ENVIRONMENTAL RACISM: TRASH EXPORTATION FROM THE UNITED STATES TO BRAZIL

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Summary: 1. Introduction; 2. Interconnected concepts and realities: racism in Brazil and the United States, environmental racism, and environmental justice; 3. Trash exportation from the United States to Brazil: the facts and the law; 4. Conclusion.

Abstract: In this paper, we discuss the intricate concepts of environmental racism and environmental justice, contextualizing these notions within their historical developments. We then shift our focus to a detailed examination of the shipment of trash from the United States to Brazil. Our analysis centers on the problem of waste flow between the countries, emphasizing the social issues and legislative frameworks in both nations, which are intricately interconnected with international law. Furthermore, we explore Brazil's role as a recipient of trash from the United States, considering its status as the fourth largest producer of waste globally and its challenges regarding inadequate waste disposal practices. The paper aims to uncover the social implications and legal justifications for the exportation of waste from the United States to Brazil. Our guiding questions include: "How does Brazil continue to receive this waste despite international and domestic legislation and in light of its limited capacity for proper disposal? What role does environmental racism play in this dynamic?". In conclusion, our findings underscore the troubling dynamics of waste disposal, whereby the burden of managing waste generated by developed countries falls disproportionately on the impoverished of developing nations. This highlights the complex interplay of racial and socioeconomic disparities, exacerbated by ambiguous or insufficient international regulations, and the lack of robust supervision and enforcement of domestic laws.

Keywords: Environmental racism; Trash exportation; Environmental international law.

1. INTRODUCTION

Gross and stereotyped generalizations have long served as a foundation for intentional and systematic discrimination against specific human groups, resulting in practices such as persecution, slavery, and, in its most serious form, genocide (WILLIAMS, PRIEST & ANDERSON, 2016). Despite societal evolution and the condemnation of once-acceptable behaviors, racism itself, unfortunately, does not, persisting deeply rooted in societies in a profound and complex ways, with diverse impacts and manifestations (ALMEIDA, 2019; BULLARD, 1993). Environmental racism, among the many kinds of racism, has an essential role in current discussions on the challenges of international environmental law. This form of racism is particularly significant due to its direct connection with escalating concerns surrounding the climate crisis, environmental displacement, and the harmful effects of pollutants on human health³. While the issue may not be exclusively linked to a particular racial group, racialized populations end up suffering more significant impacts

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³ Significant challenges in international environmental law, with no foreseeable end, directly intersect with all Sustainable Development Goals set by the United Nations in 2015.

from environmental degradation due to their notorious position of disadvantage in societies (WILLIAMS, PRIEST & ANDERSON, 2016).

Environmental problems transcend borders. Much as pollutants, they go beyond political and geographical boundaries. When discussing waste disposal, the practice of trash exportation has a prominent role that stems from countries on the north-south axis. Faced with escalating volumes of waste and stringent environmental regulations imposed by developed countries (HOORNWEG & BHADA-TATA, 2012), companies in industrialized countries, mindful of the high costs of proper waste management, frequently opt to export their waste to other countries – especially those where environmental control and surveillance are incipient (HOORNWEG & BHADA-TATA, 2012; MARTÍNEZ-ALIER, 2002). The hidden costs of these operations burden public services and the populations of recipient countries, which are saddled with the responsibility for disposing (often inadequately) of this waste – facing, later, the environmental and social reflexes that inefficient disposal can bring. Thus, the exportation of waste to peripheral countries emerges as one the most visible manifestations of environmental racism⁴.

Despite being the fourth largest producer of waste globally and facing significant challenges related to inadequate disposal practices, Brazil still is one of the recipients of much of the American trash⁵. However, how does Brazil continue to receive this waste, despite international and domestic legislation and in light of its limited capacity for proper disposal? What role does environmental racism plays in this dynamic? To answer these questions, in this article we will discuss the differences and similarities of the racism experienced in Brazil and the United States, delve into concepts of environmental racism and environmental justice, and subsequently examine the exportation of waste by the United States to Brazil. Through a socio-legal perspective, we will analyze in this article the issues stemming from waste flow between the United States and Brazil, interconnecting international law and domestic legislation of both countries.

2. INTERCONNECTED CONCEPTS AND REALITIES: RACISM IN BRAZIL AND THE UNITED STATES, ENVIRONMENTAL RACISM, AND ENVIRONMENTAL JUSTICE

Racism in Brazil and the United States

⁴ See 'toxic colonialism' in MARTÍNEZ-ALIER (2002) and PRATT (2011).

⁵ See for example the available data in NICHOLS & SMITH (2019), and WILSON et al. (2015).

Although Brazil and the United States share a common history as former colonies with a legacy of slavery, there exists a stark contrast in the racial composition of the two societies today. In Brazil, 55.5% of the population is Black or Pardo⁶ (IBGE, 2023), whereas in the United States, this figure stands at approximately 12% (JENSEN *et al.*, 2021). Additionally, the manner in which racial classifications are applied differs significantly between the two countries. In the United States, individuals who are not predominantly of European descent are typically seen as non-White, being seen or categorized as people of color – Black, African American, Asian, Native American, and Native Hawaiian/Pacific Islander (JENSEN *et al.*, 2021). I contrast, Brazil's racial classifications include White, Black, Pardo, Yellow⁷, and Indigenous – with Black and Pardo grouped together for purposes of affirmative action policies. These disparities in classification categories and terminologies between the two countries⁸ are reflective of their distinct historical trajectories, societal developments and post slavery policies and ideologies.

For the initial three centuries following Portuguese colonization, the Brazilian population primarily consisted of a small Portuguese elite, alongside Black and Indigenous individuals who endured extensive exploitation as slave labor across various sectors (AZEVEDO, 2003; SKIDMORE, 1972). Following the abolition of slavery, Brazil implemented a policy aimed at "Whitening" the population (SKIDMORE, 1972; PETRÔNIO, 2019). During this period, the country actively encouraged European immigration by offering incentives such as subsidized land and travel expenses. These new arrivals often displaced formerly enslaved individuals from various occupations, leaving the Black community relegated to undesirable and subservient roles (FAUSTO, 2000; THEODORO et al., 2008). Furthermore, upon gaining freedom, Black individuals received no compensation and were systematically excluded from opportunities for land ownership and education due to official policies (THEODORO et al., 2008). Consequently, despite a semblance of interracial assimilation and the absence of institutionalized segregation policies, this assimilation failed to translate into equality in political, economic, or cultural spheres. Brazil continues to grapple with deeply entrenched structural racism against Black, Pardo, and Indigenous populations, resulting in longstanding disparities across numerous areas

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⁶ The term 'Pardo' initially described Indigenous people in Brazil in 1500. Today, it encompasses individuals who don't identify as White, Yellow, Black, or Indigenous. While based on self-identification rather than phenotype or genotype, skin color can influence self-identification.

⁷ The term 'Yellow' refer to Asians in general, being a categorization widely used in official reports. This use is often seen as problematic, but we decided to use it directly translated to reflect the official categories and the differences between both countries

⁸ In Brazil, 'People of Color' is deemed derogatory due to the rejection of colorist concepts. Conversely, 'Negro', considered offensive in the United States, is widely used in Brazil, including official reports and academia, to encompass Black and Pardo individuals.

including health outcomes, mortality rates, educational attainment, employment opportunities, income levels, wealth distribution, and rates of incarceration (ALMEIDA, 2019; PORTO, PACHECO & LEROY, 2013).

Despite this reality, there persists a false notion of Brazil as a racial democracy and a widespread self-perception of Brazilians as non-racist, concepts that endure even in contemporary Brazilian society⁹. While this perception may be far removed from reality, it is essential to acknowledge the progress that has been made towards combating racism since the 1980s. The 1988 Constitution and the Law against Racial Prejudice Crimes (Law 7.716/1989) have criminalized racist discourse, making it a non-bailable offense not subject to the statute of limitations, with penalties of up to five years in prison.

In the United States, at least at first, things went differently. Although the country has historically been characterized as land of immigrants since its beginnings (AZEVEDO, 2003)¹⁰, after abolition, the White elite deliberately built a society based on declared supremacy and a rigid bi-racial system supported by segregationist laws and customs, that was reaffirmed by domestic courts (SKIDMORE, 1972; ALMEIDA, 2019). Until 1963, official policy of segregation prohibited marriages and relationships between Black and White individuals, established the separation between Black and White in the use of public goods and services, such as schools, parks, and hospitals, and permitted owners of private establishments to deny the entry of Black individuals (SKIDMORE, 1972; ALMEIDA, 2019). Consequently, contemporary racial tensions in the United States have become more pronounced. Nowadays, however, these tensions and challenges also encompass Latinos and immigrants perceived as non-White. The issues of mass incarceration, marginalization in urban areas and housing, low educational attainment and income levels, child abuse, health disparities, and violence faced by these communities are among the most visible aspects of this complex issue (BOWDLER & HARRIS, 2022; WILLIAMS, PRIEST & ANDERSON, 2016; ALMEIDA, 2019).

Given the context outlined above, it is not surprising that marginalized populations in the United States bear a disproportionate burden of environmental damage. Similarly, the rationale underlying his phenomenon extends to the justification for exporting waste to areas predominately inhabited by Black or Latin populations, often disadvantaged, both domestically and internationally.

Environmental racism, environmental justice (and sacrifice zones)

⁹ See for example ALMEIDA (2019) and PETRÔNIO (2019).

¹⁰ Also, see studies in FAUSTO (2000).

In 1978, toxic tailings were deposited in Warren County, United States, a community mainly inhabited by Black and low-income residents¹¹. This sparked years of protests, ultimately gaining national attention in 1982 and resulting in the arrest of 500 people (BULLARD, 1992; MARTÍNEZ-ALIER, 2002). It was within the context of this movement that the term 'environmental racism' first gained prominence, drawing attention to situations like the one experienced in Warren County. This not only led to legal action holding responsible parties accountable for the damages caused¹² but also prompted extensive research on the subject – later culminating in the proposal of the 17 Principles of Environmental Justice by movement activists, globally adopted during the United Nations ECO92 conference¹³ (BULLARD, 1993; MARTÍNEZ-ALIER, 2002). By raising environmental racism from the perspective of the victims, the environmental justice movement effectively highlighted that environmental concerns are effectively highlighted that environmental concerns are effectively and urgently impact human beings, particularly the most vulnerable among us.

The doctrine has adopted the term 'sacrifice zones' to refer to vulnerable areas affected by environmental damage that probably would not occur in more affluent ones (BULLARD, 1993). One notable aspect of these areas is their disproportionate exposure to environmental harm compared to other regions, as they attract an increasing number of polluters after becoming 'sacrifice zones'. The practice of transporting waste generated in one location for disposal elsewhere, preferably out of sight and for others to contend with, vividly exemplifies the creation and perpetuation of sacrifice zones. Despite being one of the world's largest waste producers (generating 292.4 million tons of trash annually), the United States only recycles around 30% of it (EPA, 2020). Predictably, the disadvantaged in the society are the ones bearing this burden domestically, as particularly in southern states with a longstanding history of accepting waste from across the United States¹⁴. This domestic practice of shifting trash out of sight aligns seamlessly with its international exportation, perpetuating the cycle of sacrifice zones on a global scale.

When sending trash to another location, often disadvantaged, is viewed merely as a transaction, the entire process is conveniently simplified and made 'acceptable', even considered beneficial to both parties. The problem is that the true burden accompanying this

¹¹ More regarding these events in BULLARD (1992).

¹² Even so, judicial resolution in environmental cases is slow and not that efficient in Brazil if compared to the United States, where there is a more significant number of lawsuits – a contrast that may somehow be attributed to the distinct legal traditions of each country.

¹³ Which interestingly can be considered the embryo of Sustainable Development Goals.

¹⁴ See for example PRATT (2011).

trash far exceeds what may initially appear. The transactional equation fails to include the massive costs associated with potential environmental damage and public health impacts. While trash exporters may perceive they are solving a logistical problem, they are essentially exporting the problem itself. At the same time, the importers primarily focus on immediate profits, often without the capacity to dispose of that trash properly. Yet, improperly handled waste typically result in higher downstream costs than what it would have cost to manage the waste properly (HOORNWEG & BHADA-TATA, 2012)¹⁵. This situation ultimately leads virtually irreparable social and environmental harm that sooner or later will extend beyond the invisible barriers of disadvantaged communities, impacting everyone.

3. TRASH EXPORTATION FROM THE UNITED STATES TO BRAZIL: THE LAW AND THE REALITY

In the United States, exporting trash is a longstanding practice, and recent data indicates a growing trend of such exportations to other countries in the Americas¹⁶ that lack the capacity to effectively deal with all these shipments. To understand the factors enabling the continuation of current waste exportation, we need to delve into the legal framework governing waste exportation within both international and domestic contexts.

The law

Regarding waste exportation, it is possible to legally export and import recyclable materials (such as paper, plastic, glass, and other materials) with an exceptional green flag for importing hazardous waste. Although some of these transnational movements are lawful, a considerable part is not. The legal parameters governing these practices are delineated in the Basel Convention of 1989, which regulates the control of cross-border waste movements, provided that the importing country authorizes such importation [Article 4(1)(2)(9)].

While the Basel Convention holds significant importance – not only due to its subject but also because it is a binding legal instrument for ratifying countries –, this instrument has been subject to considerable criticism. Firstly, the Convention's adoption of ambiguous concepts and the lack of clear distinctions allowed loopholes and undermined international agreements, facilitating the incorrect categorization of waste and favoring informal and illegal waste trades. For instance, the absence of a clear differentiation between 'waste' and 'products' in the Convention, along with its vague criteria for 'hazardous materials', has historically allowed the exportation of 'hazardous waste' under the label of commodities or raw materials to developing countries (PRATT, 2011; MIHAI *et al.*, 2022). Secondly, the

¹⁵ Also, the recipient country's greenhouse gas emissions will include the handling of the imported waste.

¹⁶ See for example the data in BAN (2023).

Convention's monitoring system, reliant on reports and data provided by the member states (Article 13) has been criticized for its weakness. Issues include: incomplete reporting, with only half of countries fulfilling their obligations to submit annual reports; gaps, inaccuracies and discrepancies in waste statistics provided; challenges faced specially by developing countries in collecting data and maintaining databases; and the fact that trade in second hand electrical and electronic equipment and illegal shipments are not captured by the report system (MIHAI *et al.*, 2022). Despite some recent changes¹⁷, including the establishment of a revised version in 2018 aimed at addressing electronic waste and clarifying some of the vague concepts, these issues persist.

According to Article 9 of the Basel Convention, *illegal traffic* is the transboundary movement of waste that happens either: without the proper notification or consent; with consent obtained through falsification/misrepresentation/fraud, that does not conform materially with the documents; or that results in deliberate disposal. The same disposition stipulates that in in cases where illegal traffic results from actions by the exporter or generator, the exporting state must ensure the return of the waste to its origin – also establishing that concerned parties must not impede or obstruct the return process. If the illegal traffic stems from the actions of the importer or disposer, the importing state is responsible for environmentally sound disposal of the waste. The Convention also establishes that when the responsibility for illegal traffic cannot be assigned, the parties must cooperate to ensure environmentally sound in one of the states *or* elsewhere. Moreover, the parties are obligated to introduce appropriate domestic legislation and to cooperate to prevent and penalize illegal trafficking of waste. Finally, we highlight that between the Basel Convention's general obligations presented in Article 4(3), is precisely the agreement of the states to consider illegal trafficking of waste a criminal offense.

While Brazil has signed and ratified the Basel Convention¹⁸, it has been incorporated into Brazilian law as a bellow of the Constitution norm situated on the same plane as ordinary law. On the other hand, the United States is one of the few countries (and the only one in the OECD and G20) that have not ratified the instrument. Unbound by its regulations, the United States has been including illegal waste (such as domestic trash) among the legal waste shipped to other countries. When that happens, even if the United States is responsible for the illegal traffic, Brazil has no recourse to return the waste, as only Brazil is bound by the

¹⁷ Such as the Ban Amendment, which entered into full force in 2019, and other amendments regarding plastic waste that entered into full force in 2021.

¹⁸ Brazil emphasized in its domestic law preamble that the Convention represented just the initial step towards better control of hazardous waste movement across borders.

Convention. In these situations, the illegally trafficked waste ends up being dealt with by Brazilian facilities, leaving Brazil to bear the environmental and financial burdens of the illegal traffic. While the United States continues to avoid ratifying Basel Convention, it endeavors to circumvent its regulations, particularly the rule prohibiting the importation of hazardous materials from non-party states that do not comply with the Convention criteria [Article 4(5)]. To sidestep these restrictions, the United States has been adopting a series of questionable internal regulations and bilateral agreements without necessarily complying with the rules and principles delineated in the Basel Convention¹⁹.

As previously highlighted, the responsibility for authorizing waste importation lies with the importing country. The Brazilian National Solid Waste Policy (Law No. 12.305/2010 – PNRS) serves as the primary legal framework for this matter. While subject to criticism, particularly concerning its oversight mechanisms and penalties, PNRS adeptly incorporates principles from the Basel Convention into domestic legislation. PNRS delineates crucial concepts and classifications of waste and materials, outlining responsibilities for waste management until final disposal and prescribing disposal methods. According to Article 49 of PNRS, the importation of hazardous waste, as well as waste that can cause harm to the environment and public health, is wholly and explicitly prohibited. However, inconsistencies arise between PNRS and the norm ABNT NBR 10.004/2004, which defines hazardous and non-hazardous waste in Brazil. Furthermore, while the Basel Convention criminalizes the illegal trafficking of waste²⁰, Brazilian law lacks a specific definition of waste trafficking as a criminal offense, nor does it provide corresponding penalties for instances of fraud related to it. Nevertheless, the Environmental Crime Law (Law No. 9.605/1998) broadly addresses such practices, penalizing the importation and exportation of toxic, dangerous, or environmentally harmful substances under Article 56. Offenders may face a maximum sentence of one year and four months in prison, a penalty that we deem disproportionate given the severity of the offense.

The reality

In Brazil, inadequate waste disposal areas (dumps and landfills²¹) are still in operation in all regions of the country, receiving 39% of the total waste collected in 2022 – equating to 29.7 million metrical tons of improperly discarded waste (ABRELPE, 2022). Research

¹⁹ Complying with it only materially to guarantee the flow of exportations. See for example PRATT (2011).

²⁰ The Basel Convention, while addressing illegal waste trafficking, lacks specific provisions for criminalization such as penalties and regulatory frameworks. Consequently, it appears more as a call for parties to independently criminalize such actions and institute corresponding penalties.

²¹ We opted to use both terms as we feel they are most fitting for Brazilian regulations. 'Dumps' refer to uncontrolled open-air waste sites. 'Landfills' denote waste sites with greater control and management, though not meeting sanitary landfill standards.

(ABRELPE, 2022; PwC & ABREMA, 2023) further reveals that between 43% to 51% of Brazilian municipalities resort to dumps and landfills for waste disposal. Most notably, these municipalities are concentrated in the country's disadvantaged regions, particularly in the North and Northeast²². In the North, home to the Amazon Rainforest significand and the majority of the Pardos and Indigenous populations, the rate of inadequate waste disposal ranges between 63.4% to 88%, with 79% of its municipalities utilizing inadequate disposal methods. In the Northwest region, where there is a predominantly Black population with a considerable number of Pardos, the rate varies between 62.8% to 78.8%, with 72% of its municipalities employing inadequate disposal practices²³. In addition, only 16% of waste from the North and Northeast regions undergo proper disposal, with a mere 1% being recycled (PwC & ABREMA, 2023). Additionally, approximately 20 million people in Brazil lack access to adequate urban waste collection and management services, with of them 66.52% residing in the North and Northeast regions (IBGE, 2023).

Considering these figures, should Brazil continue to accept imported waste shipments? Given the gravity of waste management challenges in Brazil, a rigorous interpretation of Brazilian legislation would lead to the prohibition of *any* international waste shipment, particularly if they do not consist of genuinely recyclable materials. Receiving any kind of waste would cause harm to the environment and public health, which is completely prohibited by PNRS. In this sense, we highlight that, between 2016 and 2021, Brazil allocated 1.85 billion dollars through its public health system to address issues stemming from inadequate waste disposal (ABRELPE, 2022).

The notion that developing countries stand to benefit from recycling materials sent by developed nations, or that recycling will lead to job creation in these regions is ultimately illusory. The data above underscore that Brazil would be able to generate the purported employment opportunities solely from its own waste production. Concerning the supposed economic gains, it is crucial to highlight that profits from such practice are private, while the associated losses public – going beyond public health. This remains particularly evident considering the financial burden of waste management. In wealthier countries where garbage collection and disposal are automated, this process typically consumes approximately 10% of municipal budgets. However, in less developed nations, waste management expenses can consume between 50% to 80% (HOORNWEG & BHADA-TATA, 2012). The additional influx of waste means a larger portion of the budget to be diverted towards waste

²² The source for this combined data on the Brazilian population is IBGE (2023; 2024).

²³ Meanwhile, in the South of Brazil, historically one of the wealthiest regions and the one with a predominantly White population, the rates for inadequate disposal of waste vary between 16% to 28.4%.

management, thereby diminishing resources available for vital sectors like education and infrastructure development.

Despite international and domestic law and the stark reality of waste management challenges, Brazil persists in receiving waste shipments, legally and illegally. Data indicates that in 2021 alone, Brazil legally received approximately 755 thousand metric tons of processed plastics (STATISTA, 2022). However, given the challenges in obtaining accurate data and the frequent reports of illegal shipments containing substantial volumes of waste, the actual figures are likely significantly higher. These illegal shipments, arriving daily at the country's ports, include not only permitted materials but also illegally trafficked items such as hospital waste, chemical compounds, and soiled diapers. Such practice violates waste exportation regulations, which dictate that waste should only be shipped from one country to another if proper disposal is guaranteed.

For two main reasons, and within a complex context that we will not delve into further here²⁴, Brazil remains an appealing destination for these shipments, notwithstanding its robust legislation on the matter. Firstly, the lack of supervision, that facilitates the importation of shipments containing prohibited waste mixed with allowed materials. Secondly, Brazil, just like the United States, is a country with huge challenges regarding its own waste management. Similar to what happens within the United States, where affluent states often export their waste to disadvantaged ones, in Brazil, garbage arrives at major ports before being sent to dumps and landfills in impoverished areas where people lack political power to voice concerns. Since Brazil is an upper-middle-income country, the mere exportation of waste may not seem questionable (HOORNWEG & BHADA-TATA, 2012).

4. CONCLUSION

A multitude of factors contributes to the perpetuation of waste exportation and the persistence of environmental racism. On the international stage, the weakness of the norms delineated in the Basel Convention may reflect a political choice and a prevailing disregard for environmental concerns, often perceived as matters for the distant future, particularly when the affected parties are perceived as 'others'. This trend seems to echo in the domestic scenarios. In light of its non-ratification of the Basel Convention, the United States exercises discretion in its waste exportation practices. Despite potential bilateral agreements, Brazil's options are limited if a shipment from the United States fails to meet Basel Convention standards or involves illegally trafficked waste. There is no international obligation for the

²⁴ Environmental protection in Brazil has long been challenging, with recent worsening due to increased corruption and organized crime in the sector.

United States to repatriate such shipments. Meanwhile, those responsible in Brazil disregard the impacts resulting from their acts. To them, since improper disposal is already a usual and unpunished practice, it will make no difference to add more waste into the existing dumps. Supposedly, and at least for now, the affected parties are effectively the 'others', not them.

Therefore, it falls upon Brazilian authorities to address this situation by both enforcing the existing domestic legislation and rectifying its weaknesses. Brazilian legislation already encompasses sufficient tools to deal with these issues properly and comprehensively. Enforcement efforts should focus on strengthening the supervision of incoming shipments or potentially prohibiting certain importations, just like Malaysia and China did in 2018. Addressing the weaknesses in the law should entail measures to combat illegal waste trafficking, including revising criminal provisions. On a positive note, it is worth highlighting that in July 2023, Brazil responded to the sharp rise in waste importation in recent years by adjusting import tax rates. Through GECEX Resolution No. 502/2023, the rate was standardized to 18%, eliminating previous exemptions for paper and glass and nearly doubling the rate for plastic. While this may not tackle the root issue, it represents tangible a government effort to discourage waste importation, marking a significant step forward.

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