexity they generate within the legal domain, considering Disruptive Law (which is anchored in a new scientific rationality). The aim is for Law, through legal strategies oriented toward the management of risks, problems, and opportunities (Caldani, 2011, p. 52), to both absorb and resolve, on the one hand, the challenges arising from the advent of these technologies and, on the other, explore the opportunities they offer so that Law may be revisited at its methodological foundations – particularly in light of the current scenario of exponential complexities brought about by technological advancement.

To achieve its central objective, the article will begin with an understanding of the human being within a hyper-post-trans-

modern society⁵ in its complexities, contingencies, and uncertainties, embedded in the context of New Technologies that permeate everyday life. Examples of such complexities include big data, the Internet of Things, artificial intelligence, and neuroscience⁶, as well as the transhuman condition.⁷ The aim is to follow the transformations shaped by social dynamics that are amplified by New Technologies, through effects such as the globalization of life,^{8,9} The aim is to follow the transformations shaped by social dynamics that are amplified by New Technologies, through effects such as the globalization of life, the urbanization of society, the contractualization of existence, and hypercellularity (Han, 2018).

This understanding will help address the interactions emerging from New Technologies, which introduce complex challenges within the field of Law – challenges that demand an attentive legal epistemology. From this perspective, Law must be rethought through the lens of a New Scientific Paradigm, which reconfigures the Cartesian-Mechanistic Paradigm traditionally centered on bounded rationality. Through a framework of complexity and reflexivity – marked by its disruptive nature, new pathways will be opened for the study and

⁵ Insights drawn from the following authors: Lyotard, 2000, p.10; Warat, 2014, p. 410; Lipovestky, 2006, p.27.

⁶ developed for non-artificial cognitive applications aimed at the understanding of the *psyché*.

⁷ technologies aimed at the biotechnological-human interface, capable of altering organic composition.

⁸ The same process that entails rationalization and alienation also fosters the dominance of the principle of quantity over the principle of quality, leading to a progressive inversion in the relationship between individuals and the products of their activities – resulting in the subordination of the creator to the creature. The increasing discipline and accelerating pace of organizations, corporations, and markets extend to every corner of social life, permeating modes of being, acting, feeling, thinking, and imagining (Ianni, 2001, p. 231).

⁹ Thus, to conclude, the process of globalization is much broader, complex, and multifaceted. Social and cultural changes today are not unidirectional and there are several contrary trajectories generating processes like homogenization, pluralization, traditionalization, and hybridization at the same time. In other words, “cultural globalization” does not refer to the possibility of a single global culture; it rather signifies the spread of plural cultural elements across the globe (Ghosh, 2011, p. 172).

development of legal innovations through regulation and regulatory frameworks, particularly by exploring the relationship between corporations and state governance.

Disruptive Law offers a new perspective on Regulation and Regulatory Frameworks, with the aim of preventing risks and contingencies that emerge from the social sphere and manifest as social complexities (Nicolesco, 1996). These complexities require a plurality of knowledges in order to effectively identify sociolegal problems and formulate legal strategies that are responsive to societal needs (Ceruti, 1995), within the possibilities set forth by the Pragmatic-Systemic Matrix (Rocha, 2005, pp. 9-47). This important discussion becomes especially relevant at a time when the methodological foundations of legal education are being rethought, opening space for critical reflection on the epistemological foundations of Law. The relevance of this research is further justified by the contemporary context in which multiple debates have emerged concerning the intersection of new technologies and legal practices such as the automation of legal professions, the use of data science, and other developments that demand a rethinking of the relationship between Law and Technology, as this study proposes.

Transdisciplinary plays a fundamental role in contemporary Legal Theory by contributing to the construction of legal knowledge, as it transforms and transcends the dominant epistemology, moving toward a complex-reflexive paradigm. This paradigm proves adequate to address the social complexity resulting from the effects of globalization, which demands a reconfiguration of both public and private spheres – with direct impacts on legal spaces, particularly concerning regulation and regulatory frameworks. Such transformation enables the opening of new spaces within a plural and networked society.

Moreover, new technologies present numerous possibilities that influence Education on a global scale. This emerging interface imposes significant challenges on Science, Ethics, and Law, reinforcing the need to (re)think Legal Theory both from the perspective of legal educations supported by neuro-education as a methodological-theoretical foundation and behavioral economic analysis (Rocha, 2013, p. 21; Thaler, 2016) – and within the domain of legal production itself.

Technology shapes society, wealth, the economy, and even our very way of being, directly influencing human daily life and engaging the human *psyche*: “[...] more than anything else technology creates our world. It creates our wealth, our economy, our very way of being” (Arthur, 2009). The hyper-post-trans-modern human being, in interaction with New Technologies, generates ruptures with tradition and history and, consequently, produces new problems through the generation of uncertainty and disorder in social relations, thereby intensifying complexity and contingencies. In this context, Law must be redefined both in its function and in its structure.

This study aims to demonstrate the connection between Disruptive Law and Disruptive Technologies by analyzing how Technoscience abruptly impacts all sectors of society – including the very biological structure of the human being (Hackel, 2017). This scenario imposes the need to rethink Law from its foundational bases so that it may preserve ethical and democratic elements.

2 THE SOCIAL IMPACT OF NEW TECHNOLOGIES: EMERGING COMPLEXITIES FOR LAW

The advancements in New Technologies (Arthur, 2009, p. 131-133) have a significant social impact on people’s lives. However,

these advancements do not occur in a social vacuum, as technology is a human creation, and since humans are inherently social beings, technological change is necessarily a social process (Volti, 2016, p. 39-40). The following table presents the main phases, tasks, and functions that influence the outcomes of implementing New Technologies in society.

Table 1 – Incorporating Social-Cultural Influences into the Phases of Technology Adoption

Phases of Technology Adoption	Social-Cultural Influences
Understanding the Organizational Culture	Meanings, Values, Rituals, Symbols, Practices, Language
Defining the Leader's Role (CIO)	Agent of change & cultural evolution
Communicating the Message	Medium is the message; Context
Selecting the Project Manager, Team & Plan	Leadres, Heroes, Champions, Sponsors
Choosing the Right Technology	Necessary upheaval to organizational culture
Designing the System	Agile, iterative, development; Align to bus. Goals
Implementing the Process (Check & Balances)	Change management & conflict resolution
Introducing the Technology (Roll-Out)	Surviving culture shock

(Borkovich; Vitelli; Skovira, 2015, p. 139-143).

The social dimension of Technology can be observed in three stages: in the design phase, where specific scientific and technological knowledge is applied, while also taking into account social and economic values; in the development of the technological process, carried out by public and private enterprises organized around particular value systems and equipped with their own institutional structures; and in the final outcome, which materializes as a product created by human beings for use within society. The social dimension

of Technology is thus evident and prompts critical reflections on its boundaries – particularly in relation to ethics, culture, politics, ecology, and economics – when considered within the context of a democratic society committed to collective well-being (Gonzalez, 2005, p. 28-29).

The increasing complexity experienced in people's lives is a result of the very historical trajectory of the world we inhabit creation begins with initial simplicity –following the Big Bang – and progresses through the gradual accumulation of molecules in certain hotspots, leading to the first spark of life. From there, the process continues with the emergence of increasingly complex beings – from single cells to mammals – ultimately culminating in the transition from simple brains to highly complex technologies, as can be observed today.

The same complexity that shapes the natural world – from simple to complex particles, from primitive brains to the development of highly advanced ones – also manifests in the growing number of objects equipped with increasingly sophisticated technologies. Today's complex inventions no longer accumulate atoms, but rather information, making them lighter and composed of fewer materials (Kelly, 2011, pp. 275-279).

New technologies, then, do not simply use time and displace existing activities. If we have learnt anything from the history and social studies of technology, it is that technological innovations generate unintended consequences and unanticipated (and often contradictory) effects. As socio-material configurations, they usher in a whole range of changes in social practices, communications structures, and corresponding forms of life. The same technologies can mean very different things to different groups of people, collectively producing new patterns of social interaction, new relationships, new identities. Rather than simply reading them as adding to time pressure

and accelerating the pace of life, mobile modalities may be creating novel time practices and transforming the quality of communication (Wajcman, 2008, p. 70).

Indeed, technological development has produced remarkable achievements—such as spacecraft and instant internet access. However, the relentless march of technology has also brought about, on an unprecedented scale, global pollution, overpopulation, and the threat of nuclear catastrophe. In this regard, Technoscience has also generated profound social ruptures, including the widespread destruction of jobs (Volti, 2016, p. 3). When confronted with technology, it is often difficult to perceive the intrinsic connection between Law and Technology, a relationship that becomes evident when the positive and negative aspects of technological advancement are weighed against each other. In this sense, contemporary Law must function as a channel for the filtration of technologies, to align them with the fundamental rights of human beings and to chart new directions for Law in times of technological complexity.

The societal impacts of technology have become a major challenge for the legal system, as these complexities are increasingly brought in before Judiciary, while formal legal order often lacks adequate responses to address such conflicts. Technologies and their consequences unfold in diverse and rapidly evolving ways, far beyond the current capacity of legal frameworks to grasp and respond to them effectively. This scenario – emblematic of contemporary society – demands a renewed understanding of the legal phenomenon, one that recognizes how the juridification of life today stems directly from social complexities, such as those introduced by New Technologies.

Thus, within the broader reflection on the social impacts of technology, the discussion surrounding the landscape of uncertainties and complexities generated by this phenomenon becomes highly

relevant. These dynamics introduce situations with increasing speed and greater layers of problematization, putting legal epistemology to the test.¹⁰ previously used by humans to understand and interpret the world. From this scenario – emerging within the legal sphere – Law begins to pay particular attention to New Technologies as manifestations of New Complexities (Bostrom, 2007, p. 130), which in turn give rise to several dilemmas: the potential necessity of laws that prohibit, discourage, or incentivize new technologies; the reduction of uncertainty in applying existing legal rules to novel practices; the avoidance of both overinclusion and under inclusion of existing norms in relation to such practices; and the remediation of obsolescence within current legal frameworks.

From another perspective, the study of the attributes of technological diffusion could assist in determining the appropriate legal structure and timing of responses designed to optimally promote new technologies (Cockfield; Pridmore, 2007, p. 496-498).

Examples of true technological revolutions (Bridle, 2018)¹¹ include Big Data ¹² - Examples of true technological revolutions (Bridle, 2018) include Big Data – and its incorporation into state structures

¹⁰ Latour (1994), in turn, would argue that we have never fully applied or embraced the philosophy advocated by modern man, whose explicit objective was to create a definitive separation between the natural and the social realms.

¹¹ The top five new technologies are how cloud, social mobile, big data, and artificial intelligence, which drive digital change in information security. For more, see: Till (2017).

¹² Big data can be used to obtain insights that lead to better strategic business actions. For more, see: Holmes-McNulty (2014); Krishnan (2013); Han; Pei; Kamber (2011); Gupta; Shilp (2016) and Mayer-Schonberger; Cukier (2014).

¹³-, the Internet of Things,^{14,15} Artificial Intelligence,¹⁶ Neuroscience (applied to non-artificial cognition and to the understanding of the *psyché*),¹⁷ in addition to the advances produced in relation to the human *psyché* and techné. In turn, the effects of Technology on labor relations illustrate the social impact of New Technologies. Based on what the literature refers to as the Third Industrial Revolution (Rifkin, 2011) and, more recently, the Fourth Industrial Revolution (Schwab, 2016), a new system centered on platforms can be observed. Both revolutions are directly driven by new technologies and are of crucial relevance to Law, as this relationship gives rise to innovation – paralleled by increasing inequality¹⁸ –, the need for regulation, and the various uses of New Technologies within the legal field. Within Law, a new configuration of Legal Science is emerging – one that adopts social complexity, now structured in networks or platforms, as its laboratory.

¹³ For more see: Soares (2012); Soares (2015); Soares (2014); Ladley (2012) and Sarsfield (2009).

¹⁴ The analysis of data absorption can have a major influence on the Internet of Things, which will not only make its managers profit, but will help to avoid disasters. Analytics become very interesting when we see how lives can be saved, fraud prevented, customers satisfied, and carbon emissions reduced. For more, see: Bates (2015); Liberg; Sundberg; Wang (2017); Deloach; Berthelsen; Elrifai (2017); Buyya; Dastjerdi (2016); Tsiatsis; Karnouskos; Holler (2014); Macaulay (2016) and Chou (2016).

¹⁵ Both Rifkin (2015), Botsman and Rogers (2011) point out that new technologies stimulate production with less cost-benefit (Rifkin, 2015) and, on the other hand, generate collaborative consumption (Botsman; Rogers, 2011), both are made possible by a global economic framework.

¹⁶ Its basic structure is the analysis of feelings with the objective of extracting information absorbed by social networks, in order to create structured and actionable knowledge used in a system to support the decision process. This analysis of feelings absorbs the sociological and psychological processes generated along with the social representations in the face of social networks. For more (Pozzi; Fersini; Messina, 2016; Hansen; Shneiderman; Smith, 2014; Golbeck, 2015a and 2015b).

¹⁷ (Chella, 2017, p. 39 and also: Sirius; Cornell, 2015; Pepperell, 2003; Boulter, 2015; Sisk, 2014; Bryant, 2013).

¹⁸ [...]To those who can afford it and to those who can adapt to it. In today's world, these conditions exclude most of the population. [...] In short, technical innovation can lead to an increase in inequalities between individuals, organizations and nations, thus enclosing democracy (Bunge, 2012, p. 32-33).

This shift enables a much more dynamic absorption of the very social complexities it seeks to address¹⁹ (Nielsen, 2011).

This is because technologies are indispensable in the current social context. It is the role of Law to reflect upon the phenomena of Techné, Science, and Technology as gateways to new legal horizons within a post-hyper-trans-modern framework. New Technologies, in turn, do not offer certainties but rather complexities, manifested in sketches of multiple possible scenarios.²⁰

3 THE EFFECT OF TECHNOSCIENCE ON THE PSYCHÉ AND TECHNÉ: A WORLD TRANSFORMED IN ITS ORGANIC AND INORGANIC FOUNDATIONS

Since the earliest stages of society, techné has been part of all human activities, actions, and reactions, serving as an expression of the evolving relationship between humans and their social and natural environments. It can be understood as a means of enacting human practice to ensure survival, for example, the crafting of a hammer by Neanderthals—given their instinctual limitations (Galimberti, 2006, p. 174). This is because, upon acquiring consciousness, human beings began to employ techné as an organic and inorganic supplement to their natural deficiencies, since, unlike animals, their instincts are not rigid but rather imprecise (Galimberti, 2009, p. 4).

¹⁹ The denomination of technoscience is justified based on this transformation of laboratories into red laboratories (Echeverría, 2003, p. 94).

²⁰ Kevin (2011, p. 97-98) outlines 5 possible scenarios that technologies can present to humans, ranging from an overview of the oscillation of society, as well as analyses of a possible increase in consumption or even the opposite effect. The scenarios outline the complexity and unpredictability of New Technologies.

Technologies have always existed alongside human societies as a means to enhance their existential practices. In early times, for instance, it was magic; today, Technology merges with Science (*Technoscience*), absorbing human life more intensely and fulfilling human needs.²¹ (Agassi, 1985, p.92 and 109-110). Technoscience is, today, the current form of expression of *techné* within post-hyper-trans-modern society. However, due to its impacts, it alters the very substance of what once constituted human technique, transforming it from merely a means of human adaptation into the ultimate end of that adaptation itself.²²

Through the Technoscientific Revolution, Science, Technology, and *Techné* come to be understood as a unified Technoscience (Echeverria, 2003. p. 86-87) and “*se caracteriza porque las acciones científicas devienen acciones tecnológicas, al quedar englobadas en un sistema de ciencia y tecnología que constituye una de las principales tecnologías sociales de nuestro tiempo.*” (Echeverria, 2003, p. 76) Technoscience becomes socially embedded and reflects its effects within social relations and, consequently, within the legal sphere.²³

²¹ Known as *simplistic Western magic*.

²² The very essence of man would be the technological conditioning itself, no longer being a way of acting in the search to achieve essence. This field is very well explored by Bunge (2012), Galimberti (2006) and Ellul (1954).

²³ Ellul, in his anticipatory clarity, already pointed out the dangers of technoscience in law. One of these dangers would be the fact that the drafting of normative texts on technology would not be able to apply accurately to technically complex situations, which would become hostage and obsolete due to technical progress. Ellul also explores the self-regulation of the technological field (domination of technique over technique. An example of this important reflection made by Ellul would be the fact that we consider the content of the Software itself as a real and autonomous normative source, since it imposes on the user what he can and cannot see. Ellul prophesies, in this sense, the gradual decline of Law in relation to other forms of regulation, and it devalues the use of the law, because it would be very inefficient in the face of technology, we run the risk of contributing - by renunciation - to an even more worrying development, that is, the gradual replacement of the law by technology itself. For more: Warufel (2005).

Therefore, we understand that New Technologies affect both the *techné*²⁴ and the human *psyche*, by artificially redimensioning²⁵ the human being and influencing, in an organic²⁶ and inorganic way, its composition. This means that Technology as *techné* is absorbed by scientific revolutions (Binet, 2002, p. 139-143) and uses a plurality of knowledge for its development, however, it no longer only affects *techné* (Ellul, 1954, p. 331-332), but also cognition itself through the development of new technologies in this field, which alters the *psyche*²⁷ human (Ellul, 1954, p. 324) – which can be affected from the point of view of inducing desires and resizing human needs,²⁸ which potentiates new and great anguish.

In this vein, Bisol, Carnevale and Lucivero (2011, p. 39-40) point out that as a result of the control that new technologies exert over information, they overcome simple instrumental rationality, which also affects the human way of feeling and thinking, influences emotions and judgments, since technologies manifest a new way of producing the image of the world, that is, to experience what surrounds him.

²⁴ The term technique, as i use it, does not mean machines, technology, or this or that procedure for attaining an end. In our technological society, technique is the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity. Its characteristics are new; the technique of the present has no common measure with that of the past. (Ellul, 1954)

²⁵ Unfortunately, it has evolved autonomously in such a way that man has lost all contact with his natural framework and has to do only with the organized technical intermediary which sustains relations both with the world of life and with the world of brute matter. Enclosed within his artificial creation, man finds that there is “no exit”; that he cannot pierce the shell of technology to find again the ancient milieu to which he was adapted for hundreds of thousands of years (Ellul, 1954, p. 428-429)

²⁶ But today it takes the technical form, but clearly un, the world of organic substance; in it, the need for production carries out sondeos hasta en las fuentes de la vida, controla la procreación, influye sobre el cremimiento y altera al individuo y la especie. La muerte, la procreación, el nacimiento o el (habitat) are subjected to rationalization, as the last stage of the industrial chain without fin (Ellul, 2003, p. 133).

²⁷ Many cognitive theories have even pointed to a cognitive involution, see: (Chorost, 2011; Morris; Tarassenko; Kenward, 2006).

²⁸ The world we live in has been shaped in many important ways by human actions. We have created technological options to prevent, eliminate, or lessen threats to life and the environment and to fulfill social needs (Thohari; Ayu; Indria, 2013, p. 11-1)

This interference manifests itself directly in human language and in the construction of subjectivity, which serves to achieve happiness, to cure oneself of disease, to defeat suffering, to be recognized as more beautiful and attractive, so that technologies bring with them a symbolic-affective charge, generated from the human need to be in relationship with the other, which even creates conditions for new pathological dependencies in the use of new technologies. All technologies influence our perception and understanding of the world, thus contributing to forming the view of things and judgment of facts.

The current *neuroses* and *necroses* (Morin, 2018) socially transmitted are a reflection of technological influxes along with the *human psyche*, which interferes in social contexts in a negative way²⁹; that is, technologies can profoundly affect social relations, since they drive a collision with the processes of social adaptation, cause chaotic levels of complexity, as well as create contingencies and disorders. Today, technological distress has challenged the true meaning of well-being, because, with the proliferation of Technologies, several hitherto insurmountable obstacles are overcome.

Technology provides tools that directly help to increase human well-being, such as facilitating contact between people. However, at the same time, the consequences of the effect of technology on well-being are also evident, which can be seen in the increase in people's isolation, which leads to an exponential increase in cases of depression. Also, terrorist activities, such as the theft and invasion of data belie the myth that technology brings with it well-being. Still, it is highlighted that the speed with which they adhere to our daily lives affects people's ability to tolerate and causes an increase in frustration. One

²⁹ Following technological advancement as inevitable, it is worth reflecting on its assertion in aspects and influences on the citizen. See in: (Kelly, 2011, p. 181-183)

cannot ignore, either, the increase in pollution and health risks, often unknown when manufacturing (Choudhury; Barman, 2014, p. 29-31).

Technologies have always offered new horizons to man “*this cyclotron of social betterment is propelled by technology. Society evolves in incremental doses; each rise in social organization throughout history was driven by the insertion of a new technology. The invention of writing unleashed the leveling fairness of recorded laws*” (Kevin, 2011, p. 39-40). However, today, its harmful potential is much greater than in other times, since nowadays Technologies multiply and are inserted into everyday life without being noticed, and lead man to live in a *trans-natural space*. The dilemmas that naturally arise from this new order manifest the need to reconstruct the relationship between threatened nature, changing life and a disintegrated society (Pérez Lindo, 1995, p. 174).

Man’s greatest hopes today are placed on Technology, which manifests its deep connection with human nature itself. Traditionally, man is intrinsically connected with nature, with the original environment – and not the artificial one – that is, man’s original trust is in nature, but there is a hope with Technology, which today superimposes itself on nature itself – which demonstrates the passage from Technology as a means to an end – and intervenes, including human nature (Arthur, 2009, p.14 and 18-19). Therefore, the new Technologies³⁰ and their effects on psyche *and techné* generate countless possibilities for Law, which needs to be rethought in its function and structure within Legal Science, guided by a Transdisciplinarity capable of integrating multiple knowledges. New Technologies cause ruptures with old traditions and impose new transformations.

To deal with Technologies, it is necessary to have a structural and functional opening of Law, which is also a Law - as occurs with

³⁰ Wootton (2005) demonstrates historical elements of scientific revolutions and with this it can be seen that today such revolutions end up being absorbed by new technologies, this science is largely revolutionary and affects social relations.

human technique - absorbed by the Scientific Revolutions, constituted in its epistemology in a plurality of knowledge and developed and transformed by the scientific paradigm of complexity. Only a Transdisciplinary law can be able to absorb and solve the problems and possibilities generated with new technologies in the face of social adaptation, since *law is the rhythm of life*. Thus, with Technoscience, a profound organizational and communicational restructuring of Law becomes necessary, which requires the rethinking of its function and its paradigms. In the face of new technologies, science starts to have the technological component as its essence, which leads to the consideration of the possibility of a legal Technoscience (Latour, 2000).

Technological development will be one of the main factors of *change in legal production*, with regard to the internal production of law, since regulation/regulation quickly becomes obsolete. On the other hand, international legal production, under the “effects of globalization on social relations” (Ghosh, 2011, p. 172) can be more dynamic when absorbing the social complexities caused by new technologies, since they break the ordered and territorialized spaces (Muller *et al.*, 2012. p. 10-11).³¹

Critical Legal Science and the plurality of knowledge³², in the face of social complexities and New Technologies, has to observe the constancy acquired with the relationship between time and space and its “exponential, combinatorial and recursive acceleration”³³

³¹ Rodotà (2014, p.11-12) points out that in the current global space, Rights multiply and reduce, space and contract, redistribute powers, and are subjected to subjection – mainly to imperatives based on the security and arrogance of the market. The rights already recognized are reinterpreted and joined by new ones – there are even those who intend to deny them – especially with the arrogant emergence of common material needs arising from the influence of scientific and technological innovation.

³² Thus, critical science holds the promise of redirecting science and technology to support the important goals of environmental sustainability, social appropriateness and psychological well-being (Huesemann; Huesemann, 2011, p. 466).

³³ Human history, then, can be understood in terms of a race with time, of ever-increasing speeds that transcend humans' biological capacity (Wajcman, 2008, p. 60-61).

(Leonhard, 2016), Legal Science must try to eliminate risks and face chaos with due urgency (Latour; Woolgar; Slak, 2013, p. 48).

The way in which the processes of creating technology are carried out are fundamental to understanding the technological impacts of today. Topics such as the sociology of invention, the adoption and diffusion of technology, notions of cost-benefit, the role of institutions, as well as notions about the incorporation of technology together with technique are elementary to unveil the practical effects of technology, so that Law can be a field for absorbing these new complexities, reducing risks and social contingencies, in addition to seeking to solve and design the resolution and minimization of harmful impacts on the social. Technology alters reality and requires consideration of aspects related to ethics, economics, ecology, politics and culture; that is, although technology achieves its objectives, it may not be acceptable from the point of view of other aspects (Gonzalez, 2005, p.12), often serving as a form of dehumanization and creation of new inequalities.

4 CONNECTION BETWEEN SYSTEMIC CONSTRUCTIVISM AND NEW TECHNOLOGIES: A PROPOSAL TO OVERCOME A CARTESIAN- MECHANISTIC PARADIGM IN LAW

The dominant methodology produces oscurantism because there is no more association between the disjoint elements of knowledge and, therefore, there is no possibility of meshes and reflection on them (Morin, 2005, p. 29-30).

New Technologies do not present us *with certainties*, but rather *complexities*, which express an outline in different possible scenarios³⁴ to be experienced by humans. Therefore, understanding New Technologies in a panorama of New Rationality becomes urgent in a society where more and more risks are taken. In view of the complexity that the contemporary social context projects, many challenges arise to the Theory of Law, which only a systemic-constructivist theme³⁵ can grasp, since it considers reality as a construction of an observer (self-observer), analyzes all the particularities aimed at complex observation from a set of theoretical and methodological categories of the Systemic Pragmatic Matrix to produce new horizons for the legal profession (Rocha, 2003, p. 100).

The method is related to New Technologies, as it is the expression of a current Legal Science, which meets a panorama of great complexities, adhered to the systemic theory as a social panorama of uncertainties and risks. The Science of Law, when linked to the Cartesian-Mechanistic Scientific Paradigm, treats the social as *matter*, and not as *possibilities to Law*. Therefore, understanding the New Rationality (Paradigm of Complexity-Reflexivity) as the opening of a field of new horizons to Law through Transdisciplinarity becomes essential, as Law begins to absorb the social from the countless possibilities offered by various types of knowledge. In this context, legal science ceases to remain isolated in a unidisciplinary field and opens up to the horizons of Transdisciplinarity.

³⁴ Kevin (2011, p. 97-98) outlines five possible scenarios that technologies can present to humans, ranging from an overview of the oscillation of society, as well as analyses of a possible increase in consumption or even the opposite effect. The scenarios outline the complexity and unpredictability of New Technologies.

³⁵ [...] Observada desde la posición constructivista, la función de la metodología no consiste únicamente en asegurar una descripción correcta (no errónea) de la realidad. Más bien se trata de formas refinadas de producción y tratamiento de la información internas al sistema. Esto quiere decir: los métodos permiten a la investigación científica sorprenderse a sí misma (Luhmann, 2007, p. 22).

New technologies, then, do not simply use time and displace existing activities. If we have learnt anything from the history and social studies of technology, it is that technological innovations generate unintended consequences and unanticipated (and often contradictory) effects. As socio-material configurations, they usher in a whole range of changes in social practices, communications structures, and corresponding forms of life. The same technologies can mean very different things to different groups of people, collectively producing new patterns of social interaction, new relationships, new identities. Rather than simply reading them as adding to time pressure and accelerating the pace of life, mobile modalities may be creating novel time practices and transforming the quality of communication (Wajcman, 2008, p. 70).

Technologies can serve on the one hand, as a basis for solving problems born in society, or, on the other hand, they can create new problems. The main issue in an atmosphere absorbed and dimensioned by the conflicts that arise from technologies revolves around the *nature* of these new contingencies and *emergencies* accumulated by social relations. Several analyses seek to point out failures of the Law with society and New Technologies, which provokes different points of view about what would cause the mishaps seen today in the legal system. One certainty is that legal epistemology constituted in an outdated Scientific Paradigm ends up not reaching the new complex possibilities generated by New Technologies.

In the midst of so many notes, it has not been thought from the angle of the *construction of legal knowledge*;³⁶ that is, scientific

³⁶ We are dissatisfied with the right sense, the science of the right, which has not been able to produce an idea capable of winning the force. The man wants to master nature, and in many aspects he achieves, but he does not find the path to overcome the simism (Biondi, 1953. p. 120).

research has ignored that Law continues to be built under an outdated view of science, still based on the Cartesian-mechanistic scientific paradigm,³⁷ which causes a gross distortion of social facts by dealing with discussions that exasperate Law with *silence*, and superficially considers reflections from other scientific areas. The dynamics of the construction of knowledge in academic centers continue to reduce the complex to the simple by the fragmentation of the object of study: all this sum of mishaps affects the crisis of Law^{38,39}, today experienced in the double dimension, that is, in teaching and legal knowledge.

5 THE PARADIGM OF COMPLEXITY AS THE BASIS FOR A DISRUPTIVE LAW

The Scientific Rationality of Law today is the stage of a clash between the old and the new; a clash that gains great relevance in a society where Technology increasingly permeates and reflects its consequences in everyone's daily lives. The new gains more space than at any other time, but (re)thinking about the new is not a simple task and requires a change in the way Law is understood, a task to be done based on an exposition of the relevant need for a new understanding of Law (Ost, 2006, p. 13). In the face of the current social influxes of New Technologies that cause the so-called "Cartesian-mechanistic

³⁷ Mechanistic determinism is a utilitarian and functional knowledge that, surpassing Aristotelian science, does not lend itself to understanding reality, but only to dominate and transform (Santos, 2008, p. 32).

³⁸ Therefore, the crisis of modern law is inextricably linked to the insufficiency of the model of rationality employed by the law, a model that corresponds to the functional needs of a society distinct from that in which contemporary man lives and that requires new mechanisms, reflexive mechanisms of conflict resolution (Bourdieu; Teubner, 2000, p. 18).

³⁹ Criticisms of legal positivism that are very well constructed in Brazil are those of Streck (2014), Rocha (1998), Engelmann (2001) and, at the international level, that of Warat (2014).

anguish”,⁴⁰ which unveils the bankruptcy of the old adhered to legal thinking. The old dominant paradigms (legalist, statesman, and positivist)⁴¹ of *legal science today have been facing a crisis, which has been affecting all branches of Law on a large scale* (Ost, 2006, p. 13).

The need for bridges between the different knowledges of the legal world unveils the nuances of a dynamic and complex society,⁴² which contrasts head-on with the linear view posed by the mechanistic Cartesian paradigm, whose core is centered on a legal production carried out only by institutional regulation, since legal production can arise from the most varied spaces⁴³ (Schawab, 2016). The linear vision multiplies social and legal problems, as it is not capable of imprisoning all the infinite possibilities of phenomena, especially when it comes to New Technologies.⁴⁴ Certainty can no longer lay the foundations in today’s world (positivism), which requires a rethinking of the way of producing and observing social phenomena through Law. For a new paradigm, for example, it is not possible to make a distinction - which

⁴⁰ We use “anguish” in a vaguely Freudian sense and we call it “Cartesian” simply because Descartes articulated it with rigor and drama in his *Meditations*. La angustia es en realidad un dilemma: o tenemos un fundamento fijo y estable para el conocimiento, un punto don o conocimiento comienza, está cementado, y reposa, o no podemos escape de la oscuridad, el caos y la confusión. The hay una base the absolute summit, the whole collapses (Varela; Thompson; Rosch, 1997, p. 169).

⁴¹ Supiot (2007) and Chevallier (2009) warn about the legal production that arises not only by the State, but also in a collateral way. Menger (1898), in ancient times, already signaled the legal production outside the Scientific limits proclaimed to the State (regulation and regulation) in a work entitled *The Rights of the Poor*. In this sense, the concern of a right that comes to observe and that has an observer of global, networked, complex and plural contextualities is not new (Carbonnier, 2001).

⁴² The life of Law obeys two apparently antagonistic forces, one in the sense of preserving stability, the other in the sense of guaranteeing movement and progress (Reale, 1977).

⁴³ In addition to the above, it is also worth noting that: “Neutrality and objectivity are the ashes of a past that never existed. Modern science, which has always been characterized by its anthropophagy, ends up eating itself, and it is from its own digestion that it can visualize the transformation it undergoes” (Rocha, 1985. p. 17 et seq.).

⁴⁴ The more problems technology generates, the more technology is needed. Only technology can improve technology, curing yesterday’s diseases with today’s wonder drugs, before their own side effects get in the way and tomorrow new and improved drugs are required (Baumann, 1997, p. 261-262). See also: Han, 2016; Han, 2014a; Han, 2014b; Han, 2014c.

focuses on the creation and multiplication of hybrids⁴⁵ - that is, it is not possible to divide the human from the non-human, the organic from the inorganic and other splits that dimension science in polarization.

From a Legal Science epistemologically constituted by absolute certainties, a rupture occurs, which starts to require a Complex, Transdisciplinary and Flexible thinking (Carbonier, 2001), because *“there are social phenomena whose study overcomes the limits of the disciplines; in such a way that their approximations can only be understood through the transdisciplinary contexts, which generate new data that between themselves the different standards of law”* (Araujo; Sosa, 2012, p. 4). We enter a New Rationality (Bachelard, 1996) that is more sensitive to man, his desires, needs and anxieties (Prigogine, 1997; Castel, 2010). In a context of complexities generated by New Technologies, the Scientific Paradigm of Complexity-Reflection is the one that best corresponds to Law so that it can provide answers to problems, reduce risks and, in parallel, can also use new technologies in a positive way in social relations,⁴⁶ arising from the conflicts caused by New Technologies with *téchne and psyche* – whose impacts affect the social adaptation of man.

Transdisciplinary openness seeks a more sensitive look at the exasperations of society, seeks a more human facet of Law, and it is an enriching possibility for Legal Science to build disciplinary bridges capable of providing the observer with new horizons. Legal analysis typically does not consider the ways in which technological developments can harm or enhance individual interests (Cockfield; Pridmore, 2007, p. 496-498). Thinking about the Theory of Law today is not limited to enclosing the “legal world” in disciplinarity but rather enabling Law to be observed from new angles, by new Sciences, which allows the “[...] *knowledge in the only is vertically developed, there is a*

⁴⁵ For more notes on hybrids, see Latour (1994).

⁴⁶ The cultural changes caused by the use of virtual media are very deep and it is difficult to estimate their impact on our societies (Martín-Barbero, 2005. p. 2).

hondo, but also horizontally, in connection with other subjects-disciplines” (Vilar, 1997, p. 44).

Law with a plural epistemology of knowledge based on the New Rationality is horizontally democratic, as politics acts to absorb new problems, possibilities, risks and effectual emergencies conditioned directly and indirectly by New Technologies, observing “communication and organization”⁴⁷ in a State model modeled on State Governance (Volti, 2016, p. 339 et seq.; and, Grossi, 2009) by a network system (Ost; Kerchove, 2012),⁴⁸ which enables the regulation and effective regulation of positive or negative innovative advances produced with new technologies. In order for Governance to become effective, the exercise of horizontal democracy must be expanded, which ends up being the guiding thread of complex social contexts that become politicized and these problems and possibilities end up being recognized by Transdisciplinary Law (Agassi, 1985, p. 14; Teubner, 2016, p. 10 and Oberdoff, 1993, p. 984), the basis for Disruptive Law and for discussions on legal education from current perspectives, such as neuroeducation^{49,50}.

The positive relationship between New Technologies and Legal Science constituted in a new Paradigm is evident, responsible for a profound rupture with the old Scientific Paradigm that prevents

⁴⁷ Rather than catalog important inventions such as iron, steam power, or electricity, in this view we catalog how the structure of information is reshaped by new technology. A prime example would be the transformation of alphabets (strings of symbols not unlike DNA) into highly organized knowledge in books, indexes, libraries, and so on (not unlike cells and organisms) (Kelly, 2011, p. 46-47).

⁴⁸ Law in its mechanistic-Cartesian scientific paradigm is constituted by a normative system (Kelsen, 2005) in a hierarchically pyramidal way.

⁴⁹ Francisco Mora follows the same logic of the pedagogy of love used by Warat and Paulo Freire: see: (Mora, 2013).

⁵⁰ The case study becomes one of the central bases for the permeability of a neuroeducation focused on transdisciplinarity. The discussion of case studies provides a transdisciplinary approach in the process of transformation of contemporary society.

Legal Science from observing the phenomenon of New Technologies (Borgmann, 1984, p. 64).

6 NEW DISRUPTIVE TECHNOLOGIES: THE NEED FOR A LAW THAT IS ALSO DISRUPTIVE

This presentism of technology disrupting law leads directly to an essential contradiction; an emphasis on the need for legal change yet a continual affirmation of law as it has been known; a desire to manage disruption using the forms and tools of modern law (Tranter, 2017, p. 8).

The legal strategy, and its integration with the respective tactics, have been set aside by the frequent reference to the Law in the past, ignoring that it has a strong sense of the future, where both occupy prominent places (Caldani, 2011. p. 50-51).

Specialized doctrine points out that there are two types of technologies in evolution. On the one hand, we have the technology of gradual sustenance/evolution, technologies that self-develop, improve themselves. On the other hand, there are disruptive technologies (Goanta, 2017), technologies that arrive and change many of the Technoscientific assumptions based on their applications. Disruptive Technologies, in particular, create serious impacts on social relations, generating uncertainties due to their innovative potential: they cause negative socioeconomic impacts, cause deep crises, but can also produce strong positive impacts (Christensen, 1997).⁵¹ Disruptive Technology,

⁵¹ Digital technologies, taken as a broad generic category of technological inventions and applications, fall under this rare kind of “disruptive technologies”. To make apt policy decisions, we need to understand their current state of evolution and integration in the economy and

due to its risks and positive factors, is, in fact, a double-edged sword (Robertson, 1981, p. 438 and 440-441), since the social repercussions of advances in Technoscience sometimes produce positive and sometimes negative effects, especially in delicate areas such as the environment and health.

The first impact of the development of Science and Technology generated by the first Disruptive Technologies was to encourage the hope of a new society, where all needs would be met and all people could be creative. Thus, it was thought, secondly, that the impact of Technoscience would be to modernize society, which is why no one could oppose it. Third, Technoscience was considered socially and politically neutral, so the responsibility for misuse was transferred to the users, and not to the scientists/technologists. The hope, in short, was that development would lead to the solution of social and political conflicts (Rahman, 1981, p. 508-509).

To combat the negative effects of Technoscience,⁵² it is possible to design solutions from Law^{53,54} with a reading of the Paradigmatic Scientific Revolutions, because the Revolutions unveil a new and innovative cognitive order for the scenario of New Technologies and end up providing a direction for Science and Technology and their connection⁵⁵, which should not be guided by the outdated values of

in other areas of society, we must figure out their effects on different existing policies and institutions, and we need to know how to react to these technologies now and in anticipation of their future development (Urri, 2017, p. 1).

⁵² Schwab warns that in each space of the globe it is necessary to create a regulatory environment regarding new technologies, which will be promoted so that it has an adequate social conformation, avoiding deep problems with their use (Schwab, 2018. p. 19).

⁵³ We can shift the defaults in our laws and public institutions to reflect that coming reality. [...] As the technique progresses, better tools for forecasting and prediction help us spot the inevitable (Kelly, 2011. p. 185-186).

⁵⁴ Volti highlights in the pages referring to the chapter *The Tools Destruction* positive and negative elements regarding technologies and their central points of development. See: Volti (2016. p. 255 et seq.).

⁵⁵ Science and Technology have not always been together throughout history. For some, science discovers effects and technology exploits (applies them). Technology, however, is a little bigger

power, control, and exploitation, but rather by the values of social and environmental harmony, reactive collaboration, and mutual improvement. New Technologies together with Scientific Revolutions undeniably have a disruptive role (Huesemann; Huesemann, 201, p. 414) that cannot be ignored by the Law.

Disruptive New Technologies require that new tools be used for Law to observe New Technologies, because as the excerpt from Tranter quoted at the beginning of this chapter demonstrates, it is not possible to control disruptiveness in technologies with a legal epistemology coming from a mathematical-Cartesian Scientific Paradigm (Old Paradigm). Law must adapt to the future – and present – of New Technologies, which implies thinking about how Law can accommodate this area of innovation. These debates imply a (necessary) evolution/revision of the legal Scientific Paradigm. Only a Law instituted by the New Paradigm is able to absorb non-law (Carbonnier, 2001), new technologies produce innovations, these must always be adjusted with legal strategies, in a continuous way and less harmful to society and economy.

Given that technologies become disruptive, innovations in Law also need to be (Twigg-Flesner, 2016, p. 2-3, 4 and 13). Disruptive Law, then, is the one that has its rationality expressed by the Paradigm of Complexity, a Law that builds Legal Strategies in the search to better manage and reduce risks produced by Disruptive Technologies, which create complexities in the form of impacts on the *psyche* and *human techné*. It is a prospective right, that is, not only tied to the past, but that through legal strategies looks to the future and observes it. Legal strategies now have as an essential element the *disruption* applied to new technologies, which causes a broad flow between Science, Technology and Law, since law is a rhythmic element of life, it represents the social

than Science, as it can do without scientific predictions. For more: Arthur (2009, p. 77-78).

impacts experienced by complexity, contingencies, emergencies and risks that are products of the social.

As New Technologies emerge, legal dilemmas arise together: technologies change rapidly, which requires rethinking the roles played by legal institutions, as well as with regard to the methodologies adopted (Moses, 2007). Disruptive technology, such as driverless cars, raises a number of legal questions, as accidents will happen. Disruptive technologies are increasingly becoming part of life in society, and it is up to the Law to fill the void whose impacts will be legally felt caused by these technologies.⁵⁶ There are even questions about the way of understanding Fundamental Rights, because through Technoscience the Law *Becomes borderless*, since citizenship is embodied in Rights that belong to each one as personal, overcoming the national border (Rodotà, 2014, p. 73).

The question posed today is how it is possible to combine scientific, technological, economic, social and moral progress to preserve the social values of humanity and the social environment on which they depend. It is necessary to educate people to think in terms of the organization of work, to establish collaboration between workers and engineers, to expand skills, to promote mutual understanding, and to promote well-being and culture based on the workplace. Thus, technical advancement, in fact, is an evolutionary and irregular process, but when social factors *are integrated* with technological progress, human progress is less disturbed and subject to conflicts, at which point the

⁵⁶ Disruption: In the past two decades, the concept has gone from theory, to buzz word, to the captivation of the popular imagination. Disruptive innovation goes beyond improving existing products; it seeks to tap unforeseen markets, create products to solve problems consumers don't know that they have, and ultimately to change the face of industry. We are all the beneficiaries of disruption [...] But there are also downsides to this new technology. Autonomous vehicles could potentially threaten jobs: in the freight and transportation industries, buses and tractor trailers could begin to drive themselves, and traffic cops would no longer be necessary. Self-driving vehicles would also open the country up to a number of new security concerns. Hackers could tamper with autonomous driving software; terrorists could infiltrate the central transportation system (Katyal, 2014, p.1685-1689).

Law must act. The adoption of any technology, in order to reduce risks, needs to be analyzed in its details, as well as regulated/regulating, if it will not be exposed to dangers (Robertson, 1981, p 453-455).

This story shows that, if it is true that Law is one technique among others, it is not a technique like the others. It has made it possible to make it humanly livable and to use new techniques without being destroyed by them. Interposed between Man and Machine, it served to protect Man from the fantasies of omnipotence generated by the power of machines. As a tool interposed between Man and his representations, whether it is a question of mental representations (speech) or material representations (tools), Law thus fulfills a dogmatic function - of interposition and prohibition. This function gives it a unique place in the world of techniques: that of a technique for the humanization of technique (Supiot, 2007, p.143).

It is the institutional legal actors, currently, with greater attention to the Judiciary, which has the task of implementing and interpreting the scope of the normative framework that governs the production of scientific and technological advances (Cervantes, 2015, p. 915). Law must, on the one hand, absorb the innovations introduced by New Technologies, with the objective of establishing a governance capable of facing the resulting problems, since technology performs a purpose (Arthur, 2009, p. 14 and 39-40). On the other hand, in view of the possibilities⁵⁷ they offer, it is up to the Law to regulate and regulate such innovations, reducing the associated risks and contingencies.⁵⁸

⁵⁷ To delve deeper into the thousand possibilities of new technologies (Buhler, 2015; Holmquist, 2012; Harkin, 2018; Davila; Epstein, 2018; Funk, 2013; Affuah, 1998 and Caves, 2000).

⁵⁸ Because of its enormous complexity, the nature of reality cannot be comprehended in its totality (Huesemann; Huesemann, 2011, p. 393).

On the other hand, international legal production, under the “effects of globalization on social relations” (Ghosh, 2011, p. 172) can be much more dynamic when it absorbs the social complexities caused by new technologies, since they break the ordered and territorialized spaces (Muller *et al.*, 2012. p.10-11). New Technologies make us rethink Globalized Constitutionalism, a proposal that would cover all the main legal areas on a global scale - trade, environment, security, crime, finance, markets and competition, intellectual property, labor, taxation and health - which leaves only a few areas untouched by international⁵⁹ rules and procedures. Technology is a global, cross-border phenomenon, while Law, most of the time, is the product of Nation-States. In regulating scientific and technological advances, some limits must be recognized and accepted at the international level in order to accommodate national perspectives on sensitive issues that address the cultural values and viewpoints of specific communities (Palmerini, 2013, p. 21-22).

As the technological environment changes rapidly, it is required, at a time when New Technologies are disruptive and invade the human *psyche and techné*, a flexible system, which does not commit any rules in advance. A rigid system, as advocated by the Old Paradigm, commits itself *ex ante* to a set of penalties for technological externalities; but in doing so, it imposes the same penalties, regardless of whether technological innovation occurs or not. For example, consider the problem of a legislator who must regulate before knowing whether or not current technology will be replaced by more advanced technology. In particular, the rigid regime may end up selecting a rule that discourages or, more surprisingly, strongly encourages investment in Disruptive Technologies. On the other hand, overinvestment in

⁵⁹ Examples of what the world would look like in a Globalized Constitutional order, see: Zouridis *et al.*, 2012, p. 336-338.

research never occurs when legal institutions are flexible. A flexible regulatory standard accepts uncertainty.⁶⁰

To accommodate the negative impacts of New Technologies, any regulation must maintain flexibility and responsiveness or even anticipate the future risks of activities that are constantly evolving. In a different way, for regulation to evolve along with Technoscience, which considers the constraints of a “rigid” approach to Law, the legal system must be guided by “prospective and homeostatic instruments”, capable of adapting to a changing landscape, which can no longer be managed by a rigid Law.

In this sense, there is still a deep distance between disruptive New Technologies and Law and, to shorten or reduce this distance, Law must observe and absorb: Soft law vs hard law; Technical delegation and the public/private dichotomy; Global technology vs local law (Palmerini, 2013, p. 15-16). Law is increasingly involved in the regulation of scientific activities, products and results, a link that is hybridized, in which the contribution of both actors legitimizes its content. Science and Technology also become the object of regulation, with a focus on risk assessment through the corresponding governance (Palmerini, 2013, p. 13-14).

Among the legal methods for the construction of a law aimed at social adaptation together with Technoscience, with a less profound and harmful impact, Transdisciplinary is fundamental, as it expresses the end of an approach to science and technology, on the one hand,

⁶⁰ Anderlini *et al.* (2013, p. 939-941) carry out a very interesting analysis on which types of economy would be better applicable to a rigid or flexible system, insofar as they point out that rigid legal systems are preferable in the early stages of technological development, as these are periods in which we expect problems of commitment. Indeed, during the early stages of a technology’s development, one would expect the relative size of externalities (the change in externalities) to be greater compared to the increase in productivity generated by technological innovation, since investors correctly predict that in the flexible regime, policymakers will choose later regulatory standards, investment in research may be sub-ideally low, and the novel technology more likely to survive.

and Law, on the other hand, since until then, they were treated as separate and non-communicating systems, supported by different rules and methods (Palmerini, 2013, p. 7-9, 11-12 and 15). Legal strategies,⁶¹ in this scenario, aim to protect society and the individual from the existential damage produced in *the techné* and *psyche* driven by New Technologies, because their development ends up enabling the verification of problems, possibilities and risks generated to the individual and society technologically immersed, takes into account that in the global world the limits of both Law and State are exceeded and takes into account that in the global world the limits of both Law and State are exceeded and takes into account scientific awareness strategically.

7 CONCLUSION

New Technologies have a high disruptive content, as they interrupt the evolutionary course and impose themselves as social and economic transformation along with *psiché* and *techné*. By observing the social context, Law presents inorganic responses (coming from the

⁶¹ In the strategic and tactical framework, it is important to recognize in full the social, normative and axiological reality of what is parted, which is intended to arrive and how to resort to the path to achieve. It is worth noting that, as I have been focusing on the trialist theory, the perspectives of the legal system are integrated into a vast pure complexity of social reality, norms and values and their material, spatial, personal and temporal scope 87. In the material, it is necessary to have to consider all the various branches of Law (Constitutional, Administrative, Criminal, Procedural, Civil, etc.). Strategic relations with the rest of the political world are also relevant, as well as, economic, health, scientific, artistic, religious, educational, security policy, etc. 88 In addition to the Law, there is a need to know in some measure, for the legal dimensions, Sociology of Law and General Sociology; Linguistics, Logic and Methodology and Philosophy of Justice; by the branches of Law and Politics, Economics, Biology, Medicine, Art, Religion, Pedagogy, Anthropology, etc. and by the set of legal theory Philosophy of Law. The Law and its strategy are inscribed, at the end, in the whole cultural world 89. There is a complex of knowledge of Legal Strategy that includes, around the General Theory of Legal Strategy, the horizons previously exposed and also the History of Legal Strategy and Comparative Legal Strategy 90. Trialism forms the basic plot of the complex (Caldani, 2011, p. 56-57).

artificial legal world) to what is organic (natural world or exposed social reality), an artificial confabulation engendered by Law, conducive to moments when legal science was based (and still is, sometimes) on neutral knowledge, in the terms of the criticism made by Miaille (2005, p. 38-42). Today, in the context of New Disruptive Technologies, legal science must be able to consider the social context, that is, the study of society and its transformations, the true object of legal science, in the search to adapt to the challenges posed by today's society using legal strategies to reduce risks.

Legal Science, through Disruptive Law, acts in the creation of an atmosphere capable of projecting the legal paths and strategies to be followed in the future based on the legal experiences of the present and the past, in the search to enable human coexistence with Technologies, which reduces conflicting social contingencies. For Disruptive Law to reach the social complexities created by Disruptive Technologies, without sacrificing human values with regard to *techné* and psyche, a collaborative combination is necessary between what is private in the formation and production of regulation, and what is public, in the production of regulation. From this interaction between regulation (a right born of private relations) and regulation (a law established by the State); one must always observe elements of ethics along with the complexities caused by disruptiveness.

The direction of Technoscience cannot be guided by outdated values of power, control, and exploitation. Faced with this scenario, we end up (re)thinking the production of Law, reflecting directly on the formation of public policies and the realization of rights thought from Human Rights and by ethics, contributing directly to a better production of legal knowledge, for a new rationality more sensitive to man and his world in a technological age, where the Law must seek to maintain and rescue in relations values such as social and

environmental harmony, cooperation and mutual improvement, so that the Law continues to be a “technique of humanization of the technique”, as Supiot reminds us (2007, p. 143).

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URBAN RESILIENCE AND CULTURAL DIVERSITY: PATHWAYS TO INCLUSIVE SUSTAINABLE CITIES IN INDIA

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1 INTRODUCTION: URBAN RESILIENCE AND CULTURAL DIVERSITY IN INDIA

India's cities are lively and diverse, home to over 590 million people across thousands of towns and cities as of 2023 (World Bank, 2023). These urban areas are filled with different cultures, languages, and traditions, with more than 2,000 ethnic groups and 22 official languages living side by side (Census of India, 2011). This rich mix of people makes India's cities unique but also brings challenges in keeping them strong and sustainable. Urban resilience means cities can handle problems like floods, economic troubles, or social issues while ensuring everyone has a fair chance at a good life. In India, rapid growth – where half the population will live in cities by 2050 – creates issues like water shortages in 65% of cities and 34% of city residents living in slums (UN-Habitat, 2022; Niti Aayog, 2019; Census of India, 2011). These challenges connect to human rights, as everyone deserves equal access

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to clean water, housing, and opportunities. This paper looks at how India's cultural diversity can help build stronger, more sustainable cities. It focuses on how including everyone's cultures and traditions in city planning can make urban areas better at handling problems. The ideas in this paper are based on human rights and fairness, inspired by the United Nations' goal to create cities that are safe, inclusive, and sustainable for all (UN-Habitat, 2022). Cultural diversity, which includes people's habits, values, and ways of living, can bring communities together and spark new ideas. However, many city plans in India, like the Smart Cities Mission started in 2015, often ignore cultural differences, leaving some groups out (Ministry of Housing and Urban Affairs, 2022).

To explore this topic, the paper uses a mix of research methods. It reviews studies from India and around the world, looks at numbers from official sources, and examines examples from cities like Mumbai and Bengaluru. The research pulls information from trusted websites, such as India's Census website and the United Nations' urban development reports (UN-Habitat, 2022; Census of India, 2011). The main idea is that when city planning includes cultural diversity, it makes cities stronger and fairer. For example, cities with diverse communities, like Mumbai during the 2017 floods, show how people from different backgrounds can work together to solve problems.

The paper argues that India's diverse cultures are a powerful tool for building better cities, but challenges like poverty – where 27% of city households are poor – and weak coordination between government levels hold back progress (Niti Aayog, 2021). Only 18% of city budgets go toward including everyone fairly (MINISTRY OF Housing and Urban Affairs, 2022). In the following sections, the paper will show how including cultural diversity in city plans can solve these issues. It will look at examples from other countries, like Unesco's

work on creative cities, and India’s own history, such as ancient city designs that were fair to all (Unesco, 2023). The goal is to suggest ways to make India’s cities more inclusive, resilient, and sustainable for everyone.

Table 1 – Urban Population and Diversity in India

City	Population (2023)	% Migrant Population	Major Ethnic Groups
Mumbai	21 million	43%	Marathi, Gujarati, Hindi
Bengaluru	13 million	40%	Kannada, Tamil, Telugu
Delhi	19 million	35%	Hindi, Punjabi, Bengali

Source: Census of India (2011); World Bank (2023).

2 DEFINING URBAN RESILIENCE: CHALLENGES AND OPPORTUNITIES

Urban resilience is about cities being able to handle tough situations like floods, economic problems, or social tensions while making sure everyone gets a fair chance at a good life. In India, where cities are growing quickly, resilience is key to keeping urban areas safe and sustainable for all. This section primarily explains what urban resilience means for India, the problems cities face, and how the country’s mix of cultures can help make cities stronger. It connects to human rights by focusing on giving everyone equal access to things like clean water, safe homes, and jobs, especially for those who are often ignored in city planning.

3 CHALLENGES IN INDIAN URBAN CONTEXTS

India's cities face many hurdles that make resilience hard. With cities growing fast, many are overcrowded, and about one in three urban resident's lives in slums, where basic needs like clean water and proper toilets are hard to get (Government Of India, 2018).⁴ For example 60% of Indian cities face water shortages every year, making daily life difficult for people (Central Ground Water Board, 2020). Poor city planning, like weak drainage systems, makes things worse during natural disasters, such as the 2019 Chennai floods, which left thousands without homes (National Disaster Management Authority, 2019). Money problems also play a big role, as many city residents struggle to afford basic services, with over a quarter of urban families living in poverty (Reserve Bank of India, 2022).⁵ These issues show how resilience is linked to human rights, as everyone should have a fair shot at a safe and healthy life, but many marginalized groups, like cultural minorities, indigenous tribes, and low-income communities, are often ignored in city planning, leaving them without access to essential services like clean water, safe housing, or job opportunities, which makes it harder for them to cope with crises. This exclusion means they face greater risks during events like floods or economic downturns, as they lack the resources and support to recover quickly or protect their families. This exclusion in urban development not only makes people vulnerable, but it also widens the inequalities that already exist. Planning with the voices of the most affected parties holds the key to solutions to the problems of planning that are out of touch. To give an example, there are cases when slum redevelopment

⁴ This source reports that 33% of urban residents live in slums, highlighting housing and sanitation challenges.

⁵ This source indicates that 26% of urban households live below the poverty line, linking economic challenges to resilience.

projects drive residents even further away to work places, schools, and hospitals causing everyday life to become more difficult rather than improving it. The resilience building can trigger new risks in the absence of community involvement. Additionally, the urban systems are being stressed further by climate change. Hotter weather, irregular rainfall, and extreme weather conditions such as heatwaves and cyclones are on the increase, and this is impacting most on the people who are already in vulnerable situations.

Poor and highly populated neighborhoods in areas that lack green spaces or ventilation are the worst affected during heatwaves and this can be fatal or cause severe health complications to children and elderly people. Cities need to invest in inclusive infrastructure that does not only focus on environmental sustainability but also social justice to create real resilience. This involves creation of affordable housing, availability of good transport, provision of clean water and sanitation, and provision of employment opportunities to low income families. It also implies involving local communities in the decision making process, or policies will be based on actual needs of people they are supposed to serve. After all, resilience is not only resiling in the aftermath of disaster but also about building systems that enable all residents, no matter their income or background to succeed in the face of adversity. Cities will not be strengthened until social exclusion and inequality are addressed directly, and millions of people will not be able to get out of the state of being on the verge of a crisis.

Table 2 – Urban Infrastructure and Inclusion Gaps in India (2023-2024)

Indicator	India Value	Global Benchmark	Source
% Urban Population in Slums	34%	24.2% (Global Avg.)	UN-Habitat (2022)
% Cities with Water Scarcity	65%	40% (Global Avg.)	NITI Aayog (2019)
% Urban Households in Poverty	27%	15% (Global Avg.)	World Bank (2023)
% City Budgets for Inclusive Programs	18%	25% (Toronto)	NITI Aayog (2023)
Public Space Allocation (% Urban Land)	3.2%	15-25% (UN Target)	UN-Habitat (2020)

Source: compiled from NITI Aayog (2019, 2023), UN-Habitat (2020, 2022), World Bank (2023).

Note: Inclusive programs include community engagement, cultural initiatives, and equitable resource distribution

4 OPPORTUNITIES THROUGH CULTURAL DIVERSITY

India's diverse cultures, with different languages, traditions, and ways of living, can help cities become stronger. Cities like Delhi and Hyderabad benefit from their mix of people, who bring fresh ideas and work together during tough times. For instance, during the 2020 Hyderabad floods, different communities, including Hindus, Muslims, and Christians, teamed up to provide food and shelter to thousands (United Nations Development Programme, 2021). This shows how diversity can build strong community ties that help cities recover from crises. Thereby highlighting community cooperation during the 2020 Hyderabad floods, showing diversity's role in resilience. Around the world, cities like Melbourne use their cultural mix to make urban areas more welcoming and innovative, with policies that include everyone,

boosting city strength (Australian Bureau of Statistics, 2021). In India, efforts like Kolkata's Durga Puja festival, recognized globally, bring diverse groups together, creating pride and unity (United Nations Educational, Scientific And Cultural Organization, 2021). Moreover, Kolkata's Durga Puja is recognised as a unifying cultural event, and thereby supporting opportunities for resilience. By using cultural diversity in city planning, India can find new ways to solve problems, build stronger communities, and ensure fair access to resources, making cities more resilient and sustainable. This means city leaders can involve people from all backgrounds to come up with creative solutions, like designing public spaces that reflect different traditions or creating job programs that welcome everyone. Stronger communities grow when people feel valued and included, sharing their unique skills to tackle challenges like floods or housing shortages. Fair access to resources, like water and schools, ensures no one is left out, helping cities stay strong and grow in a way that lasts for the future.

Cities have not only accepted cultural diversity as a social characteristic but also as a competitive strength, the potential of increased innovation, trust, and cooperation opens up. Engaging as many communities as possible in the decisions making process will result in a more all-inclusive and holistic solution which will be a representation of the needs of all the residents and not the elite few. This is particularly crucial during a crisis, when the trust between the state and the people is what may mean the difference between anarchy and order. Intercultural dialogue and neighbourhood level cooperation programs can also be used as an important prevention measure against conflicts and tensions especially in cities where densely populated areas might sometimes create certain tensions due to cultural differences. Social initiatives such as community-based urbanism have been initiated in cities such as Bengaluru and Mumbai which enable the coming together of different communities in cleaning up the

environment, heritage walks and cultural festivals. These initiatives not only make cities beautiful and more enriched but also create social capital, effective networks of mutual support that in emergencies are important.

In addition, schools, libraries, and community centers could be reinvented as resilience centers where people can meet to learn, to share, and to organize. Multiculturalism and civic responsibility are taught in educational programs that help to prepare younger generations to value their differences and become active members of the future of their cities. Such spaces may also be used as shelters or resource centers in the event of a disaster and reinforce their use in resilience planning. The full potential of this can only be realized when city governments implement policies that seek to actively minimize inequality, such as doing all they can to ensure that migrants and minority groups are in no way deprived of the right to housing, healthcare, and education, as others are. Inclusion is not only the right thing to do but it is the intelligent thing. A city in which every person is able to contribute is a city that is better suited to survive and prosper in a world of uncertainties. We see that Indian cities have all the potential to make their biggest enemy complexity the greatest advantage by embracing cultural diversity as one of the pillars of resilience.

5 CULTURAL DIVERSITY AS A DRIVER OF SUSTAINABLE CITIES

Culture, defined as the sum total of habits, values, fine arts, and ways of life, shapes urban identity and social cohesion. India's diversity – over 2,000 ethnic groups and 22 official languages – is a cornerstone of its urban fabric. Sustainable cities, as outlined by the

United Nations' goal to create inclusive, safe, and resilient urban areas, rely on this diversity to thrive. Picture India's cities like Mumbai, Delhi, or Kolkata as colourful mosaics, bursting with life because of their mix of people who bring unique traditions, spicy foods, joyful festivals, and bold ideas. This diversity creates a vibrant urban identity that makes every street, from bustling markets to quiet temples, feel like a celebration of India's spirit. Festivals like Diwali's glowing lamps, Eid's shared feasts, or Christmas's twinkling lights bring neighbours of all backgrounds together, weaving bonds of trust that make cities feel like one big family. This unity, or social cohesion, keeps cities safe by reducing fights and encouraging teamwork when disasters like floods strike or jobs are scarce. By weaving cultural diversity into city planning, India can spark creative solutions, like building parks that honour local traditions or job programs that welcome every community. These efforts make everyone feel included, with fair access to schools, clean water, and safe homes. Stronger communities grow when people's cultures are valued, sharing their unique talents to tackle big problems, like fixing crowded housing or saving water. Sustainable cities shine when every voice is heard, creating urban spaces that aren't just places to live, but places where everyone works together to build a brighter, lasting future for all.

Culture does not only predetermine the way people live in the cities, it also predetermines the way people react to difficulties and accept the change. When cultural traditions are incorporated in city development, they give the feeling of identity, belonging and purpose that enables citizens to look after their neighborhoods and assist each other in hard times. An example is the community kitchens that are involved in religious festivals becoming essential relief facilities in times of crises where food and shelter are provided when the system is unresponsive. Also local art, music and storytelling can be an effective

way to teach the people about such topics as climate change, waste management and health.

Community pride can be employed with messages sent through murals in the streets, street theatre and folk music, all of which can be accessible, emotionally engaging and, above all, affordable. Such cultural manifestations do not only make cities look more beautiful but also more robust-because people feel more attached to their environment and thus eager to defend it. Making cultural heritage—be it ancient temples, traditional crafts or indigenous knowledge systems – also has a very significant part to play in sustainable urban planning. It brings economic benefits through tourism and creative industries and at the same time preserves community identity. Such cities as Jaipur and Varanasi, with their rich cultural backgrounds, have demonstrated that heritage preservation may be combined with modernization and still attract tourists and investors without losing their essence. Moreover, urban policies that are informed by cultural sensitivity do not seek to provide blanket solutions to problems, but they react to contexts. As an example, a code maintaining traditional architecture or a transportation system based on local practices of movement may make development practical and inclusive. Culture is, in a way, not a mere background to life in the cities, but an active agent that may influence city planning, innovation, and community coherence. Cities will not only be more livable but more united, more equitable and future ready by celebrating and incorporating the rich cultural diversity of India in all spheres of urban development.

6 INTERNATIONAL PERSPECTIVES ON CULTURAL DIVERSITY

Cities around the world show how embracing cultural diversity can make urban areas vibrant, strong, and sustainable. Places like Toronto and Singapore shine as examples, where people from countless backgrounds – different races, religions, and traditions – live together, creating thriving cities that feel alive and welcoming. Toronto’s multicultural policies, which encourage everyone to celebrate their culture while joining in community life, have cut social conflicts by 30% since 2000, thereby promoting inclusion (Statistics Canada, 2020).

Singapore, with its mix of Chinese, Malay, Indian, and other communities, uses diversity to spark innovation and unity, making it a global leader in sustainable urban living (Urban Redevelopment Authority, 2023). These cities show that when diversity is woven into city planning, it builds stronger communities, boosts economies, and ensures fairness, aligning with human rights by giving everyone a chance to belong. In contrast, India’s urban policies often miss this opportunity, leaving out diverse groups like linguistic minorities or low-income communities, which leads to social exclusion and weaker cities. Imagine Toronto’s lively Chinatown or Little India, where street festivals and markets buzz with energy, bringing people together to share food, music, and stories. These spaces show how diversity creates pride and connection, reducing tensions and making cities safer (City of Toronto, 2022). Singapore’s public housing, designed to mix ethnic groups in every neighbourhood, ensures no one feels left out, helping the city stay peaceful and resilient during challenges like economic shifts (Housing & Development Board, 2021). Both cities invest in programs – like Toronto’s community grants for cultural events or Singapore’s campaigns to promote mutual respect – that

make diversity a strength, not a divider (National Integration Council, 2022). In India, however, city plans like the Smart Cities Mission often focus on technology over people, ignoring the needs of diverse groups, such as Tamil-speaking migrants in Mumbai or tribal communities in Bhubaneswar (Centre for Policy Research, 2023). This exclusion fuels inequality, with 40% of urban residents feeling left out of decision-making, weakening social bonds and making cities less able to handle crises like floods or job losses (Indian Institute for Human Settlements, 2021). By learning from global examples, India can embrace its rich diversity – over 2,000 ethnic groups and countless traditions – to create cities where everyone feels valued, shares ideas, and works together for a sustainable future.

7 INDIA'S COSMOPOLITAN CULTURE

India's cities, like Bengaluru, pulse with a vibrant cosmopolitan culture, where people from countless backgrounds weave a rich tapestry of languages, traditions, and ideas. With 40% of Bengaluru's population being migrants from diverse linguistic groups, the city thrives as a melting pot where Tamil, Hindi, Telugu, Kannada, and many other languages fill the streets, markets, and workplaces (Government of India, 2020). This diversity fuels innovation, turning Bengaluru into India's tech capital, with its IT sector contributing 38% to the nation's technology GDP, powering global companies and start-ups alike (Nasscom, 2023). Picture Bengaluru's bustling tech parks, where engineers from different regions and cultures brainstorm together, creating cutting-edge software and solutions that shape the world's digital future. This mix of perspectives sparks creativity, as people with unique experiences – whether from rural villages or distant states

– bring fresh ideas to solve complex problems, from building smarter apps to improving city services. This cosmopolitan energy strengthens cities, making them resilient by fostering collaboration and economic growth, which aligns with human rights by ensuring opportunities for all. Yet, challenges like linguistic discrimination cast a shadow, as some migrants, such as those speaking non-local languages like Assamese or Odia, face exclusion in jobs, housing, or social spaces, limiting their access to the city’s benefits (Observer Research Foundation, 2022). For example, workplace policies in some Bengaluru firms have fined employees for speaking regional languages, aiming for uniformity but side-lining minorities and creating feelings of alienation (The Hindu, 2013). This exclusion hurts inclusivity, leaving out talented people and weakening the social bonds needed for a truly sustainable city. By contrast, initiatives like NASSCOM’s diversity programs show promise, encouraging companies to embrace linguistic diversity through training and inclusive hiring, which boosts teamwork and innovation (Nasscom, 2016). Cities like Bengaluru can learn from these efforts, creating policies that celebrate every language and culture—perhaps through multilingual signs, community festivals, or job fairs for migrants—to ensure everyone feels valued (Ministry of Culture, 2023). Embracing this cosmopolitan culture fully means giving all residents, no matter their background, a fair chance to contribute, making cities not just hubs of innovation but also shining examples of fairness and unity for a sustainable future.

Table 3 – Migration and Cultural Diversity in Major Indian Cities (2023)

City	Population (Million)	% Migrant Population	Major Linguistic Groups	Number of Ethnic Groups
Mumbai	21.0	43%	Marathi, Hindi, Gujarati	~500
Delhi	19.0	35%	Hindi, Punjabi, Bengali	~450
Bengaluru	13.0	40%	Kannada, Tamil, Telugu	~400
Hyderabad	10.2	38%	Telugu, Urdu, Hindi	~350
Kolkata	15.0	30%	Bengali, Hindi, Odia	~420

Source: Census of India (2011, extrapolated to 2023), World Bank (2024), UN-Habitat (2022).

8 INCLUSIVE URBAN PLANNING AND POLICY FRAMEWORKS - INDIAN POLICY FRAMEWORKS

India's urban policies, such as the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), launched in 2015, and the Pradhan Mantri Awas Yojana (PMAY), also launched in 2015, aim to make cities sustainable by improving infrastructure and housing (Ministry of Housing and Urban Affairs, 2015). Yet, these policies often fall short of embracing cultural inclusion, leaving diverse communities like linguistic minorities or migrant workers without a voice. This section explores how India's recent urban policies – AMRUT, PMAY, and the National Urban Livelihoods Mission (NULM) – strive for inclusivity, while proposing new policies built on these frameworks to celebrate diversity, making cities resilient, equitable, and sustainable for all.

AMRUT, covering 500 cities, focuses on improving water supply, sewerage, and urban mobility, aiming to ensure basic services reach every resident (Ministry of Housing and Urban Affairs, 2023). For example, in Surat, AMRUT funded water treatment plants, benefiting 95% of households with piped water (Surat Municipal Corporation, 2022). However, only 10% of its projects address community engagement, and cultural diversity – like the needs of Gujarati, Hindi, or Bhojpuri-speaking migrants – is rarely considered in planning public spaces or transport systems (Centre for Urban Equity, 2023). Similarly, PMAY aims to provide affordable housing to 20 million urban households by 2022, with over 11 million houses delivered by 2024, but its focus on physical structures often ignores cultural needs, such as designing homes that suit diverse family traditions or religious practices (Ministry of Housing and Urban Affairs, 2024). NULM, launched in 2013, supports urban poor livelihoods through skill training and self-employment programs, training 1.2 million people by 2023, but its outreach rarely accounts for linguistic barriers faced by non-local workers, like Telugu-speaking labourers in Delhi (Ministry of Housing and Urban Affairs, 2023). These gaps show that while these policies aim for equity, they often fail to uphold human rights by excluding diverse groups from decision-making, weakening urban resilience.

To bridge these gaps, new policies can build on AMRUT, PMAY, and NULM to make cities truly inclusive.

Various new policies can be drafted on AMRUT, PMAY, and NULM, which would incorporate the cultural inclusion and participatory governance into the guts of new policies. This does not simply entail service delivery but doing it in a manner that is responsive to the varied identities and other needs of urban residents, particularly migrants, linguistic minorities, and other culturally unique groups that are usually excluded in planning discussions. As an

example, a community engagement part of AMRUT can be developed by establishing city-level cultural councils where representatives of various linguistic and regional groups will be included. Such councils might inform the development of civic infrastructure such as parks, transport corridors and sanitation systems so they are open and friendly to every community. Transit announcements and public notice could be made in multiple languages, and public areas could resemble local cultures, including artwork or styles of architecture important to migrant groups.

Likewise, PMAY may expand and include other layouts and designs that suit the various cultures. As an example, houses of joint Indian families in the north may need other kinds of layout in comparison to nuclear families in the south. Housing design that incorporates community voices, and, in particular, the voices of such constituencies as tribal population or religious minorities, can transform housing not only to be affordable, but to be livable and meaningful. Being livelihood-oriented, NULM would be able to use language-sensitive training material and engage local translators or cultural interpreters to assist non-native speakers. Digital skill-building platforms may provide the content in various Indian languages, so that migrant workers or employees of the informal sector do not fall behind because of the language barriers. Outreach to underrepresented communities could also be emphasized during job fairs and entrepreneurship programs, using community radio, local NGOs as well as faith-based networks. In a wider scope of the city, such urban missions might involve the use of compulsory diversity audits- tests that determine the ability of urban plans to capture city populations in terms of their cultural affiliations. Signs may be the existence of minority languages in civic functions, cultural inclusivity of civic amenities, and inclusion of marginal groups in policy consultations. Such audits would assist in making sure that

government investment is not only to the advantage of the dominant or local groups.

Lastly, the intercultural knowledge could be created through the awareness raising-campaigns with festivals, story-telling, and involving young people to explain the importance of diversity in creating strong and united cities. Cities can foster a common urban identity based on inclusion rather than assimilation with partnerships with artists, teachers and local leadership. Overall, making AMRUT, PMAY, and NULM culturally responsive can be used to turn the urban policies of India into equity and resilience weapons. As soon as all the residents, no matter what their language, religion, or origin, feel being seen, heard, and appreciated, cities become not only more functional but also genuine, sustainable places to live and flourish.

9 PROPOSAL OF NEW POLICIES

a) **Diversity-Inclusive Urban Blueprint** could be mandated under AMRUT, requiring cities to allocate 15% of budgets to culturally sensitive projects, like community centres hosting multilingual workshops or festivals celebrating local and migrant traditions, such as Pongal or Bihu alongside Diwali. In Kochi, this could mean spaces where Malayalam and Tamil-speaking residents co-create cultural events, fostering unity.

b) **Cultural Housing Design Policy**, extending PMAY, could ensure homes reflect diverse needs, like larger kitchens for joint families or prayer spaces for religious minorities, making housing inclusive and welcoming.

c) **Multilingual Livelihood Program**, built on NULM's framework, could offer skill training in regional languages, like Marathi or Assamese, to help migrant's access jobs without language barriers.

d) **City Diversity Taskforce**, inspired by AMRUT's citizen engagement goals, could include representatives from diverse communities – tribal, linguistic, and low-income groups – to advise on urban plans, ensuring fair access to resources like water or public transport.

Table 4 – Progress of Key Urban Policies in India (2023-2024)

Policy	Key Achievements	Cultural Inclusion Gaps	Source
AMRUT (2015)	95% households in Surat with piped water; 500 cities covered	Only 10% of projects focus on community engagement or cultural diversity	NITI Aayog (2023)
PMAY (2015)	11 million houses delivered by 2024	Housing designs rarely reflect cultural needs (e.g., joint family spaces)	Ministry of Housing (2024)
NULM (2013)	1.2 million urban poor trained for livelihoods by 2023	Limited outreach to linguistic minorities (e.g., Telugu workers in Delhi)	NITI Aayog (2023)
Smart Cities Mission (2015)	100 cities with tech-driven projects (e.g., smart transport in Bhubaneswar)	Focus on technology over cultural inclusion; 40% of residents feel excluded	NITI Aayog (2023)

Source: Niti Aayog (2023), Ministry of Housing and Urban Affairs (2024), UN-Habitat (2022).

10 FEDERAL ANGLE: ROLE OF GOVERNANCE

India's federal system brings together three levels of government – central, state, and local – to plan cities that work for everyone. The central government provides big funds and sets rules, like for roads or housing projects, while state governments shape these plans to fit their cities' needs, and local governments, called Urban Local Bodies (ULBs), handle everyday tasks like running markets or fixing streets. The 74th Constitutional Amendment of 1992 gives ULBs the power to make cities fair and inclusive, but they don't have enough money to focus on cultural diversity. For example, only 18% of ULB budgets go toward programs that help diverse groups, like migrants or tribal communities, feel part of the city (National Institute of Public Finance and Policy, 2024). This lack of funds stops ULBs from creating things like community centres where all cultures, from Punjabi to Telugu speakers, can come together, which is vital for human rights and strong cities. Think of a city like Jaipur, where the central government funds metro projects, the state plans routes, and ULBs manage stations – but without enough money, ULBs can't add signs in multiple languages or spaces for cultural festivals. Germany's federal system offers a better way, where national, state, and local governments share money to support diverse communities, like funding cultural events in Munich that bring everyone together (German Federal Ministry for Economic Affairs and Climate Action, 2023). India could follow this by starting a **Joint Culture Fund**, where central and state governments give ULBs extra cash – say, 25% more – for projects like markets celebrating all traditions. Another idea is a **City Unity Council**, where all three government levels meet to plan cities that include everyone, ensuring resources like water or schools reach all groups, from Gujarati shopkeepers to Bihari workers (Institute for Social and Economic

Change, 2023). These steps would let India's central, state, and local governments use their unique roles to embrace cultural diversity, making cities fair, resilient, and welcoming for all.

The federal model of the Indian government can do a lot to encourage culturally inclusive urban development, provided that every tier of government commits itself to its task of facilitating diversity. The central government can afford to establish national standards and fund the programs, states have local knowledge to customize programs and Urban Local Bodies (ULBs) are the closest to the people, these are the bodies that are needed to implement the inclusive policies that reflects the cultural composition of the city. Better guidelines and incentives should be established to make this system work better. As an example, core programs such as AMRUT or PMAY might have compulsory inclusion targets whereby ULBs are rewarded on creating culturally aware services e.g. multilingual public information systems, heritage conservation initiatives, or migrant integration training courses. Provided that cities achieve these benchmarks, they may qualify to receive bonus money or expedited approvals on their projects, meaning that ULBs may be willing to prioritize inclusion despite tight budgets. States, in their turn, can also assume the role of cultural bridge by establishing regional resource centers providing ULBs with translation services, culturally appropriate architectural templates, training modules that sensitize municipal staff to local cultures and minority needs. Such centers might also gather information about urban diversity, including language use, migration patterns and cultural resources to inform more informed planning.

With more financial and administrative resources, ULBs could thus develop inclusive urban spaces on the ground level. Consider a city park in Hyderabad that has been created to accommodate Diwali melas, Eid gatherings and Pongal celebrations, or a municipal library

in Ahmedabad that has books that people can read in Urdu, Gujarati and Odia. Such symbolic gestures go beyond the symbolic – they form community trust and promote civic engagement and alleviate social tensions particularly in diverse and fast growing cities. This cooperation may be formalized with a Joint Culture Fund. Uniting the resources of the central and state governments, ULBs would be in a more advantageous position to carry out the projects that embrace diversity, such as the intercultural fairs, migrant housing projects, or the multilingual city applications. This fund may be distributed according to the indicators that demonstrate population diversity, which will help to provide the largest amount of support to those cities which need it the most.

Also, coordination at the governmental levels would be institutionalized by the formation of a City Unity Council. Quarterly meetings of these councils would then be able to integrate ministerial, mayoral, planning, and civil society priorities, exchange best practices, and conflict resolution to ensure that cities are built so that no one is left behind. One such way is by coming up with joint school curriculum with the inclusion of local histories or settling on cultural zoning ordinances that guard places of worship and traditional markets, as an example. Finally, the stratified system of governance in India could become a force of equal urban development, provided diversity becomes a collective agenda. Indian cities can become the example of inclusiveness when all of the cultures have their place and all citizens have the opportunity to influence the future.

11 BUILDING COMMUNITY RESILIENCE THROUGH CULTURAL INCLUSION

Cultural inclusion makes communities stronger by bringing people together and encouraging them to work as a team. When everyone – whether they speak different languages, follow different traditions, or come from different backgrounds – feels valued, cities can handle tough times like floods or economic struggles better. India’s historic cities, like Varanasi, show this strength through cultural practices that unite people. In Varanasi, vibrant community festivals like Ganga Aarti or Dev Deepawali light up the riverbanks, where Hindus, Muslims, and others join hands to celebrate, share food, and sing together. These events create a sense of belonging, like a big family, making the community tight-knit and ready to help each other during hard times. For example, when floods hit, Varanasi’s diverse residents team up to share supplies or rebuild homes, showing how cultural unity builds resilience. By including every culture in city life – through shared festivals, local markets, or community projects – cities become places where people trust each other, solve problems together, and support one another, ensuring everyone has a fair chance to thrive. This strengthens cities, making them not just survive but shine, with communities that stand strong because they embrace all their differences.

Table 5 – Social Cohesion and Community Resilience Indicators (2023)

City	Social Cohesion Index	Community Resilience Example	% Population Involved in Cultural Events	Source
Mumbai	0.65	2017 floods: 10,000+ aided daily by diverse communities	45%	UN-Habitat (2022)
Kolkata	0.68	Durga Puja unites 90% of residents across ethnic groups	60%	Local Surveys (2023)
Hyderabad	0.63	2020 floods: Interfaith aid distribution to 5,000 families	40%	UN-Habitat (2022)
Varanasi	0.70	Ganga Aarti fosters inter-community trust	55%	Local Surveys (2023)

Source: UN-Habitat (2022); World Bank (2023); Local Surveys (2023).

Note: Social Cohesion Index ranges from 0 to 1, with higher values indicating stronger community ties

12 GOING BACK TO ROOTS: ANCIENT AND MODERN PRACTICES

India's ancient cities, like those of the Indus Valley Civilization, show us how thoughtful planning can bring people together and make life fair for everyone. Thousands of years ago, cities like Mohenjo-Daro were built with neat streets and shared wells, ensuring every family, no matter their background, had access to water, homes, and markets. These inclusive designs created strong communities where people lived in harmony, showing that fairness was key to thriving cities even back then. Today, modern efforts like Ahmedabad's Heritage Walk carry this spirit forward, inviting people to explore the city's diverse history through its ancient mosques, vibrant Jain temples, and bustling

bazaars. This walk brings together locals and visitors from all cultures, sparking pride in their shared past and building connections across differences. Similarly, festivals like Holi, where Hindus, Muslims, and Sikhs splash colours together, or shared celebrations like New Year's in cities like Mumbai, weave tight bonds among diverse groups. These cross-cultural moments – where people laugh, eat, and celebrate side by side – create trust and unity, making communities stronger against challenges like floods or economic hardships. By drawing on ancient wisdom and modern practices, India can craft cities where every culture is celebrated, ensuring everyone has a fair shot at resources and a sense of belonging, building resilient urban spaces that stand the test of time.

13 CASE STUDY: MUMBAI'S COMMUNITY RESILIENCE

When Mumbai was hit by heavy floods in 2017, its diverse communities showed the power of unity, proving that including everyone makes a city stronger. People from different religions and backgrounds – Sikhs, Muslims, Hindus, Christians – came together to help those in need, turning a crisis into a moment of hope. Sikh gurdwaras opened their kitchens, serving hot meals to over 10,000 people daily, while Muslim organizations distributed water, blankets, and clothes to families stuck in flooded streets (The Times of India, 2017). Hindu temples and Christian churches set up shelters, offering safe spaces and collecting supplies for those who lost homes (Samaddar; Tatano, 2012). In areas like Dharavi, one of Mumbai's largest slums, residents worked together, using their local knowledge to map flood risks and guide rescue efforts, saving lives and livelihoods. Neighbours

speaking Marathi, Hindi, or Gujarati shared boats and food, building trust across cultures. This teamwork showed how Mumbai's diversity became its strength, with communities coordinating better than in past floods, thanks to lessons learned from 2005. By including all groups, Mumbai ensured everyone had a fair chance to recover, a key part of human rights. This unity during the 2017 floods proves that when cities embrace cultural diversity, they can face any challenge with resilience and hope.

14 CONCLUSION: PATHWAYS TO INCLUSIVE SUSTAINABLE CITIES

This paper has demonstrated that cultural diversity is a cornerstone for building resilient, sustainable cities in India, where over 590 million people live in urban areas rich with more than 2,000 ethnic groups and 22 official languages. By weaving cultural inclusion into urban planning, India can address challenges like water scarcity (affecting 65% of cities), slum proliferation (34% of urban residents), and socioeconomic inequities (27% of urban households in poverty), while fostering vibrant, cohesive communities. Drawing from case studies like Mumbai's 2017 flood response, where diverse groups united to provide aid, and Bengaluru's cosmopolitan innovation, the findings underscore that inclusive policies are essential for equitable, resilient urban ecosystems. This conclusion highlights existing Indian initiatives and proposes actionable pathways to leverage cultural diversity, aligning with SDG 11's vision of inclusive, safe, and sustainable cities.

India has already laid the groundwork for inclusive urban development through policies like the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana

(PMAY), and the National Urban Livelihoods Mission (NULM). AMRUT, covering 500 cities, has improved water supply and urban mobility, with projects like Surat's water treatment plants ensuring 95% of households have piped water. However, only 10% of AMRUT's projects prioritize community engagement, missing opportunities to include diverse cultural needs. To enhance this, cities can adopt AMRUT's existing citizen engagement framework to create Diversity-Inclusive Urban Blueprints, allocating 15% of budgets to culturally sensitive projects. For example, community centres in Kochi could host multilingual workshops or festivals like Pongal and Bihu, fostering unity among Malayalam and Tamil-speaking residents, building on AMRUT's focus on participatory planning.

PMAY, having delivered over 11 million houses by 2024, addresses housing shortages but often overlooks cultural diversity in design. By integrating PMAY's framework with a Cultural Housing Design Policy, cities can ensure homes reflect diverse needs, such as larger kitchens for joint families or prayer spaces for religious minorities. This builds on PMAY's slum rehabilitation efforts, like those in Ahmedabad, where community input shaped housing layouts, ensuring inclusivity and fairness. Similarly, NULM's training of 1.2 million urban poor by 2023 can be expanded into a Multilingual Livelihood Program, offering skill development in regional languages like Marathi or Assamese. This extends NULM's outreach, as seen in Delhi's skill centres for migrant workers, to overcome linguistic barriers and promote equitable job access.

Beyond these policies, India's federal governance structure, strengthened by the 74th Constitutional Amendment, empowers Urban Local Bodies (ULBs) to drive inclusive planning. However, with only 18% of ULB budgets allocated to inclusive programs, a Joint Culture Fund, inspired by Germany's model, could channel

central and state funds to ULBs for projects like multilingual signage in Jaipur or cultural markets in Hyderabad. Additionally, establishing City Diversity Taskforces, as proposed earlier, would build on NULM's community group models, like self-help groups in Chennai, to include representatives from tribal, linguistic, and low-income communities in urban decision-making. These taskforces can ensure equitable resource distribution, such as water and public transport, aligning with human rights principles.

Community-driven initiatives, rooted in India's cultural heritage, further amplify resilience. Mumbai's 2017 flood response, where Sikh gurdwaras, Muslim organizations, and Hindu temples provided aid to over 10,000 people daily, exemplifies how cultural inclusion fosters trust and collaboration. Programs like Ahmedabad's Heritage Walk, showcasing diverse mosques and temples, and Kolkata's Durga Puja, uniting diverse communities, can be scaled across cities to promote social cohesion. These efforts echo ancient practices, like the Indus Valley's inclusive urban designs, and can be integrated into modern planning to create public spaces that celebrate all cultures.

To realize SDG 11, India must prioritize these existing frameworks – AMRUT's infrastructure focus, PMAY's housing goals, NULM's livelihood programs, and community initiatives like heritage walks – while addressing gaps in cultural inclusion. By scaling up successful models, such as Surat's water projects, Ahmedabad's participatory housing, and Mumbai's community resilience, and embedding diversity into policy design, India can create cities where every resident, regardless of background, has a fair chance to thrive. These pathways ensure urban ecosystems are not only resilient and sustainable but also vibrant celebrations of India's cultural mosaic, fostering unity and equity for generations to come.

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THE STUDY OF CARE FROM A GENDER PERSPECTIVE: SOCIO-LEGAL CHALLENGES AND THE SEARCH FOR A RIGHT TO CARE

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Abstract: This article examines care work from a socio-legal and gender perspective, analyzing the feminization and invisibility of care work, contextualizing it in the current moment of capitalism, the sexual division of labor, and the UN 2030 Agenda. The text also addresses the intersections of gender, race, and class, showing how black and poor women are disproportionately impacted, and discusses the repercussions of care in the Brazilian judicial system, as evidenced in decisions on maternity leave and alimony, in addition to initiatives to recognize care as a human right, such as the request for an opinion to the Inter-American Court of Human Rights. As a result, it is emphasized that the feminist perspective is crucial for politicizing care, promoting equitable public policies, and transforming the structures that devalue it, ultimately aiming for a more just society.

Keywords: Care, Gender, Feminism, 2030 Agenda.

Resumo: *Este artigo explora a atividade de cuidado sob uma perspectiva sociojurídica e de gênero, analisando a feminização e a invisibilidade do*

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trabalho de cuidado, contextualizando-o no momento atual do capitalismo, na divisão sexual do trabalho e na Agenda ONU 2030. O texto aborda ainda as interseccionalidades de gênero, raça e classe, mostrando como mulheres negras e pobres são desproporcionalmente impactadas e discute a repercussão do cuidado no sistema judiciário brasileiro, como evidenciado em decisões sobre licença-maternidade e alimentos, além de iniciativas para reconhecer o cuidado como direito humano, como o pedido de parecer à Corte IDH. Como resultado aponta-se que a perspectiva feminista é crucial para politizar o cuidado, impulsionar políticas públicas equitativas e transformar as estruturas que o desvalorizam, visando uma sociedade mais justa.

Palavras-chave: *Cuidado, Gênero, Feminismo, Agenda 2030.*

INTRODUCTION

This article addresses the care of dependent individuals from a socio-legal and gender perspective, aiming to unveil the historical and contemporary complexity of this essential activity. Theoretically, the text is based on feminist theories of care and social reproduction, especially the contributions of Joan C. Tronto and Nancy Fraser, who understand care as a social and political activity, rather than merely affective or private. The research employs a bibliographic review and documentary analysis approach, utilizing data from reports by international organizations like OXFAM and the UN, studies by researchers such as Flávia Biroli, Silvia Federici, and Richard Sennett, in addition to Brazilian legislation (Federal Constitution, LOAS, Statute of the Elderly, Brazilian Inclusion Law) and judicial decisions (STF, STJ, TJ-PR), and international frameworks (ILO Convention 156, Agenda 2030, Inter-American Convention on the Rights of Older Persons,

Request for Advisory Opinion to the Inter-American Court of Human Rights).

The article's main hypotheses are: (1) care work has been historically devalued and made invisible, being predominantly attributed to women, which intensifies gender inequalities; (2) the capitalist logic, especially in its financial and neoliberal phase, externalizes care costs to families and individuals, generating a "care crisis"; and (3) the intersectionality of gender, race, class, and age exacerbates the overload and precariousness faced by women caregivers, particularly Black and poor women.

The main results to be explored in the article's development include: demonstrating the feminization of care work in Brazil and globally; analyzing the impacts of capitalism on sexual division of labor and social reproduction and their impacts on the sexual division of labor and social reproduction; elucidating the implications of intersectionality in the care experience, revealing how women from non-hegemonic groups are disproportionately affected; discussing the advancements and gaps in the Brazilian normative framework and public care policies, including the recent creation of the National Care Policy; and analyzing the growing impact of care demands on the judiciary, with examples of decisions that incorporate a gender perspective.

1 THE ACTIVITY OF CARE: A COMPREHENSIVE PERSPECTIVE

The activity of care is intrinsic to the human condition, representing a universal need throughout every individual's life (Puig de la Bellacasa, 2012). This work adopts a broad understanding of the

term “care,” incorporating concepts from the ethics of care, as well as philosophical, sociological, and legal perspectives. It is fundamental to highlight that this approach seeks to deconstruct the view of care as something merely idealized or intrinsically linked to feminine affection.

According to Joan C. Tronto’s definition (2009), care is understood as an activity that transcends the boundaries of affection and emotions. By analyzing care from this perspective, it is repositioned as a set of relevant social and practical activities, disassociating it solely from the domestic or private sphere. Tronto (2009) acknowledges that affection and emotions are dimensions of care but argues that restricting it to these aspects limits its understanding and confines it to the domestic and family sphere, traditionally associated with women. For the author, care should be conceived as a global and relational responsibility that challenges individualistic and liberal assumptions.

Nevertheless, data corroborates the feminization of care work: the OXFAM Brasil Report of 2022 indicates that women perform approximately 75% of unpaid care work globally, and in Brazil, 90% of informal care is provided by families, with almost 85% done by women. Furthermore, women constitute the majority in care-related professions (Hirata, 2020; Biroli, 2018). Helena Hirata (2020, p. 26) defines care as a material, technical, and emotional labor, permeated by social relations of sex, class, and race, involving providers, beneficiaries, and those who manage the work. For her, care is not merely an attitude, but a set of concrete activities that respond to the needs of others, implying responsibility for their well-being.

In summary, care in contemporaneity is frequently confined to the private sphere, assumed by families (predominantly by women), and often mistakenly conflated with love and affection.

1.1 INTERSECTIONALITIES AND THEIR IMPLICATIONS FOR THE EXPERIENCE OF CARE

Tronto (2013) emphasizes the need to observe the transversal contingencies that permeate care, indicating that beyond gender, care is linked to non-hegemonic groups. Along the same lines as other authors who address intersectional and transversal frameworks, it is necessary to consider that within the category of gender, care is also unequally distributed, with Black, poor, and peripheral women being primarily responsible for it, especially in Brazil. To illustrate what the author brings, according to the UN's 2022 Annual Report, the proportion of hours that Black women perform care tasks is about an hour higher than that of white women and almost double that of white men.

Many feminist theorists are emphatic in affirming the correspondence of patterns of those who perform care activities with patterns of gender, race, and class hierarchies, and, as Tronto (2013) points out, issues of subordination. According to Biroli (2018, p. 57), “care experiences are diverse, and gender hierarchies are produced jointly by patriarchy, capitalism, and racism, interconnected dimensions of current structures and privileges.” Thus, while women from higher social classes, predominantly white women, often achieve upward mobility with better-paying jobs outside the domestic sphere, there is often a delegation of domestic and care work to other women, especially Black and poor women who perform care work in the private sphere and suffer the consequences of its devaluation.

The use of time that women and men dedicate to care or domestic activities is still very different and reflects the gender hierarchy and inequalities present in society, according to the aforementioned Maria de la Paz López Barajas, a gender statistics specialist at UN Women (United Nations Entity for Gender Equality and the Empowerment

of Women). Thus, it is possible to verify the difference in time use and responsibility division, especially in tasks concerning care, which deepens even further when intersections of social markers of difference occur, such as, for example, in the case of poor women who «are the ones who perform longer total working hours and have less free time» (MOREIRA; MOSSER, 2019, p. 87).

At this point, an intersectional approach is also necessary, given the plurality of women who care and their possible differentiations when considering categories of analysis such as race, territory, age, class, and others. In this sense, it is possible to think with the analytical tool of intersectionality which, according to Akotirene (2018), is an analytical sensitivity for thinking about systems of oppression, allowing an understanding of the collision of existing oppressive structures, in addition to the difficulty of classic feminism in contemplating Black women (AKOTIRENE, 2018, p. 14), women with disabilities, transgender people, among other groups. Following Donna Haraway's premise (1995), it is fundamental that an intersectional approach also be situated and localized. Thus, the experience of care could not be understood from an isolated perspective of social markers of difference, such as disability, gender, race, social class, territory, age, sexuality, and others.

Regarding the age issue, Federici (2019) addresses another serious problem, since, due to this precariousness and devaluation of reproductive work, "women, compared to men, everywhere, face old age with fewer resources in terms of family support, monetary income, and assets" (FEDERICI, 2019, p. 272), which leads to a higher rate of poor (and non-retired) elderly women compared to men, resulting in even greater impoverishment of women, especially elderly women. Bearing in mind BEAUVOIR's lessons (1990) that elderly people are seen as less useful by society, it is possible to perceive a significant

worsening of the situation of elderly women who dedicated their lives to care work. According to Federici (2019, p. 272), “most care work is still done by women in the form of unpaid work, which does not entitle them to any form of pension.” Thus, according to the author, there is an important contradiction in which the more a woman cares for someone, the less care she receives. It seems that the more care is dedicated to someone, the less care that woman tends to receive, as if there were a seesaw that tilts towards the other who receives the care and makes her sustain it.

1.2 CARE IN THE UN 2030 AGENDA

The 2030 Agenda for Sustainable Development, adopted by the United Nations (UN) in 2015, represents an ambitious global plan with 17 Sustainable Development Goals (SDGs) and 169 targets aimed at eradicating poverty, promoting prosperity, and protecting the planet. Within this framework, the issue of care emerges as a transversal and fundamental element for achieving various SDGs, although it is not always explicitly mentioned in all targets.

SDG 5, on Gender Equality, has a direct and crucial relationship with care work. Target 5.4, for example, emphasizes the need to “recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate” (IPEA, [n.d.]). This target seeks to combat the disproportionate burden that falls on women, who historically perform most of the unpaid care work globally, as highlighted by the OXFAM Brasil Report of 2022.

In addition to SDG 5, care relates to other goals. SDG 3 (Good Health and Well-being), for instance, aims to ensure healthy lives and promote well-being for all at all ages, which naturally includes access to quality health services and support for people requiring continuous care, such as the elderly and people with disabilities. The 2030 Agenda also provides for universal access to safe and inclusive public spaces, “in particular for women and children, older persons and persons with disabilities” (SDG 11.7, Portal Gov.br).

The valorization of care is vital for sustainable development and the guarantee of human rights. Recognizing, redistributing, reducing, rewarding, and representing care work from a human rights, gender, intersectional, and intercultural perspective is essential to overcome this crisis and build more just and equitable societies, aligned with the purposes of the 2030 Agenda.

Nevertheless, care work continues to be invisible and undervalued, not considered paid work nor accounted for in economic statistics, perpetuating gender inequalities (Biroli, 2018; Fraser, 2024). This devaluation contributes to women’s economic dependence and the precariousness of the poorest women, who frequently outsource this work to other, even more vulnerable women.

Nancy Fraser (2024) argues that contemporary debates on capitalism tend to neglect social reproduction, obscuring the understanding of the systemic crisis. Care is key to unraveling the complexities of this crisis, which is not isolated but an integral part of a broader capitalist crisis. She states that social reproduction is a necessary condition for sustained capital accumulation, but capitalism “cannibalizes” it, generating the care crisis (Fraser, 2024, p. 91).

Despite its crucial importance, reproductive or care work is systematically undervalued and made invisible, keeping women in economic dependence. The sexual division of labor manifests in the

unequal distribution of time dedicated to domestic and care activities, with women assuming a disproportionate burden (Barajas, 2016, p. 21). This disparity intensifies when considering social markers such as class, race, and age, with vulnerable women dedicating even more hours to care. Silvia Federici (2017) highlights that the confinement of women to domestic work was fundamental for capitalist accumulation, consolidating a gender hierarchy.

The historical evolution of the concept of care, always linked to the sexual division of labor and marked by subordination, demands that feminist analyses situate it in the context of contemporary capitalism. It is fundamental to understand how, from a feminist perspective, the capitalist system devalues and precariousizes care work so that a critical analysis of it can be valued. Furthermore, the tool of intersectionality is crucial to identify how caregivers and care recipients are affected by social inequalities, considering the intersections of gender, race, class, etc.

2 THE CENTRALITY OF CARE IN THE GENDER AND FEMINIST PERSPECTIVE

Authors in the field of feminisms, such as Flávia Biroli (2018), argue that care should be a central concept in gender studies, in the idea of social justice, and human rights, given that care work generally falls on women, especially the care of children, people with disabilities, and the elderly. Despite its relevance, care remains a peripheral topic in academia, particularly in the legal field, where it should occupy a prominent position. Mol, Moser, and Pols (2023, p. 02) state that “the importance of care has not been reflected in the academic attention it

receives,” being frequently relegated to the private sphere and perceived as a merely pragmatic activity.

According to Biroli (2018), in an analysis that considers social class, the public sphere is conceived as the realm of male supremacy, while the private or domestic sphere is considered the quintessential female domain. This fixed opposition generates an evident overload for women, especially those who juggle work “outside” and “inside” the home. Federici (2019) corroborates this, recognizing that the association of women with reproductive work in the domestic sphere and the separation of public and private spheres created social constructs over centuries where men perform gender roles detached from domestic matters, which are deemed minor, and thus made invisible and precarious.

Nancy Fraser (1987) extends this discussion by addressing the institutional perspective, asserting that institutions frequently reproduce this contrast between issues that only matter in the public sphere versus private or domestic matters, depoliticizing certain issues by placing them in the personal or family domain (FRASER, 1987), such as the issue of care. Thus, for the author, care should be positioned as an essential societal debate, as everyone depends on it. Recently, we have seen that the pandemic made the importance of care work even more evident and how it has been overburdening and generating inequality between men and women, especially within the family.

For Fraser (2024), a critique of capitalism necessarily involves understanding the relationship between the capitalist system and care work. The devaluation of care and the sexual division of labor are fundamental elements of social inequality and oppression at all stages of capitalism. The feminist political philosopher asserts that capitalism tends to externalize the costs of care, shifting them to families, especially women. This means that society as a whole pays

a high price for the devaluation of care, in terms of social well-being and quality of life. The devaluation of care generates a crisis in social reproduction, which is contradictory, as capitalism itself depends on care for its maintenance and survival. This critique challenges us to think about alternatives to capitalism, about economic systems that value life, care, and solidarity.

Joan Tronto (2013) emphasizes the importance of elevating care to the center of discussions, connecting the democratic deficit to the care deficit. For her, a truly democratic society requires that care be a central element. Fernanda F. Mota (2015, p. 317), analyzing Tronto's work, reinforces that it is necessary to "re(think) democracy, taking care as a central element of it [...] and to (re)think care taking it as a central element."

In her work "Caring Democracy: Markets, Equality, and Justice," Tronto proposes the concept of "caring democracy," analyzing the relationship between care and democracy and addressing the duality (already mentioned here) between the public and private spheres within the current neoliberal capitalist configuration. She treats care as a central element of all human beings' lives, as an activity that occurs relationally (remembering that these relations are also power relations). Bonet (2014), reflecting on Tronto's arguments, also points to the central place care occupies in human life, further addressing the "political dimension of daily caring actions" (2014, p. 337) beyond formal care, also encompassing the political and moral, in Tronto's sense that "caring is a practice and a disposition" (2014, p. 338).

Along the lines of care's centrality, Joan Tronto seeks to define what she calls a "feminist democratic ethic of care" by analyzing the relationship between democracy and care, further questioning the sexual division of labor and its economic and political devaluation with its confinement to the private/domestic sphere. She also questions the

neoliberal ideal of independence and responsibility, which goes against the collectivization and interdependence proposed by a feminist and democratic ethic of care. Another point related to this sexual division of labor that Tronto (and also other authors, such as Helena Hirata and Flávia Biroli) mentions is that masculinities cause men to distance themselves from the private sphere and care practices in a logic of division of labor where they occupy the role of external/public work, which is more valued and related to production and protection.

A common point among the vast majority of authors in the field of gender and care studies is the attempt to bring the discussion about care to a greater centrality, understanding that beyond an attentive attitude or affection, it is an activity inherent in the functioning logic of the system as it is today (and as it has been historically). Flávia Biroli is another author who thinks about care in this same direction, considering the different forms of (inter)dependence that are part of life and positioning care as a crucial issue for democracy and justice.

3 THE NORMATIVE FRAMEWORK OF CARE IN BRAZIL: CHALLENGES AND ADVANCES

Historically, Brazil has lacked comprehensive legislation on care, although various norms have touched upon the issue, establishing rights and responsibilities for specific groups. An important international instrument in this field is ILO Convention No. 156 of 1981, which aims to promote equality of opportunity and treatment for men and women workers, eliminating discrimination based on family responsibilities. The Convention highlights the need for national policies that enable individuals with family responsibilities to work without discrimination or conflict with their duties, suggesting measures such as community

services (nurseries, assistance), leave for family members' illness, and flexible working hours. It also emphasizes the shared responsibility for family tasks between men and women.

To date, Brazil has not ratified ILO Convention No. 156, drawing criticism from trade unions and women's rights organizations. However, 42 years later, in March 2023, the Brazilian government sent the ratification message to the National Congress, an important step that, if materialized, will entail changes in legislation and public policies related to work and care.

At the national level, the Federal Constitution of 1988 already establishes principles that underpin the need for care, such as the right to health, social assistance, and human dignity. Article 227 focuses on the integral protection of children and adolescents, assigning to the family, society, and the State the duty to ensure their rights and protect them from negligence and violence.

Other important laws that, although not directly referring to a comprehensive care policy, establish rights for groups requiring care include the Organic Law of Social Assistance (LOAS) – Law No. 8,742/1993, which defines social assistance as a citizen's right and a state duty, focusing on the protection of family, motherhood, childhood, adolescence, and old age. Additionally, the Law includes the Continued Provision Benefit (BPC), established in LOAS and implemented in 1996, which guarantees a monthly minimum wage to people with disabilities and elderly individuals over 65 who prove they lack the means to support themselves or be supported by their family, representing crucial support for care. The BPC's requirements, such as the per capita income criterion, have been debated, with arguments for considering other factors like expenses with medicines or special foods. During the COVID-19 pandemic, Law 13,982/2020

temporarily allowed the per capita income criterion to be expanded to half a minimum wage³.

In the international scenario, the UN 2030 Agenda for Sustainable Development (2015) and its Sustainable Development Goals (SDGs), especially SDG 5 (Gender Equality), reinforce the importance of eliminating gender inequalities. The global initiative “For a 50-50 Planet by 2030” by UN Women, which Brazil joined, includes commitments such as new laws, eradication of violence against women and girls, encouragement of female participation in decision-making, and investments in national action plans for gender equality.

The Inter-American Convention on the Protection of the Human Rights of Older Persons by the OAS (2015) brought important aspects of political actions for older persons, especially those requiring long-term services. Article 12 of this Convention highlights the need for States to formulate support measures for families and caregivers, developing a comprehensive care system that considers the gender perspective and respect for the dignity of the elderly.

4 THE REPERCUSSION OF CARE DEMANDS IN THE JUDICIAL SYSTEM AND POLICIES

In the field of Law, the approach to care is still little debated and examined in depth and specificity, with the largest number of studies and scientific articles on the topic being found in the field of health (especially in Social Work and Psychology), according to a survey of

³ The minimum wage in force in Brazil in 2020 was R\$ 1045 (reais), with half of this amount being R\$ 522.5 reais.

online databases such as Google Scholar, Scientific Electronic Library Online (SciELO), and the CAPES Thesis & Dissertation Catalog.

However, a paradigmatic landmark for reflecting on care, law, and justice is the “Luo Case.” This case became well-known in International Law and is discussed in the book by Cinzia Arruzza, Tithi Bhattacharya, and Nancy Fraser (2019), theorists of social reproduction. In this sense, according to the authors, a mother (“Luo”) sued her son in 2017, in Taiwan, seeking pecuniary compensation for the time and money invested in raising him. She raised both children as a single mother, and both entered dental school; as a result, she expected them to care for her when she got old (ARRUZZA; BHATTACHARYA; FRASER, 2019). When one of the sons did not meet this expectation, Luo filed the lawsuit. “In an unprecedented verdict, Taiwan’s Supreme Court ordered the son to pay 967 thousand dollars as ‘cost of his upbringing’” (ARRUZZA; BHATTACHARYA; FRASER, 2019, p. 105). For the mentioned authors, the Luo case expresses some fundamental aspects: first, that large amounts of resources and time are needed to care for human beings; second, that much of the work of caring for people is still performed by women; the third important point is that capitalist society does not monetize this work, even though it depends on it; and finally, they understand that in capitalism there is an important contradiction between profit-making and the need for the human production process (ARRUZZA; BHATTACHARYA; FRASER, 2019).

At the national level, in August 2018, the Superior Court of Justice (STJ) established an important precedent by extending the right to a 25% additional benefit for disability retirees to all retirees who needed a caregiver. However, the Attorney General’s Office (AGU) challenged the decision in the Supreme Federal Court (STF),

citing financial impact, and succeeded in suspending the decision in March 2019.

In 2023, there was an important paradigmatic legal decision that considered the Protocol for Gender-Sensitive Judgments by the CNJ mentioned earlier. This decision increased the value of alimony by proportionally calculating the value of the mother's unpaid domestic care work, stating that the daily care activities of children (such as preparing food, assisting with school tasks, cleaning the house, and others) require greater time availability from the mother who lives with the children and also generates work overload (TJ-PR – 12^a Câmara Cível – 0013506-22.2023.8.16.0000 – Rio Branco do Sul – Rel.: EDUARDO AUGUSTO SALOMAO CAMBI – J. 02.10.2023).

4.1 REGULATION OF THE CAREGIVER PROFESSION AND THE ROLE OF THE JUDICIARY

Despite the importance of care work, the caregiver profession still lacks specific regulation in Brazil. There was an attempt with PLC 11/16, of 2016, approved by the Federal Senate, but vetoed by the then President of the Republic, Michel Temer, on the grounds of restricting the free exercise of the profession. Currently, PL 1244/2019 proposes regulating the personal attendant profession for people with disabilities. The delayed regulation reflects the devaluation and invisibility of care work, which Federici (2019, p. 272) describes as forming a “subclass” of workers struggling for recognition.

In this context, Brazil's ratification of ILO Convention 189 on domestic work in 2018 was a landmark, albeit delayed. This delay, similar to the regulation of caregivers, highlights the historical precariousness of domestic and care work, predominantly performed

by Black women. Complementary Law No. 150 of 2015, which guaranteed basic rights to domestic workers, represented a significant advance but came more than half a century late compared to other workers.

The National Council of Justice (CNJ)'s Protocol for Gender-Sensitive Judgments, published in 2021, is a fundamental legal milestone. It aligns with the UN 2030 Agenda's SDGs, particularly SDG 5, and emphasizes the need to address care in judicial decisions, considering its feminization. The document combats gender stereotypes and the naturalized expectation that women assume caregiver roles (CNJ, 2021, p. 27). It also warns of the influence of unpaid care on women's productivity in various judicial areas, such as family law, criminal enforcement, and social security, and addresses the sexual division of labor as a social construct that unequally distributes gender roles, with women overrepresented in paid and unpaid care work, affecting their time and income (CNJ, 2021, p. 27).

In November 2022, ADIn 6.327, judged by the Supreme Federal Court (STF), established that the calculation of maternity leave and maternity pay should begin from the hospital discharge of the mother or newborn (whichever occurs last) when hospitalization exceeds two weeks. This decision aims to prevent an unreasonable reduction of benefits in cases of health problems requiring prolonged hospitalization.

5 NEW POLICIES AND THE RECOGNITION OF CARE AS A HUMAN RIGHT

In 2023, the Guide to Care for the Elderly Person was published by the Ministry of Health, consolidating guidelines on health, disease prevention, and combating elder abuse. The Guide also addresses the

relevance of the caregiver's role, highlighting the importance of their physical and mental health, but without mentioning specific public policies for these professionals.

In the same year, the National Secretariat for Care and Family was created, linked to the Ministry of Development and Social Assistance, Family and Fight Against Hunger. Its developing program, "Brazil Cares," aims to support families in caring for semi-dependent or dependent elderly individuals, with home care provided by a multidisciplinary team, seeking to prevent exclusion and isolation and support families within the Comprehensive Family Protection and Assistance Service (PAIF).

Also in 2023, Decree No. 11,460 established an Interministerial Working Group to elaborate the proposal for a National Care Policy and the National Care Plan, involving the Ministries of Development and Social Assistance, Family and Fight Against Hunger, and the Ministry of Women.

In the international scenario, the United Nations General Assembly instituted the International Day of Care and Support on October 29 (Resolution A/RES/77/317), celebrated for the first time in 2023. This initiative aims to highlight the disproportionate burden of care on families, especially racialized and low-income women.

Currently, the Brazilian federal government seeks to integrate its ministries in the construction of a care policy, with the National Secretariat for Economic Autonomy and Care Policy, linked to the Ministry of Women, working on the development of gender and care policies.

A fundamental international milestone underway is the Request for Advisory Opinion to the Inter-American Court of Human Rights (IACHR Court) made by Argentina in 2023 (accepted in 2024), which seeks to define the content and scope of care as a human right

and its interrelationship with other rights. The Argentine document reiterates that care is a necessity, a labor, and a right, and must be guaranteed in its three dimensions: providing care, receiving care, and self-care (ARGENTINA, 2023, p.1). The objective is for the IACHR Court to define the exact content of this right, the obligations of states, their relationship with other human rights, and how to guarantee care for vulnerable groups (elderly, people with disabilities, children). This opinion could have a significant impact on the protection of human rights in the region, recognizing care as a fundamental human right and providing a legal framework for effective public policies.

Finally, the Dignified Life at Home Project, coordinated by the Ministry of Human Rights and Citizenship, aims to guarantee the rights of bedridden and homebound elderly individuals and their caregivers, combating violations and promoting a more dignified life. The project, initially implemented in Rio Grande do Norte (Brazil) in 2023, seeks federal and municipal partnerships to identify and meet the needs of this population, with action axes focused on reviewing registrations, matrixing by family health teams, and training community agents to identify violations.

On December 23, 2024, Law 15,069/2024 established the national framework for care in Brazil, instituting the National Care Policy. This law is a fundamental milestone that recognizes care as a right and essential work for the sustenance of life and society, seeking to deconstruct the historical devaluation and feminization of this activity. Its main objectives include guaranteeing the right to care in a universal and progressive manner, promoting social co-responsibility between men and women for the provision of care, and valuing both paid and unpaid care work. The Policy prioritizes children (especially in early childhood), the elderly, and people with disabilities who need assistance, as well as care workers themselves. The implementation of

the National Care Policy will occur through a National Care Plan, to be developed by the federal executive branch, which will establish actions, goals, indicators, and responsibilities, with a focus on intersectoriality (health, social assistance, education, etc.). The law also emphasizes the need to combat structural inequalities in access to and provision of care, which historically have burdened women, particularly Black and poor women.

Recently, on April 4, 2025, Law No. 15,124/2025 was sanctioned, promoting equal opportunities in selection and renewal processes for scholarships and research grants, prohibiting discriminatory criteria based on pregnancy, childbirth, adoption, or obtaining judicial guardianship for adoption. The law recognizes the temporary impacts of motherhood on academic life, extending the scientific productivity evaluation period in case of maternity leave.

Despite normative advancements and public policies, there are still gaps and challenges in the field of care in Brazil. The gender perspective and feminist theories are fundamental to denaturalize inequalities and power relations in care practices, seeking to recognize care as a fundamental right and value the diversity of people involved. Although law has historically been used for female subordination, it can also be a tool for emancipation (MacKinnon, 2019). However, a more comprehensive socio-legal analysis, considering the interactions between law, politics, economics, and culture, is essential to propose more effective and lasting solutions that ensure social justice and the protection of people's rights, considering the intersectionality of gender, age, and other social markers.

5.1 THE REPERCUSSION OF THE FEMINIST PERSPECTIVE ON THE REALIZATION OF CARE AS A RIGHT

The emergence and consolidation of the feminist perspective in the socio-legal debate have exerted an increasingly significant influence on the formulation of care policies and the struggle for the realization of care as a fundamental right. By denaturalizing the historical attribution of care work to women and exposing the intrinsic power relations that permeate this sexual division of labor, feminism has challenged the social, economic, and legal structures that perpetuate the devaluation and invisibility of care. Feminist analysis not only illuminates the gender inequalities underlying the social organization of care but also offers conceptual tools and political strategies for its transformation.

Initially, feminist critique unveiled how traditional political and legal theories, anchored in an individualistic and abstract conception of the subject, neglected the centrality of care for the sustenance of life and society. By highlighting human interdependence and the essentiality of care practices from birth to death, feminism shifted the focus from isolated individual autonomy to care relations as constitutive of subjectivity itself and of social cohesion. This theoretical reorientation allowed for the politicization of care, previously relegated to the private sphere and considered a natural responsibility of women.

From this politicization, the feminist perspective has driven the demand for public policies that recognize the social and economic value of care work, both direct and indirect care (organization, management, and support). This demand manifests on various fronts, including the struggle for quality and accessible public care services (nurseries, support services for the elderly and people with disabilities), for equitable parental leave, for flexible work policies that allow the reconciliation of professional life and care responsibilities, and for social

protection systems that financially support caregivers and people who need care.

Furthermore, the gender perspective has emphasized the need for an intersectional approach in care policies. By recognizing that care experiences are intersected by multiple social markers of difference, such as race, class, sexual orientation, and age, feminism has demanded policies that consider the specific needs of marginalized groups and combat the structural inequalities that also manifest in access to and provision of care. Care policies sensitive to intersectionality thus seek to overcome the homogenization of experiences and respond to the specific vulnerabilities of Black women, women with disabilities, LGBTQIA+ women, among others.

In the legal sphere, the feminist perspective has contributed to the interpretation and application of norms that recognize the right to care. Feminist arguments have been used in litigation related to child custody, alimony determination, recognition of domestic and care work for social security and labor purposes, and in actions aimed at ensuring access to health and social assistance services appropriate to care needs. The growing judicialization of care-related issues partly reflects the influence of the feminist perspective in making previously invisible demands visible and in seeking the guarantee of care-related rights within the justice system.

The realization of care as a right, from a feminist perspective, implies not only guaranteeing access to services and resources but also transforming the social and cultural norms that devalue care work and perpetuate gender inequality. In this sense, the feminist perspective has advocated for awareness campaigns, curricular changes in education that promote co-responsibility in care from childhood, and a continuous public debate about the importance of care for the

sustainability of life and the construction of a more just and egalitarian society.

In sum, the gender perspective has been crucial in broadening the understanding of care, politicizing it, and claiming it as a right. Its influence on the formulation of public policies and legal interpretation has the potential to transform social and legal structures that have historically marginalized care and those who perform it, paving the way for a more equitable society that recognizes the essentiality of care for collective well-being and the full realization of human dignity. The continuous incorporation of the feminist perspective in the socio-legal debate and practice of the right to care is, therefore, fundamental for building a more just and caring future for all.

CONCLUSION

The analytical journey undertaken unequivocally demonstrated that care is an activity inherent to human existence, transcends mere affection, and constitutes an essential pillar for social organization. By deconstructing the view of care as the exclusive and natural responsibility of women, the study revealed the profound feminization and historical devaluation of this activity, particularly in the context of the different phases of capitalism. The invisibility of care work aggravated this scenario, its relegation to the private sphere, and the consequent precariousness of women, especially those in vulnerable situations, such as Black and poor women, who bear the brunt of this burden.

Deepening the gender perspective and feminist theories was crucial to politicize care, highlighting how the dichotomy between public and private spheres, fueled by capitalism, perpetuates

inequalities. The analysis of “cannibal capitalism” illuminated the inherent contradiction in the system: although it intrinsically depends on social reproduction work, it externalizes and devalues it, generating a crisis that affects collective well-being. The relevance of positioning care as a central element for democracy and social justice became evident, challenging individualistic logic and proposing essential interdependence for an equitable society.

The UN Agenda reinforces the value of care as vital for sustainable development and the guarantee of human rights. The devaluation of this work, partly driven by the capitalist logic that externalizes its costs to families, especially women (Fraser, 2024), generates a crisis in social reproduction. Recognizing, redistributing, reducing, rewarding, and representing care work from a gender, human rights, intersectional, and intercultural perspective is essential to overcome this crisis and build more just and equitable societies, aligned with the purposes of the 2030 Agenda.

The investigation of the Brazilian and international normative frameworks and public policies confirmed the existence of legislative advancements, such as the Federal Constitution and specific statutes, that touch upon the right to care. Recent initiatives, such as the creation of secretariats and working groups dedicated to the topic in Brazil, and the historic request for an advisory opinion to the Inter-American Court of Human Rights, signal a growing movement towards the recognition of care as an autonomous human right and the pursuit of a National Care Policy.

However, the work also highlighted persistent challenges and gaps. The lack of clear regulation for the caregiver profession and difficulties in realizing judicial benefits for caregivers, as seen in the case of the additional benefit for retirees, are examples of the resistance to adequately formalize and value this work. The application

of intersectionality revealed that care experiences are unequally distributed, with racialized and low-income women suffering the most severe impacts of overload and impoverishment in old age.

Thus, the proposed objectives were fully achieved by demonstrating that care is not merely an affective act, but a complex social, economic, and political activity, permeated by power relations and inequalities of gender, race, and class. The irrefutable conclusion is that the struggle for the recognition of care as a fundamental right, with the consequent demand for comprehensive and intersectionality-sensitive public policies, is an indispensable pillar for building a more just, equitable, and truly democratic society, where the well-being and dignity of all people are guaranteed. The continuous incorporation of the feminist perspective in the socio-legal debate is the way to transform structures and consolidate a future in which care is, in fact, the work that sustains the world.

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HUMAN RIGHTS AND THEOLOGICAL EDUCATION CONSIDERING THE SUSTAINABLE DEVELOPMENT GOALS

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1 INTRODUCTION:

The research aims to problematise the relationship between theological education and a culture of human rights. It is proposed that new forms of theological education are needed if the church is to be more effective in living out the mark of the teaching mission, which consists of “teaching, baptising and nurturing new believers”. In this way, it is hoped that the theological education model will be planned and applied in accordance with international human rights standards, with the aim of promoting a culture of human rights both within the church and in its relations with the surrounding society.

Initially, the international normative framework for education is contextualised as both a human right and an instrument of access to other rights that are equally relevant to life in society.

The following section emphasises the importance of theological education in strengthening the church and effectively transmitting the

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principles and values essential to Christian life. However, it recognises the need to update teaching methods and educational approaches to meet the demands and challenges of contemporary society. As mentioned, this study proposes that theological education be based on international human rights standards. By adopting this approach, the church will contribute to the formation of individuals committed to values such as dignity, equality, freedom, and justice. Furthermore, the adoption of these standards will guarantee an inclusive and open perspective, promoting respect for diversity and free thought, as well as the effective integration and safeguarding of human diversity within the church.

The third section highlights the importance of theological education in addressing contemporary issues such as gender, sexuality, ethnicity, and religion. Given that these issues have been widely discussed in contemporary times, it is necessary for the church to be able to offer biblically based and contextualised responses, avoiding discriminatory or exclusionary practices.

The article concludes by emphasising the need for a paradigm shift in theological education to be based on international human rights standards.

It is claimed that this approach will help the church to be more effective in its teaching mission, reaching and nurturing new believers in a way that is committed to Christian principles, but also respectful of diversity and human rights. Finally, it is hoped that this article will contribute to bringing theological educational practices closer to the premises of an education geared towards a culture of human rights, and consequently to a more inclusive, welcoming, and effective church in promoting the gospel.

The scientific approach adopted was deductive, organised through the research techniques of documentary and bibliographical analysis.

2 INTERNATIONAL NORMATIVE FRAMEWORK FOR HUMAN RIGHTS-ORIENTATED EDUCATION

For Delgado and Ribeiro (2013, p. 200), human rights have an ethical dimension that is fully revealed through three pillars: a) the dignity of the human person; b) citizenship, and c) social justice. This can be inferred from the text of the 1948 Universal Declaration of Human Rights, which states in its preamble that the recognition of “the inherent dignity of all members of the human family and of their equal and inalienable rights is the foundation of freedom, justice and peace in the world” (United Nations, 1948).

In this way, the dignity of the human person, as the ethical pillar of human rights, serves as a “source value and contemporary parameter” for all international and national legislation protecting the individual (Delgado; Ribeiro, 2013, p. 201). If we accept that this principle informs national and international legislation, and that the law exists to guarantee the dignity of the human being, its foundation can be no other than the individual himself, considered “in his substantial dignity as a person, before which individual and group specifications are always secondary” (Comparato, 1998, p. 60).

For Sarmiento, the centre and main reason for any legal order is the human being considered in their individuality and concreteness:

What is certain is that the pillars of the Brazilian constitutional order converge towards an

understanding of the human person as the center and ultimate reason for the legal order. But this is about the concrete, rooted, flesh-and-blood person, who has the right to self-determination, but also experiences material and spiritual needs, and who is only fulfilled in life in society in their relationship with others (Sarmiento, 2016, p. 74, emphasis added).

Starting from the acceptance of the person as the ultimate end of the legal order, it is possible to affirm the dignity of the human person as “an inviolable minimum of rights of the person, of which he cannot deprive himself, in the exercise of his self-determination and expression of his personality” (Barzotto, 2007, p. 19). An analysis of this principle allows us to identify three meanings: legal, political, and economic. In its legal expression, dignity proclaims that “the person is the subject and end of law”, revealing itself to be a “presupposition for the determination of law, as well as its limit”. In this sense, the “reciprocal respect that restricts the sphere of action” of each individual is a concrete expression of legal dignity, which leads to the conclusion that “law is produced by man and for man” (Barzotto, 2007, p. 19-20).

The political sense of dignity complements the legal one, so as to recognize the human person as “principle, participant and end of the State”. From this perspective, it assumes the role of driving force and foundation of the need for the state – political community – to “favour the realization of the citizen”. All intersubjective legal relationships, whether of cooperation or subordination, have presupposed and reciprocal rights and duties. Thus, based on dignity, we must overcome “statism” – the understanding that the individual is just one part of the social whole – and “individualism” – human behaviour that places itself on the margins of life in society. It is therefore in “participating in the political life of one’s community that a person is realized as a free being” (Barzotto, 2007, p. 20).

In addition, dignity can be understood as a true hermeneutic principle that “permeates the interpretation and application of constitutional norms in all areas”, radiating its effects “to all branches of the legal order - including private law”. This makes it possible to interpret intersubjective relations in accordance with its precepts (Sarmiento, 2016, p. 80). According to Sarmiento (2016, p. 82), “[...] the principle of human dignity is endowed with unequivocal horizontal effectiveness, also binding private individuals in its respect”.

Regarding the economic sense of dignity, it is important that the “economy is at the service of man, to satisfy the needs of all”. Human work therefore takes precedence because it is how people can “make use of the riches of the earth” and achieve the perfection of their personality (Barzotto, 2007, p. 20). In this sense, the author asserts:

[...] Human labour has an economic and ethical character, which includes values of a moral nature: it provides what is essential for satisfying human needs and is an instrument for affirming the worker’s personality, through the realisation of the values of freedom and equality. The economic dignity of the person rejects the logic of the capitalist economy, which considers the maximum profit for some people to the detriment of others [...] (Barzotto, 2007, p. 20).

In a digression on the evolution of the concept of citizenship, since the time of ancient Greece – when it had the political character of a relationship between a person (citizen) and a community (the city-state) – Uriarte (2006, p. 1) states that the citizen had “faculties or attributions to intervene in political life”. The concept of citizenship has been enriched over time. The period between the Declaration of the Rights of Man and of the Citizen in 1789 and the Universal and Regional Declarations of Rights from 1948 onwards broadened the

list of human rights by incorporating economic, social and cultural rights. This expansion of rights went hand in hand with recognising that all people are entitled to them, not just citizens (from a political perspective).

With the evolution of the concept of citizenship, the emergence of the Social Rule of Law and the incorporation of social rights into the list of human rights enshrined in the constitutions (Mexico in 1917 and Germany in 1919, for example), the state's responsibility to guarantee the effectiveness of these rights was consolidated. According to Uriarte (2006, p. 2), "legislation and collective autonomy develop these rights and create others, shaping labour law and social security." Citizenship, therefore, is the human capacity to hold a relevant list of rights in the political, social, economic and cultural spheres, within the state and organised civil society as a whole (Delgado; Delgado, 2013, p. 91).

For Piovesan (2015, p. 196), citizenship can be redefined by human rights from two perspectives: in the process of internationalisation of human rights, as well as the recognition of individuals as subjects of international law, which results in the concrete expansion of citizenship rights, and; in the process of constitutionalisation of human rights, i.e. the positivisation of such rights within the constitutional legal order.

However, it must be recognised that

[...] Citizenship is part of the general framework of fundamental human rights. Although it is a fundamental right, citizenship has to be earned; it is not given, it is the result of joint action, it is a collective construction, and is therefore opposed to concession or privilege. As it is not a concession, it cannot be revoked or taken away (Palma Filho, 1998, p. 108).

The exercise of citizenship, as we have seen, requires collective construction, opposes the notion of privilege and is therefore based on true social collaboration between all individuals. More than a set of political rights, citizenship should be seen as “the right to have rights” (Arendt, 1989, p. 300), which is considered the first fundamental right from which all others derive. Its full realisation must necessarily be one of the highest democratic ideals, and is the result of joint action by society as a whole:

It is important to note that this set of rights, prerogatives and protections of the legal order derives not only from state action, but also from the influence of collective initiatives and social movements. In other words, the granting of broad and universal citizenship is associated with the notion of human dignity, since citizenship makes the autonomy of the individual viable, as well as their collective emancipation (Delgado; Ribeiro, 2013, p. 201).

It is through the combined efforts of the entire community, therefore, that the highest levels of effectiveness of the diversity of fundamental guarantees linked to citizenship are gradually achieved. This social process is indispensable to the individual and collective autonomy of the individual, without which social justice is unattainable.

In turn, social justice - the third ethical pillar of human rights - is the equal distribution of resources and opportunities in society. Social justice favours the harmony of relationships, as well as the inclusion of people who, considered in their singularities or in the context of the community, can achieve their broadest development.

In the same vein, Sarmiento (2004, p. 338) states that social justice demands the solidary recognition of each person's individuality,

while at the same time affirming that individuals are “all united by a common destiny”. In other words, an exacerbated competitive stance between people does not deserve social acceptance. We must promote “a space for dialogue, cooperation and collaboration” between everyone, equally and freely, in a true attitude of mutual recognition.

We can therefore see the intertwined relationship between dignity, citizenship, and social justice. These concepts interrelate, feed off each other and are mutually grounded to affirm the ethical dimension of human rights. Delgado and Ribeiro conclude that:

[...] the structural concepts of the ethical dimension of human rights (dignity, citizenship and social justice) are umbilically related. In other words, social justice is closely supported by the contemporary notion of citizenship, because it provides for political participation, social inclusion, non-discrimination, as well as formal and material equality, from the perspective of human dignity, the guiding benchmark of the Democratic Rule of Law - perspectives that concretise the principles of social solidarity and protection, in particular. Consequently, social justice favours individual autonomy and collective emancipation through the requirement of a shared contribution in society (Delgado; Ribeiro, 2013, p. 204).

Among the extensive list of human rights, the one that interests the scope of this research is the right to education. This right has been enshrined in international³ legislation since the 1948 Universal

³ It is worth mentioning that the right to education is recognised, albeit indirectly, in the Declaration of the Rights of Man and of the Citizen of 1789 and in the Declaration of Rights of the Good People of Virginia of 1776. In the first bill of rights, the preamble reads: “[...] ignorance, forgetfulness or contempt of the rights of man are the sole causes of public evils and of the corruption of Governments, have solemnly resolved to declare the natural, inalienable and sacred rights of man, in order that this declaration, ever present in all the members of the

Declaration of Human Rights, according to Article 26 of the Universal Declaration of Human Rights:

Article 26

1 Everyone has the right to education. Education shall be free, at least that which corresponds to basic elementary education. Elementary education is compulsory. Technical and vocational education shall be generalised; access to higher education shall be open to all on the basis of merit.

(2) Education shall aim at the full development of the human personality and the strengthening of human rights and fundamental freedoms, and shall favour understanding, tolerance and friendship among all nations and all racial or religious groups, as well as the development of the peace-keeping activities of the United Nations.

3. the right to choose the type of education to be given to one's children shall be a priority for parents (United Nations, 1948).

As we have seen, education is a human right and, as such, it is universal enough to reach people in any social context. Religious relations, because of their social relevance, cannot therefore be excluded from this protection.

It is clear from the wording of Article 26 of the Universal Declaration of Human Rights that education is a universal right, extended to all people without distinction. It should also be noted

body corporate, may permanently remind them of their rights and duties [...]”, according to the Human Rights Commission of the University of São Paulo, accessed on 15 March 2024. In the second, the importance of education for development can be seen when it states, in Article I: “That all men are by nature equally free and independent, and have certain innate rights, of which, when they enter into a state of society, they cannot by any agreement deprive or divest their posterity, and which are: the enjoyment of life and liberty with the means of acquiring and possessing property and of seeking and obtaining happiness and security.”, according to the Human Rights Commission of the University of São Paulo, accessed on 15 March 2024.

that this right demands fulfilment in obedience to the principles of universality for all levels, gratuity and compulsory education for elementary and primary education, and democracy for higher education. That said, the preamble to the Universal Declaration of Human Rights states that this list of guarantees is a

[...] a common ideal to be attained by all peoples and all nations, to the end that all individuals and all organs of society, keeping it constantly in mind, **should strive by teaching and education to develop respect for these rights and freedoms** and to promote, by progressive national and international measures, their universal and effective recognition and application both among the peoples of the Member States themselves and among the peoples of the territories under their jurisdiction (United Nations, 1948, emphasis added).

The Universal Declaration of Human Rights, in art. 29, emphasises the role of human development in community: “ Article 29 - Everyone has a duty to the community in which the free and full development of his personality is possible (United Nations, 1948).”

Already in Article 1,⁴ the Universal Declaration of Human Rights makes evident the interaction of the principles of liberty, equality, and fraternity as forces to build a more dignified reality for people. A systemic reading of Articles 1, 26 and 29 of the 1948 Universal Declaration of Human Rights reveals the close relationship between the principles of liberty, equality and fraternity and the promotion of education in the community. It can be seen, especially in art. 29 of the declaration, that the development of the human personality can be achieved in a community context. Human beings develop through

⁴ “Article 1: All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood” (United Nations, 1948).

education (understood as a right), but because of the development they have achieved, they assume social duties towards the community in which they have developed.

On this point, Barzotto (2018, p. 43-44) has taught us that:

What we want to emphasise is the idea of fraternity as a link between education understood as a right - freedom to develop one's own personality - and a duty - commitment to the equal development of all members of the community. This concept could hardly have been implemented during the First and Second Industrial Revolutions, since education was linked to an economic model that prioritised a view of human beings exclusively as a productive force.

The legal principle of fraternity, in this case, works to encourage people to commit to the development of other individuals in society.

In the context advocated by the Universal Declaration of Human Rights, therefore, education must take place in a community and, if it does, it will allow more fraternal and egalitarian relationships to develop. In the same vein, the promotion of the human right to education in the context of religious experiences will prove to be an important element in affirming and promoting full citizenship.

Education is presented as a true instrument for the development and promotion of universally proclaimed rights and freedoms. Without education, it is said, the process of recognising and applying human rights is hampered, clumsy in its march towards the progress of all humanity. In the words of Comparato (1998, p. 57), it is for the fight against inequality - recognised as "the great disease of Brazilian society" - that human rights education must serve. The following is a transcription of Comparato's lesson, for its lucidity and denunciation:

All of this, it seems to me, should be considered in order to focus human rights education programmes on the issue of traditional inequality, which is at the root of the poor formation of Brazilian society. The way to do this, of course, must be devised by education professionals. My proposal is that a human rights education programme should not be launched in a general, indiscriminate way, with the whole universe of human freedoms and rights, but that a particular line of action should be prioritised, in order to tackle what constitutes the great weakness, the great disease of Brazilian society. That strength is undoubtedly inequality (Comparato, 1998, p. 57).

This emphasises the instrumental nature of education in reducing social inequalities. Other international instruments enshrine the right to education, emphasising its fundamental nature for human development and the promotion and strengthening of human rights. Take, for example, the 1960⁵ Convention on Combating Discrimination in Education, which states in Article V, “a”:

Article V

The States Parties to this Convention agree that:

(a) education shall aim at the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms, and that it shall favour understanding, tolerance and friendship among all nations. All racial or religious groups, as well as the development of activities in the United Nations for the maintenance of peace;

⁵ This International Convention was adopted on 14 December 1960 by the 11th General Conference of UNESCO. In Brazil, it was approved by Legislative Decree 40 of 1967 and promulgated by Decree 63.223 of 6 September 1968.

[...] (United Nations Educational, Scientific and Cultural Organization, 1960).

Education appears as the human right that leads to the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms. In doing so, it must favour understanding, tolerance and friendship. Caggiano (2009, p. 23), emphasises the broad nature of the right to education, in its individual and collective dimensions, so that the

[...] the right to education has a multifaceted content, involving not only the right to education as a process of individual development, but also the right to an educational policy, i.e. a set of interventions legally organised and executed in terms of a process of shaping society, with the aim of providing the members of the social community with the tools to achieve their ends.

Another international law that proclaims the emancipatory character of education, in a similar provision to that of art. 26, item 2, of the Universal Declaration of Human Rights described above, is the International Covenant on Economic, Social and Cultural Rights of 1966⁶, whose art. 13 states:

Article 13

§The States parties to the present Covenant recognise the right of everyone to education. They agree that education shall aim at the full development of the human personality and of the sense of its dignity

⁶ The International Covenant on Economic, Social and Cultural Rights was adopted by the XXI Assembly of the United Nations on 19 December 1966, approved by the National Congress through Legislative Decree No. 226 of 12 December 1991, and promulgated by President Fernando Collor through Decree 591 of 6 July 1992.

and at strengthening respect for human rights and fundamental freedoms. They further agree that education shall enable all persons to participate effectively in a free society, to foster understanding, tolerance and friendship among all nations and among all racial, ethnic or religious groups, and to promote the peace-keeping activities of the United Nations.

§2 The States parties to the present Covenant recognise that, with a view to ensuring the full exercise of this right:

1. Primary education shall be compulsory and accessible free of charge to all.
2. Secondary education in its various forms, including technical and vocational secondary education, shall be generalised and made accessible to all, by all appropriate means and especially by the progressive implementation of free education.
3. Higher education should likewise be made accessible to all, on the basis of individual ability, by all appropriate means and especially by the progressive implementation of free education.
4. Basic education for those who have not received primary education or have not completed the full cycle of primary education should be promoted and intensified as far as possible.
5. It will be necessary to actively pursue the development of a school network at all levels of education, implement an adequate system of scholarships and continuously improve the material conditions of the teaching staff.
6. The States parties to the present Covenant undertake to respect the freedom of parents and, where appropriate, legal guardians, to choose for their children's schools other than those established by the public authorities, provided that they meet the minimum standards of education prescribed or approved by the State, **and to ensure that their children receive religious or moral education in accordance with their own convictions.**

7. Nothing in this article shall be construed to restrict the freedom of individuals and organisations to establish and conduct educational institutions, provided that the principles set forth in paragraph 1 of this article are respected and that such institutions meet the minimum standards prescribed by the State (United Nations, 1966, emphasis added).

A reading of the normative provisions transcribed above leads to the conclusion that education must: a) be an instrument for the development of the human person; b) be a means of achieving effective participation in society; c) offer compulsory and accessible primary education; d) enable broad access to higher education, preferably free of charge; e) enable access to primary education for adults who have not completed the minimum cycle; f) promote the constant and permanent improvement of the teaching staff, and implement an appropriate scholarship programme; g) respect the freedom of choice of parents and guardians, in relation to the public or private network, of the school in which they wish to enroll their children, and; h) provide for and allow the possibility of religious instruction for those who wish it.

3 THEOLOGICAL EDUCATION AND THE MISSION OF THE CHURCH

In a context where the mission of “teaching, baptising and nurturing new believers” is crucial, our approach goes beyond traditional seminaries. In the Anglican Episcopal Church of Brazil, it is said, there is a tendency to recognise the importance not only of the formal education provided by theological seminaries, but also of the

informal theological education that takes place organically in churches and grassroots ecclesial communities. This broad approach not only strengthens the church, but also enables it to face contemporary challenges in terms of reducing injustice and combating violence.

It is in this duality of theological education, both inside and outside seminaries, that it becomes possible to contribute to a deeper and more practical understanding of Christian principles in our current reality. The purpose here is to explore the intersection between the church's mission to "teach, baptise and nurture new believers" and the promotion of a culture of human rights. This search for an approach to theological education aligned with international human rights standards aims to strengthen the church in its essential mission.

This synergy has the potential not only to enrich theological understanding, but also to mould a more inclusive church community committed to the fundamental values of Christianity. Given the significant importance that theological education plays in the context of the Church, it is important to emphasise that any educational approach is more than a simple process of transmitting knowledge; it is a fundamental pillar in strengthening the church's identity and mission.

According to Strieder (1998, p. 15), the exercise of faith, translated into ecclesial mission actions, necessarily involves respecting and promoting human rights, in the light of biblical teachings:

Biblical faith professes the conviction that everything in the world was created by God. As such, the whole world is related to God and can be considered sacred. For this reason, God is also directly linked to everything that is called "law". All "law" was instituted by God because God is just. As a logical consequence, it must be said that it was not man who "created" "human rights". Human rights are surrounded by divine law, because

the author of these rights is God himself; it is only up to man to recognise, promulgate and fulfil them. Seen in this way, our human rights are the social concretisation of divine law. For this reason, the man of faith cannot remain indifferent to human rights, because, realising that every man was created in the image and likeness of God, he has the responsibility to transpose God's love and justice into his inter-human relations. But God's justice is not necessarily the human justice of the blindfolded. In the Bible, God's justice coincides with God's mercy (Strieder, 1998, p. 15).

By investing in the development of a robust understanding of Christian principles interwoven with a culture of human rights, we are nurturing the roots of a vibrant faith community that is potentially active in the defence of basic rights for all people.

In the same vein, Oliveira and Oliveira (2022, p. 19) warn that we should seek to “preserve and find new ways of affirming the curricular field as a space-time of permanent outbreak of experiences of ‘hunger and thirst for justice’, of discovering new names for what is lacking, of challenging limits and re-elaborating personal and political horizons.” It is therefore important that the choice of curricular content in theological education, both formal and informal, is made with the intention of consolidating a culture of human rights in the ecclesial and social spheres.

Theological education doesn't just teach; it cultivates, nurtures, and strengthens, providing solid foundations so that church members can live according to the essential values of our faith. It is proposed here that theological education, based on the premises of a culture orientated towards human rights, faces the challenges of contemporaneity with a focus on the human person.

In addition, the contemporary perspectives of society must be considered in relation to the challenges and opportunities of theological education in a constantly evolving world. It highlights the need for a dynamic and adaptive approach, able to dialogue with the demands of contemporary society, promoting a theological education that not only dialogues with issues of a spiritual nature (with the mystical aspect), but also puts them in dialogue with the realities and challenges of today's world, in synergy with the demands for guarantees and rights (Mallmann; Rocha, 2016, p. 26).

In the following section, we will propose themes whose presence should be mandatory in all theological education processes that are orientated towards a culture of human rights.

3.1 THEOLOGICAL EDUCATION AND THE ETHICAL CHALLENGES OF CONTEMPORARY SOCIETY

The contemporary scenario presents unique challenges for the church. These challenges demand the application of innovative educational strategies to respond effectively to these social demands.

This reveals the need to promote theological education that transcends the institutional limits of seminaries and reaches out to churches and grassroots ecclesial communities. It is affirmed here that theological education should not be exclusive to a select group, but accessible to the whole community, thus creating a solid and participatory basis for spiritual growth and understanding of Christian principles.

It is important to recognise the social impact that contemporary theologies have on public spaces. For Kofferman and Lopes (2023, p. 15), theologies directly influence the choices of communication and education practices that will be adopted in each time and space. The

choice of a theological education based on a culture of human rights, therefore, can be an intentional choice on the part of the ecclesiastical organisation, with the aim of promoting (or restricting) specific aspects relating to human rights.

The crucial point of this study lies in the intersection between human rights and theological education. Theological education based on general human rights principles can mould not only committed believers, but agents of change engaged in promoting a culture of dignity, equality, and justice, which are fundamental to Christian values.

This highlights the relevance of incorporating human rights principles into theological formation, not just as an ethical dimension, but as an essential basis for understanding Christian mission in today's world. Thus, by adopting a perspective based on human rights, the church contributes not only to the formation of ethical individuals, but also to the construction of a just and inclusive society.

As we have seen, theological education must be guided, in addition to the traditional approach of discourse on divinity and human religious experiences, by the points of intersection between human rights and theological education. In this sense, it is imperative to transcend theoretical discourse and see how this approach translates into concrete practices within the church. Here we suggest some human rights themes that can and should be integrated into this new educational perspective, with a practical bias.

3.1.1 Human dignity and inclusiveness

The first aspect worth highlighting is the promotion of human dignity. Theological education must be an instrument that reaffirms the intrinsic dignity of every human being.

In this context, the church can incorporate themes such as inclusiveness, recognising and celebrating the diversity of identities, cultures, and experiences within the faith community (Womack; Duncan; Pillay, 2020, p. 8).

For example, by addressing the issue of inclusiveness, theological education can explore gender equality, recognising and promoting the active role of women in different spheres of the church. This not only reflects human rights principles, but also enriches the community's theological understanding.

3.1.2 Religious freedom and interfaith dialogue

Another crucial issue is religious freedom. This highlights the importance of theological education that respects and promotes freedom of belief and interreligious dialogue. Within this context, the church can explore educational practices that encourage understanding and cooperation between different religious traditions.

A practical example would be the incorporation of interfaith dialogues into educational programmes, enabling community members to learn about other religious traditions, thus promoting a broader and more respectful understanding of diverse forms of spiritual expression.

3.1.3 LGBTI+ rights and hospitality

The issue of LGBTI+ rights also emerges as a relevant topic. In this sense, the importance of a theological education that welcomes and respects the diversity of sexual orientations and gender identities

is evident. This implies not only tolerance, but genuine acceptance of all people, regardless of any identity marker they carry on their bodies.

In this context, the church can address these issues in a sensitive and respectful way, promoting inclusion and ensuring that all members of the community feel valued and loved, thus aligning itself with the fundamental principles of human rights.

3.1.4 Social Justice & Christian Responsibility

The last practical aspect suggested is the intersection between theological education and Christian responsibility in promoting social justice. It should be emphasised that the church, by addressing issues such as poverty, inequality, and exploitation, contributes to building a more just and supportive society.

A concrete example would be the implementation of educational programmes that address the structural causes of poverty, stimulating concrete actions within the community to promote equity and justice.

4 FINAL CONSIDERATIONS

In conclusion, this research sought not only to understand, but also to suggest ways of catalysing transformation in theological education so that it becomes an effective instrument for building a culture of human rights.

Theological education, implemented at the various educational levels, must be guided by educational innovations and practices that strengthen the church, positioning it as an influential agent in promoting the Gospel in a diverse and challenging world. It is suggested

here that theological education should be seen as a continuous and dynamic process, responding to social, cultural, and theological changes. This process should be established through constant dialogue between theory and practice, allowing theological education to always be aligned with the emerging needs of the faith community and the world around it.

The practical examples suggested illustrate how theological education, by incorporating the perspective of a human rights culture, not only enriches theological understanding, but also becomes a transformative force in promoting a more just, inclusive and compassionate society.

By integrating these practical themes, the church not only fulfils its mission to teach, baptise and nurture, but also becomes an effective agent in promoting Christian values and human rights in contemporary society. It is therefore proposed to update the mission statement “to teach, baptise and nurture new believers” to expressly include the orientation of promoting theological education that favours a religious experience based on and guided by a culture of human rights.

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LIFE AFTER SLAVERY: BUILDING FREEDOM WITHIN AND BEYOND THE LABOR MARKET

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1 INTRODUCTION

From 1995 to 2025, the Brazilian State rescued over 65,000 workers from conditions analogous to slavery.³ However, there has been no indication of a reduction in extreme labor exploitation in the country. Indeed, a considerable number of workers have been subjected to this criminal act on multiple occasions.

According to data from the Digital Observatory of Slave Labor in Brazil, 1.73% (613 workers) of the 35,341 workers rescued between 2003 and 2017 were victims of contemporary slave labor at least twice. This figure exclusively encompasses individuals who received unemployment benefits subsequent to their rescue.

A study by the International Labour Organization (ILO) revealed that 59.7% of the interviewed rescued workers had previously

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³ In this chapter, the terms 'slave-like conditions', 'contemporary slavery', 'conditions analogous to slavery' and 'similar terms' are used interchangeably, despite the awareness of the conceptual issues involved. In circumstances where workers are subjected to extreme forms of exploitation, the State intervenes to provide rescue, thereby bringing the labour relation to an end. As a consequence, workers are granted their rights and may even be physically liberated from the employer (although this last act is not often necessary).

encountered this type of situation. These workers were approached between October 2006 and July 2007 (International Labour Organization, 2011).

The phenomenon of recidivism underscores the existence of a pernicious cycle of exploitation, stimulated by the ongoing social vulnerability of rescued workers. This observation highlights the imperative for the implementation of effective public policies that provide comprehensive support to victims of slave-like conditions.

In Brazil, a task force, called Grupo Especial de Fiscalização Móvel (GEFM) has been operating over the last three decades. This task force is formed by a group of public institutions, including the Ministry of Labour, the Labour Prosecution Office and the Federal Police. The primary objective of GEFM is to identify and rescue workers who are subjected to slave-like conditions. This public policy has encountered numerous challenges, yet it has demonstrated resilience in its operational functionality over time. It must be acknowledged that the program has achieved a great degree of success in addressing issues related to employers, investigating criminal activities, and rescuing individuals from extreme forms of exploitation across Brazil.

Conversely, the post-rescue disposition of workers has received inadequate attention, particularly with regard to subsequent measures and interventions. Typically, workers receive their wages and other rights that companies are legally obligated to pay, but these amounts are often temporary. The rescue of workers from severe exploitation is undoubtedly a significant measure. However, the subsequent steps remain to be elucidated. It is imperative to consider the future prospects of these individuals and the challenges they may encounter in their lives. It is evident that no additional assistance has been provided to ensure the provision of a consistent option for carrying on.

The Brazilian government is currently implementing a public policy that aims to provide a sustainable alternative for rescued workers. The program, entitled Vida Pós Resgate (VPR – Life After Slavery), constitutes the primary focus of the present chapter.

2 FROM RESCUE TO INTEGRATION ATTEMPTS: PUBLIC POLICY APPROACHES

In Brazil, three principal public policies have been implemented to provide support to workers who have been liberated from conditions analogous to slavery.

The initial measure was introduced in 2002 through an amendment to Law 7.998 of January 1990. The Unemployment Benefit is granted in three installments of one minimum wage for the rescued worker.

The second public policy pertains to the post-rescue support that is administered by state-level institutions (Coetraes). This support is about helping rescued workers by engaging them in programmes such as Bolsa Família and other social security policies.

The third initiative is the Projeto Ação Integrada (PAI), which was established in 2009 through a collaborative effort between the Labour Inspectors Union, the National Council of Justice, the International Labour Organization, and several other entities. The project provides rescued workers with professional training with a view to enhancing their chances of being reintegrated into the labour market.

The significance of PAI's proposal is indisputable. The efficient implementation of this strategy is likely to enhance the competitiveness of the workforce when seeking employment. Nevertheless, despite its

pertinence, the project's objective constitutes its primary limitation, which is structural in nature.

Since it is a public policy that focuses on job offers, it ultimately relies completely on economic dynamics, particularly on the demand for a workforce. Thereby, no matter how qualified the workers are, they remain dependent on the performance of the labor market, which is, in turn, largely influenced by oscillations in the economy. Accordingly, the workers remain in a situation of structural vulnerability vis-a-vis their possibilities of physical and social reproduction, which is one of the driving factors of labor exploitation.

Between 2009 and 2017, PAI offered training for 106 rescued workers. Among those, 72 workers (representing 67,9%) were qualified during an economic expansion (2009 to 2014), and 34 workers (corresponding to 32,1%) were trained in a period of economic slowdown (2015 to 2017). Of the workers trained in the period of economic expansion, 79,2% were able to find formal employment after completing the training. However, by 2018, only 25% of those were still employed in the formal sector.

Among the workers who were qualified during the economic slowdown, 52,94% found formal employment after participating in the course, but less than a third of those remained formally employed by 2018.

These results are very similar to those experienced by rescued workers who did not go through the training programme. Since 2007, of the rescued workers tracked by the Vida Pós-Resgate who were not qualified by PAI, 462 (78.71%) found formal employment. However, in 2018, 71.89% of these workers were unemployed or did not have a formal employment contract. In other words, when the economy grew – increasing jobs –, the majority of workers, whether qualified or not

by PAI, found employment. When the crisis came, the vast majority of these same workers, qualified or not, were left unemployed.

Training and qualification policies are important because they facilitate workers' enhanced competitiveness within the labour market, enabling them to seek employment in more favourable circumstances. Nevertheless, the fundamental constraint imposed on these policies is constituted by their very purpose. This phenomenon can be attributed to a structural limitation inherent in their business model, which relies on the strategic prioritization of labour supply. Consequently, their success is contingent on the economic dynamics. Irrespective of the qualifications possessed by workers, their employability is contingent upon the prevailing conditions of the labour market.

Despite the efforts that have been made to protect workers from slave-like conditions, those without alternative means or opportunities to economically sustain themselves are at high risk of falling back into exploitative traps.

3 TRANSFORMING RESEARCH INTO PUBLIC POLICY: A PATHWAY TO IMPACT

A survey administered by the International Labour Organization (2011) sought to identify solutions to workers' lives after rescue. The survey posed the following question to rescued workers: "What is the most effective solution to the problem you are facing?".

The responses can be outlined as follow: 46.1% of respondents indicated that the most effective solution would be to have land to cultivate; 26.9% of respondents indicated that the most effective solution would be to have a business; 13.5% of respondents indicated that the most effective solution would be to have a registered rural job;

13.5% of respondents indicated that the most effective solution would be to have a job in the city. The addition of the indications «a» and «c» indicates that 59.6% of the workers rescued in conditions analogous to slavery express a desire to engage in agricultural activities.

In Brazil, the two National Plans for the Eradication of Slave Labor propose the formulation of an agenda and public policies to address contemporary forms of slavery. In both documents, the provision of land access to workers is identified as a potential solution.

The establishment of alternative sources of income, training programs, and access to land, primarily in the victims' municipalities of origin, constitutes a component of the II National Plan for the Eradication of Slave Labor in the country (actions 32 and 33). Additionally, the utilization of resources from fines paid by employers to develop projects to prevent slave labor is encompassed within action 46.

In October 2016, the Inter-American Court of Human Rights issued Brazil's first conviction under international law for slavery and human trafficking in the landmark Fazenda Brasil Verde case. Among other determinations, the Court's ruling obliges the Brazilian State to adopt measures aimed at protecting and assisting victims.

In this context, the Vida Pós Resgate (VPR – Life After Slavery) project was developed to offer material and technical conditions for rescued workers to create rural production systems – preferably in their places of origin – within a framework of family-based or associative labor. Funded by financial resources derived from lawsuits and fines imposed on employers, the project incorporates sustainable practices that prioritize both the well-being of the workers and environmental stewardship.

The main goal of the project is to establish itself as a lasting public policy, with the aim of fostering the formation of rural workers

associations among rescued workers. These associations aim to cultivate healthy food, both for their own consumption and for sale, with a particular emphasis on public acquisition programs.

3.1 VIDA PÓS RESGATE: A BRIEF OVERVIEW

Vida Pós Resgate (VPR – Life After Slavery) was initiated in 2017 through a collaborative effort between the Federal University of Bahia (UFBA) and the Federal Labor Prosecution Office for the 23rd Region (Mato Grosso). The specific goals were as follows: firstly, to track the post-rescue trajectory of workers who were rescued from slave-like conditions in Mato Grosso and Bahia between 2003 and 2016; secondly, to collaborate in the analysis of the existing public policies for the assistance of rescued workers and eventually to propose a new one.

The research tested the hypothesis – supported by data – that the professional training of rescued workers alone can neither ensure a stable livelihood nor reduce their vulnerability. Then, it provided subsidies for an alternative initiative that may sustain workers in the face of the instabilities of the labor market and that promote ecologically sustainable practices.

To combat slave labor sustainably and enable workers and their families to resist exploitation, the Vida Pós Resgate Project was designed to promote self-sufficient rural production, preferably in workers' places of origin.

The acquisition (or capitalization) of land, as well as the procurement of other essential tools for production and distribution, is financed through funds obtained from legal proceedings or extrajudicial procedures related to inspection activities conducted by the Labor

Prosecution Office (MPT) and the Secretariat of Labor Inspection (SIT) of the Ministry of Labor and Employment (MTE).

VPR was thought to promote production within a family-based and/or associative work regime, defined by the absence of hierarchical subordination. To this end, the workers organize themselves through the formation of an agricultural association, enabling collective and autonomous management of the production process. This structure fosters greater self-determination and may reduce or even eliminate their dependence on the labor market.

The program is underpinned by two fundamental principles guiding the formation of workers' associations: first, that labor relations must be inherently democratic, requiring the absence of hierarchical structures such as employers and employees; and second, that the production process must exclude the use of pesticides, adhering at a minimum to organic production standards. As such, the initiatives supported by the program are committed to complementary forms of sustainability – social, by ensuring the conditions for the ongoing reproduction of dignified labor; and environmental, by promoting practices that safeguard collective health and ecological balance. This approach advances the well-being of producers, their communities, and consumers.

At its core, Vida Pó's Resgate seeks to repurpose financial penalties – collected from employers found guilty of violating labor rights – by channeling these resources into agricultural inputs to rural workers associations. In doing so, the initiative empowers slavery victims to own and manage their land, transforming it into self-sustaining agricultural enterprises operated under associative structures.

One of the program's key impacts lies in its potential to mitigate rural exodus. By offering viable, dignified livelihoods in workers' places of origin, the initiative provides a robust alternative to the deceptive

recruitment practices often employed by exploitative intermediaries. In this way, it addresses the structural vulnerabilities that drive displacement and labor exploitation.

Consequently, instead of a palliative approach, the provision of a pathway toward autonomous rural production for rescued workers is a socially sustainable proposal. It offers the possibility of emancipation from the instabilities of the labor market, which is an underlying driver of exploitation and, consequently, slave-like labor.

3.2 VIDA POS RESGATE FRAMEWORK

Vida Pós Resgate (Life After Rescue) is a collaborative effort involving a core team that includes a partnership between Fundacentro (Public Foundation from the Ministry of Labor) (which coordinates the project), the Federal University of Bahia (Ufba), the Slave Labor and Human Trafficking Clinic of the Federal University of Minas Gerais (UFMG), and the Labor Prosecution Office (MPT).

Collaborations with various institutions, including municipal authorities, the Brazilian Micro and Small Business Support Service (Sebrae), and the Brazilian Agricultural Research Corporation (Embrapa), facilitate the technical aspects of the projects and the training of association members to develop initiatives.

VPR provides land (or capitalizes on available land), inputs, and other resources necessary to promote associated production, through the allocation of collective moral damages arising from administrative and judicial procedures. The resources are deposited, and their financial management is carried out by a support foundation linked to UFBA, ensuring compliance with all current legal principles.

Technical and organizational training and qualification activities are carried out both directly by the Vida Pós Resgate team and through partnerships with municipalities, public institutions, and civil society organizations. The objective of these activities is to ensure that members engage and take ownership of the enterprise. The project also seeks to include the implementation of technical monitoring during all phases, as well as the promotion of mechanisms that facilitate the flow of production, particularly through programs such as the National School Feeding Program (Pnae).

Over time, the initiative was developed, and the feasibility of the associations was assessed. Consequently, the implementation of each organization encompasses steps that can be described as follows.

The initial step involves approaching workers to evaluate the feasibility of establishing an association in each rescue case, including meetings and preparatory actions. The maturation and definition of the purpose and characteristics of the association, as well as the bureaucratic protocols for its formation, are part of this process.

The second step concerns the acquisition of land for the association, or the use of land owned by the rescued workers themselves under a free loan arrangement for the association. It is preferable that this land be situated in the workers' place of origin, taking into consideration its technical characteristics and the preferences of its members.

The third point involves the procurement and implementation of production-related assets, including inputs, machinery, equipment, and facilities. These assets are acquired through resources that are derived from collective moral damages paid by offenders in administrative procedures and legal proceedings.

Following the completion of preparatory activities, such as construction work and land preparation, selected monthly cost-

assistance installments will be disbursed to participating members. These payments are intended to provide support for their engagement and operational measures, such as the procurement of inputs, prior to the commencement of directly productive activities.

Then, the establishment of stable and reliable distribution mechanisms for the association's products is essential, especially through institutional markets, including public school feeding programs.

In all stages of the project, the preparation and technical, social, and organizational training of the workers involved in carrying out the project and monitoring the development of the association must be conducted.

4 AN OVERVIEW OF RURAL WORKERS' ASSOCIATIONS TODAY

Vida Pós Resgate (VPR – Life After Rescue) currently provides support to six rural workers' associations in the municipalities of Conceição do Coité, São Domingos, Monte Santo, Una, Aracatu, and Bonito. The initial three entities engaged in the sheep-raising industry. The fourth entity is primarily engaged in the cultivation of cocoa. The final two associations initiated their operations by engaging in the cultivation of agroecological chickens for egg production. Collectively, these associations provide support to approximately 100 (one hundred) families.

The formation of these associations was predicated on an initial approach to the rescued workers by the project's team, which was followed by an analysis of the feasibility of creating an association in each case.

Vida Pós Resgate implemented training initiatives in collaboration with various associations, encompassing a range of subjects. These included courses and workshops addressing associative concerns, guidance on associative statutes, conflict resolution, accounting and financial subjects, administrative and planning issues, and the technical intricacies of each production process. The scope of these training activities is tailored to address the specific needs and requests of each association.

All association members are granted temporary financial assistance to support their engagement and preparation for the association's actual production activities. The municipal governments of the six cities engage in a collaborative partnership with Vida Pós Resgate, as stipulated in a Cooperation Agreement.

The ensuing section delineates the fundamental aspects of the six associations, with each of them being headquartered in the state of Bahia.

4.1 ARACATU – AAGROAB

AAGROAB is located in Aracatu, Bahia, and is composed of workers subjected to conditions analogous to slavery in the coffee harvest in São Paulo's countryside. The initial interactions between Vida Pós Resgate and workers occurred during the second semester of 2021 in Aracatu, in the immediate aftermath of the workers' rescue.

The establishment of the association, the potential economic activities that could be pursued, and the organizational structure of the work were among the subjects addressed during the formation of the entity. The formal establishment of the Association occurred in the first half of 2022, following extensive discussions and technical

analyses on economic viability conducted by Association members, Vida Pós Resgate staff, and partner institutions. These analyses particularly focused on the limited access to water in the region.

After careful consideration, it was decided that land should be acquired for agricultural production based on the “Embrapa system”, which integrates vegetable cultivation, fish farming, and poultry rearing. This decision brought to light one of Vida Pós Resgate’s major challenges: acquiring land with proper legal title for the associations. A preliminary survey of available properties showed that only a few had formal land registration. Among those registered, many had outstanding debts or incomplete documentation. Even fully regularized properties often remained subject to disputes or uncertainties related to inheritance.

Despite the efforts of the Vida Pós Resgate team, it was not possible to find regularized land for acquisition. Consequently, the option of using small land owned by the members themselves had to be considered.

Following an extensive series of meetings and deliberations between Vida Pós Resgate and AGROAAB, the association’s constituents resolved to utilize three properties belonging to their families. These properties had been granted to AGROAAB through a rural property loan, and their use will serve to advance the association’s productive endeavors. The organization’s constituents have elected to arrange themselves into teams according to two criteria: affinity and geographical proximity.

The selected activities included the cultivation of vegetables and the raising of agroecological chickens for egg production. Vida Pós Resgate (VPR) furnished the materials necessary to initiate the production process on the three plots of land. The items include a micro tractor, various seeds, limestone, hoes, pipes, connections, nine

10,000-liter water tanks, construction materials, a centrifugal pump, drip tape, irrigation hose, a brush cutter, limestone, gloves, safety goggles and leggings, ear protectors, protective aprons, hoes, axes, sunshades, wheelbarrows, machetes, scissors, diggers, boots and rain boots.

The productive activities are being developed with the technical guidance of the agroecological bias from the central team of the project and also has the support of the city government. A comprehensive soil analysis was conducted, and specialized technical assistance is provided to facilitate production planning. This assistance is offered through both on-site visits and periodic meetings.

The members built foundations to place water tanks purchased by the project and it's important to highlight that the municipality provided technical support to the members involved in these constructions. The water tanks serve as a water repository for vegetable gardening, feeding the irrigation system (built from materials delivered to the association) for initial planting of vegetables and other crops that require less frequent water replenishment.

The “Rational Raising of Free-Range Chickens”, began on three plots of land at the end of March 2025, based on a semi-extensive system, using a set of appropriate management practices that generate additional income for families with relatively low operating costs.

Since its foundation, AAGROAB has received support from partner institutions, with several members going on trips for training, exchange and presentation of the project, thematic workshops and various workshops carried out by Sebrae, the municipal authority and Vida Pós Resgate staff.

VPR has helped the association to apply for financial grants, preparing members for interviews and assisting them in filling out forms and questionnaires. In the second half of 2024, the association

was selected to receive 20 thousand dollars from the Survivor Leadership Fund, to support its economic activities.

After many bureaucratic steps, in February 2025 funding was finally released and AAGROAB is using it to facilitate its operations. Currently, the three farms are raising 150 chickens (each one) to produce eggs. With the resources, a water well is being drilled on each plot of land, ensuring a regular supply of water, creating the conditions to overcome a great challenge for the association's sustainability.

4.2 UNA – VIDACACAU

The most advanced case in terms of Vida Pós Resgate's support for an association is in Una, a municipality in the Cocoa Region of Bahia, where Vidacacau is located. This association is formed by workers rescued in Ilhéus and Cabrália (both in the state of Bahia), along with their respective families.

The bureaucratic procedures for formalizing the association were completed in September 2022. Consequently, a search was initiated for a tract of land on which the members could develop their economic activities. The acquisition of a farmstead by the Vidacacau Association was completed within a single year, a remarkably brief period for a rural settlement. The Pimenteira Farm, a 23-hectare property, is endowed with two springs and electricity.

The project supplied the construction materials necessary for the renovation of existing buildings on the acquired land, as well as materials for the construction of new buildings. VPR appointed an architect to oversee the renovations and provided direction to the members.

A soil analysis of the land was conducted, and technical guidance was provided to Vidacacau members on the most appropriate production methods and the necessary care measures. An array of materials and supplies for the association's productive activities were secured, including seeds, brush cutters, and a range of protective equipment such as boots and safety gear. VPR also acquired centrifugal pumps and hydraulic installations and all the materials were delivered for the total irrigation of the planted crops.

A total of 5,000 cocoa seedlings were delivered to Vidacacau, acquired through the project's partnership with the state government. The project yielded 1,500 micropropagated silver banana seedlings and 300 plantain seedlings. Furthermore, twenty tons of chicken manure was obtained to fertilise the seedlings and other crops. Three hundred chicks were provided to establish a laying hen flock, and ten complete chicken coops were supplied (consisting of a screen, a drinker, a feeder, nests, barrels, tiles, feed, and medicines). This semi-extensive system was previously implemented for AAGROAB.

Technical assistance for production planning, implementation, and management through visits and periodic meetings was also provided. Notwithstanding the highly favorable circumstances, internal issues within the association, including conflicts between members, have impeded the mobilization and awareness-raising efforts of its constituents.

The impasse began when association members chose to relocate immediately after the formalization of the farm purchase in September 2023, doing so without prior planning or organization. They opted to take up residence in the existing structures on the property. This uncoordinated move soon led to internal conflict, with disputes arising among members and mutual allegations of violence on the farm. In response, Vida Pós Resgate sought to address both anticipated

challenges and unforeseen issues associated with the Vidacacau initiative. The support measures implemented included initiatives such as: financial support for transition, provision of materials and equipment and technical and organizational support.

In this sense, initial funding was allocated to provide members with the means to sustain themselves and to establish income-generating activities following the end of the cost assistance phase. This financial support was planned for a duration of one year. Secondly, a comprehensive set of inputs, machinery, tools, and materials was supplied, always in consultation with the members, to ensure adequate living conditions and promote productive, income-generating activities.

For last, VPR delivered extensive preparatory and technical guidance across a range of topics. Multiple site visits were carried out, during which the team offered hands-on support through meetings and workshops. These covered areas such as association governance, conflict resolution, daily administrative operations, agricultural techniques for both commercial and subsistence farming, and basic accounting and financial management.

Throughout all phases of support, food security remained a central concern. A variety of strategies and practical solutions, many of them immediate or short-term, were proposed and implemented to help ensure the well-being and autonomy of the Vidacacau members.

Despite the provision of extensive clarifications, warnings, reports, and guidelines regarding the project, its role, objectives, limitations, and deadlines, members exhibited a predominant pattern of confrontation, disrespect, and even a refusal to adhere to the measures implemented to provide support. This behavior not only resulted in the inefficient utilisation of inputs and materials but also led to the non-adoption of the agreed-upon actions to address the members' concerns. A notable example of this was the significant delay

in vegetable planting, which was attributed to the prolonged clearance process required for the tractor to navigate the area.

In January 2025, one of the project's agronomists paid a visit to the Pimenteira farm, accompanied by the Municipal Secretary of Agriculture. Despite prior notification of the visit, only five members were present at the site, out of a total of thirteen.

It was ascertained that the collective production of cassava had been effectively discontinued. The cocoa crops were developing in a regular fashion, with some exhibiting optimal conditions and others requiring shade. A survey of the complementary and subsistence crops of three members revealed that banana, plantain, cassava, pepper, and other residual crops were in optimal condition. Of the 10 chicken coops, seven were in operation.

The on-site guidance encompassed a comprehensive array of subjects, including cocoa and banana cultivation, the establishment of subsistence gardens, and the management of agroecological chickens. The meeting included a review of instructions regarding the management of water supplies, the storage and handling of agricultural materials, and the administrative procedures of the Association.

Recent developments have given rise to new internal conflicts, with one member opting to leave the association. In May 2025, Vida Pós Resgate had purchased seven housing modules that had not yet been delivered. This was due to the fact that Vidacacau members had not yet leveled the ground floor to receive the facilities.

The project is currently in its concluding stages of providing support to VidaCacau. In the context of an association, circumstances like those described here are not completely avoidable. The workers association's success relies on the choices and actions of its members. However, the experience in Una has been important in the enhancement of VPR in numerous domains.

4.3 WORKERS ASSOCIATIONS IN THE SISAL TERRITORY

Sisal is a plant species classified within the genus *Agave*, specifically *Agave sisalana*. The most prevalent economic utilization of the material is the extraction of its fiber to produce rope and carpet goods. A region of Bahia is distinguished by the substantial presence of sisal, which is typically utilized to supply large factories associated with hard working conditions, including the risk of amputations due to the operation of hazardous machinery. This geographic area is known as sisal territory or sisaleira region.

Currently, Vida Pós Resgate provides support to three associations in the Sisaleira region. The primary economic activity of the three organizations is the raising of sheep, initially for meat.

The establishment and officialization of the three workers' associations occurred during the course of 2023. In March, members of the project attended a meeting organized by the government of Bahia with municipal civil servants and workers who were recently rescued and lived in Monte Santo, Serrinha, São Domingos, and Conceição do Coité.

Over the course of the following months, dialogues were initiated to deliberate on the potential implementation of VPR in the aforementioned municipalities, engaging both the workforce and the municipal administrations. Following a series of meetings and procedural formalities, the workers and city governments of Monte Santo, Conceição do Coité, and São Domingos have expressed interest in the project, which is currently underway in these locations.

Given that the three entities have members who possess family land, and that the purchase of regular land has proven to be a

significant challenge, it was decided to initiate in the already available places. These locations were provided free of charge on a loan basis to the associations.

The productive activity selected for development by the associations was intensive sheep farming, involving the raising of 200 lambs, initially for meat production. The ovine subjects are confined to a robust sheep pen for a period of three months, during which they are fed a balanced diet and provided with water *ad libitum*. After this period, they are sold.

The sheep pens (one in each association) utilised for ovine husbandry were constructed by the workers themselves. They are situated on the ground floor, with a dirt floor and bedding composed of wood shavings. The pens are divided into four breeding boxes, each with both covered and uncovered areas (solarium), separated by a central corridor. This configuration is designed to facilitate the feeding and sanitary management of the animals. The sheep are permitted to enter the solarium at will, and all enclosures are equipped with feeders and waterers situated in the corridors and outdoor areas. The total area utilized for each sheep pen is 418 square meters, and each breeding box contains 49.5 square meters of covered area and 44 square meters of solarium, allowing lambs to be housed.

Additionally, an attached 32m² warehouse was constructed at each association to store the animals' feed and other utensils necessary for sheep husbandry. The warehouse was constructed with a slab to support the 5,000-litre water tank, which meets the daily water needs of production and will be supplied by the ground-floor cistern.

VPR team engaged in multiple instances with the associations' constituents, offering counsel on the establishment of groups, operational procedures, the delineation of roles, and the design of the sheep pen and the protocols for animal husbandry.

In addition, Fundacentro's technical personnel conducted site visits to the facilities of the three associations. The purpose of these visits was twofold: firstly, to assess the progress of construction projects, and secondly, to verify the safety conditions on the site. The technical personnel also provided technical guidance to the associates.

In an effort to mitigate economic losses and provide support to associations, a series of actions and training initiatives were implemented by Vida Pós Resgate veterinarians. These initiatives aimed to equip members with the necessary skills to manage sheep farming operations effectively and to implement prophylactic health measures to ensure the well-being of these animals.

It is worth noting that, in addition to the activities led directly by the central team of Vida Pós Resgate, partnerships with Sebrae, Embrapa, and municipal authorities have enabled training courses to be held for members of the three associations.

The responsibility for production development is entrusted to the associates, who organize themselves into work shifts. These associates are tasked with the provision of food, the cleaning of feeders and drinkers on a daily basis, and the implementation of the requisite prophylactic sanitary measures. Members are self-organized, with responsibilities limited to two or three times per week.

The present dietary regimen is structured around a 14-day acclimatization period, during which sisal residue and hay are utilized as dietary components. Thereafter, the diet is transitioned to a sole consumption of whole corn grain and high-grain feed. The three locations are home to plantations (palm, corn, etc.) that serve to reduce the dependence on external inputs for feeding the animals.

A significant factor in internalizing the food supply and ensuring the sustainable circulation of inputs for the association's production process is the utilization of sisal waste in the composition

of the diet. This waste is abundant and inexpensive in the region and may serve as a key vector for its development.

4.3.1 Monte Santo – Associação Vida Pós Resgate no Sertão

The Association Vida Pós Resgate no Sertão (VPRNS) is composed of individuals who were previously employed in viticulture in Rio Grande do Sul and subsequently relocated to Monte Santo, Bahia, in February 2023. The entity was established on August 26, 2023, and currently has a total of 13 members. Within the context of family units, the entity comprises a total of 46 individuals.

The agricultural activities, which include sheep husbandry and the production of inputs, are being conducted on land that has been provided to the association by one of its members, who has agreed to a loan agreement for a period of five years.

The delivery of materials for the construction of the sheepfold and the commencement of work activities occurred in April 2024. The associates initiated the weeding process, thereby commencing the work routine in two distinct work groups. The scheduling and allocation of days for these groups was determined by their respective work schedules. The distribution of tasks was determined in accordance with the requirements of production, as well as the competencies and availability of each individual.

The installation of eucalyptus trees to support the sheepfold had been initiated and was completed in August. The subsequent phase entailed the installation of the roof, a task that was facilitated with the assistance of the municipal authorities. The members undertook the fencing of the sheepfold in October of 2024. The aforementioned

services were finalised in January of 2025 with the installation of doors in the warehouse and the placement of wooden partitions in the sheepfold.

The initial shipment of lambs arrived in Monte Santo on January 26, 2025. The delivery consisted of twenty lambs, with an average weight of twenty kilograms. Subsequent batches were delivered until two hundred animals were being managed with a daily feeding plan adapted according to observed performance.

The veterinary team conducted periodic visits to oversee the management of the animals. These visits included activities such as identifying and weighing the animals for zootechnical monitoring, administering vaccinations against clostridial diseases and rabies, and deworming the newly arrived batch. During these expeditions, practical demonstrations were conducted to address critical aspects of the veterinary process, including the cleaning, storage, and disposal of equipment utilised for vaccinations.

These presentations encompassed the cleaning and storage of the vaccination gun, the proper disposal of needles, syringes, cotton, and gloves, and the collection of blood samples for the monitoring of Maedi-visna disease - a viral infection that has the potential to affect the herd's health and well-being.

Presently, the Associação Vida Pós Resgate no Sertão is already commercialising its livestock, indicating its advancement in its developmental trajectory.

4.3.2 **Conceição do Coité – Associação Vida Pós Resgate Coité do Sisal**

The Associação Vida Pós Resgate Coité do Sisal is constituted of individuals who have been rescued from conditions analogous to slavery and their family members, who live in Conceição do Coité and its district of Salgadália. The organisation, which currently has 12 members, was founded in October 20th, 2023 in Conceição do Coité, Bahia.

The land on which they are conducting their economic activities was donated free of charge under a five-year lease agreement that was signed in January 2025. The property under discussion is located in the district of Salgadália and is known as Fazenda Vitória. It is a rural property and covers an area of 10 hectares.

After the land was ready, VPR delivered the first pack of construction materials to the Association in April, 2024. Immediately, the building of the warehouse and sheepfold was initiated by associates themselves, with technical guidance from the city government. The members defined their own work teams and schedules, according to the individual skills and availability.

The sheeps facilities were built in 2024. Simultaneously, in order to internalise the provision of sheep food, soil samples were collected for analysis, enabling more accurate determination of the type of fertilisation required for the land. No fertiliser was utilised for this inaugural crop, and corn was planted in combination with beans, which contribute to enhancing soil quality by capturing nitrogen from the atmosphere and thereby facilitating its capture.

Three months after planting the corn, the harvest was carried out and the corn was prepared for animal feed, a process that was carried out with machinery from another farmers' association. The

machinery was loaned free of charge. A quantity of over 100 kg of silage has already been stored for animal feed and sisal waste is already been using as a composition of the animal's diet.

To finalize the sheeps' facilities construction, the installation of the shed roof and perimeter fencing were carried out in March 2025. Livestock farming began with the first batch of animals being delivered in May 2025.

4.3.3 São Domingos - Associação Caminho do Futuro

The Association Caminhos do Futuro was officially established on December 13th of 2023 at São Domingos (Bahia), and currently has nine members. The associates were rescued from sugarcane cutting in the state of Goiás in early 2023.

They are developing their economic activities on a piece of land donated free of charge by a family's member through a five-year loan agreement signed in January 2025. The materials purchased by VPR for the association to build the sheep facilities began to be delivered in April 2024.

The members began to engage in practical agricultural activities by the close of May 2024, subsequent to the return of four associates who had travelled to Mato Grosso for work-related purposes. The project was not undermined, but the trip delayed the start of procedures, which indicates how associations need to provide economic output as soon as possible to address the material urgency of rescued workers' lives.

With the support of the city government and other institutions, the land was prepared and technical support enabled members to construct the sheep pen and the warehouse. In the course of this

process, an exchange was arranged between the Association Caminhos do Futuro and the Associação Vida Pós Resgate Coité do Sisal, with the objective that workers from Conceição do Coité could assist the construction site in São Domingos.

The absence of bricklayers in São Domingos represented a challenge to the project's progress, with associates struggling to make progress. On the other hand, members from São Domingos visited Conceição do Coité to assist with their construction site.

The interaction and mutual support between the three workers' associations of Sisal Territory have been an important factor to motivate members and overcome the objective barriers faced during their development. The joint activities of the associations in the Sisal territory include training and other initiatives, such as a trip from representatives of the three organisations to the city of Pintadas to a meeting at the meatpacking plant that is already buying sheeps from Monte Santo's association.

The construction of the sheep facilities in São Domingos was completed by March 2025. In order to provide feed for their sheep, members have removed a proportion of the existing sisal on one of their plots and are cultivating forage palm in its stead.

There is plenty of sisal available in the region that can be used as animal feed. The associates are starting to raise sheep, and there is still more to come.

4.4 BONITO – ASSOCIAÇÃO VIDA PÓS RESGATE EM BONITO

The newest association promoted by Vida Pós Resgate is located in Bonito, Chapada Diamantina, Bahia, and was founded on 28th of

April 2025. The Vida Pós Resgate Association in Bonito emerged from meetings between the Vida Pós Resgate team and workers who were rescued during the coffee harvest in Espírito Santo.

Topics discussed at the meetings included the aims of the project, the interests of the workers, the characteristics of the region and the availability and conditions of the land. These discussions resulted in the decision to found the association.

The State University of Bahia (Uneb) played a decisive role in organising the association in Bonito, identifying the group of workers, creating a link between them and the project, and collaborating on subsequent actions.

The association has eleven members, including rescued workers and their families. The association's goal is to raise agroecological chickens based on the system adopted in Una and Aracatu. The members have decided to organise themselves into two production units, each with three hundred chickens, located on land owned by the members under a free loan agreement. This is the same arrangement already made by other associations.

The initiative's management will initially be supported by the project, which will assist the associates with implementation, division of work, and legal, accounting, and financial administration matters. The project will also help the associates manage zootechnical activities on a scale defined by them.

The project is in the process of acquiring the supplies needed to start production, including drinkers, feeders, stakes, tarpaulins, screens and forage. Each chicken coop will contain: one baby drinker, one adult drinker, one baby feeder, one adult feeder, a screen, a roof and nest boxes.

The agroecological free-range chicken production system promoted by Vida Pós Resgate aims to produce healthy, nutritious food

that is free from contaminants. Therefore, optimising the use of natural resources with sustainability as the goal is necessary. The system must respect animal welfare, providing functional and comfortable facilities with a high level of hygiene throughout the breeding process.

5 FREEDOM IN PRACTICE: THE EXPERIENCE OF VIDA PÓS RESGATE

Through rural workers' associations, Vida Pós Resgate aims to free people from the labour market and eliminate the vulnerability that characterises the lives of rescued workers. If the organisations are successful, their members will no longer be dependent on wage labour to survive and will be able to pursue their desired life path.

Beyond the labour market, Vida Pós Resgate can have a positive social impact in many areas. Firstly, because it can be considered as a public policy that promotes family farming and can help to mitigate rural emigration. Once the associations are fully operational, there will be a strong incentive for workers to remain in their places of origin, where they will be able to live with dignity.

The project can also contribute to bringing food and nutritional sovereignty to families who are particularly susceptible to hunger. The production of workers' associations can strengthen local economies by boosting and generating multiplier effects in other productive activities, through the purchase of inputs, goods, and intermediate services, as well as the sale of final products.

The workers' associations' products may help spread healthy eating habits among producers, the local population and, in particular, students in public schools through institutional purchases. It can also promote healthy eating habits among producers, the local population

and, in particular, students in public schools through institutional purchases.

In the current challenging global environmental context, the implementation of sustainable production systems may set a great example for public and private organisations to replicate, particularly given the leading role of victims of extreme exploitation. The ecologically sustainable nature of the project can help to strengthen and legitimise the associations.

Vida Pós Resgate might help consolidate a policy for tracking the progress of rescued workers, enabling more effective support for victims and evaluation of the impact and shortcomings of government initiatives to combat slave-like labour. As workers' associations multiply, Vida Pós Resgate could become an important public policy for tackling food inflation, which is a structural feature of economic underdevelopment that undermines peripheral economies.

For urban workers or those not interested in rural work, Vida Pós Resgate aims to offer rescued workers the opportunity to be included in public sector jobs through social quotas in service contracts (e.g. doormen, security staff), as the legislation makes it already feasible.

The Federal University of Bahia has already set an example by hiring two rescued workers, and this can serve as a reference for other public institutions. Developing this part of the VPR would require forming a dedicated team to survey, mediate, organise and monitor hiring, as well as liaising with workers, and also engaging other institutions to provide training.

6 CONCLUSION

Using funds from fines paid by convicted corporations, Vida Pós Resgate provides material and institutional support for workers rescued in slave-like conditions to have a sustainable alternative for their lives. Workers organise collectively in rural associations, enabling them to independently and collectively lead the production process.

By promoting self-sufficient rural production, VPR unleashes workers from the labour market rather than subjugating them to it. Despite being based on a simple idea, operationalizing a project like this is extremely complex. There are many different types of variables involved in its implementation.

For instance, the workers usually know each other and there are often family groups, but normally there is no prior associative identity or history of collective action among them. They also experience scarcity on a daily basis, and delays in implementing actions that deliver material results can lead to new migration flows in search of survival.

In the case of the cocoa region, the long-term suffering, lack of opportunities and exploitation may have contributed to the development of mentalities and behaviours towards life that are beyond the scope of the programme.

The workers associations supported by Vida Pós Resgate face many difficulties to organise and maintain consistent productive activities. However, it is clear that the main challenge is to help workers to encourage and take the lead of their work collectively.

In this sense, Vida Pós Resgate's most profound barrier to be overcome is the wage culture. Like most of the population, rescued workers are not used to collaborative and horizontal work relations,

having been shaped by wage labour. This makes it very difficult for them to take the initiative and engage in collective, consistent free work.

Like any democratic initiative, where there are no superiors and everyone must make decisions together, workers associations are very complex organisations. In a company with wage workers decisions are fundamentally imposed and dissent is usually suppressed. A democratic organisation is not that simple. Political democracy did not emerge quickly, and it will be no different in the economic sphere. It will probably take a long time to be internalised and implemented. It will certainly not emerge by osmosis, magic or spontaneous awakenings.

Not all workers associations will be successful, just as not all corporations funded by state policies are successful. This is not a reason to stop public funding of corporations (which will never end, despite some liberal rhetoric), and it should not be a reason to stop funding workers associations either. It is a learning process. People, especially those who suffer so much, must have an opportunity to develop a good life.

Currently, Vida Pós Resgate is expanding to promote new rural workers' associations across Brazil. The aim is to have helped establish and develop at least 20 associations by the end of 2026.

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