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# UN Climate Action: Why are COPs failing to deliver

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## **From COP 26 towards an Ecocentric future**

Mestrado em Ciência Política e Relações Internacionais: Segurança e Defesa

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“A year ago I was having dinner with some new friends in Athens. I asked them for ideas on what questions I should ask Alexis Tsipras, the young leader of Greece's official opposition party and one of the few sources of hope in a Europe ravaged by austerity. Someone suggested, *"Ask him: history knocked on his door, did you answer it?"*. It is a good question, for all of us.”

- Naomi Klein

## **Acknowledgments**

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## Abstract

The need for reconciliation between human beings and nature has been identified by the Secretary-General of the United Nations as the great challenge of the 21st century (Guterres, 2020f, para. 1). This dissertation focuses on the most recent moment of climate negotiations within the United Nations Framework Convention on Climate Change (UNFCCC), the 26th Conference of the Parties on Climate Change in Glasgow (COP 26). An attempt is made to understand why 26 COPs have not led to a decrease in global greenhouse gas emissions.

This dissertation opens with a brief contextualisation of some of the most impactful documents in the debate on sustainability and climate action. The historical contextualization is useful to understand the foundations that characterize climate negotiations within the UNFCCC.

The assessment of the Glasgow Climate Pact (Conference of Parties 26, 2021) leads to the identification of the most recent advances in the area of climate action, particularly as it was the first final document generated by a COP that refers to the need to phase down coal and abandon subsidies to fossil fuels. However, the analysis of COP 26 would not be fruitful without the analysis of the voices that criticised it the most and whose inputs diagnose its main weaknesses: institutional inertia, fossil fuel lobbies and the subscription to the idea of green growth.

A prescriptive closing chapter seeks to present an epistemological alternative to the weaknesses of the UNFCCC. From an anthropocentric approach to climate action, a transition to an ecocentric approach, founded on Arne Naess' *Deep Ecology* (Naess, 2008) theory, is proposed. It is suggested that building climate negotiating institutions capable of meeting the challenges of the 21st century and the needs of future generations is only possible through an ecocentric education.

Keywords: Climate Crisis; Climate Negotiations; UNFCCC; COP 26; Ecocentrism.

## Resumo

A necessidade de reconciliação entre o ser humano e a natureza foi identificada pelo Secretário-Geral das Nações Unidas como o grande desafio do século XXI. Esta dissertação centra-se no momento mais recente das negociações climáticas no âmbito da Convenção Quadro das Nações Unidas sobre Alterações Climáticas (CQNUAC), a 26ª Conferência das Nações Unidas sobre Alterações Climáticas em Glasgow (COP 26). Procura compreender-se porque é que 26 edições da COP não significaram a diminuição de emissões a nível global.

Esta dissertação começa com uma breve contextualização de alguns dos documentos mais impactantes do debate sobre sustentabilidade e justiça climática. A contextualização histórica é útil à compreensão alicerces que caracterizam as negociações sobre o clima no âmbito da UNFCCC.

A avaliação do Pacto Climático de Glasgow permite a identificação dos mais recentes avanços na área da ação climática, tendo sido o primeiro documento final gerado por uma COP que se refere à necessidade de reduzir a dependência de carvão e abandonar os subsídios a combustíveis fósseis. Contudo, a análise da COP 26 e da UNFCCC não estaria completa sem a análise das vozes que mais a criticaram, diagnosticando as suas principais fraquezas: a inércia institucional, os *lobbies* dos combustíveis fósseis e a subscrição da ideia de crescimento verde.

Um capítulo de encerramento prescritivo procura apresentar uma alternativa epistemológica para as debilidades da UNFCCC. De uma abordagem antropocêntrica à ação climática, propõe-se a transição para uma abordagem ecocêntrica fundada na teoria da *Deep Ecology* de Arne Naess. Sugere-se que a construção de instituições de negociação climática capazes de enfrentar os desafios do século XXI e as necessidades das gerações futuras só é possível através de uma educação ecocêntrica.

Palavras-Chave: Crise Climática; Negociações Climáticas; UNFCCC; COP 26, Ecocentrismo.

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## **List of Abbreviations**

CBDR: Common but Differentiated Responsibilities

CDM: Clean Development Mechanism

COP: Conference of the Parties

EU ETS: European Union Emissions Trading System

INDC: Intended Nationally Determined Contributions

IPCC: Intergovernmental Panel on Climate Change

SDG: Sustainable Development Goals

UNFCCC: United Nations Framework Convention on Climate Change

## Overview

**Research Question:** Why are COPs failing to deliver?

**Secondary Questions:** What was the main progress made during COP 26? What were the main criticisms made to COP 26? What boycotts the COPs outcomes? What alternative would allow mitigating the climate crisis?

**State of the Art:** The climate crisis is increasingly taking up space in the public sphere and in the international arena. This dissertation seeks to establish a temporality thread that follows the evolution of the debate on climate action. Moreover, the case study of COP26, appears as one of the most recent moments of negotiation on the state of the climate debate, which will allow the deepening of those same tendencies.

**Objectives:** Look at the history of climate debates and climate negotiations as a way of get a better understanding of COP 26. From the analysis of the Glasgow Climate Pact and the assessments made by NGOs determining whether or not COP and the UNFCCC are fit for purpose. The final objective is to present an epistemological alternative to the limitations identified.

**Dissertation Structure:** The first chapter is a moment of contextualisation from the second half of the last century to COP26 while the following two chapters are dedicated solely to COP26. The second chapter takes an approach from the point of view of the British Presidency, using the Glasgow Climate Pact as the main source. The third chapter analyses the same moment through the assessments made by NGOs dedicated to the climate crisis. This parallelism allows the identification of the main limitations of COP 26 and the UNFCCC and to move on to a prescriptive moment. The fourth chapter explores an epistemological solution that consists in defending Arne Naess's ecocentrism as opposed to the anthropocentrism that undermines the main institution responsible for mitigating climate change.

## Introduction

This dissertation aims to analyse the results of COP 26 by answering the question “*Why have 26 editions of the COP not been enough to mitigate the climate crisis?*”. From that analysis this dissertation seeks to infer what is boycotting climate negotiations.

In methodological terms, this dissertation aims to understand the state of the current climate crisis through the case study of COP26. The first chapter seeks to contextualize the debate around climate change up to the moment of COP26 whereas the two following chapters hold a more analytical character, focusing on the analysis of the Glasgow Climate Pact and the environmental NGOs' assessments of the COP outcomes. The analytical part gives rise to a prescriptive proposal that constitutes the last chapter consisting of a defense of Arne Naess' ecocentrism as opposed to anthropocentrism.

Several secondary questions arise from the initial question, of which I would highlight four: *a) What is the main progress made during COP26, b) What are the main criticisms made of COP 26, c) What boycotts the COP outcomes, and d) What alternative would allow mitigating the climate crisis.*

The debate on climate justice has been intensifying in recent decades, and it has become evident that it is necessary to go through a set of social, political and economic transitions that enable the mitigation of climate change. Several levels of human knowledge have been struggling with the challenges of climate change, and the political and diplomatic sphere are no exception. The political sphere and the international arena are still in the process of perfecting the most favourable mechanisms to solve global crises like the climate crisis. Therefore, this dissertation also seeks to recognize the potentialities and limitations of the onusian multilateralism.

The First Chapter of this dissertation aims to answer the question: *Which authors have shaped the debate on sustainability and climate justice?* The initial part of this dissertation is then dedicated to

understanding the evolution of the debate around climate action, from its beginnings to its institutionalisation. It is suggested that a better understanding of the history of climate negotiations and the evolution of the debate on sustainability is useful for understanding not only COP 26 but especially the topics that undermine the negotiations within the UNFCCC.

Based on these considerations, the Second Chapter answers the question "*What were the main outcomes of COP 26*" through the analysis of the Glasgow Climate Pact, the main document generated by COP 26. The deepening of the Glasgow Pact allowed inferring some of the initial objectives and final results proposed by the British Presidency. The main components addressed are the topics of mitigation, adaptation, financing, and improvement of article 6 of the Paris Agreement.

Chapter Three answers the question "*What are the main criticisms made of COP26?*". The diagnosis of the limitations of COP 26 and the lack of ambition shown by the parties, included a reflection on *path dependency* experienced within its institutional framework, the UNFCCC. The theoretical lens of Historical Institutionalism, from which the concept of *path dependency* was borrowed, focuses on the influence that political institutions have on society and vice versa and provides fundamental insights on the dynamics experienced within institutions (evolution, stagnation and change). NGOs such as WWF, Greenpeace, Climáximo, and Zero, were the sources used in the diagnosis of COP 26's weaknesses as they are considered key agents of social examination and improvement. Part of the diagnosis coincides with the evaluation of the development agenda favoured by the UNFCCC. To this purpose, part of the chapter is devoted to Principle 12 of the Rio Conference as it addresses the notion of economic growth whose nuances hold an added importance when it comes to the definition of sustainable development.

Finally, the last chapter, with a more normative slant, is dedicated to the question "*What alternative would allow mitigating the climate crisis?*" as it intends to prescribe an alternative to the values promoted within the UNFCCC, assuming that the solution holds an epistemological nature. Thus, it

is suggested that the UNFCCC, based on a concept of sustainable development inextricably linked with economic growth, has a markedly anthropocentric<sup>1</sup> climate agenda. It is proposed a transition to an ecocentric climate agenda, according to which the human being does not place himself in a position of superiority concerning nature. The ecocentrism envisaged during the fourth chapter corresponds to the definition worked out by Arne Naess in his theorisation of the concept of *Deep Ecology*. Naess' *Deep Ecology* provides some of the values that are proposed as useful alternatives for improving the capacity of the UNFCCC and the COP to deliver: the recognition of the inherent value of nature and the protection of human dignity. Moreover, from his work, it is also concluded that the 21st century appears as a century of epistemological crisis regarding the relationship between man and nature, and the 22nd century is presented as the century of ecocentrism, or the century in which the revision of society's value structure generates effects (Naess, 2008, pp. 308-313). The final part of the fifth chapter is dedicated to the construction of the XXII century, to the promotion of an ecocentric education.

Moreover, throughout this dissertation, several opportunities are taken to deepen basic concepts essential to better understand the COPs and the dynamics of the current climate negotiations of which I would emphasize the notion of *sustainable development*, *green growth*, *environmental Kuznets curve*, *anthropocentrism*, and *ecocentrism*. The deepening of all the above-mentioned concepts was essential for a better understanding of the problem analysed, as several of them are characterised by their polysemy and difficult conceptualisation, which makes the debate on climate action more complex and relevant.

The relevance of this dissertation lies in the fact that it deals with subjects that currently assume an increased preponderance within International Relations, being that the best diplomatic mechanisms to deal with such problems are still being sought. Climate change and its disruptive effect on society

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<sup>1</sup> Kyle Burchett addresses how anthropocentrism has distorted the relationship between man and nature in his article "Anthropocentrism and Nature: An Attempt at Reconciliation" (Burchett, 2014)

is starting to occupy the political agendas in an increasingly obvious way, meaning that one of the main challenges of the coming decades will be linked to mitigation and adaptation efforts regarding the climate crisis. Through this analysis I seek not only to diagnose a set of trends that characterize the COP and that limit its ability to deliver, but also to prescribe an epistemic solution to the problems examined throughout the dissertation. The Secretary General of the United Nations, António Guterres, approaches the climate crisis as the great challenge of the 21st century, stating that “*Making peace with nature is the defining task of the 21<sup>st</sup> century*” (Guterres, 2020f. para. 1). Confronted with these statements, it was considered that the therapy suggested in the last chapter could have no other nuance than the epistemic one, whose scope allows the resolution of the structural vices that boycott the struggle for climate justice.

The research phase allowed me to explore several works and articles concerning various aspects of the debate on climate justice. Since it is a subject that touches several areas of knowledge, I was exposed to articles written from various perspectives which made the research stage deeply interesting. This dissertation owes much to the works of Arne Naess, Kate Raworth, Viriato Soromenho-Marques and Naomi Klein, four authors who inspired me and to whom I returned several times.

## **Chapter 1: The History of the Sustainability and Climate Action Debate**

*It means that all our emancipatory struggles, the ones of the past and the ones to come, with all their differences and outcomes, have to be perceived as one and the same struggle. And even if some of these struggles, with all their dreams, hopes and achievements, might appear as nothing more than a tiny grain of sand in an hourglass, we always have to remember that even the tiny grain of sand can at the same time already be a mountain. It just depends on the gaze.*

- Srécko Horvat in *Poetry from the Future* (Horvat 2019, p. 140)

The first chapter of this dissertation arises as a moment of contextualisation of the struggle for climate justice. The opening quote of this chapter, by the Croatian activist and philosopher Srécko Horvat, points precisely to the need to take into consideration the temporality and evolution of the struggles that define human history as these struggles are endowed with an interconnectedness that should not be devalued.

Therefore, this chapter delves into the most important voices and moments of the struggle for climate justices, which in a way have culminated in the most recent moment of climate negotiations, the COP26. It is presumed that understanding the moments that preceded COP26 (and even the creation of the COPs) is useful to better understand its institutional design, the values that sustained it, and ultimately the outcomes it delivers. This moment of contextualisation will later allow the identification of some of the lines that answer the starting question of this thesis.

### **1.1 Environmental diplomacy: Guiding Principles**

*Over the past 50 years, policymakers, researchers and practitioners have recognized that environmental degradation and contested natural resources are part of the reason why people fight and kill each other. Experience shows us that violent conflict can be driven by natural resource degradation and scarcity, by competition for control where resources are abundant, and by the enduring legacies of colonialism. Meanwhile, climate change is beginning to redraw the maps of the world with far-reaching consequences for lives, livelihoods and political stability around the globe. (Brown & Nicolucci-Altman, 2022)*

Despite emerging as a new discipline and area of practice within international relations, the emergence of a variant of climate-oriented diplomacy is not surprising. The introductory excerpt suggests the centrality that the climate crisis occupies in the current political debate. If diplomacy emerges as a foreign policy tool focused on mediating conflicts and building cooperation, climate change and its disruptive effects on populations could not, and should not, be indifferent to it.

Brown and Nicolucci-Altman's article on climate diplomacy suggests that the growing struggle for resources, the disintegration of communities due to local pollution, and even the changing physiognomy of the global map due to rising sea levels and the melting of certain regions, catapults a set of instabilities that endanger peace within international relations.

One of the inaugural documents in the field of climate diplomacy, that will be taken into consideration to better understand COP26, and which establishes the set of basic principles for climate negotiations, is the Declaration on Development and Environment of the 1992 Rio Conference (UN, 1992). Beyond that, this chapter follows a process of contextualising of what have been almost six decades of climate negotiations in a globalised world. This analysis will include the treatment of the main guiding norms, climate summits, scientific documents, and historical events within civil society. All these strands have contributed to the narrative of the current climate negotiations, being crucial to keep in mind the points of contact between them.

#### a) Principles of the Rio Conference

*Principle 25 - Peace, development and environmental protection are interdependent and indivisible.* (UN, 1992, p. 4)

The "*Declaration on Environment and Development*" from the 1992 Rio Conference (UN, 1992) emerges as a founding document that brings together 27 guiding principles concerning climate negotiations. It is a document that is comparable to a Universal Declaration of Human Rights aimed at protecting the planet. These principles were established as the values that should guide multilateral climate negotiations, although certain principles have suffered distortions and transgressions over the years. Among other things, it is stated that the dignity of the human person is the primary motive of the campaign for the protection of the planet:

*Principle 1 - Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.* (UN, 1992, p. 1)

Furthermore, the Rio Declaration underlines the importance of solidarity between generations (Principle 3), the coincidence of the climate agenda and the development agenda (Principle 4), the interdependence of the mission to eradicate poverty and protect the planet (Principle 5), the valorisation of technological and scientific development (Principle 9), and the promotion of legislation to accompany and catapult the climate agenda (Principle 11).

Additionally, the Polluter Pays Principle (Principle 16) states that the entities responsible for pollution must be held accountable and compensate the victims in question. This principle is essential in the treatment that is given to the issue of loss and damage, and one of the biggest battles within the climate negotiations is the creation of financing strategies that compensate the less responsible nations for the loss and damage they have been subjected to. This is a principle of great importance but it has been subject to many distortions over the decades.

It is a basic principle, but it is still maturing as the current society holds limited binding juridical resources regarding the protection of the natural system. Therefore, the underdevelopment of Principles 11 and 16 results in a context of impunity regarding crimes against natural resources. However, one of the advances that have occurred in the area is the fact that the crime of ecocide, as of June 2021, is being architected to potentially integrate a fifth crime of the Rome Statute of the International Criminal Court<sup>2</sup>.

The Principle of Common but Differentiated Responsibilities<sup>3</sup> (UN, 1992, p. 2), corresponding to Article 3 of the Rio Declaration (United Nations Framework Convention on Climate Change, 1992,

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<sup>2</sup> In June 2021, a legal formulation of the crime of ecocide was created collaboratively by a group of environmental law experts. The proposal has been presented to the International Criminal Court as a possible fifth crime in the Rome Statute, with acceptance of this proposal representing a major advance in environmental policy as it would protect the inherent value of nature. Ecocide refers to the “mass damage or destruction to ecosystems, committed with knowledge of the risks...In other words, serious harm to the natural living world.” and would be a means to protect not only humans but above all nature, whereby the destruction of ecosystems that does not affect human life could be criminalized. (Stop Ecocide International. n. d)

<sup>3</sup> “The CBDR principle promotes equity considerations in international environmental law and has at least two consequences. First, common responsibility means that all states shall cooperate to protect the environment and

p. 9), addresses the issue of historical responsibility as developed countries acknowledge their responsibility in creating the climate crisis. Consequently, it is a Principle often mentioned by developing countries seeking to highlight the fact that they do not have the same historical responsibilities concerning the climate crisis. Countries (mainly in the global North) that started their industrialisation process earlier should create cooperation and funding mechanisms that speed up the adaptation of countries that are less responsible for the situation and are more fragile.

Finally, Principles 20 to 23 (UN, 1992, p. 4) are tied to the inclusion of minorities and usually excluded sections of the population. Women, indigenous communities, and youth are treated as essential actors in the fight against climate change:

*Principle 20 - Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.* (UN, 1992, p. 4)

One of the final Principles of the document, Principle 24, notes that peace an essential component of climate action. Even in a situation of armed conflict, the planet, like the life of the civilian population, must be protected. These Principles correspond to the epistemic design or the horizon of values that should underpin the negotiations. Later on, it will be understood that the analysis of the values that sustain an institution is essential to the understanding of the results obtained by it. Therefore, the Rio Principles will be revisited.

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restore ecosystems. It also implies that our generation has a responsibility towards future generations. Second, differentiated responsibilities proceed from inequalities across states be it in capacities, socioeconomic situations or historical, current and future contributions to global environmental problems. CBDR links the exploitation of global commons with a special responsibility to take actions in order to reduce damages. The Rio Declaration specifically mentions developed countries as carrying this responsibility." (Zaccai & Lugen, 2016, p. 2)

## 1.2 The founding texts of the climate justice debate

To better understand the construction of the current paradigm of climate negotiations, it is fruitful to look at the set of documents - scientific and otherwise - that, by their disruptive character, have shaped the debate on climate change.

### a) Keeling: the Metric of Consciousness Awakening

David Keeling (Keeling, 1998), the North American author who devoted his life to climatology, has influenced the climate debate by investigating, in the 1950s, the mechanisms that allowed the measurement of the concentration of gases such as CO<sub>2</sub> in the atmosphere. According to Soromenho-Marques, Keeling's contribution was essential to the creation of a metric that he calls "the danger clock" (Soromenho-Marques, 2022). Such investigation resulted in the – crucial and increasingly exponential - indicator that is the "Keeling curve". The sedimentation of this narrative was essential for the debate to be initiated within the main political and economic institutions.

### b) Rachel Carson on how to silence spring

*Yet such a world is pressed upon us. For the first time in history, virtually every human being is subjected to contact with dangerous chemicals from birth to death. In the less than two decades of their use, DDT and other synthetic pesticides have been thoroughly distributed over all but a few corners of the world.* (Carson, 1962, para. 9)

There are certain books that change the course of history. Rachel Carson was named by the Alaska Senator Ernest Gruening (Griswold, 2012) as one of those authors who, with her book *Silent Spring*, changed the course of the environmental movement. The work, published in 1962 with the help of the editor William Shawn of *The New Yorker Magazine* (Lytle, 2007, p. 1) consisted of a denunciation of the large-scale use of pesticides, especially DDT, and the adverse effects this would have on human health and nature.

*Silent Spring's* original title *Man's War Against Nature* (Lytle, 2007, p. 5) was eventually replaced as the chapter dedicated to the wonder of birds and the phenomenon of nature's silencing due to the deadly effect of pesticides ended up inspiring the name that was eventually chosen. However, the original title ends up revealing how Carson's work is something more than a *poison book*. In fact, her work also appears as a proposal of a type of ecology that echoes the *ecocentric* teachings that had been transmitted to her by her mother.

Therefore, her work is a call for man's humility towards nature and a sharp criticism of anthropocentric chemical practices that have overwhelming effects not only on nature but also on human beings. The toxicity of pesticides, which in the 1960s were already a relatively common practice and invaded the market without much regulation, is accompanied by the toxicity of an anthropocentric epistemology and a distorted human development agenda. Carson's work appears a decade and a half after the boom brought by the end of the Second World War and in the midst of the Cold war. Such a context meant in the American reality (which influenced the rest of the Western arena) that technology was the only viable way to overcome any kind of enemies (including nature) (Santos, 2012, p. 75).

Carson calls not simply for greater regulation of the products that are put on the ground and that invade every corner of the globe but mainly she also calls for a *humble science* (Santos, 2012, p. 81). What is proposed is a scientific model in which its actors are less arrogant and less devoted to the mission to dominate and simplify nature. This lack of arrogance also means that there is a concern to communicate science to the general public, a task that Carson herself has successfully accomplished throughout her work. Science should seek to work together with nature and not against it. A *modest epistemology* (Santos, 2012, p. 81) is pointed out as the solution to the reliance on and overuse of pesticides:

*The basis for scientific humbleness is not only related to knowledge creation and limits to it (that is: epistemological) but ontological as well, because we are part of nature—as stated in the previous excerpt. As such, we suffer because of nature’s imbalances in the same way as other companion creatures, an idea clearly developed by Carson when discussing environmental disease in humans: Where do pesticides fit into the picture of environmental disease? We have seen that they now contaminate soil, water, and food, that they have the power to make our streams fishless and our gardens and woodlands silent and birdless. Man, however much he may like to pretend the contrary, is part of nature. Can he escape a pollution that is now so thoroughly distributed throughout our world? (Santos, 2012, p. 84)*

Carson's work is given more space in this chapter because it proposes certain paradigm shifts that are profoundly useful in the last chapter devoted to the search for epistemological alternatives to the weaknesses identified. Therefore, the idea of epistemological modesty is something extensively elaborated on by Carson and which matches the epistemological solution that is presented in the last chapter.

In fact, *Silent Spring* initiated a debate that catapulted the creation of new legislation and new government agencies for regulation. In 1970 the US Environmental Protection Agency (EPA) was created in accordance with one of Carson's suggestions. The 1970s also saw a number of political and institutional advances in the area of the environment: Earth Day was celebrated for the first time, and the Paris Summit was held in 1972, which gave rise to the Directorate-General for the Environment of the European Commission, and the Stockholm Conference on the Human Environment was held. UNEP, the United Nations Environment Programme, was founded in 1972 (Santos, 2012, p. 78). In fact, the 1960s and 1970s were characterised by great dynamism in terms of environmental policy. These advances were also noted in the area of pesticide control. The influence of Carson's metaphors can still be detected in the European Commission's strand on pesticides:

*A happy coincidence is worth highlighting here: in a leaflet published by the European Commission about sustainable use of pesticides and the removal of the most dangerous pesticides from the market, there is a picture of a (European) robin eating an earthworm.*

*This bird is the European equivalent of the American robin, which was used by Carson in one of her multiple case studies on how the environment was being poisoned with pesticides and how birds were being killed en masse through eating poisoned earthworms. (Santos, 2012, pp. 78-79)*

The author believed that people protected what they loved. She dedicated her early works to her love of the sea and even wrote an article entitled *'Help Your Child to Wonder* (Santos, 2012, p. 74) in 1956 which has since been published as a book under the title *The Sense of Wonder*. Furthermore, her work *Silent Spring* had a great impact for the way she chose to communicate the problem represented by pesticides, with Mark Hamilton Lytle stating that "*Her respect for ideas and her ability to convey them gained the confidence of scientists and turned many of them into Champions of her book.*" (Lytle, 2007, p. 5).

This clear communication oriented to the general public and not only to the scientific community matches one of the central missions of her work: *the right to know*. The author, who testified before the Senate subcommittee on pesticides, considered that the population had the right to know the type of dangers to which they were exposed. Furthermore, it is suggested that the population should be invited to participate in deciding the types of risks to which they are allowed to be exposed and that there should be no monopoly on risk management. Finally, her work, which was also harshly criticised by various sectors of society, was praised for its boldness and sense of public service:

*But much of Carson's science was accurate and forward-looking. Dr. Theo Colborn, an environmental health analyst and co-author of a 1996 book, "Our Stolen Future," about endocrine disruptors — the chemicals that can interfere with the body's hormone system — points out that Carson was on the cutting edge of the science of her day. "If Rachel had lived," she said, "we might have actually found out about endocrine disruption two generations ago."* (Griswold, 2012)

### c) Boulding and the cowboy/astronaut binary

*For the sake of picturesqueness, I am tempted to call the open economy the "cowboy economy," the cowboy being symbolic of the illimitable plains and also associated with*

*reckless, exploitative, romantic, and violent behaviour, which is characteristic of open societies. The closed economy of the future might similarly be called the "spaceship" economy, in which the earth has become a single spaceship, without unlimited reservoirs of anything, either for extraction or for pollution, and in which, therefore, man must find his place in a cyclical ecological system which is capable of continuous reproduction of material form even though it cannot escape having inputs of energy. The difference between the two types of economy becomes most apparent in the attitude towards consumption.* (Boulding, 1966, p. 4)

Meanwhile, the economist Kenneth Boulding authored a metaphorical construction of a world designed by cowboys, opposing a world conceived by astronauts. Boulding's theory - developed in 1967 in *"The Economics of the Coming Spaceship Earth"* (Boulding, 1966) - earned him the designation of one of the founders of environmental economics (Perman, 1999, p. 94). As concerns about natural capital and the environment dissipated in neoclassical economics, Boulding sought to reclaim the classical centrality of the natural environment in economics. The parallelism constructed by Boulding identifies neoclassical misrepresentation with the figure of the cowboy who seeks unbridled expansion and who believes that any frontier is surmountable. In opposition, the metaphor of the spaceship refers to the belief on planet earth as a closed system that requires certain matching tools and mechanisms: either a circular economy or a denial of the concept of disproportionate economic growth. Finally, this article has sharpened the notion that the economic system belongs to a wider system. The natural system houses the remaining ones and that hierarchical relationship must be respected. Boulding's work was responsible for the maturing of an ecological movement as his work warns of the dangers of perpetual growth, stressing that economics is not independent of the principles of thermodynamics and of the natural system.<sup>4</sup>

Moreover, Soromenho-Marques (Soromenho-Marques, 1998, pp. 31-32) adds that Arthur Cecil Pigou - an economist who theorised about negative externalities around 1920 - had already rejected

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<sup>4</sup> "All energy conversions increase the entropy of an isolated system. All energy conversions are irreversible, since the fact that the conversion is less than 100% efficient means that the work required to restore the original state is not available in the new state. Fossil fuel combustion is irreversible, and of itself implies an increase in the entropy of the system which is the environment in which economic activity takes place." (Perman, 1999, p. 22)

the blindness of the great macroeconomic indicators. It is because of such blindness that a whole set of negative externalities, or losses without possible compensation linked precisely to the abuse of limited natural systems, are ignored.

*d) Meadows and *The Limits to Growth**

*A person who was willing to risk political suicide was the visionary system thinker Donella Meadows (...) she was unabashed: "Growth is one of the stupidest goals any culture has ever invented," she said in the late 1990s; "there has to be a point at which it is enough". (Raworth, 2017, p. 54)<sup>5</sup>*

The proposition that the prominence of economic growth is synonymous with worsening the climate crisis was first explored by the report from 1972 entitled "*The Limits to Growth*" (Meadows, Meadows, Randers, & Behrens, 1972). The document was released by the Club of Rome at the United Nations Conference on the Human Environment (UNCED) and is most notably associated with the name of Donella Meadows. In its context, it had a profoundly disruptive effect, being vilified by the political and economic community and held up as an act of courage by authors such as Kate Raworth, quoted above. The document had a sequel – *Beyond the Limits* (Meadows & Randers, 1992) - published in 1992 at the UNCED Rio Conference. Such documents exposed the inconvenient truth that the pace of economic growth practiced under current economic models would have high costs for future generations (Perman, 1999, p. 74). However, Soromenho-Marques points out that this proposition had already been made decades earlier, showing that the climate emergency is marked by the widespread practice of selective blindness and intergenerational irresponsibility towards less convenient truths:

*As for the concern about the exhaustion of resources, in a not too distant generation horizon, it is perfectly identifiable in the minutes of the US Conference of State Governors held in*

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<sup>5</sup> Translated from: "*Uma pessoa que estava disposta a correr o risco do suicídio político era a visionária pensadora do sistema Donella Meadows (...) não teve papas na língua: "O crescimento é um dos objectivos mais estúpidos de qualquer cultura uma vez inventou", afirmou no final da década de 1990; "tem de haver um ponto em que basta."*

*Washington in May 1908 (sixty-four years before the publication of the Meadows Report on The Limits to Growth)* (Soromenho-Marques, 1998, p. 6).

e) **The Brundtland report: the anthem of a common future**

On the other hand, the “Brundtland Report”, published by the World Commission on Environment and Development in 1987 and entitled *Our Common Future*, sought to respond to the theoretical vacuum concerning the definition of *sustainability*. The concept, which is nowadays fundamental for any entity responsible for an agenda that responds to the climate crisis, was not satisfactorily circumscribed. In this sense, *Our Common Future* emerged as the first manual of sustainable development (as it is understood nowadays):

*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.* (Perman, 1999, p. 49)

This report arises from the collaborative work of the members of The World Commission on Environment and Development, WCED. The organisation, created in 1983 by the UN, had as its chairperson, the former Norwegian Environment Minister and Prime Minister, Gro Harlem Brundtland. The report is seen as a milestone in the policy debate on the notion of sustainability, a topic that is now central to climate negotiations:

*It advanced, with great effect, the concept of ‘sustainable development’, which is now on political agendas, at least at the level of rhetoric, around the world. The Brundtland report was, in political terms, an outstanding and influential piece of work.* (Perman, 1999, p. 49)

The document does not assume that economic growth is something undesirable, but only that it should be linked with a strong notion of intergenerational solidarity. Such solidarity serves to some extent to limit a number of abuses that put the planet, and consequently future generations, at risk. This possibility of overlapping the notion of economic growth and sustainability did not go unnoticed by several authors and ended up generating some criticism as “*some environmentalists have expressed the view that ‘sustainable development’ is an oxymoron*” (Perman, 1999, p. 50).

However, some guidelines of economic growth were also suggested, according to which it would be possible to make it coincide with a mission of sustainability. This would include for example reducing the materialistic side of the global economy, making it more service-oriented. Despite all the controversy, the truth is that the “*Brundtland Report*” was deeply influential in its definition of sustainability, as within the UN and the UNFCCC it is the standard notion employed.

#### f) IPCC: the scientific foundation

The perception of the climate cause as a global issue was made possible by the creation of institutional mechanisms such as the IPCC or the Intergovernmental Panel on Climate Change in 1988. The scientific reports of the IPCC emerge as the central source of scientific knowledge and data that underpin conferences such as the COPs. The IPCC reports usually comprise a set of hypothetical temperature increase scenarios to which different kinds of policy agendas correspond. Robert Falkner - who analyses how the climate crisis has been shaping the structure of international relations - notes that one of the unique facets of the climate regime is that the international community realized that a solid scientific basis was essential (Faulkner, 2020).

The testimony of Navroz K. Dubash (Dubash, 2020), a climate policy professional, on the IPCC is essential to a better understanding of it. Dubash explains that the Panel is not intended to create prescriptive documents, but it is essential to create appropriate policy agendas. The reports result from the analysis of data on climate science, predicting impacts and damages, and evaluating possible strategies. The fact that the IPCC does not seek to be a policy prescriptive institution but only an institution generating scientific data and capable of translating that data to the community responsible for designing policy agendas is often instrumentalised by lobbyists trying to influence the data in the reports. Indeed, some lobbyists consider that including in a scientific report that fossil fuels should be phased out is a political rather than scientific statement and should therefore be removed (Carter, 2021).

The IPCC results come from a dialogue between several review rounds by political and scientific actors. One of the weaknesses pointed out to the IPCC and climate science, in general, is the high degree of interdependence between multiple areas of knowledge and the fact that several scientific exercises have to remain at the level of the hypothetical. The scientific results presented in climate science are partly dependent on an excessive number of indicators of complex calibration. The calculation of damages in the relatively distant future with the possible existence of *tipping points*<sup>6</sup> and decisive technological developments is an intricate exercise. Finally, the *what-if* scenarios in IPCC reports have been the main drivers of policy agendas. Upon the publication of the sixth IPCC report (IPCC, 2022), UN Secretary-General stated:

*Today's IPCC Working Group I Report is a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable: greenhouse gas emissions from fossil fuel burning and deforestation are choking our planet and putting billions of people at immediate risk. Global heating is affecting every region on Earth, with many of the changes becoming irreversible. The internationally agreed threshold of 1.5 degrees Celsius is perilously close.* (Guterres, 2021e, para. 1)

#### **g) Stern: the financial benefits of the transition**

Furthermore, it is relevant to mention the 2006 article by Sir Nicholas Stern on the economic effects of climate change. As underlined by Soromenho-Marques (Soromenho, Marques, 2011), the article, commissioned by the British government, had a striking impact on the change of public policies, mainly because it concluded that it will be more economically beneficial to make the ecological transition as early as possible. The "*Stern Review on the Economics of Climate Change*" underlines

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<sup>6</sup> "Most projections of climate change presume that future changes—greenhouse gas emissions, temperature increases, and effects such as sea level rise—will happen incrementally. A given amount of emission will lead to a given amount of temperature increase that will lead to a given amount of smooth incremental sea level rise. However, the geological record for the climate reflects instances where a relatively small change in one element of climate led to abrupt changes in the system as a whole. In other words, pushing global temperatures past certain thresholds could trigger abrupt, unpredictable, and potentially irreversible changes that have massively disruptive and large-scale impacts. At that point, even if we do not add any additional CO<sub>2</sub> to the atmosphere, potentially unstoppable processes are set in motion. We can think of this as sudden climate brake and steering failure, where the problem and its consequences are no longer something we can control. In climate terms, abrupt change means change occurring over periods as short as decades or even years." (Malina et al., 2014, p. 6)

that investing a small part of the GDP in the present for such a transition would generate an acute growth of the same indicator in the future.

A group of two dozen people, led by Stern, were given the task of analysing the costs and benefits of cutting greenhouse gas emissions, with the assumption that these calculations would help create policy agendas in that direction. On the other hand, the report also assumes that the implementation of climate policies is made more efficient through market-based solutions such as carbon taxes. The two main assumptions proposed by the Report that should be kept in mind is that climate change will cause, in terms of costs and risks, the loss of 5% of global GDP every year (Tol, 2006, p. 1). This economic disruption corresponds to the kind of disruptions typical of moments such as the great wars and the Great Depression of the 1930s. However, the rest of the premise proposed by Stern and his team is that early action will generate benefits that outweigh the costs (Tol, 2006, p. 1).

Finally, the contribution of the Stern report is linked to the fact that it concluded that *“The costs of stabilising the climate are significant but manageable; delay would be dangerous and much more costly.”* (Stern, 2007, p. vii). Along with that conclusion comes the suggestion to stabilise the level of greenhouse gases in the atmosphere between 450 and 550ppm CO<sub>2</sub> equivalent (CO<sub>2</sub>e). According to the European Environment Agency we are dangerously close to this value, which will compromise the goal of keeping the temperature increase below 1.5 degrees as the total concentration of greenhouse gases reached the level of 460ppm CO<sub>2</sub>e in 2019 (European Environment Agency, 2022), a level *“within the range of the peak level”* of the value stipulated by the IPCC.

### **1.3 Climate Negotiations History**

The existence of social movements in defence of nature is not something new. It is possible to find this type of conservationist movements as early as the end of the 19th century<sup>7</sup> but the

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<sup>7</sup> The chronological analysis developed in the article *“A causa ambiental: Para uma visão de conjunto”* (Soromenho-Marques, 1998) can be a good starting point to understand the evolution from the first environmental associations to the formalisation of these movements.

institutionalisation of these movements and the transition to multilateral negotiation tables corresponds to a reality that dates back to the second half of the 20th century.

#### a) UNFCCC: the framework

Apart from this nuance, another preponderant factor regarding climate diplomacy is the extent of the current globalization project. Globalization has manifested itself approximately since the 1970s leading to the creation of multilateral debate tables concerning the state of the planet. This paradigm has forced the adjustment of the dialogue between different political scales. Such a reality, whose complexity has especially affected (and harmed) the climate crisis, holds the United Nations Organization as the master organizer of the global table of the climate debate since the 1970's. The UN should be singled out for its entrepreneurship regarding climate action, for having served as a *"catalyst for state concern on environmental issues"* for several decades and for having generated moments of interdisciplinary scientific research and multilateral concertation (Peralta, 2012, p. 136).

Framed within this historical paradigm are multiple events of political negotiation, culminating in the most recent COP26. In 1972 the United Nations Conference on the Environment was held in Stockholm and marked the beginning of a debate about the global climate crisis held by the political community. The Conference resulted in the establishment of the United Nations Environment Programme and the consequent creation of environmental agendas in several governments (Peralta, 2012, p. 132).

1985 was marked by the Vienna Convention for the Protection of the Ozone Layer, and the environmental impulse began to be felt in this decade in political agendas with the creation of increasingly structural mechanisms and processes. The second conference outlined by the UN, the 1992 Rio de Janeiro Conference, resulted in documents such as the Agenda 21. Above all, this conference resulted in the paradigmatic framework that currently serves as the central coordinator of

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global climate action: the United Nations Framework Convention on Climate Change. The Conference of Rio established the guiding principles of climate diplomacy previously discussed. The paradigmatic structure, responsible for the organization of the COP, is widely known as the UNFCCC and is the institutional and operational architecture responsible for the line of continuity between negotiations such as those conducted in Kyoto, Copenhagen, Paris, and Glasgow.

Despite the UNFCCC's diplomatic efforts to tackle climate change, emissions have not been reduced at a global level. This is partly due to several factors associated with the plural nature in terms of sectors, actors, and scales that constitute the institution. Following the evolution of the UNFCCC as a framework is productive to infer such nuances. The UNFCCC have witnessed several changes: the actors are no longer only the industrialized countries but also developing countries and non-state actors, from a *top-down approach*, there has been a transition to a *bottom-up approach*, and from a single agenda, focused on mitigation strategies, there has been a transition to an operational triad, with the inclusion of the pillars of adaptation and financing (Kuyper, Schroeder & Linnér, 2018).

One of the issues debated after the Paris COP refers to the future of the UNFCCC in a new political context endowed with new diplomatic tools and political actors. Some authors created hypothetical lines regarding the future of the UNFCCC and consequently of climate negotiations at a global level (Kuyper, Schroeder, & Linnér, 2018). Three possible scenarios are proposed: one of cooperation, one of compromise, and one of conflict. According to the first cooperation scenario, states make their Intended Nationally Determined Contributions (INDCs) a mirror of their maximum potential, and the UNFCCC will assume a purely operational role, organizing and expediting the negotiations. The conflict scenario reflects the weakening of the INDCs and a combative environment within the negotiations, in which the UNFCCC will play a calming and pedagogical role in the face of recurrent conflicts. Finally, the middle ground, linked with an atmosphere of compromise, requires only the UNFCCC to mediate, as a channel of communication, since States are willing to collaborate.

## b) Kyoto

The third COP, held within the UNFCCC, took place at the Climate Convention in 1997 (UNFCCC, n.d.a) and resulted in the first international legal treaty under which the signatories committed themselves to reduce their emissions: the Kyoto Protocol. Kyoto appears to be a turning point as it is the only binding document in climate negotiations to date. Unfortunately, because it was not signed by the world's largest emitters, it represents only 18% of global emissions (European Commission, n.d.a, para. 2).

One of the main points of contention of this document was the level of involvement that developing countries of the global south should have regarding climate change mitigation efforts. In a clear exercise of the Principle of Common but Differentiated Responsibilities, it was decided in Kyoto that developing countries would be excluded from the emission reduction targets, that developing countries were now predisposed to meet. The testimony of Robert Faulkner (Faulkner, 2020) is enlightening to sense the nuances of this diplomatic impasse that would become praxis in the climate negotiations. According to the author, it can be described as the '*North American self-marginalization*' that consequently leads to the abandonment of negotiations by other major emitters from the negotiations. Indeed, the decision to give prominence to the issue of historic debt and cumulative emissions (Rhys, 2011) has alienated key players such as the US and Canada. These countries - mainly concerned with competition issues within international markets - would not accept an agreement that excluded countries such as the rising competitor, China.

To reach a legal agreement, COP3, the birthplace of the Kyoto Protocol, was based on a set of mitigation targets. It was in this environment of peer pressure that different countries agreed on new reduction targets: compared to 1990 levels, the US would have to reduce by 7% and the EU by 8% (Kuyper, 2018, p. 346) while countries such as Australia could increase 8%. Regarding the North American position, Faulkner (Faulkner, 2020) recalls that the international climate regime suffers

from a lack of truly binding resources and strengthening of the outlined goals, so the action of the main actors is crucial to give credibility to the negotiations. To maintain credibility, a parallel path to Kyoto, that would allow the participation of the USA, was created. This path was formalized by the Bali Action Plan in 2007 (Kuyper, 2018, p. 346).

In addition to setting the first emissions reduction target, the twelfth article of the Kyoto Protocol - under the UNFCCC (UNFCCC, n.d.a, para. 1) - established the Clean Development Mechanism (CDM) that streamlines the establishment of green investments. According to the CDM, the entities investing in sustainable projects in different countries acquire credits concerning greenhouse gas emissions in their country of origin, creating a paradigm in which investment in sustainable projects is synonymous with a license to pollute more (Perman, 1999, p. 363).

In addition, Kyoto left in the history of climate negotiations a pressing warning: the laws of the free market are a priority over the laws of the natural system. The Kyoto negotiating table, within which the principle of CBDR, compatible with the degree of historical responsibility was sought, proved that this would not be possible since it was inconceivable to create a paradigm that would weaken the superiority of developed countries in global markets.

Another mechanism established by the 17th article of Kyoto was a carbon market and consequently an emissions trading paradigm. The mechanism was not uniformly established across the globe and the issue was further explored and implemented during COP26. The revision of Article 6 of the Paris Agreement and essentially the possible creation of a carbon market that in part allows for the delocalisation of emissions was one of the most controversial topics of COP26 which will be further elaborated later on. Despite not having been established at a global level, the creation of a trading scheme for permits to emit within agreed limits was adopted essentially by the EU that, since 2005, has adopted the mechanism commonly known as EU ETS (EU Emissions Trading Scheme).

On the other hand, one of the remarkable developments within the climate negotiations has been the role of developing countries. Besides having an active voice regarding the Principle of Common but Differentiated Responsibilities, it is the representatives of developing countries that bring some taboos to the debate, such as adaptation funding, the ethical responsibilities of developed countries, and the issue of loss and damage (Wewerinke-Singh & Doebbler, 2016, p. 1504):

*Together with Small Island Developing States ('SIDS') from other regions, they were the first to propose a draft text during the Kyoto negotiations that would reduce greenhouse gas emissions by 20 per cent Protocol from 1990 levels by 2005. (Wewerinke-Singh & Doebbler, 2016, p. 1488)*

The relationship between the global North and South, and in the case of climate diplomacy of countries with high historical emissions and newly industrialised countries, has from early on been a point of recognised fragility. The complexity of negotiations linked to climate action is heightened by this overly nuanced dialogue between developed and developing countries, and the principle of CBDR has been undergoing metamorphoses of convenience.

In this context, several authors point to the existence of colonialist tendencies when it comes to certain measures at the climate negotiation tables. The following passages illustrate this same reality, which has been apprehensible since Kyoto and has become *praxis* in the other climate action conferences:

*South African delegate Nozipho Joyce Mxakato-Diseko went so far as to suggest that the co-chairs were treating the proposals of the African Group with contempt, similar to that experienced by the black majority during apartheid. (Wewerinke-Singh & Doebbler, 2016, p. 1494)*

*From its opening line, the Centre for Science and Environment's (CSE) evocatively titled 'GlobalWarming in an Unequal World' sets the stage for and foreshadows the first two decades of Indian climate politics: 'The idea that India and China must share*

*the blame for heating up the earth and destabilizing its climate. . . is an excellent example of environmental colonialism.* (Dubash, 2013, p. 2)

### c) Copenhagen

*I think that night the climate movement came of age: it was the moment when I really realised that no one was coming to save us. Sally Weintrobe, British psychoanalyst and climate expert, describes the following as the "fundamental legacy" of the summit - the dramatic and painful realisation that our "leaders are not looking after us [...] at the level of our own survival".* (Klein, 2016, p. 24)

If the outcomes of COPs are often criticized, the Copenhagen COP is unanimously described as a failed climate negotiation. The COP 15 was surrounded by high expectations for being a moment of reflection and replacement of Kyoto. The final failure may be partly related to the high initial expectations.

However, moments of crisis are usually fertile for the search for alternatives, so the failure of Copenhagen led to the transition from a top-down approach a bottom-up approach. However, after years of negotiations, the possibility of Copenhagen giving rise to a legal treaty was soon announced to be unrealistic. Finally, COP15 eventually resulted in the Copenhagen Accord 33, root of the INDCs (Wewerinke-Singh & Doebbler, 2016, p. 1490).

### d) Paris

*"It is not enough to deliver Paris because Paris does not deliver Paris"*<sup>8</sup>

(Moreira da Silva, 2022)

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<sup>8</sup> Translated from: "*Não chega cumprir Paris porque Paris não cumpre Paris.*"

Paris hosted another UN-accommodated conference in 2015, from which the Paris Agreement resulted. The Paris COP then emerged as a new opportunity to create a document that would replace Kyoto through a more diplomatic and permissive approach that placed the responsibility for setting nationally determined targets on the states themselves. Professor Christina Voigt (Voigt, 2021) notes that the agreement was born out of a peer pressure environment whereby the most influential political actors must seek to be more ambitious in order to create a whole scenario that is also more ambitious. It is also understandable that the replacement of a top-down approach by a system of voluntary contributions generated an environment of discredit with regard to the climate negotiations as it meant from the outset - almost guaranteed - that the proposed targets would not be achieved. The Paris negotiations were rooted in scientific data from the IPCC stressing the importance of not exceeding a temperature rise of 1.5 degrees. That edition of the COP resulted in a document referring to an increase of no more than 2 degrees. It also resulted in a set of INDCs that largely exceed two degrees. In fact, as stated in the opening quote, *it is not enough to deliver with Paris because Paris does not deliver Paris*.

COP 21 deserves to be dealt with in special detail for being the first moment in which the INDCs were put into practice and also because COP26 is the first moment of revision of the Paris Agreement, one being inseparable from the other. Therefore, a working group (Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP 2-8)) was created at COP17 in South Africa to prepare a legally binding document for COP21 in Paris. In this context, the symmetry of the current climate regime was particularly debated in order to perfect the depth of the Principle of Differentiated Responsibilities. The failure of this working group led to a series of special meetings in the run-up to COP21 (Wewerinke-Singh & Doebbler, 2016, p. 1492).

As regards the objective of creating a legally binding document, this objective was met despite the fact that it was pointed out several times that it was a document with hollow and unambitious

guidelines: *"Yet the Agreement is replete with aspirational statements and contains only weak legal commitments in the form of reporting obligations."* (Wewerinke-Singh & Doebbler, 2016, p. 1487).

Furthermore, as noted earlier in relation to the Kyoto Protocol, in Paris the US also assumed the position of obstructing more ambitious objectives, such as the 1.5 degree target, whose importance was widely emphasised by groups composed by developing countries. The USA's performance in the Paris negotiations is described as one of the reasons for the document's lack of reach. Take the pressure exerted by the US to make the requirement in Article 4 that developed countries must continue to take the lead in tackling climate change a non-binding duty: where it originally said *'shall'*, it now states *'should'*, adding a nuance that removes some of the musculature from the document. The subordination of the climate negotiation process to the influence of the USA undermines the quality of the global debate as more energy is devoted to meeting the needs of the USA than to improving the Paris Agreement, to the point that some authors consider that some of the technical changes proposed by the US actually represent serious abuses in international negotiation processes (Wewerinke-Singh, 2016, p. 1496).

Another issue that created friction in the course of the negotiations was the temperature limitation issue. The delimitation of a long-term temperature rise objective is dealt with, notably in Article 2, and sparked a number of peripheral debates. It was debated whether the 1.5 value - strongly advised by the IPCC reports - should be applied globally. This issue had already caused friction in Copenhagen. Thus, the dispute between the objective of 1.5 degrees (supported by key actors such as the EU, Germany, and Canada) or 2 degrees ended up - similarly to what had already been decided in Copenhagen - taking the less ambitious path as the final document contains the much-debated expression *"well below 2°C"* (United Nations, 2015). Added to this degree of ambition is the fact that there are no legal constraints of any kind for those who decide not to meet the target or to do the minimum in terms of setting national targets.

Finally, under the leadership created by developing country actors, issues such as adaptation and finance gained a new texture in Paris. The already familiar mitigation agenda was joined by the ambition to enhance adaptation agendas and their financial foundations. Article 9 is then dedicated to financing and is again marked by a moment of language manipulation. Contrary to what happened in the initial part of the agreement dedicated to the temperature limit, the imperative "*shall*" that implies the obligation of developed countries to provide financing to developing countries for mitigation and adaptation won on the financial issue (Wewerinke-Singh & Dobbler, 2016, p. 1506). The climate negotiations gain a triple focus, with article 7 of the Agreement being dedicated to the praise of the adaptive capacity and illustrating the effects of the participation of developing countries in the climate agenda:

*As the so-called taboo against adaptation gave way during the mid-2000s (89), Article 2 of the Paris Agreement would come to elevate the notion on par with mitigation (96). The Paris Agreement seeks to enhance adaptive capacity, strengthen resilience, and reduce vulnerability through technology transfer, finance, and capacity building [see Article 7 (on adaptation) and Article 11 (on capacity building)]. (Wewerinke-Singh & Dobbler, 2016, p. 1503)*

Lastly, 2015 established the Sustainable Development Goals (SDGs), a guiding metric for public policies focused on improving development such as access to clean energy, sustainable cities and communities, and economic growth.

## Chapter 2: 26th UN Climate Change Conference of the Parties

*We are after all, the greatest problem solvers to have ever existed on Earth. We now understand this problem. We know how to stop the number rising and put it in reverse. We must recapture billions of tons of carbon from the air. We must fix our sights on keeping one and a half degrees within reach. A new industrial revolution, powered by millions of sustainable innovations, is essential, and is indeed already beginning.*

- *Sir David Attenborough's Address to  
World Leaders at COP26 (Attenborough, 2021)*

### 2.1 Returning to Paris

*At the very least, the COP is a major moment of public and media judgement on climate progress. COP26 is the biggest political moment for addressing the climate emergency since Paris in 2015. The interpretation of the COP 26 outcome is likely to shape perceptions of climate action and international climate politics for years to come. (Greenpeace, 2021a, p. 1)*

After the detailed analysis of the fundamental points in the history of climate negotiations, it is now time to address the present and the twenty-sixth COP hosted by the British government in Glasgow, from October 31 to November 13 2021. As noted above, part of the significance of COP26 comes from the fact that it is the first revision moment of the goals of the most emblematic climate diplomacy document of the 21st century, the Paris Agreement. Despite being an ambitious document, it is conditioned by INDCs submitted through a bottom-up approach. Thus, moments like COP26 serve to increase the ambition of such targets. Furthermore, the Agreement binds the countries involved to the simple requirement of progressively increasing their contributions and their level of ambition, as stipulated in the fourth Article (United Nations, 2015, p. 4).

Therefore, COP26 emerges as the moment to review the methodologies and metrics of the Paris Agreement. One of the most underlined points during COP 26, which is deeply connected with the targets established in Paris, is the need not to lose sight of the objective of limiting the rise in temperature to 1.5°C (UNFCCC, 2021b).

## 2.2 The Pedagogy of Crises

Some authors, dedicated to transformational and incremental adaptation to climate change, address how certain harsh natural phenomena can catapult changes in policy agendas (Kates, Travis, & Wilbanks, 2012, p. 94).

If the pandemic crisis exposed a whole range of systemic weaknesses, one of those vices aggravated during the pandemic was the temptation to postpone a set of climate action measures. The pandemic increased the exclusion of more vulnerable political actors from the centre of the negotiations. Consequently, the scheduled moment for the debate over the new INDCs was postponed from 2020 (5 years after the signing of the Paris Agreement) to the end of 2021. In this regard, UNFCCC Secretary-General Patricia Espinosa stated:

*COVID-19 is the most urgent threat facing humanity today, but we cannot forget that climate change is the biggest threat facing humanity over the long term. Soon, economies will restart. This is a chance for nations to recover better, to include the most vulnerable in those plans, and a chance to shape the 21st century economy in ways that are clean, green, healthy, just, safe and more resilient.* (UNFCCC, 2020, para. 10-11)

Moreover, several entities noted the set of opportunities that the pandemic crisis brought for the acceleration of the ecological transition. The pandemic crisis was seen as an opportunity for a green recovery. Different influential entities, such as the World Bank noted that “*countries that have integrated their response to COVID-19 and the climate crisis have been able to find lower-carbon and more climate-resilient solutions that are beneficial not just to health systems, but also the environment.*” (The World Bank, 2021, para. 5-6).

Similarly, in a Times Magazine article Justin Worland (Worland, 2021) notes that if at the beginning of the pandemic the climate justice cause seemed to have been left behind, at a later stage reflection began on the possibility of creating a green global recovery. The author also notes that with the pandemic populations were reminded of the interdependencies that characterise a globalised society. Like the Covid-19 pandemic, climate change is the clear result of a globalised society that is alienated from the interdependencies on which it depends. The pandemic crisis also generated a wave of reflection whereby the population began to question the fundamental guidelines of their society and the type of alternatives that could be found. The author notes that the pandemic generated a desire for change that could profoundly benefit a paradigm shift regarding the relationship with the planet. While the postponement of COP26 may have taken some credibility away from it, many also considered the pandemic crisis to be the ideal catalyst for a whole range of underlying transitions, including the ecological one.

In this regard, several other moments in history - for instance, a century of wars on the European continent that culminated in the construction of the European Union - show that moments of crisis, catastrophes, and conjectures that expose the weaknesses of a society tend to have great educational potential. In short, several of the weaknesses that allowed the exponential development of a deadly virus at the global level are also the weaknesses that allow the worsening of the climate crisis. The speed of the transitions that had to be engineered in order for societies to maintain a relatively normal pace has proven - to a certain extent - that what is at stake is not the human capacity to adapt to new realities and to change habits in the name of survival.

The problem of waiting for the fruits of the pedagogy of catastrophe in this case is that climate change and the imbalances caused by it may reach several points of no return that should not be challenged: the so-called *tipping points* (Potsdam Institute for Climate Impact Research, 2021, para. 1). Thus, the most advisable thing would be to take advantage of every moment of global climate negotiation to prioritize the climate crisis and to prepare societies for an unavoidable transition.

### 2.3 2030

In addition to the extraordinary context that demanded the postponement of COP26, the conference appears in yet another paradigm of fragility that aggravates its importance. The scientific community, which guides (or should guide) the political and economic community, has been using different time scales in its reports: 2030, 2050, and 2100. The last IPCC report denotes the importance of the eight years until 2030 to meet the objective of not exceeding 1.5 degrees (Working Group III IPCC, 2021, p. 18). The decade up to 2030 is considered by the reports of the scientific community as a decisive decade in terms of greenhouse gas reduction results. The main world leaders and the corresponding agendas have tried to reflect this directive (in a more or less ambitious way).

It is therefore urgent that the INDCs reflect this ambition at the moments of review scheduled for this purpose. The UNFCCC proposed the reduction of global emissions by 45% by 2030, with the ultimate goal of achieving carbon neutrality by 2050 (United Nations, n.d). One of the political blocs committed to this mission is the European Union. The publication of the new European Green Deal (European Commission, 2019) made clear the ambition to draw up specific climate action lines for 2030 and 2050, consistent with the guidelines of the scientific community (European Commission, 2019, p. 4).

Thus, COP26 arises in a context of enormous urgency and the need to move from promises to evidence and clear ability to deliver, since decisive decades are coming for the stabilization of the negative externalities of climate change. The quote that inaugurates this chapter - from the statement by Sir David Attenborough in his speech at the COP 26 - illustrates the urgency of negotiating ambitiously for the climate. By underlining that the generations that will be affected by climate change are already alive and are no longer a distant abstraction, Sir David Attenborough denounces one of the central factors of COP26: climate change no longer has only abstract effects in the distant future. The IPCC report on the issue is evidence of this:

*Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. (high confidence) (IPCC, 2018, p. 4)*

## **2.4 Wearing out: the 26th COP**

COP26 represents the twenty-sixth time that the main global actors have sat down to discuss the climate emergency and emissions continue to rise:

*Concentrations of the major greenhouse gases – carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) continued to increase in 2020 and the first half of 2021. According to WMO, reducing atmospheric methane (CH<sub>4</sub>) in the short term, could support the pledges of 193 Member States made in Paris. This measure does not reduce the need for strong, rapid and sustained reductions in CO<sub>2</sub> and other greenhouse gases. Meanwhile, the UN Environment Program (UNEP), warns that five years after the adoption of the Paris Agreement, the emissions gap (the difference between where emissions are heading and where science indicate they should be in 2030) is as large as ever. (United Nations, 2021, para. 15-17)*

The perceived wearing-down of political institutions when it comes to climate negotiations is exactly the premise that gives rise to this dissertation. More than ever, the international community's efforts to deal with the climate crisis do not seem sufficient, with those involved -whether the main world leaders such as Guterres, leaders of small countries in the process of disappearing, and civil society itself- finding themselves worn out and disbelieving of the tools used so far, since there are not enough results to take from these negotiations. The last COP meeting in Glasgow, therefore, comes at a time of corrosion of the institutions that for more than 30 years have shown themselves incapable of speeding up the transition that will enable them to act on scientific recommendations. In short, in addition to being a decisive time for the climate crisis, it is still a fragile time at the institutional, political, and diplomatic levels. Al Gore is one of the political figures who underline

this idea, stating that “*The world is crossing the long-awaited political tipping point on climate right now,*” (Worland, 2021, para. 5).

Furthermore, Soromenho Marques's analysis of the structural lines of the field of environmental policy partly reflects the weaknesses that characterize it. Thus, when referring to environmental policy in Portugal, the author uses the words: *insular, residual, circumstantial, vertical, marginal, relative,* and *not very interdepartmental* (Soromenho-Marques, 1994, pp. 128-129). It could be said that the results generated by COPs are also evidence of this underdevelopment (or lack of interest) in relation to environmental policies.

It is then in this context that - on the 13th of November 2021 and after a pre-COP held from September to October of the same year in Milan (European Council, n.d) - two weeks climate negotiations began in Glasgow. The Conference began with the objectives of refining some loose ends of the Paris Agreement and addressing issues such as financing for adaptation.

## **2.5 The Glasgow Climate Pact**

The Glasgow Climate Pact (Conference of the Parties 26, 2021) is the main document resulting from COP26, which allows the analysis of the central points of the negotiations and is praised for its capacity to have kept the objective of not exceeding 1.5 degrees on the horizon. However, this document underlines the importance of not abandoning the objective outlined in Paris and of effectively putting into practice the standards outlined in the documents.

The four objectives that motivated the British presidency and which are perfectly listed in the Glasgow Pact are mitigation, adaptation, financing, and cooperation. The document opens with the statement of the President of COP26, Alok Sharma, about the motto that echoed during the two weeks of negotiations:

*We can now say with credibility that we have kept 1.5 degrees alive. But, its pulse is weak and it will only survive if we keep our promises and translate commitments into rapid action.*  
(UK Presidency, 2021, p. 1)

The British presidency, together with the largest number of delegations ever to attend a COP, is also proud to have strengthened its focus on concrete action, seeking to move away from the atmosphere of non-binding promises that has accompanied decades of climate negotiations (the contrast between *promise* and *deliver*).

#### **a) Mitigation: Keeping 1.5°C Alive**

Primarily on mitigation proposals, the Pact announces that almost 90% of the world's GDP is now backed by zero-emissions commitments. The political actors present used the negotiating table to add value to their INDCs, with the decade to 2030 being a particular milestone. This was coupled with the president's push for commitments to move away from coal (Conference of the Parties 26, 2021, p. 3), reverse deforestation, transition to electric vehicles, and reduce methane emissions.

Despite the mitigation efforts described in the document, the INDCs, which should seek to approach 1.5 or "*well below*" 2 degrees as suggested by the Paris Agreement (United Nations, 2015, p. 3), for 2030 point to an increase of up to 2.4 degrees. According to the document, the INDCs, if met, would allow the achievement of 1.8 degrees. There is already a set of laws that allow, for instance, to tax greenhouse gas emissions, however the Glasgow Climate Pact is not binding, therefore the failure to comply with certain promises cannot be legally sanctioned.

Despite the permissive language that has accompanied coal the document recognizes that the energy sector is responsible for a quarter of global emissions. There is an urgent need to stop building more coal-fired infrastructure and to invest in clean energy:

*Keeping 1.5C alive requires immediately stopping the building of new coal power plants, scaling up clean power and retiring existing coal fleets: in advanced economies by 2030 and globally by 2040.* (UK Presidency, 2021, p. 9)

The coal issue has been deeply debated and negotiations have been taking place to decide between using the term *phasing down* or *phasing out*. The first and less ambitious version was eventually chosen. In relation to this decision, the UN Secretary-General António Guterres employed incisive language:

*Last Friday, the UN climate convention secretariat published the initial version of its Nationally Determined Contributions report — the collective scorecard on our path to 2030. (...) But major emitters have a chance to present or re-submit more ambitious national climate plans in the next few months with credible emissions cuts aligned with the 1.5-degree objective. And if we take immediate action to end the dirtiest, most polluting and, yes, more and more costly fossil fuel from our power sectors, then we have a fighting chance to succeed.*

*Phasing out coal from the electricity sector is the single most important step to get in line with the 1.5-degree goal. (Guterres, 2021g, para. 13-27)*

Yet the Climate Glasgow Pact reports that 65 countries have already committed to completely eliminating coal, including 20 new countries during COP26. Moreover, the fossil fuel pledges appear ambitious:

*We delivered the first negotiated references to ‘phasing-down coal power’ and ending fossil fuel subsidies in the UNFCCC’s 26-year history. We cannot stop at coal. We need to phase down the use of all fossil fuels across the energy sector. At COP26, 34 countries and 5 public finance institutions committed to end direct public support (c.\$24 billion annually) for the international unabated fossil fuel energy sector by the end of 2022. This is a huge leap forward and will free these funds and many more in the private sector for deployment in renewable energy. (UK Presidency, 2021, p. 9)*

Indeed, the 36th point of Part IV of the Glasgow Climate Pact, dedicated to Mitigation, contains an obvious reference to the need to start moving away from the reliance on fossil fuels:

*Calls upon Parties to accelerate the development, deployment and dissemination of technologies, and the adoption of policies, to transition towards low-emission energy systems, including by rapidly scaling up the deployment of clean power generation and*

*energy efficiency measures, including accelerating efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards a just transition;* (UNFCCC, 2021a, p. 4)

Another facet of mitigation efforts is sustainable land and forest management. Accordingly, it was announced that 91% of global forests were protected by INDCs to halt deforestation by 2030. In addition, through the "*Glasgow Leaders' Declaration on Forests and Land Use*" (UK Presidency, 2021, p. 5), other targets associated with financial packages aimed at protecting soils and forests were formalized. The focus on the importance of forests lies in the fact that they are natural mechanism of carbon capture, an essential process to reach the stipulated target, both in Glasgow and in Paris, of reaching carbon neutrality.

Mitigation is incomplete without taking into account the transition in the road transport sector, responsible for 10% of greenhouse gas emissions. In this regard, the Glasgow Climate Pact stressed that the transition in this sector has finally reached a turning point:

*Our primary objective for transport at COP26 was to demonstrate that the transition to zero emission road transport technology has reached a tipping point: it is inevitable, underway and, through collaborative action, accelerating. COP26 must be remembered as the COP that kick-started the mass market for zero emission vehicles.* (UK Presidency, 2021, p. 13)

At the pre-COP26 meetings, practically no major producer in the automotive industry had committed to making a transition. However, post-COP26, producers corresponding to one-third of the global market have already outlined targets for transition to clean energy. On top of this, countries representing a fifth of the global vehicle market have already added national commitment targets to phase out fossil fuel-dependent vehicles. Finally, non-governmental players such as General Motors and Volkswagen have committed to producing emission-free vehicles by 2035 (UK Presidency, 2021, p. 13).

Methane - mainly from oil exploitation, gas, waste, agriculture, and livestock industry - emerges as a problematic gas that has not been sufficiently addressed at the COPs. It is debatable why this gas has been excluded from the narrative and debates on the climate crisis, since the UN confirms that *"Measured over 20 years, methane is 80 times more potent than CO2 in causing global warming, while nitrous oxide is 280 times more potent"* (United Nations, 2022, para. 12). However, on the second day of COP26, and still within the scope of the Mitigation pillar, over 100 countries - including six major emitters, such as the USA, Brazil, the EU, Indonesia, Pakistan, and Argentina - signed the *Global Methane Pledge* (UK Presidency, 2021, p. 15) to reduce methane emissions by 30% by 2030. This means the establishment of a new platform dedicated to methane, which accounts for almost 50% of emissions and more than 70% of the world's GDP.

#### **b) Adaptation**

The second pillar of the current climate negotiations and COP26 is Adaptation and Loss and Damage management, with more and more countries preparing their adaptation plans for the challenges of the climate crisis. To this end, funding for adaptation is essential. According to reports from the UK Presidency, COP26 was the first time that a funding target for adaptation was set at the global level (UK Presidency, 2021, p. 5). Furthermore, the need to create channels of access to adaptation mechanisms - both financial and technical - for the most vulnerable and fragile populations, such as Indigenous Peoples, was stressed.

The focus on adaptation has not always been clear, and for some authors it is even a sign of defeat and recognition of the inability to consistently follow effective mitigation targets that avoid the need for adaptation. However, the effects of climate change have already started to be felt in the most diverse parts of the globe, and it is no longer enough to invest only on mitigation efforts. Aiming to reduce this widespread state of vulnerability, COP26 hosted a working group: the Sharm el-Sheikh Work Programme on the Global Goal on Adaptation (UK Presidency, 2021, p. 5).

In this context, the Glasgow Climate Pact underlines the importance of the local level, the urgency for each government to formulate specific adaptation plans for their regions. The British government developed the Adaptation Action Coalition (UK Presidency, 2021, p. 16), which resulted in 40 countries coming together to find adaptation responses to climate change. In unison, the 26<sup>th</sup> COP launched the Adaptation Research Alliance (ARA)(UK Presidency, 2021, p. 16). This is an unprecedented organisation with 90 governmental and non-governmental actors ready to create resilience strategies. The new Alliance has also emphasised that, when it comes to the adaptive capacity of different societies, indigenous wisdom will be taken into account (in a clear political exercise to strengthen representativeness within the COPs). Consequently, part of the funding provided to the climate emergency is directed to adaptation strategies, which is evidenced by the Champions Group on Adaptation Finance (UK Presidency, 2021, p. 17), formed by political actors such as the European Commission, New Zealand and the African Development Bank, that aim to find a financial balance to deal with two sides of the climate crisis: mitigation and adaptation.

### c) The Finance pillar

The third pillar of the current climate agenda - designed during the Glasgow COP and formalized in the Glasgow Climate Pact - is the financial pillar. This component is not only important in terms of raising financial resources but also in terms of qualifying the destination of those resources. In this sense, 34 countries and 5 public finance entities (UK Presidency, 2021, p. 9) have committed to stop financing fossil fuel projects by next year. In addition, progress was made toward aligning existing financial resources and major global financial institutions to achieve carbon neutrality.

Through the Least Developed Countries Fund (UK Presidency, 2021, p. 17), developed countries have committed to increasing the flow of financing for sustainable development to developing countries. The Pact claims to have mobilized billions in the public sector and trillions in the private sector, underlining that the costs associated with the impacts of climate change will be greater than the costs of preventing it from advancing. The financial aspect is central to the climate crisis since it

will require a costly structural transition. However, the economic opportunities brought by this transition are also underlined, and it is even stated that "solar power is the cheapest form of electricity in history; zero-emission vehicles will sooner be cheaper, more reliable, and deliver cleaner air in our cities than fossil fuel cars" (UK Presidency, 2021, p. 19)

However, building a more efficient and sustainable future also requires a high degree of upfront investment (note that billionaires such as Bill Gates were present at the signing of the Paris Agreement and are key actors called upon to participate in climate transition efforts). Moreover, investment in formalised adaptation measures (delayed for so many decades and partly inaugurated during COP26) is of particular urgency for certain more vulnerable territories such as certain Pacific islands whose territory is at risk of disappearing in the coming decades.

*The UK therefore placed the commitment from developed countries to raise \$100 billion every year in climate finance at the centre of its incoming Presidency. (UK Presidency, 2021, p. 19)*

The previous passage reflects exactly the UK presidency's final target in terms of financing. Furthermore, according to the Glasgow Pact, with the help of the British presidency, 95% of the most developed countries have set new and more ambitious financial targets dedicated to climate action (UK Presidency, 2021, p. 19), which was produced for the achievement of the 100 billion dollars goal dedicated to the climate cause. It is underlined that the progress made in terms of climate finance is unbalanced with the existence of subsidies dedicated to fossil fuels so the historical pact previously stated to combat the widespread funding of fossil fuel farms through public financing was also committed. This commitment includes all G7 political actors except Japan (UK Presidency, 2021, p. 21).

In addition, politicians from developing countries such as Burkina Faso and the Maldives have signed up to the desire to stop funding fossil fuels, sending a clear message that they want their economies to develop through clean energy (UK Presidency, 2021, p. 21). This initiative is not

intended to end at the negotiating table, and its ambition is to send a signal to private investors to follow the same path. The practice of directing investment to sustainable development and climate transition is central to capacity building and technology transition. Such capacity building in the field of financing concerns areas such as carbon markets.

**d) Collaboration: the improvement of Article 6<sup>9</sup>**

The fourth component developed in the Glasgow Climate Pact focuses on Collaboration. Emphasizing the issue of collaboration means recognizing the urgency of stabilizing interdisciplinary mechanisms between the different areas of the climate crisis. A focus on the finalization of the Paris Agreement (essential for its operationalization) during COP 26 was the development of structures to develop transparency within climate negotiations in general and on issues such as carbon markets in particular. The refinement of cooperation strategies involves optimizing the 6th article of the Paris Agreement which addresses cooperation at the level of INDCs (United Nations, 2015, p. 7).

Along with addressing the collaborative tone that should prevail within the climate negotiations, Article 6 addresses the creation of carbon emissions crediting mechanism at the global level, creating the rules on international carbon markets should function and how and how those carbon credits can be transferred. An operational 6<sup>th</sup> article should help countries implement more ambitious and less expensive INDCs (UNFCCC, 2022, para. 1-6).

The exercise of making collaboration in the climate negotiations more efficient emerges as an essential step to achieving the goals defined in the *Breakthrough Agenda* (UK Presidency, 2021, p. 23) created during COP 26. This Agenda includes points such as energy innovation created so that clean energy becomes the most accessible in the market, innovation in the transport sector with the aim of "*making zero-emission vehicles the new normal*" (UK Presidency, 2021, p. 23), innovation in the steel sector that aims to put carbon-neutral steel at the heart of global markets and innovation in

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hydrogen to ensure the standardization of carbon-neutral and accessible hydrogen in global markets by 2030.

In addition, the English Presidency was responsible for creating a set of institutions to deepen cooperation, such as the Energy Transition Council created in September 2020, the Forest, Agriculture and Commodity Trade (FACT) Dialogue created in February 2021 together with Indonesia, the Zero-Emission Vehicle (ZEV) Transition Council already mentioned and the COP26 Clydebank Declaration (UK Presidency, 2021, p. 24) which refers to the port sector and freight transport.

Finally, the Glasgow Climate Pact notes that COP 26 was the largest COP organized to date with 120 world leaders and some 50,000 delegates. Thus, 194 countries were represented. Moreover, the event had debate days dedicated to gender, youth participation, and public empowerment and, in this context, a Work Programme for Climate Action Empowerment was published. The issue of postponement due to the pandemic is also addressed by the presidency who ensured that to “*ensure that COVID-19 restrictions did not create a barrier to participation, the UK Government funded the required managed quarantine stays for all registered COP26 attendees (party delegates, observers and media) coming from red-list countries.*” (UK Presidency, 2021, p. 25).

Finally, the debate on gender and climate action, fostered by the UK presidency, according to reports from the Glasgow Climate Pact, resulted in better alignment between different feminist agendas: the UNFCCC Gender Action Plan and UN Women's Feminist Action for Climate Justice.

## **2.6 Falling short**

Finally, after analysing the document resulting from COP26, it remains to be examined the mechanisms that prevented the Conference from being a complete success. In fact, what the scientific community, accompanied by the UN, advises is not to exceed 1.5 degrees. After decades of negotiation, this objective is far from being achieved despite political efforts to keep it at the centre

of the debate. Despite all the advances that may have been achieved during COP26, these were not enough, as the INDCs were far from reaching the 1.5 degrees value.

The next chapter considers precisely the institutional constraints that have limited the success of the negotiations. The analysis of the negative aspects of COPs is partly done with the help of critical voices from members of the scientific and civil communities. This layer of society - the scientific community, activists, and indigenous communities - has represented an essential source of pressure to improve the performance of political and economic actors concerning climate action. The following chapter analyses the limitations of the institutional frameworks employed over 26 years of COP. A better understanding of the limitations of the institutional tools used in climate negotiations results in a better understanding of the (usually insufficient and disappointing) political outcomes that result from them.

## **Chapter 3: Behind the failures of COP 26: Institutional Inertia, Fossil Fuel Lobby, and Green Growth**

### **3.1 Beyond Declarations: The Other side of COP26**

#### **a) Critical Voices**

*This COP was as disappointing as any of the previous one. The inclusion of the words “fossil fuels” into the final declaration seems to be the only “advancement” it represents compared to the past. It is meaningless. What is overwhelmingly meaningful is the announcement that the two next COPs will be in Egypt and the United Arab Emirates. This means only one thing for the climate justice movement: there is no possible fiction in which any of us can actually entertain the idea that the COP is a process in any way different from the World Trade Organisation and the G20.*

- João Camargo, activist (Camargo, 2021a, para. 1)

*This is no longer a climate conference, this is now a global north greenwash festival.*

- *Greta Thunberg, activist (Thunberg, 2022)*

*Finally, I want to close with a message of hope and resolve to young people, indigenous communities, women leaders, all those leading the climate action army. I know many of you are disappointed. Success or failure is not an act of nature. It's in our hands. The path of progress is not always a straight line. Sometimes there are detours. Sometimes there are ditches. As the great Scottish writer Robert Louis Stevenson said: "Don't judge each day by the harvest you reap, but by the seeds that you plant."*

- *António Guterres, Secretary-General of the UN*  
(Guterres, 2021d, para. 42)

After the analysis of the main declaratory document of COP 26 - the non-legally binding Glasgow Climate Pact - it is useful to consider other sources of information about the Conference. An institution is not assessed solely through the evaluation it makes of itself, there are other actors - both internal and external - whose insight allows us to deepen the usefulness and efficiency of an institution, or in this case a climate negotiation conference.

In this sense, the initial statements refer to different levels of criticism of COP26, coming from different voices in civil society and politics. The first quote belongs to a Portuguese activist from a non-governmental organization fighting for climate justice in Portugal, *Climaximo*, who notes that the COP is mainly an economic organization based on prioritizing profit and not the planet. The second quote belongs to the famous activist Greta Thunberg, who stopped participating in the COP and who accuses the Conference of having become a *greenwashing* festival engineered by the developed countries of the global north. Finally, the third quote was uttered by António Guterres in his concluding speech at the COP26 and is directly addressed to all those who are disappointed with the results of the Conference, reminding them of the value of incremental changes.

## **b) Declarations, Regimes, Institutions, and Actions**

With such approaches - coming from actors from different scales of civil and political society - it is possible to analyse some of the structural flaws that accompany COPs, weakening them. An institution that systematically falls short of its initial objectives and the real needs of the population deserves to be deepened and possibly restructured. In this sense, Soromenho-Marques's article, "Globalisation, Risk, and International Environmental Policy" (Soromenho-Marques, 2003, pp. 45-50), provides guiding criteria to examine the degree of efficiency of environmental negotiations.

These criteria are based on four fundamental components, corresponding to different degrees of success: Declaratory, Regimes, Institutions, and Actions. *Declaratory* refers to statements made with ethical ambitions and potential translation into action while the category *Regimes* refers to the creation of binding legislation with international and domestic effects. *Institutions* refer to the creation of new institutional tools "*enhancing the capacity of international system to stabilize and secure positive environmental trends.*" (Soromenho-Marques, 2003, p. 47) while *Actions* addresses "*Results of great practical content, which should reflect agreement in praxis, translating the will to co-operate in environmental problem solving on a large scale, while choosing a local focus as the unit of implementation. This includes economic co-operation.*" (Soromenho-Marques, 2003, p. 47).

Given the current acute state of the climate crisis, the most important thing would be to understand what tangible actions come out of COP 26. However, even in terms of *Declaratory* results the Conference ended with INDCs that do not respect the values imposed in the Paris Agreement, which leads us to conclude that even in terms of ethical ambitions (which may or may not have a practical translation) COP 26 did not deliver adequate results. Through the theoretical help of the concept of *path dependency*, this chapter seeks to understand why some components (central to the success of climate action) were not adequately debated. To better understand what the potential sources of institutional inertia are within the UNFCCC, part of the chapter is devoted to some of the insights provided by historical institutionalism.

## 3.2 Multilateralism: Multiple Constraints

### a) Globalization

*So we do have a responsibility to stop ourselves from, what I would call, the reductionist analysis of climate change that look only at megatons and really have a much more holistic approach understanding that all of these issues are intertwined. That's what makes it both hugely challenging but also hugely exciting to understand that all of this is a huge web of connections that yes the carbon intensity of our economy is one factor but so is gender, so is race, so is social divisions, so is geographical divisions. All of that is part of the same web that we have spun and we are perhaps paying more attention to one tread of that web that is decarbonisation but that is not independent from and will not be radically changed – it will be marginally changed but not radically – unless we understand the other treads. (Figueres, 2022)*

Globalisation ultimately means the increased mobility of people, information, resources, ideas, discourses, and problems. The pandemic and the climate crisis can be understood as the downside of this reality. Interdependencies have thickened, simplifying means of communication and complexifying several other issues. The analytical capacity to address the climate crisis should also follow this process of examining interdependencies between different scales and areas of knowledge, as stressed by the opening testimony of this section, by the Costa Rican diplomat deeply involved in climate negotiations. Figueres suggests the need to approach climate policies in a more holistic and sustained manner. She does so by recalling that decarbonisation is only the tip of the iceberg and that the climate crisis is the outcome of a set of deeper systemic violence. In this way, the need to rethink a malignant industrial system and an unsustainable economic system goes through the recognition that these systems are based on racist premises of superiority of the countries of the global north over countries of the south for example. A holistic interpretation of the climate crisis and the effects of globalisation requires the proper diagnosis of the various *treads* of the vast and complex *web* that is the international landscape of the 21st century. When talking about the effects of the capitalist economic system on the planet one is also diagnosing a materialist and extractivist heritage. These

legacies concern not only the relationship built between human beings and nature but also the historical and colonial relationships that have been deepened between countries of the global south and countries of the global north. In a globalised world, all these (historical and geographical) layers should be taken into consideration.

Globalization also impacts the relationships established between different geographical and therefore political scales. Thus, we are witnessing more and more *crossscale linkages* (Rodima-Taylor, Olwig, & Chhetri 2011, p. 4) with different scales influencing each other in an increasingly profound way. The century of *hyper-connectedness* and the fabrication of a sense of proximity has distorted the geographical distance that once existed between the local and the global scales. The following excerpt addresses the need to accept and take advantage of the rapprochement between different political scales:

*Indeed, the global is embedded in the local and vice versa. The very notion of the local and the global constituting a dichotomy is, in fact, problematic because it is based on the idea of “society as a bounded object or closed social system analogous to an organism”, which it is not.* (Rodima-Taylor, Olwig, & Chhetri 2011, p. 3)

Another of the certainties brought by globalization has been the existence of a very peculiar distribution of wealth. If in fact, the capitalist system has meant the increase of wealth at the world level, it has also meant a glaring inability to distribute this wealth. The Oxfam (Oxfam, 2022, p. 1) report on the state of inequality at the planetary level demonstrates that:

*Billionaire wealth and corporate profits have soared to record levels during the COVID-19 pandemic, while over a quarter of a billion more people could crash to extreme levels of poverty in 2022 because of coronavirus, rising global inequality, and the shock of food price rises supercharged by the war in Ukraine.* (Oxfam, 2022, p.3)

Such data makes us wonder whether it is urgent to continue pursuing the creation of disproportional wealth or whether in reality, the root of the problem lies in the need to create an economic system

with better mechanisms for distributing wealth. These asymmetries are glaring in the climate field. If globalization has united the world, the separation between the global north and south is still obvious: the south depends on extractive industries that put them at a heightened climate risk, while the north depends on manufacturing industries, relocating those industries that are inconvenient to have nearby. It becomes clear that the world is one, but the differences in lifestyles, consumption trends, and disrespect for the planet are different:

*Indeed, if everyone were to enjoy the current lifestyle of the developed countries, more than three additional planets would be required. This situation is rendered all the more unsustainable by the process of globalization, even though the precise relationship between environmental degradation and the over-use of resources, on the one hand, and globalization, on the other, is complex and sometimes contradictory. (...) While often generating greater income for poorer countries exporting basic goods to developed country markets, ever-freer trade can also have adverse environmental consequences, by disrupting local ecologies and livelihoods. (Vogler, 2014, p. 342)*

Naomi Klein reflects on this relationship between globalisation and the worsening of climate change, specifically highlighting the diametrically opposite process of degradation of the planet through the creation of a global free market partly represented by the success of the World Trade Organisation (Klein, 2016, p.33). His work then discusses the two aspects of globalisation, emphasising the dimension that has been prioritised. Furthermore, the author notes how climate change is also being instrumentalised for the financial gain of what she considers to be the '1%', exposing the issue of carbon credits as part of the problem (Klein, 2016, p. 20).

#### **b) The Tragedy of the Commons**

*Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. ... Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society*

*that believes in the freedom of the commons. Freedom in a commons brings ruin to all.*  
(Scott, 2015, p. 72)

Globalization has thus meant the broadening of problems whose solution no longer resides solely in local or national power. This process, in reference to a pamphlet dating back to 1833 and retrieved by Garrett Hardin in 1968 (Hardin, 1968) can be called "*the tragedy of the commons*". That tragedy involves the awareness that there are a variety of resources that can be seen as a common heritage and that the parties managing them start from the premise that they want to increase their control of those resources limitlessly. One of the concerns of the article is to understand how to limit these freedoms on a common good or "*how to legislate temperance*" (Hardin, 1968, p. 1257)

To this task of dealing with the freedom of parties to exploit resources, the international political system is still adapting. Multilateralism emerges as the essential tool to deal with global crises. However, such an approach to political negotiation is still searching for institutional foundations that would allow it to have a more binding character without disrespecting the parties' right to self-determination.

This issue of managing our common home, of the need to question an economic system focused on infinite growth that does not match the natural system, is a starting point to concepts that will be discussed further on. Some authors point to the "*suffocating fundamentalism of the market*" (Klein, 2016, p. 41) as something that boycotts the capacity of current political institutions to respond to the climate crisis. In line with what is advocated by Hardin, it is believed that a society unable to question and limit the laws of the free market will obviously be a society unable to respect the natural limits of the planet, and one that will manage its resources in an unsustainable way.

### **c) Multilateralism**

*Particularly since World War Two, the multilateral treaty has been a favoured vehicle by which to manage collective action problems. A collective action problem is one that no State*

*can manage individually but that is at the same time difficult to address collectively because there will be incentive for each individual State to leave others to bear the burden of taking action, while itself reaping the benefits of business-as-usual.* (Scott, 2015, p. 72)

Alongside the virtues of the global scale and the process of Globalisation, there are also the vices of Globalisation. The new configuration of political scales - broader, with boundaries that are more difficult to define - also means a new configuration of conflicts and crises. The globalised world carries crises at a global level, within which it is complex to create efficient consultation environments, determine responsibilities and finally reach a resolution. The prominence of Globalisation has made Multilateralism a vital protagonist as a method of political negotiation. However, it is easy to see that a multilateral negotiation table will mean that it will be more difficult to reach any kind of consensus that generates proportional actions. This is why negotiations resulting from multilateral strategies, and especially climate negotiations, can be interpreted as an insufficient middle ground.

The climate crisis also appears as a crisis of multilateralism as a mediation tool. The creation of multilateral institutions such as the UNFCCC was necessary to try to overcome this crisis of coordination. In the case of the UNFCCC, there is a striking parallel between the complexity of the climate crisis and the need for multilateral cooperation. The degree of consensus achieved through multilateralism within the UNFCCC is not sufficient to achieve the goals proposed by the IPCC. If the creation of the Paris Agreement with the central objective of limiting the rise in temperature to 1.5 degrees (or the much-debated *well below* 2 degrees) was a diplomatic breakthrough, there do not seem to be multilateral concertation tools capable of achieving such goals. The lack effectiveness of multilateral tools was visible at COP26, which was the first moment to review the goals of the Paris Agreement and where there were aggravations of the previously proposed results.

### **3.3 Institutions Are Key: Institutionalism**

#### **a) The fascination with institutions**

This interest in political institutions is justified by the fact that it is impossible to analyse deeply many political phenomena ignoring the value that institutions have in shaping those same phenomena. It was soon understood that the analysis of political life was inseparable from the analysis of its institutions. Societies are embedded in a set of norms, rules, institutions, and social structures that define them and that define their perception of reality. Institutionalism and more specifically some of the basic concepts of Historical Institutionalism will allow the understanding of some of the weaknesses of the UNFCCC and how some of the values fostered within the institution end up shaping our perception of what climate justice is.

### **b) New Institutionalism**

The maturing path of Institutionalism flows into the formulation of New Institutionalism in the last two decades of the 20th century. New Institutionalism involves the re-appropriation of the Institutionalism, which had lain dormant after the Second World War, to explain the emerging phenomena of the end of the twentieth century. The new Institutionalism is partly a response to the increasing process of globalization experienced at the end of the twentieth century. This process has required the creation from scratch or the profound restructuring of old institutions:

*Finally, the global expansion of capitalism and European Union (EU) integration led to significant research demonstrating the role of institutions as intermediaries between structures and outcomes. Some social scientists explicitly referenced earlier institutional works in their call for bringing institutions back in. This new body of work that came to be labelled NI sought to investigate among other things the interaction of society and institutions, the sources of institutional coherence, how historical processes lead to delayed outcomes, and nonutilitarian models of behaviour. (Barkanov, 2016)*

The analysis of institutional structures touches various other areas of knowledge besides political science, such as economics, anthropology, sociology, and psychology. Thus, different branches of Institutionalism place different focuses on different initial assumptions.

### 3.4 Historical Institutionalism

#### a) Historical Institutionalism: The Meso-Level

*Disappointed with grand theory and bored or simply uninterested in the technical approach of behaviouralism, many political scientists continued to be interested in real world outcomes. It was here that historical institutionalism was born. Political scientists, some believe, should actually try to explain important real world events.* (Steinmo, 2008, pp. 157-158)

Historical Institutionalism emerges as a middle-ground approach (when compared to other branches of New Institutionalism) that recognizes the richness of assuming that individuals are simultaneously rational and relational being with particular biological characteristics. The belief that human behaviour needs adapted laws makes this approach more interested in the practical outcome of its analysis. This approach is deeply linked to empirical analysis and is more interested in explaining than predicting political phenomena through generalizable laws as it is assumed that prediction exercises don't take into account "*contingency, and the complex interaction of interdependent variables over time.*" (Steinmo, 2008, pp. 174-175).

Historical Institutionalism emerges as a branch of Institutionalism that uses history as a primary analytical tool, believing in the analytical value that it has for a better understanding of the political structures under analysis. In fact, institutions are created in a given political context which triggers their need and political actors learn by experience and do not live in a historical vacuum, so this historical content should be deeply analyzed.

Thus, this approach, born at the end of the 20th century but officially coined at the beginning of the 1990s (Steinmo, 2008, p. 150), was the one that most endeavoured to explain mechanisms of political change through the use of concepts such as *path dependency* and *institutional layering*. After all, the analysis of the interdependencies of the past that bring us to the crystallisations - in the form of institutions - of the present, is nothing more than a keen proposal for the study of change:

*These paths are made up of institutions (with their values, standards and rules) and public policies determined by previous choices that impose constraints on institutional development processes. Thus the notion of dependence in relation to the path taken highlights the historical dynamic that dictates that once a path is chosen, it is difficult to change it because the processes become institutionalized and are reinforced over time. It becomes increasingly difficult to reverse past institutional choices because not following the rules and standards established by previous choices (exit option) generates 'costs' in terms of investment, learning, coordination and anticipation. That is why existing institutions are usually modified and not replaced despite their less than optimal nature, and institutional inertia is generated. (Trouvé, 2010)*

Following the parallelism between political science and exact sciences, historical institutionalists may be considered the environmental biologists of the social sciences. This comparison arises from the fact that these theorists see the analytical value of examining the interdependencies between different factors. This sensitivity to these interdependencies in human nature means that these theorists do not look for great laws capable of predicting future behaviour, but are very cautious about the dynamic and unpredictability of human nature:

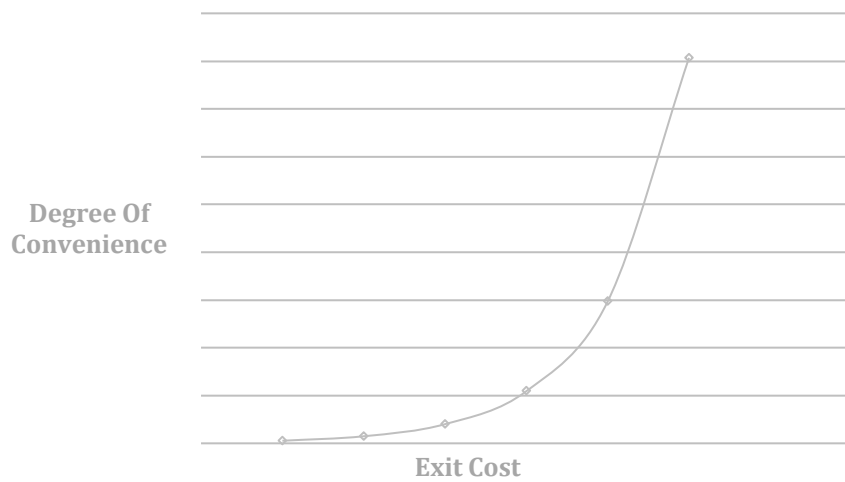
*In sum, for historical institutionalists, history is not a chain of independent events. There is more than the temporal dimension implied in this basic point. Taking history seriously ultimately means that the scholar is sceptical of the very notion of variable independence. Instead, acknowledging the importance of history suggests an explicit awareness that important variables can and often do shape one another. Historical institutionalists, more than political scientists in some other traditions, are explicitly interested in these interactive effects on the interdependence of multiple causal variables. Historical institutionalists are something like the environmental biologist who believes that in order to understand the specific fate of a particular organism or behaviour, she must explicitly examine that organism or behaviour in the ecology or context in which it lives. (Steinmo, 2008, p. 166)*

Finally, Historical Institutionalism is brought into play to this discussion since understanding historical interdependencies seems to provide essential lessons on the measures to be implemented in the future:

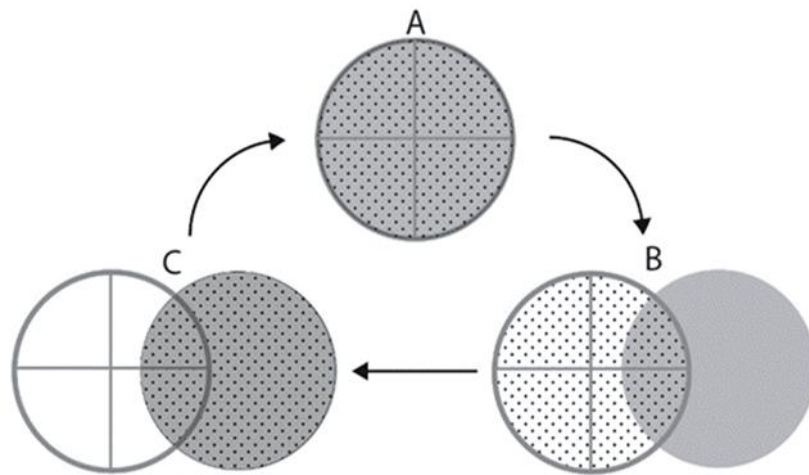
Secondly, if we cannot know the effects of past ideas, how could we rationally calculate our self-interest for future policy ideas? (Steinmo, 2008, p. 173)

### b) Institutional Inertia: Path Dependency

'institutions are sticky; they often remain in place long after mismatches between regimes and the biophysical and socioeconomic settings with which they interact become severe and widely understood, at least among specialists'. (Young, 2010, p. 379)



**Fig. 1** *Path Dependency*: (Increasing) Relationship between the degree of convenience or the longevity of the institution and the cost of exit.



**Fig. 2** Institutional Mismatch: the three domains (circles) can be interpreted as the UNFCCC, scientific recommendations from IPCC, economic interests namely economic growth. Currently scenario A is not a reality as there is not a perfect match between the UNFCCC, temperature mitigation according to the IPCC recommended values and the economic growth mission.

The first graphical representation refers to the idea of *Path Dependency*, where there is a direct proportionality relationship between the longevity of an institution and the exit costs. Therefore, over time the institution will acquire a series of self-sustaining layers which will cause a greater reluctance towards change and a greater difficulty in distance the institution from its initial institutional moulds. On the other hand, the second diagram, inspired by an essay on Institutional Inertia in European fisheries (Schuch, Gabbert, Richeter, 2021, p. 4), illustrates a situation of institutional mismatch. What can be concluded from this graph is the existence of 3 forces that ought to overlap: the institutional tools of the UNFCCC, the scientific recommendations of the IPCC not to exceed 1.5° C, and the mission of economic growth defended by major actors in the international context.

"A" represents the ideal situation whereby the diplomatic and institutional tools of the UNFCCC would be aligned with the mitigation capacity prescribed by the scientific community and the capitalist paradigm. However, what we are currently witnessing is a mismatch between these three forces. Assuming that the filled circle represents the IPCC mitigation target and the circle with dots

represents the UNFCCC, situation "B" represents the present, a *green growth* approach according to which the UNFCCC is almost fully overlapped with the values of the capitalist system. Finally, situation "C" would represent an *ecocentric* approach whereby the mitigation effort is more relevant than the economic growth agenda.

Bringing back the initial quote that opens this section, one can easily understand how institutions can be described by their *stickiness*. More specifically, it is almost impossible to study climate negotiations without coming across a sense of institutional inertia and a favouring of incremental change.

Institutions are usually created as tools to create stability. In analysing that stability, that reluctance concerning change, Historical Institutionalists sought exactly to look for endogenous sources of change. Thus, path dependency analysis means the analysis of the capacity of an institution to adapt and change through the analysis of its historical layers (Schuch, Gabbert, Richeter, 2021). As far as the climate negotiations are concerned, it would be useful to understand what institutional changes would have to be put in place for the UNFCCC to have greater flexibility to deal with the challenges it faces.

It is a theory that places the subject almost in a deterministic position as it submerges them in institutional models with such dense historical layers and so few mechanisms for change that they seem to have no alternative option. This sense of determinism, which applies to the dynamics of Globalisation or to the economic system of capitalism, suggests the non-existence of alternative paths or tools for change. Globalization as a process centred on the idea of gigantism and endless progress creates an illusion of irreversibility. Actors are led along pre-existing institutional paths according to which there are many tools for maintaining the structures of the past, and not so many exit options.

This will be a relevant theory to further explore the institutional inertia of the institution that frames climate negotiations, the UNFCCC. The existing literature on *path dependency* links the concept to various fields of knowledge such as mathematics, political science, and economics, showing the polysemic nature of the term. In fact, the concept of *path dependency* can refer to the idea of memory, irreversibility, maintenance of the status quo, and valorisation of the timing and sequencing of events. Some of the nuances of this concept will be explored in the following pages.

### c) Increasing Returns and Path Dependency

Paul Pierson's article (Pierson, 2000) exposes the mathematical side of the *path dependency* concept, linking it to the idea of *increasing returns*. This theory, illustrated by the mathematical model of the *Polya Urn Process*, intends to illustrate the accumulation of pre-existing processes or the idea of *positive feedback*. According to Pierson, the mathematical observation of *increasing returns* allows the creation of some assumptions comparable to the concept of *Path Dependency*, both of which analyse vicious processes that are self-sustaining.

*Unpredictability* is one of these factors since the possibilities that may arise from an initial assumption are practically indescribable over time. Another assumption is *inflexibility* as the author notes that the longevity of a process implies that it becomes harder to shift from one path to another. This premise also means that the earlier the necessary changes are sought the less inflexibility has to be overcome as the passage of time can mean a situation of institutional lock-in (Pierson, 2000, p. 253).

The last two assumptions are *Nonergodicity* and *Potential Path Inefficiency*. The first suggests that small events should not be disregarded as they may influence the sequence of events. The second points out that "*In the long-run, the outcome that becomes locked in may generate lower pay-offs than a foregone alternative would have.*" (Pierson, 2000, p. 253)

North further stresses that inefficient institutional designs will create inefficient outcomes. Stating that adapting to pre-existing but superfluous institutions can end up meaning inefficiency:

*Individuals and organizations adapt to existing institutions. If the institutional matrix creates incentives for piracy, North observes, then people will invest in becoming good pirates.*  
(Pierson, 2000, p. 256)

Another aspect highlighted by Pierson is the predisposition to change in the economic field when compared to the political field. The author suggests that in the economic field change is more plausible and the ability to adapt is enhanced due to the extremely competitive environment of the capitalist system. This competition requires the creation of dynamic learning and adaptation tools that are less common in the political field where reversing processes is more complex (Pierson, 2000, p. 256). On the other hand, the political field is more limited in terms of adaptive capacity due to the *Status Quo Bias* and the *Short Term Nature of Political Actors*, two concepts that can be linked to the inertia felt at the UNFCCC.

Finally, the author observes that organisms controlled by processes of *increasing returns* are endowed with four characteristics: *multiple equilibria*, *contiguity*, *a critical role for synchronization and sequencing*, and *inertia*. *Multiple equilibria* meaning that many outcomes are possible to achieve from a given starting point. *Contingency* suggests that "*small events, if they occur at the right time, can have large and lasting consequences.*". The third characteristic underlines that the same event placed in different contexts will result in different outcomes. *Inertia* refers to the idea that "*Once a process of increasing feedback is established, positive feedback can lead to a single balance. This equilibrium, in turn, will be resistant to change.*" (Pierson, 2000, p. 263).

#### d) The Third Type of Path Dependency

Liebowitz and Margolis (Liebowitz & Margolis, 2013) represent another example of authors who expose an interesting aspect of the *path dependency* concept. The authors attempt to develop an

analysis of paradigmatic cases of increasing returns, delving into the case of the QWERTY keyboard (the chosen one despite not being the most efficient in terms of writing speed) and the choice of the VHS system instead of the Beta system.

However, the most useful insight we can draw from this article, pertaining to the analysis of climate negotiations, is the distinction between three types of *path dependency*. The first type is linked with actors who make long-term decisions that turn out to be the right ones. The second refers to actors who make decisions that are the right ones given the information available at the time of decision making. In this case, even if there is regret, the actors could not have made any other decision.

Furthermore, the third type of *path dependency* - and the most relevant for the argument discussed here - refers to actors who made certain mistakes that were avoidable from the outset. This type of *path dependency* is interesting because it exposes a chosen inefficiency within an environment where there was enough information to make more efficient decisions. It is an approach that invites us to analyse the creation of institutions from the point of view of the information existing in the context of their creation.

Concerning climate negotiations, it invites us to analyse the information that existed at the time of the design of the founding principles of the UNFCCC. This approach allows us to understand to what extent the results presented at COP26 are not the result of a structure of increasing returns founded on purposefully incorrectly chosen founding values. It makes us wonder whether, in 1992, when the principles of the UNFCCC were created, there was not already enough information to understand that *green growth* was not the most efficient strategy and would lead to the failure of the main point on the agenda of the institution: the mitigation of climate change.

#### e) What would Darwin Say on Political Evolution

One of the concepts that arises most in the literature on Historical Institutionalism is that of *evolution*. Lewis and Steinmo's article "Taking Evolution Seriously" (Steinmo & Lewis, 2007) explores a relevant parallelism between the analysis of change in the evolutionary exact sciences and the analysis of change in Historical Institutionalism.

The simplest parallelism to note between evolutionary theories and the approach of Historical Institutionalism is the deep interest in the study of interdependencies, of lines of causality between various factors (of natural and social life). The study of these interdependencies means enhanced attention to incremental changes whose cumulative effect eventually gives rise to transformational changes. Recognizing that the Darwinian theory of evolution is outside the focus of analysis of this thesis, it only remains to note that one of its greatest contributions was the theorization of variation in this incremental sense (Steinmo & Lewis, 2007, p. 5).

Thus, the article in question builds a comparison between the field of genetics and political life. Both are disciplines that study non-inanimate variables subject to imperfect recombination processes. The sciences that deal with such variables must also have this flexibility, abandoning pretensions of creating generalizable laws.

Understanding the nature of variation and what it means to progress within that variation requires looking at variables such as biology and the surrounding environment. This *Concept of Dual Causation*, of balanced analysis of *nature* and *nurture* is essential to the analysis of genetic and political phenomena.

Another similarity that unites the two areas of knowledge is the understanding of the vocation for permanence:

*Why 'reproduce' rather than 'survive' or 'maximize our individual self interest?' This is due to the overwhelming evidence collected by biologists that individuals (at least in all social*

*species) simply do not consistently act in their individual self interest. In fact, all social creatures invest enormous personal resources in reproduction and the protection and future success of those who share their genes. (Steinmo, 2007, p. 23)*

As explained in the article, both in genetics and in politics, there is a clear difference between *reproduction* and *survival*, underlining that a purely selfish and individualistic society does not survive. Some of the profiles favoured are described as having little capacity to expand into the future.

This issue of intergenerational solidarity has been much worked on within climate negotiations. Indeed, the human species is characterized for the time invested in protecting and maintaining future generations. However, it seems that this predisposition has been undermined by the triumph of individualism that is characteristic of the *homo economicus*<sup>10</sup> (Raworth, 2017, pp. 115-154) and that sustains the capitalist system. Raworth, an author that will be further explored in the last chapter, believes that favouring profiles like the *homo economicus* E. F. Schumacher's work also devotes some attention to the notion of *permanence*:

Finally, there is a fundamental distinction between evolution in the genetic field and evolution in the political field: human beings are intentional beings, meaning that they “*can consciously decide to change the way they affect their world*” (Steinmo & Lewis, 2007, p. 19) and therefore intentionally change the course of evolution.

The article even proposes that by making certain decisions at the institutional level, prioritizing certain values over others, and making certain preferences institutional lock-in, we are also sending certain genetic messages. This proposition believes that the evolution of the political institutions

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<sup>10</sup> Concerning the prominence of *homo economicus* in the 20th century, Kate Raworth, in her work *Donut Economics*, devotes the third chapter to the description of its characteristics. The third of seven changes that the author believes must be made at the economic level to alter the course of climate change is linked to the change in human nature associated with *homo economicus*. (Raworth, 2017, pp. 115-154)

around us may influence the genetic material that prevails since institutions reflect the kind of social characteristics that are valued. Being so, the evolution of institutions reflects the valuing of certain human characteristics and expectations over others and underlines certain preferences:

*Almost every constitution begins with broad statements about human nature, but these statements could in fact be based in really quite different assumptions about human natures. The evolutionary point is that these different institutional designs may ultimately structure or shape these different human natures. If so, they have far more important implications than the obvious fact that they help structure strategic behavior. If they advantage certain types of individuals over others (rationalist vs. contextualists, or systemizers vs. empaths ) then they may also have the evolutionary effects of shaping who wins, who loses, who reproduces and who does not, and then, what we prefer. (Steinmo & Lewis, 2007, p. 29)*

It is with this capacity for choice and intentionality in mind, that chapter 5 will be devoted to the kind of political (and ethical) choices that can be made to escape certain institutional constructions that do not respond to current needs.

### **3.5 Multilateral Institutions: UNFCCC**

#### **a) UNFCCC: limitations**

*The COPs and UNEP have shown their limits in shifting the global economy and in building up sustainability and global resilience. Efforts are scattered. UNEP has the status of a simple programme within the United Nations governance system. A programme cannot take autonomous decisions and apply them. COPs and UNEP do not have a strong trade component which is rather attractive when we recognise that trade is the main hindrance on the road to sustainability. (Manga, 2018, p. 329)*

The recognition of the limitations of the UNFCCC as the framework institution of the COPs is a means to identify the points that need correction and the alternatives that will need to be found for those points. Indeed, the UNFCCC emerges as a convention without supranational leadership which translates into an inability to impose binding measures to mitigate climate change.

However, designing a new institution from scratch, rather than simply accumulating new Protocols and Treaties along the same lines, is challenging and has risks. The effectiveness of the UNFCCC in addressing the climate crisis is debated as decades of negotiations have not led to lower emissions globally. It is questioned whether the UNFCCC should be *supplanted* or further *supplemented*:

*Indeed, even talk about 'reform' may highlight points of difference, positions may become more polarized, and the current climate change regime, understood as consisting of the 1992 UNFCCC, its 1997 Kyoto Protocol, and decisions taken by Parties under these instruments, may be weakened through continual emphasis on its shortcomings. As with any institution created through political compromise, it was the best that could be achieved through a difficult process of negotiation. If the current regime were to be abandoned, it may not only be the case that nothing better could be created, it may in fact prove impossible to get a replacement framework convention of any kind. The possibility of beginning from scratch is particularly daunting given the urgency of the action needed to address climate change.*  
(Scott, 2015, p. 71)

Thus, it would be unfair not to approach the UNFCCC in its complexity as it should not be approached as a simple intergovernmental negotiating forum. In fact, the UNFCCC currently houses multiple layers of society beyond politics. The institution currently holds a catalytic function, bringing together the interests of civil society, the scientific community, and the economic faction of society (Hermwille, Obergassel, & Beuermann, 2015, p. 1).

However, this meeting place between various textures of society has not yet been able to catalyse effective mitigation measures towards the goal - formalized in the Paris Agreement - of limiting global warming to 1.5 degrees as some authors point that “*the consensus-based decision-making rules have effectively impeded more ambitious climate protection by a subset of parties.*” (Hermwille, Obergassel, & Beuermann, 2015, p. 2).

However, as suggested by the sentence above, this does not mean that the UNFCCC has not been responsible for stimulating action in favour of the climate crisis. In this sense, it remains to be

understood - with the help of the *path dependency* concept - the kind of constraints that limit the UNFCCC's success. Multilateralism has already been pointed out as a double-edged sword, widening the negotiations' potential but also making them more complex. The gigantism of the climate crisis obliges such multilateralism, but this should not prevent us from reflecting on the basic units of such action, each State embedded in its socio-economic context. Sensitivity to different scales of action is a challenge for any multilateral organization as actors have their own structural routines, meaning that there is a “*duality of structure*” according to which national political dynamics are decisive for climate negotiations (Hermwille, Obergassel, & Beuermann, 2015, p. 4).

The extreme fragility inherent in managing different political scales was reflected in the decision taken at the Copenhagen COP to switch to a *bottom-up* approach that emphasises freedom of decision at the national level even when dealing with global crises. In this sense, the transition from the original Kyoto system to the Copenhagen system has generated controversy as the INDCs have not been sufficient to achieve the initially agreed mitigation value:

*The move away from Kyoto-style binding and collectively agreed QELROs towards a bottom-up approach in which countries make non-binding pledges may well reflect the inability to effectively draw on structures of domination, that is, defining, allocating, and exercising control over resources, at the international level. (Hermwille, Obergassel, & Beuermann, 2015, p. 7)*

The complexity of the issue also lies in the fact that it is a difficult one to frame and concede. The problem is scientifically proven but multiple narratives can be created around climate change. The 21st century - its increasing tendency towards polarisation - is proof that complex issues are exposed subcomplexly through binomials. The UNFCCC also seems to have given in to the creation of dualisms useful for maintaining the status quo. It is a sign of this status quo bias to create the narrative that the climate crisis is an environmental problem and not a development problem:

*On the flip side, the focus on emissions has strongly monopolized the narrative that climate policy is based on. It may be fundamentally sub-complex to see climate change solely through the lens of emissions because it frames climate change as an environmental problem. However, as historically nearly all economic activity has been associated with GHG emissions, framing commitments/contributions in terms of emission targets directly triggers the perspective of seeing climate protection as an economic burden and impediment to development, as can be seen by frequent statements of concern about access to 'carbon space' or 'development space'. Climate change is thus arguably fundamentally a development problem much more than an environmental problem. (Hermwille, Obergassel, & Beuermann, 2015, p. 8)*

Some authors point to the "triumph of the market logic" within the UN as one of the main sources of inertia within the climate negotiations, leaving the health of the planet in a deadlock for decades. Klein suggests the mutual reinvention of a relationship between developed and developing countries that merely seeks to respond to market logics whereby developed countries refuse to slow down their economic growth and developing countries refuse to give up their right to pollute (Klein, 2016, p. 38).

#### **b) The Principles of Rio: Which Development?**

The theoretical lens of Historical Institutionalism and the deepening of the notion of *path dependency* allowed the understanding of the importance of analysing the ideas, values, and historical contexts that gave birth to the UNFCCC. With this in mind, the next pages are dedicated to the analysis of the Rio Principles (UN, 1992), the founding principles of the UNFCCC, partially addressed in the second chapter.

The analysis of the 27 founding principles was made in the hope of finding explicitly reflected some of the values that would have suffered a *lock-in* process and created the failure of the institution. I had hoped for a more obvious result in this regard.

The Rio Principles have the value of an ideological framework for the UNFCCC. It is a document that advocates the need to eradicate poverty, cooperate in a global partnership, uphold the principle of equity that protects the most vulnerable and least responsible countries for the climate crisis,

believe in the capacity-building potential of the evolution of scientific development, to create efficient environmental legislation, and to follow a precautionary approach. However, there is another aspect of the Rio Principles that should be taken into account: the development aspect. What kind of development is advised and favoured by the UNFCCC?

*Principle 4 In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it. (UN, 1992, p. 2)*

The expression "*sustainable development*" is used repeatedly in the document. It is stated that a sustainable development and protection of the planet are two inseparable missions (Principle 4). However, throughout the document, we perceive the implications of this concept of development. In this sense, Principle 3 suggests the maxim of the *right to development* aligned with the maxim of the protection of the interests of present and future generations. This Principle does not suggest an excessive, incalculable and infinite development, and introduces the very important variable of solidarity with future generations:

*Principle 3 The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. (UN, 1992, p. 2)*

However, Principle 12 eventually distorts to some extent the conception of development suggested by the UNFCCC. In Principle 12 lies the space (which turned out to be fully used) or permission to create a direct link between sustainable development and economic growth:

*Principle 12 States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global*

*environmental problems should, as far as possible, be based on an international consensus.*  
(UN, 1992, p. 3)

This usurpation of the concept of development by the notions of profit, free market, and “*economic growth*” is so obvious today in the climate negotiations that one would expect this idea to be explicitly repeated in the founding Principles of the organization, but this does not happen. Throughout the Rio Principles, the concept of “*sustainable development*” is repeated several times, and only once does it mention “*economic growth*”. This fact brings us back to a specific characteristic of the *path dependency* concept debated earlier: *contingency*. *Contingency* means the fact that small events or non-dominant principles may have unpredictable effects and should not be undervalued.

Thus, we enter a fragile terrain of the climate cause: the propensity to infer that a solution for the climate crisis translates into economic growth. This principle suggests that the fight against climate change cannot call into question open and liberal international trade that favours economic growth. Protecting the planet cannot call into question the vigorous capitalist system and all the freedoms associated with it. It is not being assumed here that the inclusion of Principle 12 is in itself responsible for the failure of the UNFCCC and the COPs. It is merely suggested that the inclusion of such a Principle reflects another evolutionary line that accompanied the creation of the UNFCCC and which is still in force and has its repercussions: the belief in the idea of *green growth*. Such a belief is created so that one does not have to question the mission of economic growth when talking about sustainability.

What is suggested in this approach is that the structural values of the UNFCCC allow the normalization of the overlap between the concepts of *sustainable development* and *economic growth* under a capitalist system. Therefore, even if the concept of economic growth is explicitly mentioned only once, every other time *development* is mentioned there is plenty of room for this development to be interpreted as economic growth measured through GDP.

For the analysis being developed in this chapter, it is useful to keep in mind the concepts of *Decoupling* and *the Environmental Kuznets Curve* that will be further discussed in Chapter 5. Quite briefly, the first concept refers to the ability to decouple economic growth (GDP) from environmental degradation while the second refers to the belief that economic growth (which causes pollution and environmental degradation) will be the antidote to dealing with the effects of climate change. Principle 12 suggests exactly the possibility of dissociating economic growth from environmental degradation and also the possibility that the wealth created by such unsustainable economic growth may be the antidote to the climate crisis. Klein notes that climate action within mainstream political institutions is undermined by the parallelism that is built in relation to the mission of economic growth, as what has been exposed to the people is that there are only two options: poverty or poison, austerity or extraction. When faced with these binomials the populations and political actors tend to choose extraction and wealth, believing that there are no other options (Klein, 2016, p. 37)

Being so, the aim here is to better understand the implications of such initial statements. It seems relevant to understand how the creation of a narrative of coincidence between economic growth and sustainability can create *increasing returns* that are suboptimal. It is also useful to underline that creating a rigid dualism between the protection of the planet and economic growth would be a reductionist ontological perception, an oversimplification, and it is not very useful to create theories based on radically opposed binomials. However, what we have observed so far is that capitalist economic growth is based on excessive consumerism, the creation of profit without regard to means, and the dependence on non-renewable energy, so an economic growth mission along these lines cannot be reconciled with the mitigation of climate change.

Therefore, the choice to include a principle related to the protection of economic growth and the free market can be analysed from the previously explored perspective set out by Liebowitz and Margolis (Liebowitz & Margolis, 2013). Does the inclusion of an economic growth principle correspond to a

type three *path dependency*? Was there enough information at the time of the creation of the UNFCCC to understand the contradiction of including the mission of economic growth in an institution dedicated to climate change mitigation?

The next chapter is dedicated to understanding the future of the climate negotiations and the possible hierarchization of priorities that will have to be made. Note that the critique of the free market is not a critique of the potentialities in terms of human development that it has enhanced. The criticism of the free market and of economic growth as undisputed dogmas of today's society is the criticism of its excessiveness. The development they have catapulted into being is nowadays joined by an inability to understand what is vital from what is a luxury, an inability to distinguish between what is in fact a sign of development and what is a sign of excessive consumerism, and an inability to live within the limits of planet earth. The climate crisis seems an insurmountable crisis essentially because it challenges the basic values of a dominant economic system, associated with a deregulated and disproportionate management of resources (Klein, 2016, p. 32). The economic system is part of a limited natural system and must therefore have appropriate rules. Such an idea is not yet a reality within the UNFCCC.

### c) INDC: the bottom-up approach

Multilateralism in climate negotiations requires the complex task of building consensus among multiple of member states. Member states - through a bottom-up regime - have relative freedom to build their development agendas. The *Intended Nationally Determined Contributions* (INDCs), the expression of each country's climate ambition, grant greater freedom within the climate regime for each political actor to suggest the emission mitigation efforts they intend make. Ideally an INDC should generate transformation in the most carbon intensive sectors and be equitable, ensuring that the value presented is proportionate to the harm generated by the entity (Manga, 2018, p. 324).

The focus on voluntary and non-binding contributions is one of the factors that make the negotiations more complex and less ambitious. It is the diplomatic solution found to overcome the complexities of multilateralism. It is also an obvious limitation to the success of the on-going mitigation mission, as there is not enough ambition from the parties. The existence of Principle 12 within the UNFCCC, which matches the UN's eighth Sustainable Development Goal (SDG), ultimately allows nations to clearly prioritize economic growth while believing that such economic growth is part of the mission towards sustainability.

### **3.6 Institutional Inertia in climate negotiations or How to Become a Greenwash Festival**

#### **a) The road to the *Greenwash Festival***

As noted earlier, one of the most useful lessons of Historical Institutionalism is the appreciation of the small and complex interdependencies that explain certain realities. Principle 12 of the Rio Conference - which translates into the valorisation of economic growth and the free market – denounces the nature of the failure of the UNFCCC to mitigate temperature rise.

Finally, the final part of this chapter is devoted to the critical voices that opened it. 29 years separate the publication of the Rio Declaration and the declaration made by the famous climate activist Greta Thunberg (the second sentence opening this chapter) stating that the COP is currently nothing but a *greenwash festival*. In those almost three decades, political agendas have also been forced to shift from mitigation to adaptation in terms of climate agendas. It has been three decades of a clear *mismatch* between environmental needs and political agendas. Three decades of worldwide economic growth and intensification of the globalization process that were also synonym of planetary degradation and aggravation of climate change.

The scientific knowledge already existed, as did the institutions for multilateral consultation. The IPCC was created in the late 1980s and the UN had organized, in 1972, the United Nations

Conference on the Human Environment (Stockholm Conference). However, there is an economic regime whose synergies seem stronger than any other area of knowledge.

So what does it mean to accuse COP26 of being a *Greenwash Festival*? According to the Cambridge Dictionary, *greenwashing* refers to “*behaviour or activities that make people believe that a company is doing more to protect the environment than it really is*” (Cambridge Advanced Learner's Dictionary & Thesaurus, n. d., para. 1) and adds a practical example : “*The environmental movement has warned consumers against greenwashing, saying that when businesses use terms such as "environmentally friendly" and "green" they are often meaningless.*” (Cambridge Advanced Learner's Dictionary & Thesaurus, n. d., para. 3). That said, it can be argued that a climate negotiating institution that has failed for 26 years to be assertive about banning fossil fuel or deforestation falls into the *greenwashing* narrative and consequently loses credibility. Accordingly, While recognising the value of the UN climate negotiations, Klein takes the opportunity to underline how COPs are becoming a costly, carbon-rich global therapy session (Klein, 2016, p. 24).

#### b) What NGOs have to say

*This shouldn't come as a surprise to anyone. It is the way this system operates: just enough propaganda of “ambition” and technofixes to keep fossils flowing as ever, while the climate collapses. The information does provide us with a question: if the debate on climate change debate is framed by companies and governments around the terms of net-zero, carbon credits, carbon taxes and offsettings, rather than stopping emissions, when will it ever come to the real problem of the climate crisis? Well, never. And that is the purpose.* (Camargo, 2021b, para. 6)

A measure of the success of a climate negotiation moment like COP26 is achieved through the assessment made by NGOs working closely with the nuances of climate action. In fact, non-governmental organizations such as *WWF*, *GreenPeace*, *Oxfam*, or even the Portuguese organizations *Zero* and *Climáximo*, exert key pressure to make the negotiations more ambitious. The

testimony of a member of the Portuguese organisation Climáximo, which opens this section, introduces the tone with which COP26 was treated by most NGOs involved in the climate debate.

Faced with the lack of responsiveness that institutions such as the UNFCCC have demonstrated, civil society and the scientific community has been at the centre of the denunciation that has been made, and the NGOs' actions can be used as an example of the positive pressure exerted by non-state actors. Some of the main criticisms raised against the most recent COP are its strong corporate bias, the presence of fossil fuel lobbies, and the inability to give up an idea of civilizational progress based solely on economic growth dependent on fossil fuels.

After examining the Glasgow Climate Pact in the previous chapter, it remains to analyse the main criticisms made at COP26. The presented criticisms end up illustrating how Principle 12 has been interpreted within the climate negotiations. The influence given to the capitalist framework, the protection of economic growth, and neoliberalism has been criticized by several activists and NGOs.

The verdict made by *Greenpeace* member Mal Chadwick, *"If you want to know if something has succeeded, you should start by asking the people with the most to lose. In this case, that's those who are already being hit hardest by climate change, and they've given a clear answer"* (Chadwick, 2021, para. 1), may serve as a motto to analyze the criticism made at COP26. The Glasgow Pact means for certain regions a direct threat to their existence. The Minister of Environment of the Maldives, Shauna Aminath, has been vocal about the fact that exceeding the 1.5 degree limit agreed in the Paris Agreement would mean a death sentence for the Maldives. Thus, several NGOs are proposing the need to take adaptation funding to the most vulnerable countries without historical responsibilities seriously. Adaptation, a key area for the survival of certain territories, still has a secondary place within climate negotiations.

The criticism on the fact that the adaptation component is not being properly worked on is shared by other organisations such as *WWF* (WWF, 2021b, p. 7) and the Portuguese organization *Zero* (Zero,

2021, para. 18), with part of this disinvestment being the result of the developed countries' failure to keep their promises related to the financing of the green transition in developing countries. One of the factors noted, both in the Glasgow Pact and in NGO texts on the Conference, is that the promise to devote 100 billion per year to climate finance was not kept.

The finance issue lies not only in the need to raise funding but also to reallocate it to the right purposes, with current inaction increasing the cost of the processes necessary for a green transition. The measures proposed by the main NGOs are linked to the need to make an equal division between financing for mitigation and for adaptation. Adaptation funding is an essential point for the achievement of a just transition that protects the most vulnerable and least responsible for the climate crisis. Climate Finance should also focus on the area of Loss and Damage, also linked with the mission of a just transition that compensates populations and regions for certain losses caused by the climate crisis, and many of these losses and damages are not even quantifiable. Adaptation is one of the areas where the need to put into practice the Principle of Common but Differentiated Responsibilities is more expressive and is one of the most neglected ones. That tendency is symptomatic of the misalignment that still exists between developed and developing countries.

Yet another highlighted point is the need to "make money greener", borrowing the expression used by the WWF (WWF, n.d.). According to WWF, the COP26 represented a good advance in this sense: *"We saw a big breakthrough on a key UK climate promise, with the announcement of new rules to make it mandatory for big UK firms to show plans on how they will hit their climate targets"* (WWF, n. d., para. 19). The creation of rules such as this is encouraging because coming from the UK the impact of the measure would be global, meaning that any company in the world that wants to attract investment from the UK should have a plan to achieve carbon neutrality.

In this context of green finance, and line with the mission of carbon neutrality, the analysis conducted by *Greenpeace* announced that one of the most relevant negotiations at COP26 refers to

fossil fuel financing. It is expected that the fact that a group of 20 governments (including Canada, the US and the UK) and financial institutions have agreed "*to stop funding new overseas fossil fuel projects with public money by the end of 2022*" (Chadwick, 2021, para. 37) may represent the beginning of the end of fossil fuels, being also an opportunity to start investing in renewable energies. WWF also praised COP26 for having reached the first final document that addresses fossil fuel subsidies as part of the problem, noting nevertheless that the seriousness of the climate crisis still requires more assertiveness:

*This COP marks the first time that fossil fuels subsidies are mentioned in an approved decision text as well as the recognition of the need to ramp up investments in clean energy while ensuring a just transition. The first text was well received. Yet, we were deeply disappointed by the watering-down of the language on coal from phase-out to phase-down by a single country, India. WWF emphasizes that strong language, deadlines and ways to operationalize are needed if we are to achieve the needed transition away from all fossil fuels.* (WWF, 2021a, para. 6)

However, this does not mean that COP26 was not partly discredited by the strong presence of corporations dedicated to the fossil fuel lobby, the attempt by fossil fuel companies to manipulate the scientific reports of the IPCC, and the meetings between fossil fuels lobbyists and the British government representatives just before COP26 was due to take place. All these issues were strongly criticized by the main NGOs:

*During this same period important revelations of the massive gap in terms of necessary emission cuts and country's plans emerged, as the broader rejection of greenwashing became pervasive. The narrative of false solutions and green capitalism doesn't work. Yesterday, the revelation that over 800 oil & gas wells are being planned for drilling still this year and in 2022, in the report "Drill, Baby, Drill", makes it clear that the proceedings of COP26 are mostly propaganda, as the only real, mandatory and contractualized plan global capitalism has for the climate crisis is collapse.* (Camargo, 2021b, para. 1)

The document on new oil drilling projects planned for the coming years (the decade up to 2030 being decisive for climate action) (Glasgow Agreement, 2021), shows the extent of the presence of oil

companies at the heart of current climate decisions. This presence may partly explain the failure of the COPs, reflecting a notion of development mainly based on an economic growth agenda.

The document foresees a scenario of incoherence and permissibility: *"There are 816 new oil & gas wells being planned and drilled until the end of the year and in 2022. These are located in 76 countries all around the world, countries whose governments are currently sitting in the halls of the COP26 in Glasgow, to "negotiate" a solution for the climate crisis."* (Camargo, 2021b, para. 4). To the worrying plan for new oil exploration, one can add the fact that a large part of them are associated with the UK, responsible for the organisation of the COP26:

*The host UK appears close to the top of desired new wells, with 36, mostly offshore, in the basins of Central Graben, Moray Firth, the North Sea and Shetland. It is very likely that while Boris Johnson was doing his James Bond gag on stage, at least some four wells were being drilled to add to British fossil fuel reserves, making him a sort of meta-Bond villain. The top of the ranking for most wells planned goes to Australia and Russia, with 80 wells each, closely followed by Mexico with 78.* (Camargo, 2021b)

It is concluded that diplomatic and political success has several layers that separate it from success in terms of reducing emissions. Real success would be to reverse the direction of increasing greenhouse gas emissions, and a ban on new oil drilling would be a step in the right direction. However, the COP26 presidency seems to be proud of the progress made on coal mining which the Glasgow Pact suggests the need for *phasing down* (not *phasing out*). Finally, Climaximo proposes 7 guidelines for analyzing climate summits (Climáximo, 2021). According to this parameter, one of the factors to take into account is who is invited to participate, and which actors choose to be present or absent as the composition of the Conference's participants partly changes its course.

Accordingly, the report by the NGO *Global Witness* reveals the extent of the fossil fuel lobbyists' presence at the Glasgow COP. According to the Organization, on November 8 *"At least 503 fossil fuel lobbyists, affiliated with some of the world's biggest polluting oil and gas giants, have been granted access to COP26, flooding the Glasgow conference with corporate influence."* (Global

Witness, 2021, para. 2). Furthermore, the Organization's report exposes the amount of fossil fuel lobbyists outnumbered the largest delegation present by two dozen, with more than 100 oil companies present. This presence is impactful and changes the course of the negotiations because it stifles the most vulnerable delegations. In this sense, it is reported that *"Fossil fuel lobbyists dwarf the UNFCCC's official indigenous constituency by around two to one"* (Global Witness, 2021, para. 7). The document also notes that the presence of fossil fuel lobbyists is greater than the delegations of the eight countries most affected by climate change (including the Philippines, Mozambique, Bangladesh, and Pakistan), and that 27 national delegations included fossil fuel lobbyists (including Brazil and Canada). Regarding the presence of this corporate mass associated with the fossil fuel industry, Rachel Rose Jackson stated:

*The architects of the climate crisis cannot build a livable and just future when they've already burnt the house down. With Big Polluters in the building and so many of those on the frontlines left outside due to vaccine apartheid—COP26 is compromised. It is people on the front lines of this crisis, not polluters, who have the life raft we need at this moment.* (Global Witness, 2021, para. 17)

In parallel to having a strong presence at the heart of negotiations, fossil fuel lobbies also have a strong presence in domains far from public scrutiny. An investigation undertaken by *Unearthed*, *Greenpeace's* investigative journalism project, explores the pressure exerted by lobbies such as the fossil fuel and meat industries on the most recent IPCC scientific reports.

In the course of their research, authors Lawrence Carter and Crispin Dowler, describe the kind of pressure exerted to have certain conclusions removed from the scientific reports that guide the UNFCCC climate negotiations<sup>11</sup>. Examples include the attempt by the Organization of the Petroleum

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<sup>11</sup> According to the investigation "The documents passed to Unearthed show how fossil fuel producers including Australia, Saudi Arabia and the Organization of Petroleum Exporting Countries (OPEC), are lobbying the IPCC – the world's leading authority on climate change – to remove or weaken a key conclusion that the world needs to rapidly phase out fossil fuels." (Carter & Dowler, 2021, para. 6)

Exporting Countries (OPEC) to remove any reference to a fossil fuel phase-out from the scientific reports. One of the arguments used by OPEC is that such statements are not policy-neutral, and that the IPCC is a centre of scientific knowledge which should not be prescriptive. Furthermore, lobbying includes trying to hide the obstruction to the success of the climate negotiations exercised by this same fossil fuel lobby:

*OPEC also asks the authors to strike out a number of references to fossil fuel lobbies impeding action on climate change including the sentence: “Several scholars have traced delay and sluggishness by states to pursue [ambitious] climate mitigation policies to the activities of powerful interest groups who have vested interest in maintaining the current high carbon economic structures”. (Carter & Dowler, 2021, para. 56)*

However, there are certain actors, less obvious than OPEC, who have sought to protect the interests of the fossil fuel industry. According to the document on which an investigation is based, *“a senior Australian government official rejected the largely uncontroversial conclusion that one of the most important steps to reduce greenhouse gas emissions was to phase out coal-fired power stations”* (Carter & Dowler, 2021, para. 89)

Besides the fossil fuel lobby, the authors also denounce the lobbying by Brazilian and Argentinean government officials to protect the interests of the meat production industry, deeply associated with methane emissions into the atmosphere and the deforestation of the Amazon Forest:

*In comments on the draft seen by Unearthed, both countries call on the authors to delete passages in the text which suggest a shift to plant-based diets would cut greenhouse gas emissions, or which describe beef as a “high carbon” food. (Carter & Dowler, 2021, para. 61)*

In fact, the livestock industry has been investigated in recent years as one of the food sectors most responsible for greenhouse gas emissions, with leading scientific papers currently suggesting a transition to a plant-based diet as a way to save resources and reduce emissions:

*A 2018 study published in the journal Science, which examined data from 38,700 farms across 119 countries, found that moving “from current diets to a diet that excludes animal products” could cut food’s land use by around 3.1 billion hectares and its carbon emissions by 49%. (Carter & Dowler, 2021, para. 64)*

One of the points discussed by several environmental NGOs was the *Forest Deal*. This agreement, signed by around 100 governments, to eliminate deforestation by 2030, was seen as a step in the right direction but suffered some relevant criticism. First, the deal was accused of being a recycled measure from 2014, also aimed at ending deforestation, that did not have any real impact. The Brazilian activist Carolina Pasquali noted that the signing of this agreement by Brazil is no reason to celebrate:

*There’s a very good reason [Brazil’s forest-destroying president] Bolsonaro felt comfortable signing on to this new deal. It allows another decade of forest destruction and isn’t binding. (Chadwick, 2021, para. 33)*

Another factor strongly debated within the COP26 and consequently by the NGOs that accompanied it was the surprising (after 26 COP editions) prominence given to nature. Manuel Pulgar Vidal, Climate & Energy Global Practice Leader at WWF and former Peruvian Minister of the Environment, stated that:

*Nature truly arrived at COP26. Leaders are finally recognizing that action to protect and restore nature must be at the heart of our response to the climate crisis, in tandem with a full transformation of the energy system. COP26’s recognition of the role of nature must catalyse all countries to increase the contribution of nature in their national climate plans. (WWF, 2021a, para. 10)*

This verdict reveals the anthropocentric nature of the UNFCCC negotiations, the overconfidence in the ability of man-made technology to repair any kind of damage and the alienation from nature. It also means that the 26th edition was marked by the proposal to invest in nature-based solutions as “actions to protect, sustainably manage and restore natural and modified ecosystems in ways that

*address societal challenges effectively and adaptively, to provide both human well-being and biodiversity benefits”* (FEBA-PEDRR-EHAN, 2021, p. 3).

However, there is still too much trust deposited in technologies whose efficiency is unproven on a large scale. At a critical time for reducing emissions, there is still a belief that artificial carbon capture mechanisms are the antidote to reducing greenhouse gas concentrations in the atmosphere. This argument is used extensively by stakeholders with a vested interest in continuing to emit the same amounts and protecting economic growth based on fossil fuels. Some of the pressure on the IPCC to remove arguments from its reports, by actors such as Saudi Arabia (Carter & Dowler, 2021, para. 29) for example, is justified on the basis that the existence of these artificial mechanisms for capturing carbon from the atmosphere is not being taken into account. The protection of major forests and oceans - according to an anthropocentric view of the struggle for climate justice - is useful because these are natural means of capturing carbon from the atmosphere.

The IPCC and even figures like Bill Gates (Gates, 2021, pp. 75-107) are reticent about this technology, and there is the understanding that *“over-reliance on CCS and negative emissions technologies, should they fail to materialize, would lock-in a high-emissions pathway with no obvious escape route. The risks here cannot be overstated.”* (Carter & Dowler, 2021, para. 46)

One of the proposals that has been debated, and opposed by organizations such as Greenpeace, is the creation of a global market of carbon offsets. This debate comes in the sequence of the deepening of the sixth article of the Paris Agreement that deals with the cooperation between countries in reducing emissions. One of the COP26 objectives was the revision and improvement of this article, and one of the interpretations that has been made is associated with an emissions trading market according to which a country is able to pay another country to emit on its behalf. Therefore, the emissions continue to be produced but on behalf of another. This suggestion is the purest reflection of climate negotiation *praxis*: developed countries try their best to protect their fossil fuel-dependent economic

growth and do so through exercises of climate colonialism by delocalizing their emissions to developing countries:

*Offsetting doesn't stop emissions entering the atmosphere and warming our world - it just stops those emissions appearing on the ledgers of the polluters. Offsets are an accounting trick. According to the scientists behind the latest UN scientific report, the world needs to make immediate, dramatic and consistent emissions reductions - but offsetting is the opposite of that. It's a licence to keep polluting, it incentivises the commodification of nature and allows powerful corporations and governments to take over the lands of vulnerable communities, trample on human rights and violate environmental integrity. (Greenpeace, 2021b, p. 2)*

Finally, we are getting dangerously close to the value agreed in the Paris Agreement - 1.5 degrees of temperature increase – as COP 26 is praised for not giving up underlining the importance of this target. However, the NDCs are not presently aligned with this mission. The scientific community suggests that in order to reach the value agreed in Paris a 45% reduction is required by 2030, whereas at present we are heading for a 16% increase by 2030 (Greenpeace, 2021, p. 3).

### c) What is Guterres apologising for?

*The combined profits of the largest energy companies in the first quarter of this year are close to \$100 billion. This grotesque greed of the fossil fuel industry and their financiers is punishing the poorest and most vulnerable people, while destroying our only home. (Guterres, 2022b)*

António Guterres dedicated a series of public statements (Guterres, 2022a) to the need to rethink the prominence given to fossil fuels in our society and the intergenerational irresponsibility of political agents of his generation:

*Let me start by just following on the words of the Portuguese President and to apologize, on behalf of my generation, to your generation, in relation to the state of the oceans, the state of biodiversity and the state of climate change. In my generation, those that were politically responsible - that is my case -, we were slow, or sometimes unwilling to recognize that things*

*were getting worse and worse in these three dimensions: ocean, climate and biodiversity.*  
(Guterres, 2022c)

The above quote comes across with a tone of regret towards future generations: “*we were slow*”. The leader of the largest multilateral organisation and the organisation responsible for the UNFCCC now takes a position of deep regret regarding the lack of solidarity between generations and the institutional inertia that has generated the current climate emergency.

António Guterres' apology may then serve as a motto for the proposal to change institutional structures that do not respond to the challenges facing future generations.

## **Chapter 4: The Epistemic Nature of the Climate Crisis**

*We certainly need to hear about our ethical shortcomings from time to time.*

- *Arne Naess in Ecology of Wisdom* (Naess, 2008, p. 93)

To answer the starting question of this dissertation one must recognise that the answer is not simple but part of the problem lies in a set of values and ideologies that do not coincide with the respect for nature. As the opening passage suggests, from time to time it is essential to review our acts of ethical laziness. It is with the help of the author of this quote that this exercise of revision will be carried out in the course of this chapter.

The interest of analysing the history of climate negotiations and the institutions that host them is linked with the pedagogical potential of such an analysis. Inferring and enumerating the weaknesses of an institution might prove to be useful for the prescription of certain antidotes. The aim of the analysis carried out so far was, at the very least, to be able to enter this moment of reflection on the

long-awaited solutions. Several remedies were taken into account. However, as a state of globally amplified climate calamity is not something that can be reduced or simplified, several of the antidotes I had initially identified seemed insufficient. Politics is a structure of values and the non-implementation of the goals set at the COP and the goals that remain to be set has deeply political and ideological nuances.

If from the very beginning it was established that the last chapter of this thesis would have a normative and prescriptive hue, the amplitude of what was eventually chosen as the appropriate solution is much greater than what was initially intended. I initially considered working on the more technical aspects of the negotiations and how different scales and policy approaches could be the key to successful climate negotiations. However, all the evidence pointed to the need to go further. It is impossible to address the failure of the climate negotiations without addressing the underlying failure, consisting on the fact that most of today's society's interpretation of reality is deeply disconnected from the natural systems in which it is embedded and on which it depends. The last chapter is dedicated to addressing the epistemological problem behind the climate crisis. Such an analysis will include the deepening of the concepts of *Deep Ecology* and *Ecocentrism*.

#### **4.1 The epistemological problem**

*Because this thing of, one fine day, seeing everything differently..., of wanting to see everything differently, requires a lot of discipline.*<sup>12</sup> (Nietzsche, 2000, p. 145)

As Nietzsche's opening quote indicates, the ability to see problems from different perspectives requires discipline. According to this opening motto, the exercise of reviewing the epistemological foundations of our society coincides with a disciplined conduct. One could argue that the struggle for climate justice lacks a foundation of values and metrics linked to moderation and proportion. The

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<sup>12</sup> Translated from: "Porque isto de, um belo dia, ver tudo de maneira diferente..., de querer ver tudo de maneira diferente, exige muita disciplina"

epistemological relation to an object, in this case, the climate crisis, requires a perspective that in turn implies a given hierarchization of a set of values. This chapter discusses the anthropocentric climate action narrative as opposed to the *ecocentric* model proposed by Arne Naess.

Our knowledge is a language<sup>13</sup>. Accordingly, the reality has various ways of being interpreted. What is suggested in this chapter is that the failure of the UNFCCC to deal with the ecological crisis lies in its reading of the nuances of the climate crisis. An inadequate reading of a situation generates a mismatched response. The interest in studying the epistemological problem of the climate crisis arises from the realization that the weaknesses that boycott the negotiations framed by the UNFCCC are failures to interpret reality.

Nietzsche<sup>14</sup>, the author whose opening quote initiates the argument on epistemological challenges, is one of several who dedicated his work to the praise of perspectivism, defending the non-existence of absolute truths and the prominence of the individual or collective perspective on a given action. This dissertation does not seek to become an analysis of Nietzsche's work but his input on epistemology is useful to the understanding of the values that underpin the narrative constructed around the climate crisis. The UNFCCC is endowed with a collective perspective of celebration of an anthropocentric solution to the climate crisis which deeply undermines the outcomes it produces. The denial of absolute values translates into flexibility for change and re-evaluation.

Concerning the climate crisis, several authors address how climate change is narrated and how, in relation to such a glaring problem, a selective alienation is created. Klein calls it "intermittent ecological amnesia" and suggests that this is a reaction trend to *"fear that letting the full reality of this crisis sink in will change everything. And we're right."* (Klein, 2016, p. 15).

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<sup>13</sup> In addition to *The Gay Science*, the same author's *Posthumous Fragment 7* (1886-1887) refers exactly to this the debate about perspectivism, with the author concluding: "It is our needs that interpret the world." FP, 1886-1887, 7 |60|: retrieved from <http://www.nietzschesource.org/#eKGWB/NF-1886,7>

<sup>16</sup> Translated from: "Negamo-las porque receamos que deixar entrar a plena realidade desta crise mude tudo. E temos razão."

Our knowledge is filtered by values linked to the economic system in place, a knowledge adapted to a certain purpose. This status quo bias, the creation of a climate action narrative that does not question some of the capitalist values, emerges as an attempt to master something relatively unknown, to name something so complex as the climate crisis through familiar metrics and narratives. The UNFCCC is an organisation that favours a fossil-fuel-dependent capitalist status quo partly because it is composed by parties that assess the climate crisis favouring an anthropocentric and consequently capitalist human development agenda, hence the predisposition is not surprising.

The interpretation made of the present - the myths, metrics, and dogmas that sustain our society - are deeply dependent on the anthropocentric idea that man controls nature. Nature and ecosystems are placed in a position of subjugation and instrumentalisation. The recognition that the climate crisis is above all a crisis of values leads to the realisation that a paradigm shift is needed, arising from the revision of the values structuring human knowledge.

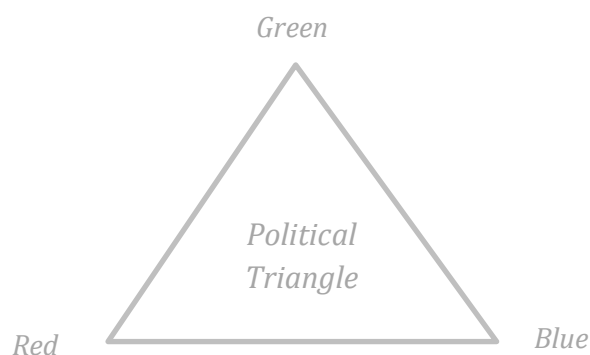
The recognition of the technical, political, diplomatic weaknesses of U.N. multilateralism is useful. However, change - after decades of climate negotiations that failed to prevent the exponential growth of greenhouse gases emissions - must be structural and epistemological. What is proposed in this chapter is the exercise of rethinking "*the stories we tell about our place on Earth*" (Klein, 2016, p. 15)

#### **4.2 Deep Ecology by Arne Naess**

*Whether reflecting on modesty in mountain climbing, on how to interpret the call for sustainable development, or on the ecology of self, Naess followed an approach of continuous open inquiry, of always going deeper to get the roots of a problem or an issue. Why are we using this policy? Why is this form of education not working? What are our ultimate values? What is the best forestry for this watershed? What values take priority in this development?* (Drengson, 2008, p. 19)

*Deep Ecology*, elaborated by Arne Naess, emerges as a proposal for an alternative worldview. Naess, a Norwegian philosopher and mountaineer, was dedicated to theorizing an epistemological system concerning the relationship between human beings and nature. His theoretical exercise, linked with the doctrine of *Deep Ecology*, is composed by a set of principles - modesty, ecological maturity, and proportion - examined in depth in this chapter. Furthermore, there is an attempt to demonstrate the practical magnitude of these principles concerning the climate emergency.

As demonstrated by the triangular model bellow (Naess, 2008, p. 311), what is being suggested is that the political sphere - regardless of the ideological pole (represented by *blue* and *red*) - should be broadly guided by a refined ecologist worldview. COPs are symptomatic of the lack of priority that environmental problems have in global political agendas. The concept "ecology" appears in the dictionary described as “the *study of the relationships between organisms and their environment. Some of the most pressing problems in human affairs, expanding populations, food scarcities, environmental pollution including global warming, extinctions of plant and animal species, and all the attendant sociological and political problems, are to a great degree ecological*” (Smith, n. d., para. 1).



**Fig. 3** Political Triangle by Arne Naess

Ecology should be understood as an unavoidable and fundamental question within political life. The whole political structure of a society, within its diversity of agendas and ideologies, should point towards a supra green pole. The generalization of some of the principles of Naess' environmental ethics, creation of a status quo that is deeply aware of the natural world and of the interdependencies, on which it depends, may catapult the changes needed to reverse the climate crisis.

### a) 8 Fundamental Principles

Part of Naess' effort to systematize *Deep Ecology* involved the elaboration of 8 Foundational Principles. The first principle - "*The flourish of human and nonhuman life on earth has inherent value.*" (Naess, 2008, p. 111) implies that the value of nature (non-human life and inanimate beings) is neither relational nor instrumental: its value is emanated by itself.

The second Principle - "*Richness and diversity of life-forms are also values in themselves*" (Naess, 2008, p. 111) - refers to the commitment to diversity and plurality. This celebration of diversity includes the recognition that *Deep Ecology* draws inspiration from various religions and branches of ethics and that such coexistence is valid. The second Principle, according to the author, is aligned with the appreciation of all kinds of insight: no matter how small or how local. This Principle - and contrary to what happens with other *ecocentric* strands of the ecology movement - safeguards the respect for all cultures, blocking a possible appropriation of the theory in behalf of ideologies of ethnic cleansing, for example.

The third premise - "*Humans have no right to reduce this richness and diversity except to satisfy vital needs.*" (Naess, 2008, p. 111) - introduces the critique of excess and exacerbated materialism, whereas not implying a step backwards in terms of vital needs. When reflecting on modernity and development Naess states that "*Our way is back to sustainability, not to old forms of society*" (Naess, 2008, p. 289), addressing the fact that environmental movements are constantly accused of wanting to return to the past when this is not the case. There is much to learn from the societies of the past

and that communication with older generations is central to the climate crisis. However, if a society that is sustainable and efficient in its relationship with nature and in the management of its resources is narrated as a sign of regression, this shows how the notion of progress in today's society needs to be reviewed. The expression of Gandhi highlighted by Schumacher – “*what were luxuries for our fathers have become necessities for us*” (Schumacher, 1993, p. 20) – implies that the dialogue with the previous generation is not a sign of regression if it means the selection of elements that nurture a healthier relationship with nature, leaving behind other components that in fact do not serve a mission of civilizational progress.

The fourth Principle deals with a very sensitive issue within the ecological movements: overpopulation and the pressure it exerts on the planet. The author reserves a chapter to delve deeper into this question and more precisely to search for the most appropriate formulation to expose this concern. The result of this careful exercise in formulating a principle on overpopulation is the following: “*The flourishing of human life and cultures is compatible with a substantial decrease of the human population* (Naess, 2008, p. 111).

The fifth Principle refers to the excessive human intervention in nature and how this situation has been degrading (Naess, 2008, p. 111). On the other hand, the sixth Principle prescribes the need to change political agendas:

*In view of the foregoing points, policies must be changed. The changes in policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present and make possible a more joyful experience of the connectedness of all things.* (Naess, 2008, p. 111)

The distinction between *big* and *great* is developed through the seventh Principle: “*The ideological change is mainly that of appreciating life quality (dwelling in situations of inherent value) rather than adhering to an increasingly higher standard of living.*” (Naess, 2008, p. 111). This Principle

translates into the valorisation of qualitative measures, echoing a critique of a society totally guided by quantitative metrics.

The eighth Principle is a call for action. Those who identify with the above Principles should seek to be active agents of change. Among the eight Principles presented, I would underline the concepts of *self-realization, identification, ecocentrism, and inherent value*.

#### **b) Self-Realization as a means to Identification**

While the ecology developed by Naess is not anthropocentric in nature, the truth is that in order to understand Naess' notion of *Deep Ecology* it is necessary to start from an individual exercise. The construction of a *Deep Ecology* presupposes an empathic capacity that extends to the natural system. The construction of this deep empathy requires the development of the individual as an essential process. Unlike anthropocentrism, the reflection on the individual level advocated by Naess does not result in an ideology based on the superiority of man over nature.

When addressing the relationship between ecology and values, Soromenho-Marques, deals with the construction of a boosted anthropocentrism based on man's overconfidence in himself (Soromenho-Marques, 2021, p. 32). Soromanho-Marques evokes the figures of Prometheus and Faust, both associated with the desire for overcoming human limitations. The author suggests that the desire for overcoming sought by both figures is profoundly different: Prometheus seeks the elevation of man's knowledge on behalf of emancipation while Faust seeks to overcome human limitations on behalf of domination. The comparison between the two figures is illustrative of the tendencies that shape modern society, which is dangerously connected to Faust's desire for domination and not so much to Prometheus' mission of emancipation. Much like Faust, an anthropocentric society is characterized by the inability to impose limits on a disproportionate self-confidence. The *Ecocentrism* proposed by Naess is partly an apology for the modesty that comes from ecological maturity.

Thus, Naess advocates the usefulness of *self-realization* as a starting point stating that individuals should live under the premise of *deep questioning*, and of building an enhanced self-esteem and self-respect. This *deep questioning* at the individual level implies that Naess' theory is open to variation and interpretative amplitude, as there is little interest in creating quantitative metrics of what is a vital need.

The author proposes that the term '*vital needs*' is deliberately constructed vaguely so that there is 'latitude in judgement' (Naess, 2008, p. 112). Different climates and different societies presuppose different vital needs. Coincidentally, the author calls his specific interpretative framework *Ecosophy T*. The point is that each individual - within their exercise of *self-realization* - constructs their own *Ecosophy* with their own "*paths of deviation*" (Drengson, 2008, p. 32).

The exercise of *self-realization* and the creation of a coinciding *Ecosophy* triggers *Identification*. In such a context, *Identification* requires a broad maturity and enables a better identification of the interdependencies that surround the human species. The project of self-respect and empathy, once addressed to the self, is now transposable to all that surrounds the self:

*In his writings, he refers to this process as developing from a healthy, well-integrated ego to a social self and then beyond that to what he calls the metaphysical self. In his ecology writings, he uses the words "ecological self" to refer to the metaphysical self. Having an extended sense of identification leads us to say that we defend our home place as part of ourselves.* (Drengson, 2008, p. 36)

Finally, the connection between *self-realisation* and *identification* emerges for Naess as indivisible. This means that identification is both a means and an end of *self-realisation*. But what is the limit of this process of mature and acute empathy?

### c) Ecocentrism

*In summary, full global and regional biodiversity is necessary for full ecological sustainability. Full ecological sustainability is necessary for sustainable development. Biodiversity is required*

*to satisfy the vital needs of humanity. All this is now generally acknowledged. That the biodiversity of this planet should be protected also for its own sake was first internationally recognized through the U.N World Charter for Nature. The initiative to get this established was taken by a group of economically poorer nations. (Naess, 2008, p. 301)*

*Ecocentrism* - a core value of Naess' *Deep Ecology* approach – presupposes that the limit of empathy is not anthropocentric and it is not enough to satisfy human needs at the expense of other living beings inhabiting the planet. All in all, Naess' theory is an apology of the *inherent* value of nature.

However, *ecocentrism* - opposed to anthropocentrism - has several implications and, like all else, requires a certain degree of moderation and common sense. The *ecocentrism* advocated by Naess is combined with the belief in the need for human beings to satisfy their *vital* needs. Thus, the defence of *ecocentrism* should not serve to attack human dignity. Instead, it is coincident with the critique of a society of excess and exacerbated consumption:

*The postmodern state of affairs implies the satisfaction of the vital economic needs of the total population, but not affluence. The key slogan would be “Enough is enough.”. When vital economic needs are satisfied, there is enough in terms of material richness – in principle, limitless richness. The near future of the industrial countries, let us say, the period until 2050, should emphasize a reduction in the use of energy and in material production, until the countries reach a level attainable by the total human population without the danger of gigantic catastrophes. (Naess, 2008, p. 280)*

One could argue that the nowadays - society in general and climate negotiations in particular - is deeply shaped by an anthropocentric sense of ecology according to which all available means are exploited to achieve certain goals (mainly materialistic ones). The 12th Founding Principle of Rio is evidence of this: the fight against climate change cannot jeopardize economic growth of a system based on hyper-consumerism and unregulated free market trends. The UNFCCC does not follow *ecocentric* values.

An *ecocentric* agenda would be a fundamental pillar to mitigate the climate crisis. It would not be necessary to choose between a *bottom-up* or a *top-down* approach within climate negotiations. The INDCs would have a tangible effect because they would be embedded in the belief that the respect for nature is an integral aspect of the protection of human dignity. Multilateralism would be consolidated since the ultimate ambition of each nation would be to protect a common asset with which they identify and for which they have empathy: nature.

What is proposed is that the ecocentrism proposed by Naess is more comprehensive in its ability to protect human rights and the rights of the planet while an anthropocentric approach to the climate struggle presupposes the idea of man's domination over nature, ultimately generating a situation of climate crisis. Last July 2022, the UN took the historic decision to declare the right to a healthy environment a Human Right (UNEP, 2022). Although it is not a legally binding measure in all UN member states, it is a proposal that recognizes that the sustainability of the planet and ecosystems is something we owe to future generations and that directly interferes with human dignity. However, this measure is not synonymous with an *ecocentric* human development agenda, even highlighting the hard truth that until 2022 the relationship between human rights and the right to a habitable planet and a sustainable and ecological civilizational agenda had not been formalised.

#### d) Inherent value

*The flourishing of human and nonhuman life on earth has inherent value. The value of nonhuman life-forms is independent of the usefulness of the nonhuman world for human purposes.* (Naess, 2008, p. 111)

It would be extremely useful not to have to constantly justify on the international arena why nature deserves to be defended. The history of climate negotiations is deeply impacted (and undermined) by the fact that it is not enough within the current international framework to profess that nature has inherent value. The negotiations, held within the UNFCCC, are subject to anthropocentric priorities such as the defence of economic growth, of neo liberal values, and of the preservation of the

competitiveness of States, meaning that one is more likely to defend nature if that defence brings some kind of economic advantage.

The positioning of the USA and China in the panorama of the negotiations illustrates such a reality. As analysed in the second chapter, the Kyoto Protocol, which proposed the respect for the Principle of Common but Differentiated Responsibilities, was not ratified by the USA because it threatened its competitiveness in the market, especially against China. This quarrel has gone on for decades and is based on the belief that if it does not bring economic benefit, the conservation of nature is not justified. The priority falls on the satisfaction of anthropocentric interests that translate into the satisfaction of non-vital desires in the short term.

Nature, ecosystems, the resources of planet earth (to call them resources or natural capital is in itself symptomatic of an anthropocentric perspective of nature) are highly instrumentalised in today's society. The anthropocentrism that underpins the capitalist system is based on the idea of man's superiority over nature. Naess' *ecocentrism* presupposes a certain amount of modesty that he identifies as maturity: "*Human nature is such that, with sufficient comprehensive maturity, we cannot help but identify ourselves with all human beings*" (Naess, 2008, p. 81).

According to the author, a human being with a certain maturity is capable of a process of wide identification with his surroundings, recognising the inherent value of human, and nonhuman life. The political implementation of the idea that nature and ecosystems should be protected and respected *for their own sake* would have major impacts at a global level:

*In the 1980s, it was out of the question for a wide group of politicians to declare that life on earth, or life in the universe, has any value in itself apart from the rather narrow serving of human needs and interests. It was out of the question to declare that the richness and diversity of life are also worthy of care for its own sake. Such thoughts could not have been incorporated into a report such as the Brundtland Report. By now, only one country, New Zealand, can show a public document that affirms intrinsic value.* (Naess, 2008, p. 296)

One could assess how the Rio Principles stand in relation to *ecocentrism*. In fact, the previous chapter was partly dedicated to the implications of Principle 12, essentially dedicated to the protection of neo-liberal values and economic growth. These assumptions are mainly connected to the capitalist economic system, which allows us to foresee that the values that sustain the UNFCCC are also those of consumerism and extortion of natural resources in the name of anthropocentric ideals.

However, it is not necessary to reach the twelfth Principle to understand that the negotiations developed within the UNFCCC do not follow an *ecocentric* approach. The first sentence of the first Principle reads as follows:

*Human beings are at the centre of concerns for sustainable development.* (UN, 1992, p.3)

This is clearly an anthropocentric approach, which has been exacerbated and pushed to its limits over the decades. With this it is not intended to totally devalue the Principle in question because, in fact, the mission of sustainable development cannot be dissociated from human interests. In other words, *ecocentric* interests, as defined by Naess, include the protection of human dignity, so that one does not totally exclude the other, but rather there is a partial identification.

However, the fact that the values underpinning climate negotiations are solely anthropocentric generates obvious imbalances. What is proposed is that an *ecocentric* approach would make the negotiations more inclusive and ambitious by having more regard for the inherent value of nature and less for satisfying non-vital and essentially materialistic human needs.

#### e) Naess' practical guide to Deep Ecology

Reflecting on the values that underpin society is often interpreted as an exercise of abstraction that has no particular relevance for the creation of practical measures. However, all practical action results from prioritising a set of values over others.

Reflecting about the values of a society - which in this context has been done through the lens of Arne Naess' *Deep Ecology* - should not remain in the utopian realm. As discussed previously, the eighth principle advocated by Naess addresses the need not to leave the values of *Deep Ecology* in the realm of abstraction and theory.

The author has dedicated part of his work to translating the values he has developed into practical actions. The chapter dedicated to this exercise - which is part of his work *Ecology of Wisdom* (Naess, 2088) - is called "*Lifestyle Trends within the Deep Ecology Movement*". The author calls for the practice of a simple life that distances itself from what is unnecessary. To this idea he adds the belief that human beings approach this simplicity when they are fully aware of the values that move his life.

A simple life is opposed, according to Naess and many other supporters of a transition towards climate justice, to the consumerism fostered by capitalism. Anti-consumerism is a fundamental part of a life of respect for planetary limits.

For Naess, the type of behaviours fostered by the capitalism of his time (Naess wrote most of his work in the second half of the 20th century) are criticised for their anthropocentrism disconnected from the planet. The author states "*A capitalist society is in a certain sense a rather wild society. We need some degree of wildness, but not exactly the capitalist sort*" (Naess, 2008, p. 312). This criticism of the capitalist system is materialised through maxims such as: "*Eliminate or lessen neophilia - the love of what is new merely because it is new*" (Naess, 2008, p. 140). In fact, the capitalist system is partly based on the instrumentalisation of *neophilia*.

Moreover, another focus established by Naess is intergenerational solidarity. This notion of solidarity, as suggested by the *Brundtland Report* (Brundtland, 1987) analyzed in the second chapter, is an essential aspect for the definition of the concept of sustainable development. The sense of proportion results in respect for planetary limits and consequently for future generations. Naess

underlines that one must seek a lifestyle that can be universally sustained without certain populations and cultures being unfairly treated and exploited:

*Appreciate lifestyles that can be maintained universally – life-styles that are not blantly impossible to sustain without injustice toward fellow humans or other species. (Naess, 2008, p. 140)*

*Maintain concern about the situation in developing Nations, and attempt to avoid a standart of living too much higher than that of the needy (maintain a global solidarity of lifestyle) (Naess, 2008, p. 140)*

Another of the factors valued by Naess is the respect for diversity, while difference should not be interpreted as a threat. This proposal reflects the fact that Naess' *Deep Ecology* is a hymn to diversity, pluralism and the ability to create personal and adapted interpretations. To this idea of pluralism is added the call to value the potential of the scale on which we move. This valorisation involves the development of the local and small-scale level.

A better contact with local production allows us to have a better idea of what our vital needs are. In addition to this proximity with the products we consume, the valorisation of the local scale also reflects the creation of a sense of community:

*Appreciate, or participate in, primary production – small-scale agriculture, forestry, fishing. (Naess, 2008, p. 141)*

*Try to satisfy vital needs rather than desires. (Naess, 2008, p. 141)*

The satisfaction of vital needs and the protection of human dignity are for Naess ways of protecting the inherent value of human beings. These principles are not compromised in Naess' ecocentric theory, and this applies to all people. Naess praises a lifestyle that is light and non-disruptive to the inherent value of the ecosystems around him. In practice this means that one shouldn't *"use life-forms merely as means. Remain conscious of their intrinsic value and dignity, even when using them as resources."* (Naess, 2008, p. 141). For Naess, the awareness of the inherent value of the nature that

surrounds him leads to the practice of vegetarianism. Besides, nowadays, the reduction of meat consumption is pointed out as one of the measures that can be practiced at an individual level, which has the greatest impact on the reduction of the ecological footprint (Carter & Dowler, 2021, para. 69). On this subject, the UNFCCC states that the “*The rearing of livestock generates 14 per cent of all carbon emissions, similar to the amount generated by all transport put together.*” (UNFCCC, 2021b, para. 1)

The suggestions exposed above may seem to some relatively vague and this vagueness is deliberately created by the author. Thus, such proposals have a plurality of possible applications because the realities of the inhabitants of the earth are themselves plural. However, the application of these suggestions - and their possible variations - would have key impacts on the type of political agendas that are created concerning climate action.

f) **The word *Deep*: the danger of polarisation**

*Anything seems to pass through deep ecology's donut hole: anarchism at one extreme and eco-fascism at the other.* (Murray, 1987, pp. 165-176)

In delving into the subject of *Deep Ecology*, one should be careful to identify the strand of ecocentrism defended. Thus, it is important to stress that what is being presented as a valid alternative here is the approach developed by Arne Naess since misidentification would mean the validation of theories much more radical than the one proposed by Naess.

The term *Deep Ecology* is deeply vulnerable to polarisation. The sentence that introduces this section is an example of this. The term is usually linked to a radicalization of ecological movements, namely denounced by the use of the term *deep*. However, Naess' theory does not attempt to use the term *deep* in the same way as other authors who identify themselves "with the same movement". In Naess' theory the use of the term *deep* is not an invitation to radicalization or a motto for the creation of eco-fascist ideologies, but rather an invitation to deepen the human being's capacity for empathy. Thus,

an *ecocentric* approach does not exclude the interests of the human being but challenges a lifestyle that is disproportionate and unable to discern vital needs from luxury.

One must keep in mind that, if taken in the wrong direction, the deep ecology approach can be appropriated as a way of building xenophobic discourses that are basically a legacy of colonialism and racism deeply felt in the relationship between developed and developing countries. One should also bear in mind that the dimensions of the climate crisis are also the result of this unbalanced relationship. However, the sensitive debate on the pressure that the increase in population is causing the planet can be distorted to the point of becoming a discourse that supports a mission of ethnic cleansing. According to some authors, the Nazi doctrine behind the genocide of the Jewish people can be identified as an *eco-brutalist* doctrine:

*It is easy to forget that this same kind of crude eco-brutalism led Hitler to fashion theories of blood and soil that led to the transport of millions of people to morder camps like Aushwitz. The same eco-brutalism now reappears a half-century later among self-professed deep ecologists who believe that famines are nature's "population control" and immigration into the US should be restricted in order to preserve "our ecological resources." (Murray, 1987, pp. 165-176)*

This type of appropriation was made by authors such as Dave Foreman, who employs the term *deep* as a tool of radicalization and not of deepening, calling himself an Eco-Warrior. His major works, the magazine *Earth First!* (Earth First, n. d) and *Confessions from an Eco-Warrior* (Foreman, 1991), granted him a reputation as a radical ecologist and controversial activist who instrumentalised the environmental movement in favour of ultra-conservative ideas.

If ecology refers to a certain degree of empathy for nature and the ecosystems around us, Naess's inclusion of *Deep* refers to a deepening of this empathy, whereas the *deepening* of authors like Foreman means exactly the opposite. Foreman uses the defence of *ecocentrism* as a pretext to disseminate ideals of ethical cleansing. According to Murray Bookchin, a philosopher mainly linked

with social ecology, Foreman even suggested that the famine crises in Ethiopia are processes of natural selection and that providing humanitarian aid to this people would be contrary to the teachings of *Deep Ecology* (Murray, 1987, p. 167). Now, it is quite clear that one uses ecology to expand empathy ( *identification*) capacity of a society while the other uses it as an excuse to generate hate speech and white superiority values. The *Deep Ecology* analysed in this case - that of Naess - is not identifiable with such an appropriation and should not serve as an excuse to create hate speech.

*If deep ecologists have even the faintest knowledge of the “population theorists” Devall and Sessions invoke with admiration – notably, Thomas Malthus, William Vogt, and Paul Ehrlich – then they would be obliged to add: by measures that are virtually ecofascists. This specter clearly looms before us in Devall’s and Session’s sinistre remark: “the longer we wait [for population control], the more drastic will be the measures needed. (Murray, 1987, p. 172)*

*Deep Ecology* - and in general all environmental movements that examine the issue of population control from an *ecocentric* perspective - are subject to radicalisation and one should bear in mind that this tendency might increase. The worsening of extreme climate phenomena will be a catalyst for the appropriation of environmental movements by ideologies that are also extremist. The climate crisis can make it more urgent to create adaptation and mitigation measures that may be imposed by supremacist groups in power (Murray & Foreman, 1999). Therefore, a dialogue on the values that should sustain an ecological transition is needed since the term *ecology* does not *per se* presuppose a peaceful or subtle approach. There is a wide interpretative margin in ecology movements that could lead humanity in diametrically opposed directions and the issue should be given more attention than it currently deserves. Murray Bookchin draws attention to this polysemic value of the term *ecology*:

*Let us agree from the outset that the word “ecology” is no magic term that unlocks the real secret of our abuse of nature. It is a word that can be easily abused, distorted, and tainted as words like “democracy” and “freedom”. Nor does the word “ecology” puts us all – whoever “we” may be – in the same boat against environmentalists who are simply trying to make a rotten society work by dressing it in green leaves and colorful flowers, while ignoring the deep-seated roots of our ecological problems. (Murray, 1987, p. 166)*

Finally, Naess seemed the most suitable to enrich this study because he approaches *ecocentrism* in the most careful way, without disregarding the value of human dignity. More than a disregard of the anthropocentric approach, what Naess seeks to do is to bring to the centre of the debate the hypothesis that anthropocentrism cannot survive without ecocentrism. Naess underlines this incapacity for total and radical disconnection between the interests of human beings and the well-being of planet earth, recalling that human beings will not emerge victorious from an anthropocentrism that ignores the well-being of nature.

Consequently, in the long term it is impossible to have an anthropocentric society capable of dissociating anthropocentrism from nature, and therefore an *ecocentric* approach should be deeply valued. Naess proposes the process of initial *self-realization* since he believes that it is impossible for human beings not to realize that their interests are deeply connected to the interests of the natural world. Consequently, he believes that this process of deep reflection on man's interests and his place in the world would lead him to an amplification of his ability to identify with the natural system. The author reiterates the need to defend the vital needs of the human being as well as human dignity, so his *ecocentrism* is not antagonistic to human interests. What is criticised is the anthropocentrism that instrumentalizes nature in the name of human luxuries. Some fear that an *ecocentric* epistemology means the extreme valuing of nature over human beings. The point is to find a balance between respect for human dignity and the limits of the planet and this is not possible using only an anthropocentric perspective of ecology.

Let me propose a small illustrative example. Flying is something that makes travelling globally easier. However, the airline industry, just like the whole transport sector, is one of the biggest emitters of greenhouse gases, accounting for around 2.5% of global CO<sub>2</sub> emissions, and 3.5% of non-CO<sub>2</sub> impacts on climate (Ritchie, 2020). Thus, excessive air travel (just like the whole transport sector) has directly contributed to worsening the climate crisis. However, according to the anthropocentric system followed nowadays, there are no restrictions on the number of flights each

individual can take per year. In a society where *ecocentrism* prevails, it would be legitimate to limit leisure-oriented flights and the use of private jets in order to decrease the emission of greenhouse gases. It is complex to address rationing measures that limit individual freedoms, but the truth is that an anthropocentric vision of the climate crisis is permissive to the point that several representatives, such as Bill Gates, travelled to the signing of the Paris Agreement by private jet (Gates, 2021, p. 21). This reality persisted at COP26 (Williams, 2021) and would be inadmissible according to the *ecocentric* lens proposed by Naess.

Finally, one of the factors that creates unease in ecological movements, including Naess', is the fact that the defence of the planet is considered to limit the defence of human dignity, as if both factors were not interdependent. The author himself suggests how problematic the creation of this simplification (which facilitates polarisations) is, suggesting that one thing emerges as a deepening of the other, that someone who nurtures respect for his home and the environment demonstrates respect for oneself:

*The answer is that whatever the intensity of their fight for animals or wilderness, deep ecology supporters recognize the very special obligations we have for our fellow humans. What we look for is not a shift of care from humans towards nonhumans, but an extension and a deepening of care. It is unwarranted to assume that the human potential for care is constant and finite and that any increase of care for some creatures necessarily reduces care for others. (Naess, 2008, p. 311)*

### **4.3 Education for an Ecocentric future**

In his work *Ecology of Wisdom*, Naess concludes on a peculiar note of hope. The author reiterates his confidence in the problem-solving capacities of human beings, believing that the time will come when the level of empathy of human beings will expand. However, his hope lies in the 22nd century and not in the 21st century. It is predicted that the 21st century will be especially troubled in terms of the ecological, ethical and epistemological crisis:

*So, the big question is, how low are we going to sink before we start heading upward in the year 2101? How far down are we going to fall before there is a clear trend of decreasing regional and global ecological unsustainability? (Naess, 2008, p. 309)*

Naess' proposal may indeed come to fruition but it is also true that, as the Croatian activist Srécko Horvat proposes, the future is built in the present and it is not because it is a distant reality that we have no responsibility for it:

*The message here is clear. We already have to be the very Society that we are aiming to build. (Horvat, 2020, p. 125)*

This last part intends to underline the power of education as a mechanism for epistemological assessment and as a fundamental mechanism to create a society capable of dealing with the challenges of the climate crisis. Regarding the epistemological problem initially pointed out, education is a driver of change. The mindset of the 22nd century has its seeds spread in the 21st century.

#### **a) An Adequate Education**

*We are suffering from a metaphysical disease, and the cure must therefore be metaphysical. Education which fails to clarify our central convictions is mere training or indulgence. For it is our central convictions that are in disorder, and, as long as the present anti-metaphysical temper persists, the disorder will grow worse. Education, far from ranking as man's greatest resource, will then be an agent of destruction, in accordance with the principle corruption optima pessima. (Schumacher, 1993, p. 80)*

As suggested by E. F Schumacher, education without a review of the values that guide it is useless and even harmful. The author, who dedicated a chapter of his work *Small Is Beautiful* to "The Greatest Resource" (Schumacher, 1993, p. 60) (referring to education), proposes that the human species devotes more and more resources to education, but that this dedication has not yet undergone an essential revision of values. Schumacher, suggests that a materialistic society tends to forget the invisible foundations that sustain it. It is stressed that scientific development, in engineering or

economics for example, lacks a sense of purpose that responds to the needs of the future and the current generations.

Climate action is often accused of being an elitist and post materialist cause. Currently sustainability is perceived by many as a call for regression. Such beliefs are reflective of an epistemological system that measures development only through materialistic metrics. However, generations from the 21st century will have to start questioning this interpretation of development as they encounter increasingly extreme weather phenomena.

When referring to the inadequacy of current education, one is not just talking about the inadequacy in purely scientific terms. Of course there are many scientific and technological advances to be made and such advances could greatly benefit the climate cause. One such technological development is associated with the need to make renewable energy sources more efficient and cheaper. However, in this case we are dealing with the values sustaining areas of knowledge that are dominant in our society and that greatly influence the unfolding of the climate crisis:

*The way in which we experience and interpret the world obviously depends very very much indeed on the kind of ideas that fill our minds. If they are mainly small, weak, superficial, and incoherent, life will appear insipid, uninteresting, petty and chaotic. It is difficult to bear the resultant feeling of emptiness, and the vacuum of our minds may only too easily be filled by some big, fantastic notion – political or otherwise – which suddenly seems to illuminate everything and to give meaning and purpose to our existence. It needs no emphasis that herein lies one of the great dangers of our time. When people ask for education they normally mean something more than mere training, something more than mere knowledge of the facts, and something more than mere diversion. (Schumacher, 1993, pp. 64-65)*

It is proposed that the role of education is, among other things, to find an ethical and moral centre that drives scientific knowledge. A rich education without a rich purpose or the right framework generates distorted relations such as the one currently witnessed between human beings and nature. It generates a disregard for nature and becomes a tribute to materialistic solutions. Some of the

problems that we face as a society and that we think can be simplified to problems of a materialistic nature are in fact problems that concern the level of ideas and education. Moreover, the author stresses the need to create an education that is not constructed for the maintenance of the privilege of the one who is educated and that is distributive and expansive: “*If this ideology does not prevail, if it is taken for granted that education is a passport to privilege, then the content of education will not primarily be something to serve the people, but something to serve ourselves, the educated.*”. (Schumacher, 1993, p. 173)

#### **b) Education: The case of Economics**

Kate Raworth is one of today's authors who focused on the type of education that economics students are exposed to. Raworth recognises that such an education not only does not prepare students for the challenges of the 21st century, but is part of the problem, exacerbating the trajectory towards climate catastrophe.

Her work, *Doughnut Economy* (Raworth, 2017) can be included in the group of works that draw some influence from Naess's *Deep Ecology*. There is a continuity not in the prominence given to *ecocentric* ecology but more in the way in which the need to simultaneously protect human dignity and planetary limits is underlined. Raworth's work aims to find exactly that balance that Naess was already seeking, suggesting that it lies in the way in which the economists of the future are educated as her work deconstructs several of the fully anthropocentric metaphors and metrics sustaining the capitalist system so the *ecocentric* component enters into the equation. In fact, the 22nd century, on which Naess places all his hope and optimism, has already begun to be built, namely through works and exercises of *deep-questioning* such as the ones carried out by Raworth.

The author organises her theory through 7 basic principles based on the metaphor of the doughnut. The image of the doughnut (displayed below) (Raworth, n.d.) serves to propose a society that is oriented by the goal finding a balance between the social base and the ecological ceiling, between

human dignity and the limits of the planet. This middle ground, to which corresponds the "doughnut dough" is the new metric proposed by the author.

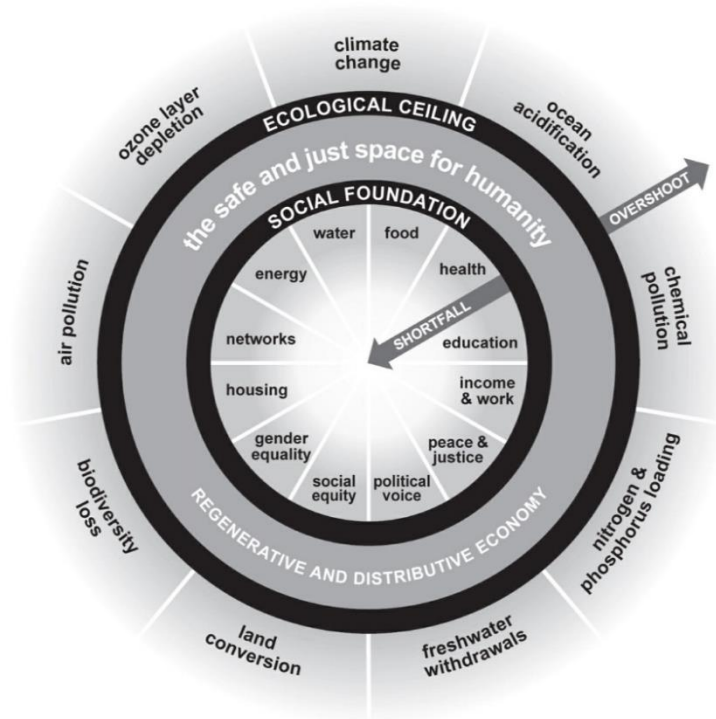


Fig. 4 Doughnut Economics by Kate Raworth

#### d) The dogma of growth: the green growth narrative

*Once a year, I conduct a class that divides friends, confronts ideologies and challenges us all to alternate our mindsets. I arrive early at the room where the seminar takes place and pull the chairs out of their neat rows and divide them into two long columns separated by an aisle, rather like the seats on an aeroplane. As they begin to arrive the students are confronted with a single question on the screen: Is green growth possible? Yes/No. (...) As these students*

*quickly discover, our beliefs about economic growth are almost religious: personal by nature, political by consequence, kept private and little discussed.*<sup>15</sup> (Raworth, 2017)

Like Naess, Kate Raworth criticises the main features of a deeply self-absorbed society with an unreasonable sense of anthropocentrism. The concept of economic growth and its relationship with the climate crisis is one of the points addressed, as the author suggests agnosticism in relation to economic growth.

Jason Hickel and Giorgos Kallis (Hickel & Kallis, 2019) who sought to understand - in their article "*Is Green Growth Possible?*" - whether the concept of *green growth* would not be a contradiction in terms. The authors deal with the concept of *decoupling*<sup>16</sup>, according to which economic growth remains inextricably linked to an upward trajectory of environmental degradation. Thus, decoupling is still far from being achieved:

*The notion of green growth has emerged as a dominant policy response to climate change and ecological breakdown. Green growth theory asserts that continued economic expansion is compatible with our planet's ecology, as technological change and substitution will allow us to absolutely decouple GDP growth from resource use and carbon emissions.* (Hickel & Kallis, 2019, p. 1)

Furthermore, it is explained that the narrative of *green growth* is useful - and continuously used - by economic policymakers. The prominence given to this narrative allows postponing a clear decision

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<sup>15</sup> Translated from: "*Uma vez por ano, dou uma aula que divide amigos, confronta ideologias e nos desafia a todos a alternarmos as nossas mentalidades. Chego cedo à sala onde decorre o seminário e tiro as cadeiras das suas filas ordenadas e divido-as em duas longas colunas separadas por uma coxia, mais ou menos como os assentos num avião. Conforme começam a chegar os alunos são confrontados com uma única pergunta no ecrã: O crescimento verde é possível? Sim/Não. (...) Como esses alunos descobrem rapidamente, as nossas crenças quanto ao crescimento económico são quase religiosas: pessoais por natureza, políticas por consequência, mantidas em privado e pouco discutidas.*"

<sup>16</sup> "Central to the United Nations' post-2015 development agenda grounded in the Sustainable Development Goals is the notion of 'decoupling': the need to divorce economic growth from its ecological impact. For proponents, decoupling entails increasing the efficiency with which value is derived from natural resources in order to reconcile indefinite economic growth with environmental sustainability. However, even advocates admit that the idea of decoupling remains poorly conceptualized and subject to scant empirical investigation. (...) According to UNEP, the decoupling concept was first advanced in 2001 by the Organisation for Economic Cooperation and Development (OECD), which presented it 'as one of the main objectives in their policy paper "Environmental Strategy for the First Decade of the twenty-first Century"' (UNEP, 2011a, p. 4)." (Fletcher & Rammelt, 2017, p. 150)

between economic growth or sustainability of life on the planet since so far the *decoupling* process is not a reality.

Raworth, one of the speakers invited to participate in a panel on the green transition included in the set of events of the Portuguese Presidency of the Council of the European Union of 2021 (Secretaria-Geral do Ambiente, 2021), sought to problematize the issue of economic growth as the ultimate dogma. The author does so by describing her experience as an economics student and teacher and by explaining that only later in her career as a teacher did she realise that she had never questioned the desirability of economic growth in any and every situation. It was also a turning point in her journey when she was asked what the best way to measure development was. As an economist she had never questioned the purpose of her discipline and had not even felt the lack of a sense of purpose (Raworth, 2017, p. 48).

The author takes the reader back to the history of economics as a discipline, highlighting some concepts such as GDP and the Environmental Kuznets Curve. All of them are useful for a better understanding of the trends in climate negotiations. The economic indicators in question refer to the prominence given to the growth of wealth, the latter implying that in this very wealth lies the cure for the climate crisis. The author seeks to demonstrate that an economic mission of infinite growth cannot be considered sustainable.

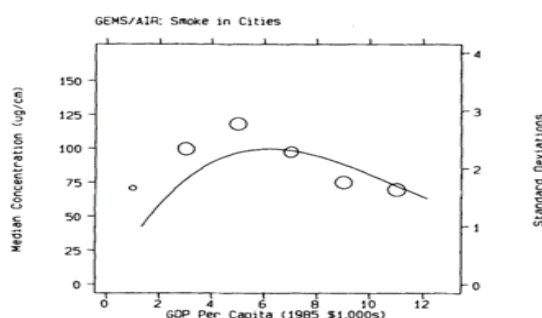
*Jonh Stuart Mill, for example, could hardly expect the steady state to precede what many would today call a "post-growth society". "The increase of wealth is not unlimited," he wrote in 1848. "A stationary situation of capital and population does not imply a stationary state of human progress. There would be as much scope as ever for all kinds of mental culture and social and moral progress; the same scope for improving the art of living, and a much greater probability of its being improved, when minds cease to be hoarded by the art of advancement."*<sup>17</sup>(Raworth, 2017, p. 291)

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<sup>17</sup> Translated from: "Jonh Stuart Mill, por exemplo, mal podia esperar que o estado estacionário precedesse aquilo a que muitos chamariam hoje em dia uma "sociedade pós-crescimento". "O aumento da riqueza não é ilimitado", escreveu em 1848. "Uma situação estacionária de capital e população não implica um estado estacionário de progresso humano. Haveria tanto âmbito como sempre para todos os tipos de cultura mental e progresso social e moral; o mesmo espaço

Raworth's theory is further enriched by a reflection on the guiding values of economic activity - inseparable from all the others - which for several theorists seems to be an essential but little debated question. Thus, her proposal is that the epistemological bases of today's society, especially those associated with the dominant economic system, must be rethought (Raworth, 2017, p. 57).

On the other hand, the author's reflection is relevant to the topic under analysis due to the way she addresses the issue of the Kuznets Environmental Curve, useful to better understand *green growth*. Such metrics match and sustain the agenda of large organizations and world banks. The Kuznets Curve model (analysing the relationship between GDP growth and economic inequality in an attempt to create a qualitative analysis of the wealth) was transposed to the climate struggle by Gene Grossman and Alan Krueger (Grossman, 1995, pp. 353-377). The following image (Grossman, 1995, p. 363), illustrates the relationship between economic growth and air pollution in cities:



**FIGURE I**  
**The Relationship between per Capita**  
**GDP and Urban Air Pollution**

**Fig. 5** Environmental Kuznets Curve: The Relationship between per Capita GDP and Urban Air Pollution

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*para melhorar a arte de viver e uma probabilidade muito maior de esta ser melhorada, quando as mentes deixassem de ser açambarcadas pela arte de avançar."*

The authors analysed the pattern between economic growth (GDP) and the growth of pollution, predicting that such a relationship would form an extreme rise followed by an extreme fall (forming an inverted 'U') (Raworth, 2017, p. 198). During the analysis, the authors studied the relationship between the growth of economic wealth and the contamination of air and rivers. The Kuznets Curve initially appeared as an economic model which intended to measure the relationship between economic growth and wealth distribution, suggesting that as wealth increases, inequality initially increases sharply and then falls sharply. Furthermore, the Environmental Kuznets Curve tries to transfer this assumption to the ecological sphere. The exercise of linking GDP and the level of pollution allows building a narrative that economic growth is an indispensable step to tackle the climate crisis.

It is a message with plenty of room for misinterpretation. Despite the warnings issued by the authors themselves (Raworth, 2017, p. 243), the environmental Kuznets curve may serve as a motto for a set of political practices that stimulate economic growth and market liberalisation. Agendas mainly linked to economic growth and neoliberalism may be presented as mitigation measures. Concerning this distortion, Raworth stresses:

*This is what Mariano Torras and James K. Boyce concluded when they matched the same cross-national data used to create the Kuznets Environmental Curve with levels of citizen power. They found that across a wide range of countries - and especially in low-income ones - environmental quality is highest in those where income is more evenly distributed, where more people are literate, and where civil and political rights are more respected. It is people power, not economic growth per se, that protects local air and water quality.<sup>18</sup> (Raworth, 2017, p. 245)*

The author notes how difficult it will be to change the course of the climate crisis as long as the major political and economic actors do not deconstruct the centrality given to the mission of

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<sup>18</sup> Translated from: "Foi o que Mariano Torras e James K. Boyce concluíram quando fizeram corresponder os mesmos dados transnacionais usados para criar a Curva Ambiental de Kuznets com níveis de poder dos cidadãos. Descobriram que, ao longo de uma ampla gama de países – e sobretudo nos de rendimentos baixos -, a qualidade ambiental é mais elevada naqueles onde o rendimento está distribuído mais equitativamente, onde há mais pessoas alfabetizadas e onde os direitos civis e políticos são mais respeitados. É o poder das pessoas, e não do crescimento económico per se, que protege a qualidade do ar e da água locais."

economic growth (reliant on disproportionate and unsustainable practices). The prominence given to economic growth by Institutions is materialized in the inertia shown by them to address climate urgency. Institutions sustained by the mission of economic growth, do not demonstrate to have the necessary mechanisms to tackle the climate crisis (Raworth, 2017, p. 245).

*The Bank for International Settlements - which is effectively the central bank for central banks - agreed, noting that 'the world economy seems incapable of returning to sustained and balanced growth [...] the road ahead is very narrow'.<sup>19</sup> (Raworth, 2017, pp. 297)*

#### **d) An opportunity to change**

*Undertaking this reformulation task is arguably one of the most exciting opportunities for economists in the 21st century.<sup>20</sup> (Raworth, 2017, p. 267)*

What is intended through the exposition of Naess' theory and of what I consider to be some manifestations of his legacy is to show that when it comes to the climate crisis, it is not enough to talk about a deep revision of the values that sustain society. this chapter has tried to present the *ecocentric* model of education as one of the ways of creating this structure of values. This final section is intended to recall that this challenge of restructuration, this phase of transition towards a healthier relationship between political actors and nature should be faced with enthusiasm as it is endowed with multiple potentialities.

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<sup>19</sup> Translated from: “O Banco de Pagamentos Internacionais – que é efectivamente o banco central dos bancos centrais – concordou, referindo que “a economia mundial parece incapaz de regressar a um crescimento sustentado e equilibrado [...] o caminho que temos pela frente é muito estreito”.

<sup>20</sup> Translated from: “Levar a cabo esta tarefa de reformulação é, sem dúvida, uma das oportunidades mais entusiasmantes para os economistas do século XXI.”

## **Conclusion**

This dissertation aimed to infer, through the COP 26 case study, *why the emissions of greenhouse gases are still increasing after 26 editions of COP*. This starting question is reducible to the formula "*Why are COPs failing to deliver?*", the subtitle of this dissertation. From the analysis of the Glasgow Climate Pact as well as the remarks published by the main environmental NGOs, it was concluded that the results generated by COP 26 reflect two distinct but mutually reinforcing trends. The aggravation of the climate crisis and the inability to generate ambitious and proportionate INDCs derives from two indissociable trends: a reality of institutional inertia and the subscription to an anthropocentric climate crisis narrative,

The diverse methodologies employed, the descriptive, analytical and prescriptive strands of this dissertation were useful in addressing several issues, enhancing the deepening of the research, allowing me to address many other issues related to globalisation, multilateralism and the capitalist system. Climate action cannot be conceived without probing these major vectors, and for this reason, they have been repeatedly revisited. Furthermore, the starting question covered four secondary questions that guided the development of this dissertation.

## **Contextualization**

The diagnosis made to COP 26 and the epistemological solution suggested in the final chapter would not have come to fruition without the initial contextualisation moment and the assessment of the evolution of the COP framework institution, the UNFCCC. The contextual assessment, delving into the documents, works and reports that founded certain debates related to climate change was useful

to better understand the main inertia or triggering points of fundamental moments of climate negotiations.

The relevance of the first chapter lies in the fact that it is a moment of recognition that the COP is an institutional crystallisation almost three decades old. It was quite valuable to the construction of the argument to address at this early point the issue of climate diplomacy and its guiding principles. This contextualization allowed me to understand the narrative that was built around the climate crisis, which would then be quite useful to understand whether the results announced by the Glasgow Climate Pact were relevant and whether the criticisms made by NGOs were legitimate. Fundamentally, the research and composition of this first chapter represented a turning point with regard to the normative proposal that I hoped to present in the last chapter, as I began to suspect that it would have a more political philosophy-oriented slant.

#### *What was the main progress made during COP 26?*

The second chapter was devoted to the question "*What was the main progress made during COP 26?*" and to the analysis of the Glasgow Climate Pact. The second chapter focuses mainly on the voice of the British Presidency responsible for hosting this edition of the COP in an attempt to understand the type of narratives created in relation to the challenges and results achieved. However, the chapter dedicated to the voice of NGOs also allowed me to infer some of the results achieved, as certain decisions that resulted from COP 26 generated consensus among NGOs.

In the final balance of the most striking decisions of COP 26, I would highlight the achievement of generating a Final Pact that refers to the need to phase down the use of coal and the achievement of mentioning for the first time *fossil fuels subsidies* in a final document. Another praiseworthy topic was the concern shown in not losing sight of the most ambitious number of Paris: 1.5°C of temperature increase. This was a much debated value in Glasgow, despite the COP INDCs far

exceeding it. The final document of COP 26 can then be described as the historical moment when the influence of non-renewable energy sources in today's society began to be threatened.

### *What were the main criticisms made to COP 26?*

The third chapter offered some perspectives on “*What were the main criticisms made to COP 26*”. The main criticisms generated by the environmental NGOs are directed at the lack of ambition of the submitted INDCs, the strong lobby presence at the conference venue, and the capitalist nature of some of the solutions proposed.

While the British presidency presents some achievements as paradigmatic milestones in the history of climate negotiations, NGOs such as WWF and Greenpeace take the opportunity to clarify that the debate on coal oscillated between the choice of the words, “*phase down*” or “*phase out*” (the less ambitious version having been chosen), and that the fact that the Glasgow Climate Pact is the first final document to question the financing of fossil fuel projects proves the strong fossil fuel lobby existing within the COPs.

Another component that generated disagreement, being narrated in profoundly different ways, was the issues of the Declaration on deforestation signed by countries such as Brazil and the revision of the sixth article of the Paris Agreement, one of the key components that needed urgent revision. The “*Glasgow Leaders' Declaration on Forests and Land Use*” (UNFCCC, 2021, p. 5), which unites 137 countries committed to stopping deforestation by 2030, is accused of being a recycled measure that had no real impact in the past, with deforestation of key areas such as the Amazon continuing to increase. On the other hand, Article Six of the Paris Agreement, under scrutiny in Glasgow, concerning the design of carbon market mechanisms or, more precisely, the create a carbon offset paradigm, did not reach a consensus among the main environmental NGOs, with reference entities such as Greenpeace stating that it is a measure that does not go to the root of the problem: the need to effectively reduce emissions (Greenpeace, 2021, p. 2).

### *What boycotts the COP outcomes?*

A comparative analysis of these two chapters and the retrieval of some of the topics covered during the contextualisation moment made it possible to reach some conclusions regarding the question "*What boycotts the COP outcomes*", mainly analysed in the third chapter. Through the analysis of the *Rio Principles* and of the main criticisms generated by NGOs, it was possible to infer that *path dependency*, the prominence given to *green growth* and the presence of fossil fuel lobbies are some of the trends, deeply interdependent, that boycott the success of the COP.

The concept of institutional inertia, borrowed from the theoretical lens of historical institutionalism, allowed me to better conceive the mechanisms of adaptation and change within an institution. The third chapter was partly devoted to the interest in COP as a Conference within a multilateral institution that holds a structure of values concerning the meaning of *sustainable development*, *green growth*, or *climate justice*. I tried to underline the role that institutions can play in crisis management, whether by the narratives they construct, the processes they favour or the parties they benefit. The brief moment devoted to the notion of *path dependency* allowed me to infer that *status-quo bias*, *lock-in*, *increasing returns*, were terms that effectively translate into the praxis of the UNFCCC.

From historical institutionalism I also drew the interest for the analysis of the founding values of an institution to better understand its evolution over time. In this sense, I tried to understand the type of development favoured by the UNFCCC through the analysis of the *Rio Principles*. I concluded that the notion of *sustainable development*, mentioned several times, has a polysemic nature that may not be the most favourable to the mitigation of the climate crisis. The analysis of Principle 12, linked with the need to protect economic growth, brought to my attention a highly debated issue, the idea of *green growth*. Some of the nuances of this concept were then debated, as economic growth in today's society has not yet been decoupled from the dependence on fossil fuels and narratives of excessive and unnecessary consumption. Finally, it was concluded that the inability of the UNFCCC to

question this idea of *green growth* discredits the institution, currently accused of being a “*greenwashing festival*”.

### ***What alternative would allow mitigating the climate crisis?***

The fourth chapter sought to answer the question “*What alternative would allow mitigating the climate crisis?*”. I began by recognition that the alternative I was seeking should be epistemological in nature, since all the other alternatives I had initially considered were not sufficient. In the course of my research I came to understand that the climate crisis was symptomatic of a structural crisis of values that damages the relationship between human beings and nature and that manifests itself in diplomatic interactions, institutional constructions and educational systems. The previous chapters allowed me to identify a profoundly anthropocentric narrative concerning the climate crisis denounced by a widespread tendency for humans to place themselves in a position of superiority concerning nature which is reflected in today's disproportionate societal habits. The alternative proposed is to find an ecocentric sense of proportion.

It became clear that *ecocentrism*, the ability to recognize the inherent value of nature, can, in practical terms, mean a wide range of things. Hence, Arne Naess' approach, a branch of *Deep Ecology* that advocates an ecological maturity that allows identification with all elements of the natural system without neglecting the protection of human beings' vital needs, was selected as an alternative.

In Naess' work I found answers that respond to the most elementary weaknesses felt in the UNFCCC. What was concluded was that the COP results, unambitious and unable to respond to the needs generated by a crisis between human beings and nature decades ago, are an obvious sign that the UNFCCC has not yet managed to create an institutional environment in which the inherent value of nature is recognised. In fact, one of the things highly commented on by both the British

presidency and NGOs was the fact that nature was given special prominence at this COP, leaving latent the idea that nature would not be the central topic under discussion at previous COPs.

Finally, this author proposes that the 21st century would be a century of deep crisis and reformulation of the relationship between human beings and nature that would lead to the development of an ecocentric 22nd century. Being so, the final part of the dissertation is dedicated to the conclusion that the solution effectively lies in 21st century education and some of the nuances of an ecocentric education system were examined.

The purpose of this dissertation was to dissect some of the weaknesses that the institutional structures responsible for climate negotiations, through the case study of COP 26, setting out to find an epistemological alternative to these weaknesses. In short, this dissertation appears as an apology of proportion and an open critique of excess. The health of multilateralism is quite important to the climate cause as it is the ability to bring different factions of society to the table in order to reach consensus. In parallel, this capacity for dialogue and compromise should not mean compromising on transparency and scientific data (two points that have been neglected for decades). Finally, in addressing issues such as the nuances of capitalism or ecocentrism, I never intend such approaches to be appropriated as means to endanger the respect for human dignity, an idea which I believe cannot be reinforced enough.

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