

# City, Project and Equity

From Languages and Appropriations  
to Forms of Regulation

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## City, Project and Equity

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## INTRODUCTION

Globalization can be defined as the enhancement of social relationships on a world scale which impose unequal growth. The change of paradigm caused by the conversion of national societies into globalized societies results in severe challenges in dealing with social and environmental issues. The increasing unbalance between freedom and individual rights weaken human ties. Thus, in this time of crisis, existential uncertainty is rooted on the fragility and volatility of social ties.

Debates on environmental issues, global, sustainable, and smart cities, on social media and gender issues, among others, which took place in the last decade, spring from the wide changes caused by globalization and world modernity. As the state fades in the face of new global powers, insecurity, inequality, and instability in work relationships increase and are compounded by serious environmental, housing, and social problems. By progressively abandoning or renouncing its responsibilities and roles as a provider of certainty, security, and rights for its citizens, the State creates great misfortunes in urban life and contributes to the neglect of public spaces, thus generating a feeling of uncertainty which leads to a lack of professional perspective and commitment to the collective (the entire urban community).

The rapid verticalization and densification of large cities bring up great challenges to be tackled, such as in human mobility, the preservation of cultural heritage, the quality of public spaces, laws and guidelines, urban infrastructure, the coexistence between citizens, and the quality of life. Social relationships, the appreciation of culture, and fast urban

changes brought about by a globalized world require actions that, while safeguarding major values, do not hinder development and necessary growth in a time of accelerated change. In the digital era, continuous flow, instantaneous exchanges of information, and deterritorialization make space irrelevant, mainly public spaces where people spend time together. Thus, it is essential to understand the current process of human mobility.

The degradation of public spaces is a visible fact that complicates the establishment of quality places to stay. Gated communities are answers to the crisis of public spaces. People's isolation in private spaces is a sign of fear in the face of the unexpected that may be found in public space. The precariousness of central areas in large cities shows the tough reality of the frailty of human relationships: inequalities, neglect, violence, and intolerance. Governments which had once been the guardians of the laws that assured collective welfare are now powerless in the face of urban degradation and violence. In addition, public policies aimed at deregulation, flexibility, and privatization increasingly aggravate this process.

As a consequence, the striking inability to deal with differences, characterized by intolerance in accepting contrasting views, evinces a breach with collective and universal values. Everything indicates that the quest for universal rights and respect for differences should be the focus of our future concerns.

The outbreak of globalization in the early 1990s brought along the internationalization not only of commerce, but also of education and inter-institutional research. Likewise, it is one of the results of the changes in the notion of space-time, in which a surge of interchange, visiting-professor, post-doctoral programs etc. attempts to connect institutions and individuals in research networks. In this sense, the projects and researches mentioned here have also contributed to this debate.

The current need to interpret facts from an interdisciplinary point of view comes from the fragmentation and specialization of knowledge, in which each researcher analyses only his own discipline with a very specific focus, thus losing sight of the whole in which his research and teaching activity is inserted. Therefore, current complex problems cannot be treated by professionals from a single field of knowledge.

To handle this complexity, we have to create a pool of professionals to act together and work not only in interdisciplinary, but also in trans-disciplinary ways. Sciences develop precisely through information and

knowledge exchange and by means of interaction. Consequently, it is clear that adopting a practice that integrates knowledge, exchange and interdisciplinary experiences, favours the perception and construction of collective knowledge.

This book is, therefore, a result of developing networked research and international exchanges enabled by CAPES' Institutional Internationalization Program (PrInt). It is impossible not to recognize in this praiseworthy scientific program an opportunity to build new academic and human links, which entail a qualitative improvement in the level of our technical production.

If PrInt has allowed us to reap good results, this is also due to the efforts of professors, executive technicians and students from the Graduate Programs in Political and Economic Law (PPGDPE) and in Architecture and Urbanism (PPGAU). We have combined our skills, complemented our points of view and consolidated investigations of great practical and intellectual value to establish links between fields of research and activity. This work, which was born from this alliance, presents articles produced in co-authorship by professors and students of Mackenzie Presbyterian University in São Paulo, as well as by faculty members associated with important training and research centres in other countries.

We have a natural tendency to favour our own position, that is, we are inclined to defend our own point of view (MOLDEN; HIGGINS, 2005), which can lead to poor conclusions when making decisions. We often draw conclusions and inferences based on little evidence (RITCHARD; PERKINS, 2005; PERKINS, 1995). The interaction and exchange of experiences between professionals from different fields of knowledge forces us to change this situation in order to perceive a whole new spectrum of possibilities for interpreting and evaluating the same facts.

Building facts is a collective process. Each researcher adds a layer onto previous knowledge so as to decrease disagreements and advance towards truth, even though we admit that truth is always provisional in the field of science.

Sciences are not autonomous, because they depend on collective actions. Academic investigations are not carried out only within universities, neither are they restricted to knowledge produced in laboratories. Several strands should be addressed by researchers who wish to carry out an investigation which has a greater impact on their performance field.

A systems view, favoured by interdisciplinarity, enhances this kind of knowledge construction and exchange. Complexity contains a multiplicity in which the whole is much bigger than the sum of its parts. Facing complexity implies facing uncertainty and doubt as starting points to generate reflection and self-knowledge.

In the article “Costal Cities and Climate Change in Brazil: Challenges and Perspectives”, professors Solange Teles da Silva, Julia Motte-Baumvol, and Tarin Cristino Frota Mont’Alverne address the combination of factors involved in climatic change in coastal cities, showing a sensitive relationship between human interactions in urban spaces and the climate changes that result from these interventions. Since coastal cities are densely populated spaces, identifying the direct relationship between humans and the climate requires, in the authors’ view, a regulatory arrangement that may ensure development in conjunction with climate justice, since climate is one of the essential factors for human development.

In the chapter titled “Eladio Dieste’s Inventive Design and Building – The Discontinuous Gaussian Vaults”, professors Felipe Corres Melachos, Wilson Florio, Federica Maietti, and Luca Rossato analyse the Uruguayan engineer’s innovative work in designing curved roofs. From the drawings produced by the engineer, it was possible to identify a regular defining geometry in the undulating surfaces that overcome large spans. Parametric modelling has contributed to identify the “algebraic” formula underlying geometry, demonstrating the permanence of a constructive thought that made construction possible.

Professors Orlando Villas Bôas Filho and Matteo Finco present the article “Urban Space, Social Exclusion and ‘Legality Regimes’: An Approach Based on Étienne Le Roy’s ‘Theory of Multilegalism’”, in which they discuss the reflections of urban and social exclusion in official and unofficial regulatory dynamics, many of which appear as life-management mechanisms for socially marginalized groups, doing without the state as a source of normativity. From Étienne Le Roy’s notion of multilegalism, the authors present an innovative analytical perspective to include environments marked by hybrid and multiple social relationships, as occurs in spaces of social exclusion.

In the chapter “Corridors and Arches: Portraits of a Dichotomy Within Dematerialising Networks”, professors Laura Abbruzzese, Valter Caldana, and Romeo Farinella reflect on the different meanings of the concept of



“corridor”, ranging from a space within a building to a whole territory. On the other hand, the idea of “arch” is analysed from the primordial geometrically-defined constructive element to its understanding as a symbol for defining places, networks, and an urban territory.

From their research on expressions involving graffiti, professors Irene Nohara, Carlos Leite, and Elisabete Castanheira have analysed the plurality of perceptions and uses of urban space as well as how regulation has kept up with the dynamic of those expressions, choosing the city of São Paulo as their analytical field. In “Creative and Social Innovative Potentialities in São Paulo: The Case of Graffiti and the Regulated Transformation of Urban Space”, the authors address an agenda for the city based on the notion of the socio-political regulation of transforming urban spaces by means of art and culture, counting on the leadership of public agents and on a regulatory perspective that makes this proposal for artistic intervention in the city feasible.

Professors Ingrid Ambroggi, Rosana Schwartz, and João Clemente Neto, along with Axel Föllner-Mancini and Bernhard Johannes Fichtner, wrote the chapter called “University Projects and Human Mobility: Contemporary Perspectives for a City that Can Educate and Accommodate”. They address topics regarding the connection between individuals and their territories, highlighting the construction of identity which results from their integration (or lack of it) into the places they inhabit. Educational spaces, artistic interventions, and public spaces are studied in order to identify actions that promote better social and educational coexistence.

Fernando de Oliveira Domingues Ladeira, a student from the Graduate Program in Political and Economic Law in our university, presents the article “Translating City Walls: Space and Symbolic Power”, in which the relationship between the city and its human inhabitants is mediated by a symbolic relationship that impacts directly on subjects’ individuality, mainly regarding the nature of their relationship with urban space. Therefore, cities as symbolic horizons are the author’s central topic as he follows a path that allows him to envisage the importance of making urban space more and more accessible to different publics so that they may build themselves together with the city.

In the chapter *Dynamics of periphery in Sao Paulo: reflections on possible pathways progressing towards social resilience*, professors Carlos Leite and Angélica Benatti Alvim, professor Jörg Schröder, from Leibniz Universität

Hannover, and two young PhDs Andresa Ledo Marques and Daniela Getlinger, reflect on the trajectory of the changes in the poor, outlying neighbourhoods of the city of São Paulo in the context of the need to overcome the metropolis' fragmentation. Recent experiences point to new perspectives in order to develop innovative forms of integrating urban plans in vulnerable territories.

Lastly, in the chapter “Proyecto urbanos versus operaciones inmobiliarias: acerca del Dique 1 en Puerto Madero, Buenos Aires”, researchers Alicia Novick, Eunice Helena Abascal, Natalia Feld, and Angélica Benatti Alvim investigate the process of renovation of the buildings in Puerto Madero, Buenos Aires, looking at the normative instruments of urban planning. The authors highlight the conditions of implementation and the procedures resulting from the direction established by the Master Plan designed to rehabilitate the urban intervention area. In addition to the subordination of the state to private companies, the research reveals that it was possible to show that Dyke 1 ceased to be an element of urban design and became a set of real estate developments unrelated to the original idea.

We wish you all an excellent study!

The organizers.

FABIO RAMAZZINI BECHARA  
FELIPE CHIARELLO DE SOUZA PINTO  
WILSON FLORIO

# 1. COASTAL CITIES AND CLIMATE CHANGE IN BRAZIL, CHALLENGES AND PERSPECTIVES<sup>1</sup>

SOLANGE TELES DA SILVA

JULIA MOTTE-BAUMVOL

TARIN CRISTINO FROTA MONT'ALVERNE

## Introduction

The relationships between climate change and coastal cities involve different spatial scales and thus different scales of regulation in the way in which spaces and natural resources are used and appropriated. Such relationships include an analysis of the effects of extreme weather phenomena, which result among other consequences, changes in the volume of precipitation, floods, droughts and heat waves, as well as an increase in sea level. But there is also another aspect to climate change in addition to the technical issues, the collapse of infrastructure and loss of access to essential services: the human aspect. In fact, « [p]oor people are disproportionately affected by climate impacts, which could push an additional 100 million people into extreme poverty by 2030»<sup>2</sup>.

<sup>1</sup> This article is the result of the CAPES Print/UPM Project mission. The social scale: language, cities and culture – Project «City, Project and Equity: from languages and appropriations to forms of regulation» taken place in October 2021 – University of Paris Descartes, France and the consolidation of the UPM/Université Paris Descartes/UFC research network.

<sup>2</sup> BOYD, David R. UN Human Rights Council Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment (A/74/161), New York, 15 July 2019, p. 5. Available at: < <https://digitallibrary.un.org/record/3814570>> Access 20 Dec. 2021.

And it is precisely this human aspect of climate change, which little by little has gained expression and visibility, that is emphasized in this essay from the perspective of vulnerabilities, justice and equity in coastal cities. This is because it is precisely in coastal cities that a large part of the human population is found and that is where these issues are exacerbated and call attention to the “climate emergency”<sup>3</sup> and the possibilities that bring the norms that lead a “climatization” of public policies.

Therefore, the objective of this essay is to carry out a reflection, based on the plurality of normative spaces, on the construction of legal strategies for mitigating and adapting the effects of climate change in coastal cities and, in particular in Brazilian coastal cities, under the prism of vulnerabilities, justice and equity. Consequently, based on a reflection on the relationship between cities and climate change, we dive into the analysis of this essay, focusing on Brazilian coastal cities with their vulnerabilities. We then look at the relationship between climate change, human rights and coastal cities, highlighting the challenges to be considered in the climate justice context. As complement to this discussion, we work with the perspective of the intrinsic relationship between biodiversity and climate change in coastal cities, which brings to the discussion the concept of Nature-Based Solutions (NBS) and the perspectives of its diffusion in coastal areas to face the effects of climate change.

## 1. Coastal cities and climate change

Brazil has a coastline of more than 8,500 km in length<sup>4</sup>, in which 17 member states and 300 coastal municipalities<sup>5</sup> are bathed by the Atlantic

<sup>3</sup> In fact, in terms of scientific evidence of the climate emergency, the First IPCC report already indicated the profound changes that climate change could cause in human societies and ecosystems. HOUGHTON, John Theodore; JENKINS, G.J.; EPHRAUMS J.J.,(eds). *Climate Change: The IPCC Scientific Assessment*, 1990. Group I. IPCC, Cambridge, UK: Cambridge Univ. Press, 1993. As Christel Cournil underlines, «the climate emergency no longer needs to be demonstrated and since the last three years it has been increasingly ‘proclaimed’ by certain States, regions, metropolises, cities, as a priority field of public action. » (Free translation) COURNIL, Christel. Introduction. In COURNIL, Christel (right) *La fabrique d’un droit climatique: au service de la route ‘1.5’*. Paris: Pedone, 2021, p. 17.

<sup>4</sup> Considering cuts and reentries.

<sup>5</sup> MARENGO, José A.; SCARANO, Fabio R. (eds.) *Impacto, vulnerabilidade e adaptação das cidades costeiras brasileiras às mudanças climáticas. Relatório Especial do Painel Brasileiro de Mudanças Climáticas*. PBMC, COPPE – UFRJ, 2016, p. 15. Disponível em <<https://>

Ocean. Among the «42 Brazilian metropolitan regions, 18 are located in the coastal area or are influenced by it»<sup>6</sup>. If, on one hand, 40% of the world population lives in coastal areas<sup>7</sup>, in Brazil more than 60% of the Brazilian population lives in such areas.<sup>8</sup> Exposed to the rising number of extreme rainfall events, both in terms of frequency and intensity, which elevates the risk of landslides, floods and flash floods, as well as coastal erosion and sea level rise, Brazilian coastal cities and their respective human populations must then prepare to face the risks associated with climate change.

According to the Intergovernmental Oceanographic Commission (IOC) linked to UNESCO, these risks related to climate change in coastal areas can be classified as rapid-onset risks such as tsunamis, sea level rise and waves generated by extreme winds or even cumulative or progressive risks such as sea level rise and coastal erosion.<sup>9</sup> But environmental risks

ppgoceano.paginas.ufsc.br/files/2017/06/Relatorio\_DOIS\_v1\_04.06.17.pdf> Access 20 Dec. 2021. In addition to the 280 Municipalities facing the sea, defined in a list established by the IBGE, there are also municipalities that are not facing the sea, but that are included in the terrestrial band of the coastal zone because they (i) are in coastal metropolitan regions, (ii) are contiguous with the capitals and large coastal cities that present conurbation, (iii) are distant up to fifty kilometers from the coastline, which include, in their territory, activities or infrastructure of great environmental impact in the coastal zone or coastal ecosystems of high relevance (art. 4th). of Decree 5,300/2004). IBGE. Municípios defrontantes com o mar 2020. IBGE. Municípios defrontantes com o mar 2020. Disponível em: < [https://geoftp.ibge.gov.br/organizacao\\_do\\_territorio/estrutura\\_territorial/municipios\\_defrontantes\\_com\\_o\\_mar/2020/Municipios\\_Defrontantes\\_com\\_o\\_Mar\\_2020.pdf](https://geoftp.ibge.gov.br/organizacao_do_territorio/estrutura_territorial/municipios_defrontantes_com_o_mar/2020/Municipios_Defrontantes_com_o_Mar_2020.pdf)> Acesso em 22.10.2021. BRASIL. Decreto n. 5.300, de 7 de dezembro de 2004, que regulamenta a Lei n. 7.661, de 16 de maio de 1988, que institui o Plano Nacional de Gerenciamento Costeiro – PNGC, dispõe sobre regras de uso e ocupação da zona costeira e estabelece critérios de gestão da orla marítima, e dá outras providências.

<sup>6</sup> MARENGO, José A.; SCARANO, Fabio R. (eds.) *Op. cit.*, p. 13.

<sup>7</sup> UNFCCC. Policy Brief Technologies for Averting, Minimizing and Addressing Loss and Damage in Coastal Zone. Executive Committee of the Warsaw International Mechanism for Loss and Damage – Technology Executive Committee, 2020. Available at: [https://unfccc.int/ttclear/misc\\_/StaticFiles/gnwoerk\\_static/2020\\_coastalzones/cfccc85aaa8d43d38cd0f6ceae2b61e4/2bb696550804403fa08df8a924922c2e.pdf](https://unfccc.int/ttclear/misc_/StaticFiles/gnwoerk_static/2020_coastalzones/cfccc85aaa8d43d38cd0f6ceae2b61e4/2bb696550804403fa08df8a924922c2e.pdf) Access 20 Dec. 2021.

<sup>8</sup> *Idem, ibidem.*

<sup>9</sup> IOC – Intergovernmental Oceanographic Commission. *Hazard awareness and risk mitigation in integrated coastal area management. United Nations Educational, Scientific and Cultural Organization (UNESCO), Manuals and Guides No 50, ICAM Dossier No 5, 141p., Paris, França, 2009.* Available at: <[http://legacy.ioc-unesco.org/index.php?option=com\\_oe&task=viewDocumntRecord&docID=3947](http://legacy.ioc-unesco.org/index.php?option=com_oe&task=viewDocumntRecord&docID=3947)> Access 20 Dec. 2021.

can also be considered, as Nicoladi and Petermann point out, based on the result of three categories: (i) natural risk associated to processes and events of natural origin or induced by human activities»<sup>10</sup>, (ii) technological risk, resulting from production processes, (iii) social risk, « resulting from social needs for full human development that contribute to the degradation of living conditions ».<sup>11</sup> The authors then, by examine these three risks, define five levels of vulnerability and identify the scenario that emerges and brings the challenges for the country's integrated coastal management facing climate change.<sup>12</sup>

The Special Report of the Brazilian Panel on Climate Change: Impact, vulnerability and adaptation of Brazilian coastal cities to climate change in 2016 brings the state-of-the-art knowledge of the impacts of the effects of climate change in these cities, showing that

« Coastal cities are particularly vulnerable to the impacts of climate change and its consequences, such as rising sea levels, heat waves, floods and droughts. In the case of Brazilian coastal cities, deficiencies in urban infrastructure and concentration of poor residents at risk accentuate this vulnerability. »<sup>13</sup>.

The concept of vulnerability is not univocal. In fact, different interpretations of the meanings can be associated with the term vulnerability, whether from the biophysical aspects, considering the individuals or social groups most vulnerable to climate change, such as indigenous and non-indigenous traditional communities – *quilombolas*<sup>14</sup>, fishermen

<sup>10</sup> NICOLADI, Joao Luiz; PETERMANN, Rafael Mueller. Mudanças climáticas e a Vulnerabilidade da Zona Costeira do Brasil: Aspectos ambientais, sociais e tecnológicos. In *Revista de Gestão Costeira*, 10(2), 2010, p. 153. Available at: < [https://www.aprh.pt/rgci/pdf/rgci-206\\_Nicolodi.pdf](https://www.aprh.pt/rgci/pdf/rgci-206_Nicolodi.pdf)> Access 20 Dec. 2021.

<sup>11</sup> *Idem, ibidem.*

<sup>12</sup> *Idem, ibidem.*

<sup>13</sup> MARENGO, Jose A.; SCARANO, Fabio R. *Op. cit.*, p. 129.

<sup>14</sup> «The quilombola communities are social groups whose ethnic identity distinguishes them from the rest of society. According to the definition of the Associação Brasileira de Antropologia (Brazilian Anthropology Association), quilombola communities 'are groups who developed resistance practices in the maintenance and reproduction of their characteristic ways of life in a determined place.' The origin of such groups is related to the process of resistance to slavery, which subjugated blacks brought from Africa to Brazil for 300 years.

and fisherwomen, shellfish gatherers, among others – or by carrying out an analysis based on the multiple factors and processes that influence both individual vulnerability and their ability to respond to the effects of climate change<sup>15</sup>. There is this difference in these interpretations though they are complementary.

The term «vulnerability» was expressly adopted in the United Nations Framework Convention on Climate Change (UNFCCC) referring to the need of assistance of those «vulnerability» States

The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration (art. 3.2. UNFCCC)

Thus the convention addresses the vulnerability of developing states.<sup>16</sup> Climate change «will exacerbate existing poverty and inequality»<sup>17</sup> in States with devastating effects on coastal cities.

The quilombola communities were formed from a wide variety of processes, both during the slavery regime and after the abolition of slavery in the 19th century, facing inequalities that are perpetuated through to the present day. Their identity is defined by 'the experience and shared vision of their common past as well as their continuity as a group. Therefore, the quilombolas have a common historical reference constructed from shared experiences and values'. Quilombola communities are characterized by the common use of their territories, conceived by them as a collective and indivisible space occupied and utilized through consensual rules respected by the various family groups that make up the communities and based on solidarity and mutual assistance». COMMUNIQUE REGARDING THE FULFILLMENT BY THE BRAZILIAN GOVERNMENT OF ILO CONVENTION 169 ADDRESSING INDIGENOUS AND TRIBAL PEOPLES, 2018. Available at: < [https://cpisp.org.br/wp-content/uploads/2018/09/CommuniqueRegardingtheFulfillmentBytheBrazilianGovernmentofILOConvention169AddressingIndigenousandTribalPeoples\\_2018.pdf](https://cpisp.org.br/wp-content/uploads/2018/09/CommuniqueRegardingtheFulfillmentBytheBrazilianGovernmentofILOConvention169AddressingIndigenousandTribalPeoples_2018.pdf)> Access 20 Dec. 2021.

<sup>15</sup> IWAMA, Allan Yu et al. Risk, Vulnerability and Adaptation to Climate Change: an Interdisciplinary Approach. In *Ambio*. Soc. 19 (2), Apr-Jun 2016. Available at: < <https://doi.org/10.1590/1809-4422ASOC137409V1922016>> Access 20 Dec. 2021.

<sup>16</sup> MBOYA, Atieno. Vulnerability and the Climate Change Regime. In *UCLA Journal of Environmental Law and Policy*, 36 (1), 2018, pp. 79-103.

<sup>17</sup> HUMANS RIGHTS COUNCIL. Climate change and poverty – Report of the Special Rapporteur on extreme poverty and human rights (A/HRC/41/39), 17 July 2019, p. 4. Available at: < <https://undocs.org/en/A/HRC/41/39>> Access 20 Dec. 2021.

«Coastal countries face high risks from the impacts of projected climate change; in coastal zones such risks are exacerbated by additional factors, such as compound floods and coastal land subsidence. The concentration of people, assets and socioeconomic activities in coastal zones make them particularly vulnerable and in urgent need of proactive protective action. Climate impacts along with population increases will further exacerbate the expected damage to infrastructure and the vulnerability of coastal populations. SROCC emphasizes the importance of climate-gearred adaptation of coastal zones and that adaptation measures generate many co-benefits at different scales». <sup>18</sup>

On the one hand, individuals and social groups will be more affected because they often live in areas more exposed to the risks of climate change, in precarious housing and having fewer resources to adapt to the effects of climate change. On the other hand, developing countries will have to bear between about 75 to 80% of the costs<sup>19</sup> of climate change and among these countries Brazil. Thus, the climate emergency demands actions at different regulatory scales, considering issues of equity and climate justice.

## **2. Climate change and human rights in coastal cities**

The relationship between climate change and human rights can be observed either through: (i) the understanding that a right to an ecologically balanced environment presupposes appropriate measures in relation to the climate or (ii) the insertion of human rights in the climate regime. Literature also has an important role in the discussions and more profound look at this theme,<sup>20</sup> indicating clues for reflection on this issue

<sup>18</sup> UNFCCC. Policy Brief Technologies for Averting, Minimizing and Addressing Loss and Damage in Coastal Zone. Executive Committee of the Warsaw International Mechanism for Loss and Damage – Technology Executive Committee, 2020, p. 16. Available at: < [https://unfccc.int/ttclear/misc\\_/StaticFiles/gnwoerk\\_static/2020\\_coastalzones/b9e88f6fea374d8a5cb44115d201160/3863c9fabdf74ea49710189acbf6907a.pdf](https://unfccc.int/ttclear/misc_/StaticFiles/gnwoerk_static/2020_coastalzones/b9e88f6fea374d8a5cb44115d201160/3863c9fabdf74ea49710189acbf6907a.pdf)> Access 20 Dec. 2021.

<sup>19</sup> *Idem, ibidem.*

<sup>20</sup> BODANSKY, Daniel. Introduction: climate change and human rights: unpacking the issues. In *Georgia Journal of International and Comparative Law* vol. 38, n. 3, 2010, pp. 511-524. McLNERNEY-LANKFORD, Siobhán, DARROW, Mac, RAJAMANI, Lavanya. Human rights and climate change: a review of the international legal dimensions. Washington: World Bank, 2011.



from the climate justice concept.<sup>21</sup> The principles of equity and common but differentiated responsibilities<sup>22</sup>, enshrined by UNFCCC and in the Paris Agreement<sup>23</sup>, materialize the implementation of this concept internationally, but it must also be understood that climate justice can be analyzed domestically of each country and between different social groups. As Leroy states, climate justice can be understood as:

«a set of principles that ensures that no group of people, be their ethnic, racial or class groups, supports a disproportionate amount of degradation of the collective space caused by climate change, which seriously compromises the quality of life and makes its reproduction and the forces you to migrate»<sup>24</sup>.

Based on this, how can we ensure that no group of people in coastal areas, indigenous and traditional peoples, such as artisanal fishermen and fisherwomen, shellfish gatherers, “caiçaras”, black women and men, and other vulnerable groups do not bear a disproportionate share of the negative effects of climate change? How can the relationship between human rights and climate change provide answers and ensure the rights of a vulnerable portion of the population residing in the coastal area?

From the human rights point of view,<sup>25</sup> according to David R. Boyd report, Special Rapporteur on human rights obligations related to benefit with a safe, clean, healthy and sustainable means, recommended to the United Nations General Assembly in July 2019, «*The poorest half of the world's population, 3.9 billion people, generate only 10 percent of global emissions.*

<sup>21</sup> SILVA, Solange Teles da; RAMOS, Marina C. . Justiça climática: desafios e perspectivas a partir de uma análise das decisões dos Tribunais Superiores Brasileiros. In: AYALA, Patryck. (Org.). *O Direito das mudanças climáticas: normatividade e princípios para a justiça ecológica no direito nacional e internacional*. 1ed. Curitiba: CRV, 2020, v. 1, p. 77-96.

<sup>22</sup> Art. 3. UNFCCC.

<sup>23</sup> Art. 2.2 Paris Agreement.

<sup>24</sup> LEROY, Jean Pierre. 2009. Justiça climática: um direito humano negado. In *Democracia Viva* n. 43, 2009, p. 3-4.

<sup>25</sup> It is important to highlight the work of the rapporteur John Knox who presented in 2018 the perspective of the «greening» of human rights. UNGA. Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment – Report of the Special Rapporteur John H. Knox, (A/73/188), 19 July 2018. Available at: <<https://undocs.org/en/A/73/188>> Access 20 Dec. 2021.