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CLIMATE CONSTITUTIONALISM: THE THREE-DIMENSIONALITY OF CLIMATE CHANGE LAW

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ABSTRACT

The effects of climate change, increasingly present in society, require the Law to face and regulate global, regional and local demands for responses to mitigation, adaptation and losses and damages related to this phenomenon potentiated in the Anthropocene. This article comes from a bibliographical and documentary research on the transnational formation of a body of constitutional foundations that permeate several climate disputes around the world. The central objective of the research is to obtain a diagnosis of the reciprocal influence between multiple jurisdictional dimensions and different legal traditions. As a secondary objective, there is a critical reflection on this transnational normative body that serves as a coherent basis for the formation of fundamental climate rights and duties. In this context, from a comparative methodological perspective, it was analyzed, from Environmental Constitutionalism, the emergence and recognition of Climate Constitutionalism based on the three-dimensionality of climate change law, based on international, national and transnational regimes for dealing with climate change and its effects. To illustrate the practical importance of climate constitutionalism, we explored the paradigmatic climate disputes Leghari v. Pakistan and Juliana *v.* USA, which, in common, reflect on the role played by constitutional provisions, as a strategy to face the weakening of fundamental rights due to the negative effects of climate change.

Keywords: environmental constitutionalism; Juliana v. USA; Leghari v. Pakistan; climate changes; three-dimensionality of Climate Change Law.

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CONSTITUCIONALISMO CLIMÁTICO: A TRIDIMENSIONALIDADE DO DIREITO DAS MUDANÇAS CLIMÁTICAS

RESUMO

Os efeitos das mudanças climáticas, cada vez mais presentes na sociedade, exigem do Direito o enfrentamento e regulação das demandas global, regional e local por respostas à mitigação, à adaptação e às perdas e danos relacionadas a esse fenômeno potencializado no Antropoceno. Este artigo é oriundo de uma pesquisa bibliográfica e documental sobre a formação transnacional de um corpo de fundamentos constitucionais que permeiam diversos litígios climáticos ao redor do mundo. O objetivo central da pesquisa é a obtenção de um diagnóstico da influência recíproca entre múltiplas dimensões jurisdicionais e tradições jurídicas diversas. Como objetivo secundário, tem-se a reflexão crítica sobre esse corpo normativo transnacional que serve de base coerente para a formação de direitos e deveres fundamentais climáticos. Nesse contexto, ante uma perspectiva metodológica comparada, analisou-se, a partir do Constitucionalismo Ambiental, o surgimento e o reconhecimento do Constitucionalismo Climático alicerçado na tridimensionalidade do direito das mudanças climáticas, alicerçado nos regimes internacional, nacional e transnacional de tratamento das mudanças no clima e seus efeitos. Para ilustrar a importância prática de um constitucionalismo climático, foram explorados os paradigmáticos litígios climáticos Leghari v. Paquistão e Juliana v. USA que, em comum, refletem sobre o papel exercido pelas previsões constitucionais, como estratégia para enfrentar a fragilização de direitos fundamentais em razão dos efeitos negativos das mudanças climáticas.

Palavras-chave: *constitucionalismo ambiental; Juliana v. USA; Leghari v. Paquistão; mudanças climáticas; tridimensionalidade do Direito das Mudanças Climáticas.*

INTRODUCTION

With the intensification of extreme weather events and their early arrival given scientific forecasts, Law takes on a leading role in the global process that has been demanding responses to mitigation, adaptation and losses and damages related to climate change. Given this finding, there is a need to outline the structuring bases of this branch, built on the borders of the legal system with that of science. Therefore, this text not only elucidates the Climate Change of in the most traditional dimensions of Law, that is, International Law and National Law, but also presents the formation of a new dimension, the transnational one. This dimension emerges both from classic international instruments and from evolutionary acquisitions obtained in national and regional law, which gain global influence through a comparative law methodology. As a driving factor for these acquisitions, there is an increasingly intense phenomenon, which is climate litigation.

Next, this article deepens an analysis of this transnational dimension. It is necessary to bring up that a generation of conflicts and environmental problems emerged from the advance of the Industrial Society. This phenomenon produced a vast consecration of the right to a balanced and healthy environment in several constitutional traditions with the objective of presenting answers to the challenges of environmental justice, forming what has been called Environmental Constitutionalism. With the entry of the Anthropocene[2] on the scene, problems of a more complex, deterritorialized and transtemporal order are added to a first generation of environmental conflicts. And it is in this new generation that climate disputes are found. Such disputes bring to the legal discussion a new dimension of (in) justice, beyond the social and environmental ones. This is about climate justice. The entry of Law into the Anthropocene demands a compatible constitutional theory capable of guiding the Rule of Law in this new dimension of conflicts and climate justice. This is where the recent debates about the formation of a Climate Constitutionalism begin, an evolution of its predecessor, the environmental one.

Finally, the importance of a Climate Constitutionalism, as a congruent link between the various constitutional experiences for dealing with climate matters, is brought from a study released on two of the most relevant

2 Anthropocene is a concept that represents the "age of humans", created to describe a new geological era, not yet official, from which the dynamics of the Earth system are determined by human activity. The term was proposed by Paul J. Crutzen in 2002 in a text published in *Nature* (CRUTZEN, Paul J. Geology of mankind. *Nature*. 415, 2002.)

cases of climate disputes, Leghari v Pakistan and Juliana v. USA. Despite the differences between these cases, both bring a reflection on the importance of the role played by constitutional provisions, as a strategy to face the weakening of fundamental rights due to the negative effects of climate change. Still in terms of similarities, they are also close in terms of the influence they produced and still produce at a transnational level.

1 INTERNATIONAL CLIMATE REGIME

Climate Change Law is constituted by a three-dimensional legal regime, constituted by the international, transnational and national regimes of treatment of climate change and its effects. Between 1988 and 1990[3], climate change came to be determined as "a common concern for humanity", at which time the United Nations Assembly formally began to set in motion negotiations for a treaty that would address both climate change and its effects (SANDS; PEEL, 2018, p. 299).

Such negotiations culminated in the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The international regime of the Climate Change Law revolves around three instruments of International Law: the aforementioned 1992 Framework Convention, the 1997 Kyoto Protocol and the 2015 Paris Agreement (FARBER; CARLARNE, 2018). The Framework Convention consists of a very broad instrument that establishes objectives and basic principles, as well as the negotiation structures to convert these principles into more concrete obligations. Therefore, this depends on regulation. The Kyoto Protocol is a treaty derived from the Framework Convention, whose content establishes goals and schedules to reduce greenhouse gases emission. This adopts a top-down regime, establishing independent binding obligations for emissions reduction by developed countries, to be achieved through a series of market instruments for climate mitigation and meeting their targets.

The Paris Agreement, in turn, represents the apex of this negotiation process at the international level and provides for the normative framework for climate governance from 2020 onwards. The treaty commits the Parties, through an international political consensus, "to maintain the global average temperature rise well below 2°C in relation to pre-industrial levels, and endeavor to limit such temperature rise to 1.5°C in relation to

3 In this sense, see Resolution 43/53, of December 6, 1988, Resolution 44/207, of December 22, 1989, Resolution 45/212, of December 21, 1990 and Resolution 46/169, of December 19, 1991, all of the United Nations General Assembly.

pre-industrial levels, recognizing that this would significantly reduce the risks and the impacts of climate change" (UNFCCC, 2015)[4].

Unlike the Kyoto Protocol, the Paris Agreement does not have a defined deadline, providing for a continuous process of submission of voluntary climate actions by countries, the so-called Nationally Determined Contributions (NDC). As a manifestation of the principle of common but differentiated responsibilities, these should reflect the highest possible ambition of each Party, being periodically and progressively reviewed by the countries (FARBER; CARLARNE, 2018). Rather than rigid targets and timelines for emission reductions, the Paris Agreement adopted a bottom-up approach, with mitigation and adaptation actions being determined individually by Parties in line with each Party's domestic political and economic priorities.

1.1 National climate regime

On the other hand, legal responses to climate change must also be the object of attention at the domestic law level. In other words, climate change must be thought about and negotiated globally, but mitigation, adaptive and loss and damage actions must be carried out locally. To this end, countries begin to develop their Climate Change Law internally, (i) ratifying international law climate treaties; (ii) enacting regulations on climate matters, such as constitutional provisions, national, subnational and municipal legislative processes, and infralegal normative acts; (iii) through the development of executive climate mitigation and adaptation plans. Strategies can also be based on market instruments, such as carbon taxation, on the one hand, and the formation of a carbon market (cap-and-trade), on the other. Thus, any measure to combat climate change nationally will necessarily have to make use of one of these strategies: conventional legal regulation, taxation of emissions or market of emissions quotas. Finally, an important driving factor and definition of climate regulation is exercised by jurisdictional courts (national, regional, community or even international), in what is called climate litigation (UNEP, 2020).

The Brazilian climate legal regime is structured on the basis of the National Policy on Climate Change (PNMC), established by Law no. 12,187 of December 29, 2009, on the one hand, and the ratification of the Paris Agreement by Decree no. 9,073, of June 5, 2017, on the other. Also,

4 See art. 1, (a), of the 2015 Paris Agreement (UNFCCC, 2015).

domestic law must adopt as guidelines for the PNMC all the commitments assumed by Brazil within the scope of the United Nations Framework Convention on Climate and other documents on climate change to which the country comes to be a signatory (art. 5 of Law no. 12,187/2009). It is important to highlight that, in the national system, there is an ambiguity of goals, capable of causing confusion and legal uncertainty. First, the legal text of the PNMC provides for a reduction of 36.1% to 38.9% of projected emissions by 2020, based on the 2010 inventory (art. 12 of Law no. 12,187/2009). To obtain and systematize this national climate target, the projection of emissions for 2020 are quantified by sector for (i) land use change, (ii) energy, (iii) agriculture, (iv) industrial processes and waste treatment, through regulation emanating from Decree no. 9,578, of November 22, 2018 (see article 18). Finally, this infralegal regulation defines sectoral plans for climate mitigation and adaptation to achieve the objectives defined by the PNMC, noting strong emphasis on the fight against deforestation (art. 17). Such plans consist of sectoral executive plans with scientific content, with the function of operationalizing climate governance by sectors and with normative force. There is, therefore, a normative system, with quantifiable sectoral targets and operational executive planning.

On the other hand, the ratification of the Paris Agreement, enacted by Decree no. 9,073/2017, makes a domestic norm the climate target of maintaining the increase in global average temperature well below 2°C compared to pre-industrial levels, and making efforts to limit this temperature increase to 1.5 °C compared to pre-industrial levels. To this end, the Brazilian NDC provides, as a Brazilian target for the Paris Agreement, a 37% reduction in greenhouse gases emission for 2025 compared to the emissions recorded in 2005, and 43% in 2030, with the achievement of climate neutrality in 2060. It is worth noting that this goal is built on bases different from those provided for in the PNMC, with an ambiguous duplicity of climate goals in the national climate legal system. Likewise, the absence of a complete, coherent and operational system for the Brazilian NDC is highlighted, since there is no quantifiable division of targets and respective executive plans.

1.2 Transnational climate regime

In addition to the international and national dimensions, there is the formation of an increasingly strong transnational dimension. This turns to

the global aspects of Climate Change Law, having as its driving force the global expansion of climate disputes which, in turn, trigger a transnational movement for climate justice (PEEL; LIN, 2019). In this increasingly frequent process, worldwide paradigmatic cases begin to influence and have their adherence tested in other jurisdictions, triggering true transnational climate governance through litigation (CARVALHO, 2015; 2020b). Climate disputes are jurisdictional phenomena and therefore often take place at the local level, in national or subnational courts. In view of the constant absence of a binding character and enforcement of international instruments, such as the Paris Agreement, climate disputes involve litigants and decisions of domestic courts (PEEL; LIN, 2019). Despite the fact that litigants are often from the same nation, where the judicial demand is processed, the transnational character stems from the fact that its judicial reflexes acquire a local and global reach, simultaneously (BODANSKY, 2015).

One of the most outstanding aspects of this dimension, originating from the guidelines emanating from the Paris Agreement itself, is the fact that climate governance (i) is multilevel and goes beyond the State (having individuals, non-governmental organizations, cities, states, countries as actors etc.); (ii) has a scientific basis (based on Scientific Reports of the Intergovernmental Panel on Climate Change – IPCC); and (iii) identifies the potential that climate change has to affect the most vulnerable and cause the violation of human rights, such as life, human dignity, property, an ecologically balanced environment, among others. And it is at the heart of this transnational movement that a global constitutionalism begins to acquire its environmental and, more recently, climatic face.

2 ENVIRONMENTAL CONSTITUTIONALISM

The increase in concerns about the global environmental balance is reflected in a growth in the inclusion of environmental rights and obligations in the constitutions of several countries. The insertion of substantial constitutional environmental provisions began in the early 1970s, with Yugoslavia, for example, being one of the first countries to adopt a right to the environment at a constitutional level, in 1974 (KOTZÉ, 2016), as a result of the international influence exerted by the United Nations Conference on the Human Environment in Stockholm in 1972. This proliferation of provisions of substantive or procedural environmental rights in constitutions

around the world set the mark that, in 2015, 76 countries already expressly recognized the right to the environment in their constitutions (DALY; MAY, 2015).

Despite an international influence, the constitutional provisions of each country are marked by specificities in the respective constitutional texts, influenced by their own cultures, theories, doctrines and national constitutional jurisprudence. This diversity ranges from countries that, like Ecuador and Bolivia, consider nature a legal entity (*Pachamama* and the principle of *"buen vivir"*). Other Latin American countries, such as Brazil, Mexico, Colombia and Argentina, included the right to the environment in their constitutions in the 1980s, largely attributing individual subjective rights to a healthy environment. In the case of Brazil, the insertion of the fundamental right to an ecologically balanced environment involves a double dimension, on the one hand subjective public rights and, on the other, objective duties of protection (CARVALHO, 2020a).

From a comparative methodological perspective (MALY; DALY, 2015), Environmental Constitutionalism operates in a transnational dimension, from which the comparison between the adoption of environmental protection in the various world constitutional traditions, in international law, in human rights and in environmental law, is able to form a coherent body able to fill gaps and reciprocal influence towards effective protection of the environment from a constitutional level and status. It is, therefore, an emerging global phenomenon of comparative constitutional law, forming a coherent interpretation process of the different constitutional cultures at multilevels, such as subnational, national and supranational (DALY; MAY, 2015).

Erin Daly and James May draw attention to five advantages of environmental constitutionalism or, in other words, the constitutional protection of the environment to the detriment of its prediction only in infraconstitutional norms (DALY; MAY, 2015). The first advantage lies in the normative superiority and greater durability of constitutional norms in relation to those of a different nature. The second is due to the fact that, as part of a superior law of a given territory, the constitutional provision guides public discourse and behavior itself. A third benefit is the likelihood of compliance increases in the face of constitutional provisions. The fourth advantage presented by the authors concerns the fact that, when compared to ordinary environmental laws, these cover more specific issues, the environmental constitutional provisions protect broad substantive

environmental rights, not just inherent to specific or isolated matters. Finally, the fifth advantage of constitutional protection over protection by infraconstitutional laws alone is that environmental constitutionalism provides a safety net to protect the environment when international rules or other domestic laws are not strong enough for judicial enforcement.

It is worth noting that the constitutionalization of a given matter makes its protection more perennial and guides the future legal decisions of a legal system, controlling the legal temporality, from a constitutional dimension. This limits the scope of future discretion, both for the Public Administration and for the courts themselves. In the terms discussed above, environmental constitutionalism involves a fundamental dimension (fundamental environmental constitutionalism), based on textual constitutional devices that protect citizens' substantive and procedural rights to environmental quality, guaranteed by national or subnational instruments (HUDSON, 2015). In addition, there is a second form of environmental constitutionalism, in what is called "structural environmental constitutionalism" as the allocation of environmental regulatory authority at different levels of government and which reflects the structural limits and restrictions to the implementation of environmental policies (HUDSON, 2015).

3 CLIMATE CONSTITUTIONALISM

The consolidation, since the end of the last century, of the new geological era, still informally called *Anthropocene*, demands for a transnational governance and a climate constitutionalism capable of providing the bases for a new wave of global legal conflicts, among which the climatic one stands out. The Anthropocene imposes not only the need to understand a narrative of physical emergency (*physis*) but also a crisis for justice (*polis*) (JARIA-MANZANO; BORRÀS, 2019), strongly guided by the fight against climate vulnerabilities. To deal with this new historical moment, there is a need for integration between climate governance and global constitutionalism, in what has been described as *climate constitutionalism* (JARIA-MANZANO; BORRÀS, 2019).

Awareness of the gravity of the climate emergency has led to an evolution from environmental to climate constitutionalism, with some constitutions beginning to include rights specifically related to climate stability. In this sense, there are at least seven countries that have already incorporated the subject of climate change in their respective constitutional

texts, namely the Dominican Republic (1998), Venezuela (1999), Ecuador (2008), Vietnam (2013), Tunisia (2014), Ivory Coast (2016) and Thailand (2017) (MAY; DALY, 2019). In a more recent publication, constitutional climate clauses were identified in Algeria, Bolivia, Cuba, Ecuador and Zambia (GHALEIGH; SETZER; WELIKALA, 2022).

Other countries, such as France and Chile, are considering holding referendums to include references to the environment and the fight against climate change. In Brazil, there is the Constitutional Amendment Proposal – PEC no. 233/2019 of Climate Stability, which aims to include among the "principles of the economic order the maintenance of climate stability and determines that public authorities must adopt actions to mitigate climate change and adapt to its adverse effects", by adding item X to art. 170 and item VIII to § 1 of art. 225, both of the Federal Constitution (BRASIL, 2019).

At the transnational level, the Framework Convention and the Paris Agreement form the basis of the process of constitutionalizing climate governance (JARIA-MANZANO; BORRÀS, 2019). The imposition of new global environmental problems brought by the Anthropocene triggers the need for a constitutional transition, able to deal with such challenges. Faced with the absence of coerciveness in International Law and the difficulty of domestic law in dealing with global problems, global constitutionalism starts to conceive a coherent body to deal with the challenges imposed by climate justice. Initially, national constitutional texts, international or regional normative texts, as well as decisions in national constitutional, regional and international courts, begin to form pieces that, despite being fragmented at first, soon form an integrated and coherent global body capable of exerting a reciprocal influence between countries and their courts, in a climate constitutionalism with a transnational dimension.

This transconstitutional evolutionary movement aimed at reflection on the inclusion of rights and duties related to climate stability consists of a legal response to the deleterious effects of climate change. For May and Daly (2019), climate constitutionalism offers at least two additional paths for advancing climate justice: the express incorporation of climate change into the constitutional text or the inference that other express constitutional rights (life, dignity, due process and balanced environment) implicitly embody obligations that require responses to climate change.

The importance of climate constitutionalism is to allow the absorption of evolutionary acquisitions involving transnational scientific and legal

elements that are compatible and coherent with constitutional practice at the national level. Also, because it is a norm often accepted as having a higher status and directed to a certain national or subnational community, the Constitution and its text enjoy perenniality and legitimacy before the courts. In this way, the treatment of climatic content by constitutional theory has the effect of providing the capacity for its treatment to be more accessible in court, to have greater capacity for operability and greater local practical application. As stated in the US Constitution, the Constitution is the supreme law of the land.[5] The role of climate constitutionalism is, therefore, to induce the confrontation of the global phenomenon of climate change through more localized (constitutional) solutions, arising from transnational learning in favor of climate justice. The term *climate justice* takes on the meaning arising from the way in which climate change will impact basic human rights, exacerbating vulnerabilities. In the Brazilian scenario, a manifestation of this Climate Constitutionalism has been described from the climate public civil action of IEA *v.* Brazil (SETZER; CARVALHO, 2021), whose content postulates the defense of a fundamental right to climate stability as well as the achievement of the climate goal of combating deforestation in the Amazon foreseen in the Plan to Prevent and Combat Deforestation in the Legal Amazon – PPCDAm, as a sectoral plan for climatic mitigation.

The strong adherence of the judicial courts and the prominent status of the constitutional text in national legal systems demonstrate the significant potential that climate constitutionalism holds to design responses to climate justice, from the institutional design of the Rule of Law, especially from the domestic level. In addition, the greatest attribute of constitutionalism is to serve as a foundation and support for decisions at the national territorial level, aimed at resolving climate conflicts related to the particular circumstances of each country (MAY; DALY, 2019). It is from climate constitutionalism, as a transnational phenomenon, that a more solid basis is formed for an increasingly effervescent support of climate disputes.

3.1 *Rights turn*: the turn of climate litigation towards human rights

As is widely known, litigation has been proving to be a fruitful climate governance strategy through the judicialization of commitments and goals assumed at the international and domestic levels. It is also not new that this

5 As provided in art. VI of the Constitution of the United States of America of 1787.

phenomenon consists of a dynamic and innovative process that makes use of judicial instruments with the scope of demanding necessary measures for mitigation, adaptation or climate damage and losses, to be adopted by governments or private actors. As already demonstrated, the initiatives that took place in each country engage in a dialogue, influencing each other transnationally, arousing reflections about the viability and adherence of these strategies at the domestic level. An important feature of this emerging phenomenon in full effervescence is the use of judicial instruments to deal with the challenges brought about by climate change, permeating such debates through the reinterpretation of traditional legal concepts.

Despite the undeniable fragmentation of this phenomenon, it is also true that such actions are related and similar because they ultimately reflect legal responses to climate scientific information and data. In a more recent pattern, these climate lawsuits have been drawing attention to the direct relationship between the consequences of climate change and its deleterious effects (violation or weakening) of human rights. This historical approach between climate litigation and human rights (rights-based litigation) (PEEL; OSOFSKY, 2017) was endorsed and strengthened by the text contained in the Preamble of the Paris Agreement[6]. At a global level, the recent direction of climate disputes presents a structural pattern that demands judicially for mitigation or adaptive measures (1) to meet the objectives of the climate regime outlined by the Paris Agreement in 2015 (climate governance); (2) based on current quantifiable scientific knowledge, brought by the IPCC in its Reports and Assessments; (3) invoking norms, frameworks and mechanisms for the application of human rights, in order to legally hold governments accountable for complying with such objectives (RODRÍGUEZ-GARAVITO, 2021; WEGENER, 2020).

Below, we turn to some emblematic cases to demonstrate both the strength of the turn in climate disputes towards human rights and the importance of a transnational constitutionalism to sustain a rule of law capable of facing the challenges of climate justice. This is exactly the case in Leghari *v.* Pakistan[7], where there is an important transition from the notion of environmental justice towards its climate dimension. On the other hand, in cases of strategic disputes, it is not uncommon the fact that even cases

6 "Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity" (UNFCCC, 2015).

7 To access the full content, see Pakistan (2015).

that have not been upheld are capable of serving as bases for future initiatives as well as inducing behavioral changes, inductively. This is the case of Juliana *v.* USA, which shed light on the potential of a fundamental right to climate stability.

3.2 Leghari *v.* Pakistan: the reinterpretation of fundamental rights in the face of the new challenges of climate justice

The judicial confrontation of the complex climate issue must be analyzed as a historical process, of overcoming the legal strategy based exclusively on command and control regulation. The coming closer together of the climate issue and human rights occurs in the evolutionary wake of the achievements of social justice, at first, duly followed by its environmental and, more recently, climate dimension. As Randall S. Abate (2019, p. 34) explains, the rights-based thinking was, until recently, confined to the domain of social justice. At that time, strategic litigation used human rights to defend civil rights and affirmative actions, based on social justice. In a second evolutionary moment of North American law, this strategy began to be extended to debates about environmental justice. In order to overcome a regulatory system exclusively of environmental command and control, environmental justice litigation inserted the rights-based theory, aiming to combat the disproportionate exposure of the most vulnerable groups to pollution (ABADE, 2019, p. 34) based on the use of fundamental rights. In this historical course, climate justice brings this analysis to a more complex, current and broader dimension in the analysis and interpretation of fundamental rights.

This process of transition from problems of environmental justice to those related to climate is the object of attention in *Leghari v. Pakistan* (ABADE, 2019, p. 34). Ashgar Leghari, a Pakistani farmer, files a lawsuit against the Federal Government of Pakistan to demand the Pakistani government's implementation of its 2012 National Climate Change Policy and the corresponding Plan for its implementation *(Framework for Implementation of Climate Change Policy – 2014*-2030). As found by the Lahore Court of Appeal itself, "no practical implementation took place on the spot" up to the time of the filing of the action by the plaintiff. The author's reasons confronted the severity of climate change and local vulnerabilities (extreme flooding and frequent droughts) with the absence of any government strategies to conserve water or movement towards heat resistant

seeds, the author fearing he would not be able to maintain his livelihood through agricultural production.

In his action, *Leghari* postulates that the non-implementation of such instruments by the government would result, at the domestic level, in the violation of their fundamental rights, in particular the right to life, which includes the right to a healthy and balanced environment, as well as the right to the dignity of the human person. To do so, he uses an argumentative basis from the constitutional principles of social and economic justice. Also, he makes use of the principles of international environmental law, such as sustainable development, the precautionary principle, environmental impact study, inter and intragenerational equity and the public trust doctrine. In a final decision on 01/25/2018, the Court upheld the public interest demand, in order to ensure that the failure to implement national climate change policies violated the fundamental rights of Pakistani citizens.

Without delving deeply into all the richness of this case, it is noteworthy that, for Chief Justice Syed Mansoor Ali Shah (Lahore High Court), while environmental justice has a more local scope and is restricted to our own ecosystems and biodiversity, the climate dimension of the latter is a reinterpretation of the former. Thus, climate legal issues involve a movement from a "linear environmental issue" debate, inherent to environmental justice issues, towards a "more complex global problem" (LSE; GRANTHAM INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT, 2021, p. 22), which is the climate crisis. Climate justice therefore "links human rights and development to achieve a human-centered approach" and must be "informed by science, responsive to science and recognizing the need for equitable management of the world's resources" (LSE; GRANTHAM INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT, 2021, p. 22). It is noted that in *Leghari*, great weight is ascribed to science, as communication capable of describing the negative effects of the climate change phenomenon. In addition, in this case, there is a legal translation of this scientific information into the judicial finding that the government's failure to adopt the necessary climate actions entails the violation of a series of fundamental rights, such as to life and the environment, to property and dignity of human person. In the words of the ruling in *Leghari*, the framework of constitutional rights today must be "designed to meet the needs of something more urgent and powerful, i.e. Climate Change" (LSE; GRANTHAM INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT, 2021, p. 11).

3.3 Juliana *v.* USA: the fundamental right to climate stability

In this historical course, it was Juliana *v.* USA[8] the climate action that gained great visibility by proposing the constitutional viability of defending a fundamental right to a stable climate system. For the authors, 21 young Americans, government policies and programs to encourage the use of fossil fuels violated their constitutional rights to life, liberty, property, equal protection, and public trust resources (MAY; DALY, 2020). In summary, the authors claim that the federal government, by authorizing, financing and executing policies and programs that cause or contribute to an "unstable climate system", negatively affects the orderly freedom guaranteed by the US Constitution. It deserves mention in the Juliana v. USA case that, despite its setback at the appeal level due to the lack of justiciability (UNITED STATES, 2020), this case, still pending a final decision, represents a milestone, especially in terms of the content of the historic decision of the Judge of the District Court of Oregon, Ann Aiken.

By understanding that climate instability affects fundamental rights, especially those of freedom, the judge accepted the authors' claim in order to adopt the most demanding standard of scrutiny of government policies that may be violating fundamental rights (MANK, 2018; UNITED STATES, 2020). Making use of the notion of ordered liberty as a fundamental right from the substantive due process clause in Obergefell v. Hodges (UNITED STATES, 2015), the decision stated that "Exercising my 'reasoned judgment', I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society" (UNITED STATES, 2020). According to this, government actions that damage the climate system are capable of compromising fundamental rights, such as to life, liberty and property, constitutionally protected under the aegis of the substantial due process clause. The Judge of the District Court also understood the existence of a fundamental right to a stable climate system, on the grounds that fundamental rights can be those listed in the Constitution, as well as those that, despite not being expressly provided for, are (1) "deeply rooted in this Nation's history and tradition" or (2) "fundamental to our scheme of ordered liberty"[9,10] (UNITED STATES, 2020, p. 32). That

8 To access the entire content of the action, see: United States (2020).

9 "Fundamental liberty rights include both rights enumerated elsewhere in the Constitution and rights and liberties which are either (1) "deeply rooted in this Nation's history and tradition" or (2) "fundamental to our scheme of ordered libe1ty[.]".

10 To corroborate the analysis of this argument, see Novak (2020).

is, even in a legal tradition that analyzes fundamental rights from an eminently individualistic perspective, as is the case of the North American constitutional tradition, its reflection based on the challenges imposed by climate change was able to bring to light the judicial conviction that "the right to a climate system capable of sustaining human life is fundamental to a free and ordered society" (UNITED STATES, 2016, p. 34).

FINAL CONSIDERATIONS

Climate Constitutionalism emerges from the transnational dimension of Climate Change Law, from a symbiosis between the international and national dimensions. Adopting a comparative methodological perspective, a coherent and systematic body is formed of how constitutional structures can ensure careful judicial attention to violations of fundamental rights caused by omissions or activities linked to climate change.

The present text sought to present the novel terminology of Climate Constitutionalism, as a transnational learning strategy about the role that fundamental rights have in a scenario of climate change and, consequently, of jurisdictional conflicts that have climate justice as their object. Therefore, there are two ways of using constitutionalism to deal with climate conflicts. The first, by inserting the climate issue in the constitutional text, a path adopted by a group of precursor countries around the world. On the other hand, the use of Constitutional Law to deal with the climate issue starts from the (re)interpretation of anthropocentric fundamental rights (life, property, human dignity and even the environment), now in the face of climate phenomena and the potential violations caused for the lack of compliance with climate targets and commitments. In both cases, the jurisdictional courts will have the role of participating in climate governance, provoked by strategic litigation, under the guidance of constitutional, national and transnational premises.

Thus, a Climate Constitutionalism, forged in the transnational dimension of learning and reciprocal influences, to some extent, lays the foundations for the rights-turn movement to develop, uniting climate governance and human rights.-turn movement to develop, uniting climate governance and human rights. In this evolutionary path, the leading climate case Leghari *v.* Pakistan promotes a pioneering reinterpretation of traditional fundamental rights (to life, human dignity, health, heritage and the environment), based on the emergence of a new global context of climate

justice. On the other hand, Juliana *v.* US, proposes the viability of a fundamental right to climate integrity, given that a balanced climate system is fundamental to a just and free society. Both actions, regardless of the results, shed light on other diverse constitutional traditions, showing all the strength of the transnational dimension of climate disputes and the formation of the bases of a Climate Constitutionalism. After all, as stated in the opening of the Brazilian climate action of the IEA *v.* Brazil, "Climate stability is a new social need essential to the preservation of human life and ecological balance" (LSE; GRANTHAM INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT, 2020, p. 34).

Countries with climate constitutional clauses	**Some jurisdictional climate cases with constitutional basis**
Dominican Republic, Venezuela, Ecuador, Vietnam, Tunisia, Ivory Coast, Thailand (MAY; DALY, 2019), Algeria, Bolivia, Cuba, Ecuador and Zambia (GHALEIGH; SETZER; WELIKALA, 2022).	*Leghari v. Pakistan* *Juliana v. Germany* *Neubauer v. Germany* *Future Generations of Colombia v. Colombia* ADPF 708 STF (Brazil) *IEA* v. Brazil

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