Collective human rights as an (onto)logical solution to climate change: reconceptualizing, applying and proceduralizing an overlooked category of human rights

Holtz, J.I.

1 Introduction

1.1 Introductory Remarks

Climate change[1] is one of the biggest threats facing humanity today. Currently, global temperatures have already risen by 1.1ºC,[2] causing more frequent and intense extreme weather events, melting glaciers and rising sea levels, among other effects.[3] Transformative action is urgently needed to avoid the worst effects of the climate crisis. Yet, climate change is notoriously difficult to solve as its causes and effects are spread out over a large timeframe and touch upon all geographical levels – from the national, to regional, to international – and it is interweaved with our economic, social, political and geophysical systems.[4] These complexities have led to the qualification of climate change as a 'super-wicked' problem.[5]

In 1992 the United Nations Framework Convention on Climate Change (UNFCCC) was established and mandated to provide solutions to the problem.[6] The UNFCCC revolves around the incorporation of environmental,

---

1 The term will be used interchangeably with global warming throughout this thesis. Climate change is sometimes said to include the portion of warming which is deemed natural and not attributable to human activity. This research, however, uses both global warming and climate change to indicate the anthropogenic warming of our planet caused by increasing greenhouse gas emissions.

2 IPCC, 'Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change' (2023) SPM at A.1.

3 *See generally* IPCC, 'Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change' (2022). This is explained in further detail in section 1.2 below.

4 *See*, for example Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (Oxford University Press 2017) 2–4; IPCC, 'Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change' (2014) at Summary for Policymakers (hereinafter: SPM) 4.4.

5 *See* Richard J Lazarus, 'Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future' (2008) 94 Cornell Law Review 1153; Kelly Levin and others, 'Overcoming the Tragedy of Super Wicked Problems: Constraining Our Future Selves to Ameliorate Global Climate Change' (2012) 45 Policy Sciences 123; Rebecca Bratspies, 'The Climate for Human Rights' (2018) 72 University of Miami Law Review 308.

6 'United Nations Framework Convention on Climate Change' [1992] 1771 UNTS 107.

economic and social considerations. However, since its establishment, global temperatures continue to rise, prompting the question whether the UNFCCC is sufficient to effectively tackle climate change. This failure of the UNFCCC to limit global temperatures combined with the complex nature of climate change has led to the proliferation of other approaches to climate change.

One of these approaches is the human rights approach. The delay of a sufficient political response has confronted the world with increasing climate impacts, threatening livelihoods. Climate change is displacing communities, causing food insecurity, water shortages, and increasing diseases, among other things – all negatively impacting the realization of a wide range of human rights.[7] In 2005 this link was brought into the public sphere, leading to a deeper understanding of the interlinkages between human rights and climate change in the years that followed.[8] Former High Commissioner on Human Rights, Michelle Bachelet, captures this deeper understanding when stating that:

> '[t]he world has never seen a threat to human rights of this scope. This is not a situation where any country, any institution, any policymaker can stand on the sidelines. The economies of all nations; the institutional, political, social and cultural fabric of every state, and the rights of all your people – and future generations – will be impacted.'[9]

This global scope of both human rights violations and climate change is a powerful narrative to urge more ambitious climate action and to provide a 'human face' to the issue. However, such a conception can, if employed uncritically, also eradicate difference by advancing a generalist conception of human rights. These risks are particularly true when considering critiques of human rights that address its narrow and biased subjectivity, state-centricity and connected limited and tendentious integration of the environment and nature. Indeed, a reconceptualization of concepts such as subjectivity, governance and territoriality, among others, is vital to address climate change's complex temporal and spatial scope.

---

7 IPCC 2022 WG II (n 3); UNGA, 'Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights' [2009] UN Doc. A/HRC/10/61.

8 Sheila Watt-Coultier, 'The Petition to the Inter American Commission on Human Rights Seeking Relief From Violation Resulting From Global Warming Caused by Acts and Omissions of the United States' [2005] available at: <https://earthjustice.org/sites/default/files/library/legal_docs/summary-of-inuit-petition-to-inter-american-council-on-human-rights.pdf>. See for an example of the academic exploration of the interlinkages contributions to Stephen Humphreys, *Human Rights and Climate Change* (Cambridge University Press 2009).

9 'Global Update at the 42nd Session of the Human Rights Council' (*OHCHR*, 9 September 2019).

This research explores the potential of collective human rights to provide such a reconceptualization. The choice of collective human rights is manifold. The qualification of this category of rights as solidarity rights signifies a move away from self-interested individuals towards communities of care. This community encompassed by collective rights represents a departure from the state/individual dichotomy at the core of human rights and has been associated with an expansion of actors. Moreover, their association with 'collective goods' could aid in a better integration of nature and the environment, particularly when centralizing its Indigenous connotations.

Still, the human rights and climate change discourse remains overwhelmingly silent on the relationship between collective human rights and climate change, bypassing the opportunity to unearth its potential in the climate context. This overwhelming silence, however, is not surprising given the unclarities, ambiguities and contradictions associated with this category of rights. Indeed, the category has rarely been accorded a meaningful exploration as to why we should have such rights and who or what is left unprotected in their absence.

To provide an account of collective human rights that balances legal certainty, (climate) justice and societal value,[10] this research aims to formulate a coherent theory of collective human rights premised upon the study of ontology, or ways of being. The concept of ontology, supported by philosophical and anthropological accounts, can provide the needed clarity to the current interpretation and application of collective human rights and define their role as a space for ontological flexibility within human rights law. It builds on the role and position of Indigenous rights and more broadly the (de)colonial histories often associated with collective rights to aid in the clarification of the most-often forwarded rights to self-determination, a healthy environment and development.[11] From here, the substantive and procedural climate advantages from a collective rights lens can be clarified to ultimately enable the recognition of the ever-increasing importance and moral imperative of collective rights as both a shield towards continued neoliberal expansion and assimilation and as a sword to change the dominant narrative and bring unheard voices to the fore. Only when fully appreciating and valuing ontological difference can the human rights response to climate change be enhanced.

---

10 Gustav Radbruch, 'Five Minutes of Legal Philosophy (1945)' (2006) 26 Oxford Journal of Legal Studies 13, Or as Alston explains: '[t]o achieve an appropriate balance between, on the one hand, the need to maintain the integrity and credibility of the human rights tradition, and on the other hand, the need to adopt a dynamic ap-proach that fully reflects changing needs and perspectives and responds to the new threats to human dignity and well-being', Philip Alston, 'Conjuring up New Human Rights: A Proposal for Quality Control' (1984) 78 American Journal of International Law 607, 609.

11 A term first introduced in Karel Vasak, 'For the Third Generation of Human Rights: The Rights of Solidarity' (1979) 2 Inaugural lecture to the tenth study session of the International Institute of Human Rights, Strasbourg.

To position this study in the current climate change debate and more accurately situate and quantify the collective rights approach vis-à-vis other approaches to climate change, this introductory chapter first takes a closer look at the problem by fleshing out the characteristics of climate change as a 'super-wicked' problem. Next, the proposed solution to this problem, the UNFCCC, is reviewed, identifying strengths and weaknesses to address these super-wicked characteristics. Following this analysis, other approaches to tackling climate change are assessed in light of these characteristics: the environmental approach, the economic approach and justice approach. This analysis highlights the added value of a human rights approach, but also its shortcomings and caveats. Based on this analysis, section 1.4.2 further clarifies why a human rights approach should pay due account to collective human rights, providing an overview of its *prima facie* advantages. In order to explore such advantages, the research question and sub-questions are identified and its corresponding structure, aim, approach and methodology explained.

1.2 Climate Change: A Super-Wicked Problem

Widespread scientific data evidences that the Earth is warming due to increased greenhouse gas (GHG) concentrations in the atmosphere caused by human activity.[12] Climate change has extensive impacts on human and natural systems as each consecutive year sees the highest anthropogenic emissions of GHGs.[13] Climate change has warmed the atmosphere and oceans, leading to ocean acidification, threatening the survival of marine ecosystems.[14] Ice sheets are diminishing, glaciers are melting and snow covers are decreasing, causing 20 centimetre of sea level rise.[15] Climate change increases the frequency and intensity of extreme weather events, including heat waves, droughts, floods, cyclones, wildfires and events resulting from changes in precipitation patterns such as mud and landslides.[16] These processes are mapped by an increasing body of climate science. As a result, science provides more detailed and comprehensive information of climate processes and is increasingly able to allocate portions of the greenhouse gas effect to particular drivers, such as forest degradation, fossil fuel industries or intensive animal agriculture.[17] This scientific knowledge has contributed to the qualification as climate change as a 'super-wicked' problem.[18]

12 Naomi Oreskes, 'The Scientific Consensus on Climate Change' (2004) 306 Science 5702. This study summarizes 928 abstracts of scientific papers written between 1993 and 2003.
13 IPCC SR 2014 (n 4) SPM.1.
14 ibid SPM 1.1.
15 As measured between 1901 and 2018 IPCC SR 2023 (n 2) SPM at A.2.1.
16 IPCC SR 2014 (n 4) SPM 1.4.
17 ibid SPM 2.
18 *See* Lazarus (n 5); Levin and others (n 5); Bratspies (n 5).

In order to compare and contrast a human rights approach to other approaches to climate change, as well as to identify its potential merits and that of the inclusion of collective human rights, this section first clarifies the content and scope of the challenge we are facing on the basis of the characterisation of climate change as a super-wicked problem. This characterisation is substantiated by scientific evidence as presented by the Intergovernmental Panel on Climate Change (IPCC). The IPCC is the leading scientific body on climate change and its reports also inform the climate negotiations at the UNFCCC.[19] This review provides an overview of the current state of play and the scale and urgency of limiting global warming to 1.5ºC.[20] In doing so, this section analyses the proposed solutions to climate change by studying the way they each address the identified aspects of climate change which make it notoriously difficult to solve. This, in turn, allows for a better review on the contribution of a human rights approach which includes collective human rights to combat the climate crisis.

1.2.1 Climate Change as a Wicked Problem

A super-wicked problem is a term derived from 'wicked' versus 'tame' problems as defined by theorists Rittel and Webber to give a name to those issues that are difficult to govern because they refer to open societal systems.[21] Rittel and Webber identify key features of problems that policy makers should consider when choosing an implementation tool to address these wicked problems. The assumption is that a consideration of these aspects will improve effectiveness of solutions.

Their argument starts off by stating that pluralism and the differentiation of values have led to problems which cannot find a definite answer in science, contrary to 'tame' problems which are amenable to the tools of verification and scientific analysis, providing a well-defined starting point and finishing

19 The UNFCCC in Article 4(2)c, for example, acknowledges '[c]alculations of emissions by sources and removals by sinks of greenhouse gases (…) should take into account the best available scientific knowledge.'

20 This temperature aim is a good example of the 'informing role' of the IPCC: While the Paris Agreement originally calls for the need to keep warming limited to 'well below 2ºC', the IPCC Special Report on 1.5ºC of temperature rise – which clearly stipulated the devastating effects of each additional degree of warming above 1.5ºC – guided the climate regime to adopt policies to limit warming to 1.5ºC instead of 'well below 2ºC'. Paris Agreement to the United Nations Framework Convention onf Climate Change [2015] 3156 UNTS 79, Article 2(1)a; IPCC, 'Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5 °C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change' (2018).

21 *See* Horst WJ Rittel and Melvin M Webber, 'Dilemmas in a General Theory of Planning' (1973) 4 Policy Sciences 155.

line.[22] 'Wicked' problems, therefore, are defined by 1) unique, indeterminate problem-definitions, 2) a plurality of objectives held by various stakeholders, 3) a myriad of possible solutions, which are neither true or false but instead rely on the normative values of those providing the solution, and 4) the fact that its solutions will generate waves of irreversible consequences over a long period of time.[23] The latter means that '[e]very attempt to reverse a decision or to correct for the undesired consequences poses another set of wicked problems, which are in turn subject to the same dilemmas.'[24] Consequently, there is no one perfect solution, but solely a solution that best limits the emergence of new wicked problems.

Climate change is ticking these 'wickedness-boxes'. First, our understanding of the issue and its linkages with other problems is constantly evolving, as evidenced by scientific studies specifying the impacts of climate change on various groups as well as on the role of climate change as a risk multiplier, for example in relation to conflicts.[25] In addition, climate change has been linked to problems such as biodiversity collapse, poverty eradication and, as central in this study, the realisation of human rights.[26] Developments such as these shift the problem-definition and, by extension, the various solutions, causing climate change to constitute a unique, indeterminate problem-definition. Second, climate change touches upon the very fabric of global, regional, national and local society and is interweaved with our economic, social, political and geophysical systems.[27] The increase of GHG emissions through fossil fuel combustion and deforestation[28] is largely driven by economic growth, lifestyle, energy use, land use patterns, technology, climate policy and, relatedly, population growth.[29] While GHG intensive activities might occur

22 ibid 156; Tom Ritchey, 'Wicked Problems. Modelling Social Messes with Morphological Analysis' (2013) 2 Acta Morphologica Generalis at 2.

23 Rittel and Webber (n 21) 160–164. More precisely, Rittel and Webber identify 10 characteristics, which are here captured in five characteristics. To view all ten aspects in detail, *see* 160-167.

24 ibid, 163.

25 Ragnhild Nordås and Nils Petter Gleditsch, 'Climate Change and Conflict' in Susanne Hartard and Wolfgang Liebert (eds), *Competition and Conflicts on Resource Use* (Springer 2015).

26 HRC Res 41/21, 'Human Rights and Climate Change' [2019] UN Doc. A/HRC/41/L.24; United Nations Special Rapporteur on Extreme Poverty and Human Rights, 'Climate Change and Poverty' [2019] UN Doc. A/HRC/41/39.

27 *See*, for example Bodansky, Brunnée and Rajamani (n 4) 2–4; IPCC SR 2014 (n 4) SPM 4.4.

28 IPCC, 'Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems' (2019).

29 IPCC SR 2014 (n 4) SPM 1.2. Noting that the reliance on fossil fuels in combination with population growth will lead to the highest increase of emissions. When transitioned to fossil free energy systems, the contribution of population growth will naturally be less. The IPCC additionally notes that '[t]he contribution of population growth between 2000 and 2010

in a specific territory, once emissions are in the atmosphere they are regarded a global issue. Seeing the issue in isolation and not considering its importance to other (global) issues, will increase the consequences, as well as the emergence of new, derived wicked problems.[30]

Third, not everyone has contributed to the problem to similar degrees, and therefore a myriad of perspectives arise, making proposed solutions dependent on the specific political context. Developed countries have historically contributed the largest share of GHGs. The United States (US) is the largest emitter with 20% of total emissions followed by the European Union (EU) with 17%.[31] To contrast, between 1850 and 2010, the entire continent of Africa made up 7,1% of global emissions, while the US in the same period accounted for 18.6%.[32] Developing countries have thus historically contributed less GHG emissions, but are amongst the first to experience climate impacts, posing specific questions on the adaptation to these effects, such as how loss and damage caused by climate change should be addressed in these countries.[33] Yet, developed countries tend to focus more on the mitigation of climate change, through for example developing technical solutions aimed at the reduction of GHG emissions.[34]

Between these countries, as well as between sections of the population, there are again different perspectives on possible solutions. Examples include the approach of small island developing states (SIDS) to enhance the urgency of ambitious global mitigation in order to protect their land under threat from

---

remained roughly identical to the previous three decades, while the contribution of economic growth has risen sharply.'

30 For example, the embedded power imbalances also reflect colonial bounds as well as reflecting problems incorporated within sustainable development, Rachel Kyte 'Climate Change is a Challenge for Sustainable Development' (*World Bank*, 15 January 2014); Subhabrata Bobby Banerjee, 'Who Sustains Whose Development? Sustainable Development and the Reinvention of Nature' (2003) 24 Organization Studies 143; Julia Dehm, 'Carbon Colonialism or Climate Justice: Interrogating the International Climate Regime from a TWAIL Perspective' (2016) 33 Windsor Yearbook of Access to Justice 129.

31 Marcia Rocha and others, 'Historical Responsibility for Climate Change – from Countries Emissions to Contribution to Temperature Increase' (2015).

32 Michel GJ Den Elzen and others, 'Countries' Contributions to Climate Change: Effect of Accounting for All Greenhouse Gases, Recent Trends, Basic Needs and Technological Progress' (2013) 121 Climatic Change 397.

33 IPCC SR 2014 (n 4) SPM 2.3.2. This is also partly reflected by the principle of CBDR, as well as through the negotiations at the UNFCCC, as expanded in section 1.3.1.

34 For example, the UNFCCC requires its parties to submit national reports. For developed countries (referred to as Annex-I countries at the UNFCCC) it is required to communicate on 'emissions and removals of greenhouse gases (GHGs); national circumstances; policies and measures; vulnerability assessment; financial resources and transfer of technology; education, training, and public awareness', while developing countries (referred to as non-Annex-I at the UNFCCC) are required to report on 'measures to mitigate and to facilitate adequate adaptation to climate change'. *See* <https://unfccc.int/es/topics/mitigation/workstreams/nationally-appropriate-mitigation-actions/national-reports>.

sea-level rise, or the focus on new adaptation models such as forced relocation.[35] Indigenous populations and local communities defend their lands and its perceived capacity to function as a 'carbon sink',[36] while their governments may prioritise mitigating climate change through building hydro-electric dams, which can adversely impact these lands.[37]

Another perspective on solutions arises considering the contribution of (transnational) corporations to climate change. Research shows that 100 companies are responsible for 71% of global emissions and more than 50% of global industrial emissions since 1988 can be traced to just 25 companies.[38] Approaching the problem from this perspective requires solution such as tackling public investments in such companies or developing accountability mechanisms for environmental damage caused by these companies.[39]

The global scope of the issue, as well as the differentiated impacts and contributions and the fact that climate change touches upon each aspect of the Earth's systems, make policy responses particularly challenging, or wicked. Policy responses must therefore take into account the (both horizontal and vertical) trickling down effects of choices, as to reduce the materialisation of new wicked problems.

1.2.2 Additional Characteristics of a Super-Wicked Problem

As mentioned, climate change is not only a wicked problem but qualified as a 'super-wicked problem'. A super-wicked problem is defined by several

35 *See* for example Mariya Gromilova, 'Revisiting Planned Relocation as a Climate Change Adaptation Strategy: The Added Value of a Human Rights-Based Approach' (2014) 10 Utrecht Law Review 76; Stacy-Ann Robinson, 'Climate Change Adaptation Trends in Small Island Developing States' (2017) 22 Mitigation and Adaptation Strategies for Global Change 669.

36 It is important to note that – something expanded in Chapter 2 – the concept of carbon sinks is not part of Indigenous cosmology and a particular terminology that further embeds Western economic models in the response to climate change as for example explained by Dehm (n 30) 137.

37 *See* for example Center for International Environmental Law, 'Fact Sheet: Chile's Alto Maipo Hydroelectric Project (February 2017) or Banktrack, 'Barro Blanco Dam Project (19 November 2018). For a more extensive documentation of these type of projects, *see* the work of the Business and Human Rights Resource Centre, <https://www.business-humanrights.org/en/>. This also reflects the characteristic of wicked problems as defined by Rittel and Weber as solutions are never really solved but instead are at best resolved. This does not mean, however, that each solution is equal – there are indeed approaches who can be qualified as 'more just' or 'better', just not as either false or true.

38 Paul Griffin, 'The Carbon Majors Database: CDP Carbon Majors Report 2017' [2017] CDP Report 1.

39 ibid. An attempt to regulate businesses can for example be found in 'Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework' (*OHCHR* 2011) UN Doc. HR/PUB/11/04.

additional, distinguishing attributes to consider when choosing an approach to tackle such a problem.

First, for these problems, time is running out. Since the issue arrived in the public sphere in the 1980s, GHG emissions have continued to rise despite the growing number of climate policies addressing the issue. In 2019, global GHG emissions were 12% higher than in 2010[40] and the emissions from 1990-2019 constitute 42% of all historic CO2 emissions, with 58% occurring between 1850-1989.[41] If the world maintains a business-as-usual model, global temperature increase is expected to reach between 2.2ºC and 3.4ºC the end of the century.[42] Even when taking into account current pledges and climate policies of countries, global temperatures will still increase between 1.7-2.6ºC.[43] The IPCC has clearly identified the detrimental impact of climate change by each additional degree of warming.[44] At a certain point, the cumulative effects of global warming could lead to 'tipping points' – points of no return, where the effects become irreversible.[45] Urgent action is therefore required to combat climate change.

Second, those responsible for the problem are also those predominantly responsible for the formulation and implementation of solutions. Even though sources and effects of climate change can be increasingly identified, the response thus far has been inadequate as the response to date can be regarded 'global political paralysis'.[46] As further explained in section 1.3.1, the UNFCCC has not lead to the results necessary to limit global warming and states' lack of ambition is currently putting the world on a trajectory of between a 2.6 and 4ºC global temperature rise.[47]

Third, and relatedly, the central authority needed to address the issue is either weak or non-existent. There exists a global collective action problem because of a lack of coordination between states, related to a weak climate regime.[48]

---

40 IPCC SR 2023 (n 2) SPM A1.4.

41 ibid SPM A1.3.

42 As evidenced by Climate Action Tracker, an independent scientific analysis that tracks whether government climate action is Paris aligned 'The CAT Thermometer' <https://climateactiontracker.org/global/cat-thermometer/>. The corresponding data can also be found on this page.

43 ibid.

44 IPCC Special Report 1.5°C (n 20).

45 *See* for studies on this phenomenon for example Timothy M Lenton, 'Early Warning of Climate Tipping Points' (2011) 1 Nature Climate Change 201; Elmar Kriegler and others, 'Imprecise Probability Assessment of Tipping Points in the Climate System' (2009) 106 Proceedings of the National Academy of Sciences 5041; Timothy M Lenton and others, 'Tipping Elements in the Earth's Climate System' (2008) 105 Proceedings of the National Academy of Sciences 1786.

46 Bratspies (n 5) 320.

47 'The CAT Thermometer' (n 42).

48 Levin and others (n 5) 128; Bratspies (n 5) 321.

Fourth and finally, irrational discounting is pushing responses to the future and therefore onto future generations. Irrational discounting is a concept of the cost-benefit analysis (CBA) – the monetary evaluation method that balances perceived benefits with expected costs in order to select the most cost-effective solution. The application of a CBA to climate change has attracted proponents and opponents.[49] However, the incorporation of this concept as one of the 'super-wicked' elements suggests the insufficiency of such an approach. There are several arguments rejecting any benefit from applying a CBA. The first relates to the specific temporal scope of climate change. Climate effects are not easily attributed to a specific event. GHG emissions are in the atmosphere for a long period of time and contributory actions to climate change can be traced back for hundreds of years, while its effects may only materialise in the distant future.[50] These spatial and temporal gaps make it hard for the analysis to account for the complete costs. Second, it can be regarded unjust, or even impossible, to put a value on climate impacts, such as loss of territory and culture, the disruption of ecosystem services, the decline in biodiversity, ocean acidification or the increased spread of vector-borne diseases.[51] The uncertainties and caveats of the analysis therefore make it near impossible to first draw a temporal framework as a basis of the analysis and, second, to decide what to include herein and how to value these costs.

As an extension of CBA, irrational discounting encapsulates these concerns and additionally includes the tendency to promote short-term interests both on an individual and national (and therefore to a certain extent global) level.[52] Discounting in this context means converting future costs into the value they would have at the present time. Consequently, dependence on a high discount rate would diminish current value of future costs, while a low rate would reveal the enormous costs of future consequences of climate change.[53] Mitigating the worst effects of climate change does require accounting for the future when making policy choices. This means that, at present, tackling climate

49 *See generally* William Nordhaus, *A Question of Balance: Weighing the Options on Global Warming Policies* (Yale University Press 2014) chs 1, 7; Eric Posner and Matthew Adler, 'Cost-Benefit Analysis: Legal, Economic, and Philosophical Perspectives: Introduction' (2000) 29 The Journal of Legal Studies 1.

50 Lazarus (n 5) 1176, 1177; Bratspies (n 5) 325; IPCC SR 2014 (n 4) SPM 3.1.

51 *See* generally for these impacts IPCC 2022 WG II (n 3).

52 Levin and others (n 5) 128, 129; Lazarus (n 5) 1174–1176. This refers to the central place of the doctrine of state sovereignty in international law and policy and therefore the climate and other regimes.

53 *See* on general discussions on discounting in the climate discourse for example Simon Caney, 'Climate Change and the Future: Discounting for Time, Wealth, and Risk' (2009) 40 Journal of Social Philosophy 163; David Weisbach and Cass R Sunstein, 'Climate Change and Discounting the Future: A Guide for the Perplexed' (2008) 27 Yale Law & Policy Review 433. Both take a different approach, Caney argues that discounting is diametrically opposed to the principle of intergenerational equity and climate change is better approached from a human rights perspective. Weisbach and Sunstein give a more balanced overview of the various approaches to discounting in relation to climate change.

change will require high costs, whilst possibly only receiving a small portion of the benefits.[54] The current capitalist model cannot grasp this challenge because of its tendency to promote short-term (economic) interests. In the climate regime, this complexity has been captured through the incorporation of the principle of intergenerational equity.[55] However, there is no international instrument defining components of the principle and its status and content in international law remains superficial.[56]

Climate change's complex temporal and geographical scope, interrelatedness with all sectors of society and the urgency of effectively tackling the issue all contribute to it being a super-wicked problem. The climate issue even contains another muddling component, as Bratspies points out: 'the overwhelming majority of the conduct that has gotten us to this point has been entirely legal.'[57] A response to climate change therefore calls for a re-evaluation of our legal system to enable a more effective response to the climate crisis. Various approaches have emerged, each skewed on different areas of international law. In the following section, the proposed solution by the international community of states, the UNFCCC, as well as the more dominant approaches to tackling climate change are reviewed in light of the wicked and super-wicked attributes.

1.3 Solutions to Tackle Climate Change: The Need for a Human Rights Approach

Guided by these super-wicked characteristics this section first analyses the international community's solution to the problem: the UNFCCC. Next, it

54 This is notwithstanding the general problematic of capitalism and its fuelling of climate change, *see* Jason W Moore, 'The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis' (2017) 44 The Journal of Peasant Studies 594.

55 Intergenerational equity means that the actions of this generation should not undermine the rights of future generations. This is underlined in Article 3(1) UNFCCC: 'The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities'.

56 *See* generally Catherine Redgwell, 'Principles and Emerging Norms in International Law' in Kevin R Gray, Richard Tarasofsky and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016). She notes that '[i]ntergenerational responsibility 'has yet to attract the international community's imprimatur as [an] operational legal concept.'' (198). While climate litigation has revealed an increasing incorporation of future generations, particularly through youth-based cases, there remains a reluctancy to fully engage with the concept. For example, in CRC, 'Chiara Sacchi et al. v Argentina' (2021) UN Doc. CRC/C/88/D/104/2019, the Committee went out of its way to provide extraterritorial indications but did not engage with the argument of the applicant children representing future generations. Another indication as to its predominant use as a framing tool is the failure of the ECtHR to give it legal consequences as discussed in sections 5.2.1.3 and 5.2.3.1.

57 Bratspies (n 5) 327.

identifies and studies several other approaches to combatting climate change and how they address these characteristics. After balancing and comparing these approaches, this section concludes that the human rights tradition offers a unique set of attributes to combatting climate change. By no means does this research suggest that human rights are a silver bullet in combatting the climate crisis – the wickedness of this problem, as elaborated on in the previous section, implies a need to combine various approaches. It does, however, stress that while several approaches to tackle the climate crisis have emerged, a human rights approach is best placed to approach this super-wicked problem and spur the transformative changes necessary whilst addressing the root causes of climate change. Addressing root causes[58] ultimately can usher the way to realizing global justice, looking beyond the Western growth paradigm[59] to address different ways of being.[60] Arriving at the human rights approach, it shortly reviews the plurality of interpretations of this approach. In section 1.5, the exact content of the human rights approach to climate change as interpreted and employed in this research is explained further.

1.3.1 The Proposed Solution: The United Nations Framework Convention on Climate Change

The UNFCCC is essentially a sustainable development treaty as it incorporates environmental, developmental, and social and ethical concerns. This can be observed from its preamble which, among other things, '[a]cknowledg[es] that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated respons-

58 It is, as subsequently shown, difficult to identify causes of climate change as they relate to specific climate events and impacts. However, climate change and the unwillingness or inability to respond to the threat is anchored in some persistent systems which have led to this unwillingness or inability. Specifically, this concerns deeply rooted power imbalances, finding its origins in the dominant economic system aimed at short-term financial gain (or capitalism), colonialism and imperialism. This is also reflected in the analysis here of climate change as a super-wicked problem and is fully analysed in Chapter 2 of this study. James Moore has described this system as the 'Capitolocene' as an alternative to the causes of climate change identified in works of, for example, Bruno Latour on the 'Anthropocene'.

59 Which also implies moving beyond the 'unavoidable paradigm' of sustainable development, *see* Sam Adelman, 'The Sustainable Development Goals, Anthropocentrism and Neoliberalism' in Duncan French and Louis J Kotzé (eds), *Sustainable Development Goals: Law, Theory and Implementation* (Edward Elgar Publishing 2018); Virginie Barral, 'Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm' (2012) 23 European Journal of International Law 377.

60 These different ways of being, or ontologies, are central to this research and are discussed in detail in Chapter 2 and incorporated throughout this study.

ibilities and respective capabilities and their social and economic conditions'[61] and that 'steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas'.[62]

When scientific consensus was found in the 1980s that global temperatures were rising due to increased GHG emissions, scientists decided that the reduction of these gasses was warranted.[63] During the at that point purely environmental discussions which aimed to achieve necessary reductions to protect global ecosystems, it soon became clear the required policies would impact states' economies and that differentiated approaches were warranted. Newly developing states in particular feared that a response to climate change would infringe upon their economic sovereignty, effectively posing barriers to their economic growth.[64] As a result, around 1990, the discussions became highly politized, led by intergovernmental negotiations motivated by economic self-interest, soon creating a deeply divided political landscape.[65] Developing countries also posed essential justice questions, since they contributed the least to the problem, but would have to bear the brunt of the impacts.[66] Ultimately, vastly different positions led to a heavily compromised agreement, which incorporates the three dimensions – environmental, developmental and social: the UNFCCC.

At its core, the UNFCCC is an environmental treaty as its aim is to stabilise the concentration of GHGs in the atmosphere to a level 'that would prevent dangerous anthropogenic interference with the climate system', but, as is immediately added, this must be done in a manner which will 'allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner'.[67] This phrasing is a reflection of the compromises made during the drafting process of the Convention.[68] To achieve the objective, the Convention was established as a framework, meaning that the Convention itself sets out the objectives, but does not provide the implementation tools.

61 UNFCCC, preamble para 6.
62 ibid para 16.
63 Daniel Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary' (1993) 18 The Yale Journal of International Law 451, 458.
64 Daniel Bodansky, 'The History of the Global Climate Change Regime' in Urs Luterbacher and Detlef F Sprinz (eds), *International Relations and Global Climate Change* (MIT Press 2001) 30, 31. This was led by states such as China, Brazil and India.
65 ibid 28–30.
66 This led to the principle of CBDR as one of the UNFCCC's leading principles as reiterated through Article 3(1) of the Convention (n 55).
67 UNFCCC, Article 2.
68 Bodansky, 'The History of the Global Climate Change Regime' (n 64).

For implementation it relies on established negotiation processes to adopt tools by consensus.[69]

To operationalise the UNFCCC, the legally binding Kyoto Protocol (KP) was adopted in 1997.[70] However, this Protocol was criticised for, among other things, its top-down structure and the failure of its mechanisms. in particular its emissions trading regime.[71] It, moreover, failed to take into account responsibilities of the rapidly growing economies such as China and, as a result, the US failed to ratify the Protocol.[72] Since the KP failed to reduce global emissions, a new operationalising treaty was negotiated.[73] In 2015, these negotiations culminated in the adoption of the Paris Agreement (PA).[74] This Agreement, together with its agreed upon implementation guidelines, is the current dominant tool with which the climate crisis is addressed. The PA aims to '[hold] the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels'.[75] The goals set by the PA are centered around the notion of sustainable development, taking due account to the goal of poverty eradication, and highlight the need for (intra – and intergenerational) equity and to act in compliance with the principle of common but differentiated responsibilities (CBDR) throughout.[76] Its preamble also acknowledges that

> 'climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of Indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.'[77]

---

69 Alan Boyle and Navraj Singh Ghaleigh, 'Climate Change and International Law beyond the UNFCCC' in Kevin R Gray, Richard Tarasofsky and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016) 29.

70 UNFCCC, 'Kyoto Protocol to the United Nations Framework Convention on Climate Change Adopted at COP3 in Kyoto, Japan' [1997] 2303 UNTS 161.

71 Amanda M Rosen, 'The Wrong Solution at the Right Time: The Failure of the Kyoto Protocol on Climate Change' (2015) 43 Politics & Policy 30; David M Driesen, 'Sustainable Development and Market Liberalism's Shotgun Wedding: Emissions Trading under the Kyoto Protocol' (2008) 83 Indiana Law Journal 21.

72 Rosen (n 71).

73 An overview of similarities and differences between the two can be found in the introductory chapter of Bodansky, Brunnée and Rajamani (n 4).

74 UNFCCC, 'Decision 1/CP.21, Adoption of the Paris Agreement' [2016] UN Doc. FCCC/CP/2015/10/Add.1.

75 PA, Article 2(1(a)).

76 ibid, Article 2 and Article 4(1). CBDR is expressed through the regime of loss and damage (Article 8), the transfer of resources and technologies from developed to developing countries (Article 10), climate finance (Article 9(1)) and the established market mechanisms (Article 6).

77 ibid, preamble.

This has caused the PA to be hailed as the first legally binding environmental treaty incorporating an explicit reference to human rights.[78]

The yardstick with which to measure progress of states towards limiting global warming, as well as the core to achieving the goals set out in the PA, are the Nationally Determined Contributions (NDCs).[79] These NDCs are reflective of a bottom-up approach and ultimately dependent on states' voluntary choices. They are also central to the 'ambition cycle' established under the PA: NDCs will be submitted by state Parties every five years, the progress of implementation of these NDCs will be tracked through the Transparency Framework and this Framework will in turn inform the Global Stocktake, which will track collective progress towards achieving the Agreement's objectives and its outcome will inform the formulation of the updated NDCs – completing the cycle.[80] Next to this process underpinning the PA, it similarly considers other, more 'peripheral' issues, such as loss and damage, technology and knowledge transfer, climate finance and capacity building.[81]

Just as in the KP, the achievement of the NDCs in the PA is closely aligned with the establishment of an emissions trading regime.[82] The PA's emissions trading regime is therefore regarded a precondition for the success of the climate regime.[83] Emissions trading allows states – mostly high-emitting developed states – to implement reduction emission activities and projects in other – often developing – states to help meet their own domestic reduction target. The rationale behind these schemes is that it helps 'buying' states to become more ambitious in their reduction targets, because they are able to reduce emissions against lower costs, while the 'selling' state benefits from the finance of mitigation beyond their own resources.[84] These emissions are divided into tradeable units and given a price, in essence providing states with a right to emit up to a certain, decided upon, cap. By financialising GHGs, so the argument goes, an incentive is provided to divest from carbon intensive activities and move towards a low-carbon economy.[85] In reality, calculating the necessary carbon price and cap that will spur required reductions while

78 Sébastien Duyck, 'Delivering on the Paris Promises? Review of the Paris Agreement's Implementing Guidelines from a Human Rights Perspective' (2019) 9 Climate Law 202, 207.

79 PA, Article 4.

80 ibid, Articles 4(9), 13(5) and 14(1) and (3).

81 ibid, Articles 8, 9, 10, 11.

82 ibid, Article 6.

83 Benjamin Stephan and Matthew Paterson, 'The Politics of Carbon Markets: An Introduction' (2012) 21 Environmental Politics 545. The International Carbon Action Partnership found that of Intended NDCs, 64 mentioned some reliance on or contemplation of the use of markets.

84 Kyoto Procol, Article 12(2).

85 An argument for example used in Stephen Smith, 'Environmentally Related Taxes and Tradable Permit Systems in Practice' [2008] Organisation for Economic Cooperation and Development, Environment Directorate, Centre For Tax Policy And Administration, Paris.

still counting on meaningful state involvement, is difficult. Even more, effectiveness of these mechanisms has not been proven. The pre-Paris market mechanisms under the KP have been subjected to criticism and ultimately failed to create significant barriers for emission intensive activities,[86] nor did they lead to financial assistance to resource-poor countries.[87] Instead, such mechanisms lead to the lock-in of carbon emissions, by allowing the exploitation of new fossil fuel reserves.[88]

Even though the UNFCCC process represents a consensus of the international community and aligns itself with other global problems such as poverty eradication and sustainable development, and, to a small degree, human rights, it has several shortcomings when reviewing it in light of the super-wicked characteristics. The choice for a framework, while conceivably beneficial for multilateralism, leaves ample discretion to states.[89] This discretion could result in one-dimensional policy choices, not sufficiently taking into account the spillover effect of these policies to other problems, creating new wicked problems. This risk is exacerbated by the reliance on market mechanisms in the PA, the economic focus of which could, and is, overpowering other global objectives such as that of the realisation of human rights – a problem that has not known any further incorporation than the PA preamble.[90] This tipping of the sustainable development scale in favour of an economic approach is also clear in the definition of the environmental precautionary principle, which requires a CBA.[91]

The reliance on multilateralism at the UNFCCC also impacts the suitability to address the urgency of the crisis. Progress at the negotiations has been notoriously slow and discussions on several, more contested, issues have taken

86 Bodansky, Brunnée and Rajamani (n 4) 183–184. The argument here specifically sees to the use of 'additional' in the regime. The KP established that emission reductions derived from the use of these mechanisms had to be additional to domestic efforts. However, in practice this distinction was not practicable and therefore the mechanism mostly created a financial incentive to implement these projects while continuing with business-as-usual. With this unclarity, it is at best a zero-sum game: one can emit what another reduces.

87 ibid 189–190.

88 For an extensive analysis of this phenomenon, *see* for example Gregory C Unruh, 'Understanding Carbon Lock-In' (2000) 28 Energy Policy 817.

89 Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary' (n 63) 494–495. This was already discussed in the drafting hereof, with some states expressing concern of the compatibility of a framework with the urgency of the issue.

90 For the rights connotations or integrations within the UNFCCC *see* generally Center for International Environmental Law, 'Rights in a Changing Climate: Human Rights under the UN Framework Convention on Climate Change' (2019). More so, analyses specifically pertaining to collective rights are described in sections 3.2.2.2., 3.3.2.2. and 3.4.2.2.

91 UNFCCC, Article 3(3). This is also identified in the more comprehensive analysis of sustainable development as it pertains to the right to development in section 3.3.1.2.

years to complete.[92] Where climate change requires a mechanism that could speed up decision-making, the UNFCCC appears to do the exact opposite. Moreover, the centrality of state sovereignty in the negotiations processes, as well as in texts, produces a mechanism that has a weak central authority and relies on solutions provided by those that have caused the issue. States are apprehensive towards adopting a mechanism that could have an impact on state sovereignty.[93] As a result, many provisions are vague and emphasise their voluntary character, such as the NDCs. In the Transparency Framework it is stressed that it should be 'implemented in a facilitative, non-intrusive, non-punitive manner, respectful of national sovereignty, and avoid placing undue burden on Parties'.[94] The vague wording also results in ill-defined central premises such as equity and CBDR.[95] Relatedly, the climate regime itself does not contain any non-compliance or enforcement mechanism to hold states to their commitments. The regime only contains a form of supervision through the establishment of the Committee to facilitate implementation and promote compliance under the PA. While they may provide useful insight in the compliance of states with the agreement, their role remains a facilitative one devoid of 'strong' powers.[96]

The reliance on a CBA in relation to the application of the precautionary principle under the UNFCCC combined with the centrality of market-based mechanisms and conceptual unclarity surrounding the application and inter-

92 An equivalent of the PA, for example, failed to be adopted in Copenhagen in 2009. Similarly, the completion of the implementation guidelines to the PA have taken six years to complete. They were completed with the adoption of guidelines for its market-based mechanisms in CMA, 'Decision 3/CMA.3, Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement' (2022) UN Doc. FCCC/PA/CMA/2021/10/Add.1.

93 An overview of these political sensitivities and the PA is found in Lavanya Rajamani, 'The 2015 Paris Agreement: Interplay between Hard, Soft and Non-Obligations' (2016) 28 Journal of Environmental Law 337; Daniel Bodansky, 'The Legal Character of the Paris Agreement' (2016) 25 Review of European, Comparative and International Environmental Law 142. These Articles do not concern the adopted implementation guidelines and are rather positive since many agree that the PA was a breakthrough. However, as argued in this research, this has been tempered through the subsequent negotiations around the implementation guidelines.

94 PA, Article 13(3).

95 For example, discussions persist around appropriate institutional and financial arrangements in relation to CBDR and Article 8 PA on loss and damage only refers to facilitative and cooperative approaches, while explicitly mentioning that loss and damage 'does not involve or provide a basis for any liability or compensation'.

96 UNFCCC, 'Decision 20/CMA.1 Modalities and Procedures for the Effective Operation of the Committee to Facilitate Implementation and Promote Compliance Referred to in Article 15, Paragraph 2, of the Paris Agreement' [2019] UN Doc. FCCC/PA/CMA/2018/3/Add.2; UNFCCC, 'Decision 24/CMA.4 Rules of Procedure of the Committee to Facilitate Implementation and Promote Compliance Referred to in Article 15, Paragraph 2, of the Paris Agreement' [2023] UN Doc. FCCC/PA/CMA/2022/10/Add.3.

pretation of intergenerational equity,[97] result in a system which easily falls prey to irrational discounting. Adding this reality to that of the UNFCCC's state centrality, slow progress, wide discretionary provisions, and voluntary character, leaves much to be desired. As it stands, the UNFCCC does not sufficiently address the 'super-wickedness' of the climate crisis.

1.3.2 Other Approaches to Tackle Climate Change

It may not be surprising considering '[m]any of [the UNFCCC's] provisions do not attempt to resolve differences so much as paper them over, either through formulations that preserved the positions of all sides, that were deliberately ambiguous, or that deferred issues',[98] that since its adoption, global emissions have risen around 50%.[99] With the environment under mounting pressure from increasing global temperatures, various approaches have emerged in an attempt to help adequately respond to this crisis. As indicated, the climate regime currently falls short in addressing various characteristics that can enhance effectiveness of climate policies. In addition, the PA is not comprehensive as it excludes emissions from aviation and shipping from being counted in the NDCs.[100] Altogether, it is unsurprising that other approaches have been advocated towards tackling the climate crisis.

Comprehensive perspectives on climate change can roughly be divided into three main strands: environmental, economic and social. In this analysis, more 'sectoral' approaches such as climate change and international trade law or climate change and law of the sea, are not analysed.[101] The research limits itself to those approaches that try and address climate change as a whole. Naturally, not all approaches fully stick to one of these strands, but some combine two or more.[102]

The next section only touches upon these 'hybrid approaches' where relevant under their dominant approach, such as the environmental justice approach. First, the 'purely' environmental approach is discussed through the analysis of some of the dominant principles employed in relation to the climate crisis: the precautionary and polluter pays principles. Second, an economic

97 *See* generally Redgwell (n 56); Rajamani (n 93).

98 Bodansky, 'The History of the Global Climate Change Regime' (n 64) 34.

99 IPCC SR 2023 (n 2) SPM A.1.4.

100 <https://unfccc.int/news/shipping-aviation-and-paris>.

101 These approaches are nevertheless relevant, '[t]he important lesson is that climate change should be on the negotiating agenda of all international institutions whose mandate is affected by it. (…) It is a trade issue. It is an issue for the IMO and convention secretariats responsible for protecting the marine environment, and so on', Boyle and Ghaleigh (n 69) 54.

102 There are also several approaches not falling under these categories. These approaches are not dealt with extensively in this research and include the security approach (relying on the UN Security Council), transitional justice and criminal law.

approach is examined, including a general economic theory on climate change and particularly the employment of market-based approaches, which is an approach which in part determines the effectiveness and ambition of the climate regime. The third section concerns an ethical approach to climate change, based on the notion of distributive and corrective justice – including environmental justice. Lastly, a human rights approach is reviewed in light of the characteristics of the super-wicked problem, a review which emphasizes its advantages over each of the previously discussed approaches. This section identifies and appraises various conceptions of the human rights approach to clarify the position of this research in the human rights and climate change discourse.

1.3.2.1 Precaution and the Polluter Pays – an Environmental Approach

In a strict sense, climate change can be seen as an environmental problem. The environmental approach is consequentialist in nature: it looks at goods over rights and is goal oriented. In relation to climate change this translates into an environmental approach that first establishes the global temperature which we need to stay below, then decides on the GHG concentrations necessary to avoid exceeding said limit and subsequently identifies the pathway necessary to reach this concentration and thus stay below the identified temperature limit.[103]

International environmental law (IEL) has its roots in balancing sovereign interests of states. IEL is thus intrinsically global in nature. It originated from the premise that the environment is something shared by states and needs a governing structure for activities of states that cross borders and harm the environment in other states – including the global commons.[104] Under IEL, state sovereignty is limited insofar as activities in one state harm, or could harm, the environment of another state(s). In principle, this rationale seems adequate for addressing a global problem such as climate change. On the other hand, this attribute makes compliance with the environmental regime subservient to compliance of other states. More so, it can result in a 'wait-and-see' stance, where states are waiting for other states to comply with their environmental obligations first.[105] Thus far, the environmental regime lacks a comprehensive governing agency for the global commons which can provide for the incentive to counter this 'free-riding' behaviour through sanctions, compliance

103 Bodansky, Brunnée and Rajamani (n 4) 6–7.

104 Frederiech Soltau, 'Common Concern of Humankind' in Kevin R Gray, Richard Tarasofsky and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016) 206. Influential cases of the International Court of Justice that are part of the foundational principles of environmental law include; *Trail Smelter Arbitration (United States v Canada)* 3 1905; ICJ, *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay), Judgment* [2010] ICJ Rep 14.

105 Bodansky, Brunnée and Rajamani (n 4) 299.

monitoring or otherwise.[106] Any specific dispute that arises, needs to be addressed through either dispute settlement mechanisms or through the law of state responsibility.

IEL, next to these general aspects, contains several substantive and well-established principles which have been deployed to tackle climate change. The first embodies the characteristic of the environmental regime as described above – the no-harm principle. Incorporated in various multilateral environmental agreements, the no-harm principle is defined in Principle two of the Rio Declaration on Environment and Development (Rio Declaration) as

> '[t]he sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.'[107]

Not every occurrence of transboundary harm constitutes a violation of the no-harm principle. Components of this principle are fleshed out by the International Court of Justice (ICJ). First, the transboundary harm must concern significant harm.[108] Second, a state must take 'appropriate' preventive measures to avoid damage to the environment of another state or to the global commons. Third, this obligation of prevention is not one of strict liability but anchored in and intertwined with the notion of due diligence.[109] According to the International Law Association (ILA), in light of climate change, this would require states to '[t]ake all appropriate measures to anticipate, prevent or minimise the causes of climate change, especially through effective measures to reduce greenhouse gas emissions.'[110] By wielding the term 'appropriate measures', exact state obligations under this principle remain nebulous and its added value in the climate context at present is limited.[111] This ambiguity

106 Nico Schrijver, 'Managing the Global Commons: Common Good or Common Sink?' (2016) 37 Third World Quarterly 1252, 1261.

107 UN Conference on Environment and Development, 'Rio Declaration on Environment and Development' [1992] UN Doc. A/CONF.151/26 (vol. I) principle 2.

108 *Trail Smelter Arbitration (United States v Canada)* (n 104) 1965.

109 *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)* (n 104) para 101.

110 International Law Association, 'Legal Principles Relating to Climate Change' (2014) Article 7A(2).

111 As indicated by Mayer, the principle is rarely invoked in the climate context. Its application, moreover, is contested due to the interpretation that no-harm is reflected in CBDR and equity in the climate regime and as the climate regime is applicable *lex specialis* this would make the no-harm principle irrelevant, Benoit Mayer, 'The Relevance of the No-Harm Principle to Climate Change Law and Politics' (2016) 19 Asia Pacific Journal of Environmental Law 79, 79, 81–85. However, several scholarly contributions (including Mayer) contest this and find added value in the principle, for example, Sandrine Maljean-Dubois, 'The No-Harm Principle as the Foundation of International Climate Law' in Benoit Mayer and Alexander Zahar (ed) *Debating Climate Law* (Cambridge University Press 2021).

additionally can contribute to lowering the threshold to states' due diligence obligations.[112]

This due diligence obligation to prevent provides the context for the more often employed principle in relation to climate change: the precautionary principle. Contrary to the obligation of prevention, which calls for knowledge or certainty of significant harm, the precautionary principle 'shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'[113] The possibility of invoking this principle could therefore result in a higher threshold of states' climate obligations. In fact, it is argued that this principle is part of the obligation of due diligence.[114] In the climate context, for example, any scientific uncertainty around the occurrence of tipping points does not exempt states from taking measures to address it. Precaution has also been stressed in relation to sustainable development.[115] In practice, however, the principle has rarely been applied to climate change and controversy persists around the exact scope and content of the principle.[116] More essentially, it is argued that with the status of climate science today, and current climate impacts, precaution is not sufficient and a post-cautionary principle is needed.[117] The principle, however, could be a tool towards changing the narrative from solely promoting short-term (economic) interests, to one taking into account future impacts on people and planet – if not applied as a CBA.

This post-cautionary principle is partly captured by the environmental principle of the polluter pays through its focus on responsibility of current climate impacts and the distribution of burdens and benefits. As the term suggests, it entails that the emitter of GHGs pays for the negative consequences thereof. This is where the simplicity ends for a straightforward application of this principle. As discussed, the causal links of climate change are complex due to its spatial and temporal scope. Identifying a particular polluter is an arduous task and confronts us with questions such as: Is the polluter the beneficiary of the polluting activity since they consume the GHG emissions? Or should it solely rest on the shoulders of the industry in question? What about damage done in the past? Should current generations pay up for the

112 Mayer (n 111) 93, 94.

113 Rio Declaration, principle 15.

114 For example, in ITLOS, *Responsibilities and Obligations of States Sponsoring Person and Entities with Respect to Activities in the Area (Advisory Opinion)* (2011) ITLOS Reports 10 [131].

115 *See* for example an early warning hereof in ECE, 'Bergen Conference – Ministerial Declaration on Sustainable Development' (1990) 20 Environmental Policy & Law 100, 7.

116 Jonathan B Wiener, 'Precaution and Climate Change' in Kevin R Gray, Richard Tarasofsky and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016) 164–168.

117 ibid 178–180.

GHG emissions of their ancestors? Essentially, applying the polluter pays principle to climate change leaves significant gaps as to its specific operationalisation and filling these gaps requires some form of a theory of justice.[118]

Having provided a summary of the dominant environmental principles and their relevance in the climate context, several impairments of the effectiveness of climate policies designed from an environmental approach in relation to climate change can be deduced. First, all preceding principles, while authoritative in IEL, are ill-defined and lack certainty as to their application in relation to climate change. Since time is running out to act on climate change, IEL may not be well-suited to drive the urgent policies needed. This is exacerbated through the non-binding, soft law character of most of the applicable environmental norms.[119] This is especially relevant as IEL is state-centric and reliant on reciprocity. For a state-centric regime to be effective in this context, policies must be widely supported. It, moreover, does not resolve that those responsible for the policies which caused climate change, also have the responsibility in this regime to provide solutions.

The lack of a central authority in the environmental regime, and specifically in relation to the global commons, makes that there are little to no consequences of states' inaction, in turn contributing to the complexity of gathering the support needed for these policies. There is the possibility of either dispute settlement or invoking a state's responsibility. However, both these mechanisms are again state-centric and highly political. Dispute settlement is grounded in the idea of compromise and usually provides significant freedom to the parties to settle the dispute, which could dilute necessary actions or roll back on implemented measures.[120] Invoking state responsibility can impact diplomatic relations between states beyond the issue at stake. In relation to the 'time is running out' factor, the latter may only be invoked when impacts are such that their severity trumps any potential adverse impacts of the invocation of a state's responsibility.

Two further objections to the effectiveness of this approach can be made. The precautionary principle as defined in both the Rio Declaration and the UNFCCC relies on a CBA to decide on the necessary precaution in a specific case. The precaution needed to avert the worst effects of climate change is costly and will need to include uncertain benefits – something politicians are hesitant to confront. Interpreting the precautionary principle as defined in the UNFCCC and Rio Declaration is therefore insufficient when developing climate policies as this falls short in addressing the global and intergenerational scope.

---

118 *See* for a comprehensive analysis of the polluter pays principle in the climate context, Simon Caney, 'Cosmopolitan Justice, Responsibility, and Global Climate Change' (2005) 18 Leiden Journal of International Law 747.

119 Bodansky, Brunnée and Rajamani (n 4) 36.

120 Applying to mediation, arbitration and negotiation as dispute settlement mechanisms (excluding adjudication).

When turning the focus to the 'inherent wickedness' of the problem, it becomes clear that a one-dimensional *modus operandi* could compound the issue, creating increasing numbers of new wicked problems. In other words, approaching climate change from solely an environmental perspective will increase the risk of overlooking its interconnectedness with other societal processes and of alternative (non-state based) relationships to the environment – producing an abundance of new wicked problems.

That being said, environmental treaties are rarely just environmental, as they often incorporate justice principles, most frequently CBDR.[121] Incorporation hereof could relieve some of the issues with state support in state-led processes, as those countries with differentiated interests are more likely to join. More so, where environmental principles do not rely on a CBA, their focus on the environment in itself leaves more room for incorporation of future interests, since nature spans across generations.[122] This is especially true where they incorporate sustainable development strategies reflecting its intergenerational characteristic.[123] The transboundary roots of IEL also portend that application to a borderless issue such as climate change is more palpable. Still, these roots also stretch to balancing of states' interests and by extension to a strong notion of state sovereignty. Combined with the absence of a tenacious central authority and conceptual unclarity related to some of the relevant terms in the climate context, it can be concluded that there remain substantial gaps in an environmental approach to climate change.

1.3.2.2 Market-Based Mechanisms – an Economic Approach

Previous paragraphs have already touched upon the inherent problems to an economic approach to climate change as it relates to the application of CBAs and, more specifically, accounting for future harms instead of promoting short-term interests. Despite this, economists have proposed theories to battling climate change and economic approaches play an important role in the climate regime through the pivotal position of market-based mechanisms.[124] To fur-

121 Jonas Ebbesson, 'Introduction: Dimensions of Justice in Environmental Law' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009) 5–6.

122 This can also be derived from the environmental principle of common concern of humankind, *see* Soltau (n 104).

123 Redgwell (n 56) 189.

124 This is defined in Article 6 of the PA, specifically paragraph 4: 'A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established (…) and shall aim: (a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development; (b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party; (c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used

ther understand the arguments in favour and against such an approach and to better compare and contrast it to other approaches, this paragraph discusses both the general theory of economics and the environment, and the rationale behind market-based mechanisms in light of the super-wicked problem of climate change.

'Economics' has been defined in various ways. Generally, it looks at scarce resources and how to allocate production, distribution and consumption between competing ends.[125] An economic approach to climate policies is thus one characterised by its orientation towards a specific goal. Economists argue for those policies that have the most 'efficient' outcomes or, in other words, the outcomes which have the greatest economic benefit or produce the most 'welfare'.[126] It therefore relies, in large part, on the CBA. Provided the environment is a scarce resource, economics will look at how to efficiently distribute this resource, which at first glance seems useful – leaving aside more inherent critiques of anthropocentrism and neoliberalism.[127] Yet, while distribution between competing ends in economics based on this rationale at any given point in time might be possible, in the climate context this question is posed in a broader temporal scope. The allocation, therefore, needs to be positioned as to account for the environmental needs of future generations.

'Environmental economics' is consequently defined by several market failures.[128] A few are worth mentioning here. First, the characterisation of the atmosphere as global common means no one state has a legally binding property right over the atmosphere, to utilise it to one's heart's content and exclude others from using it. Accordingly, no one will be willing to pay for this good, because until this is rewarded with a property right, others can continue to use it freely. Why pay when you can use it for free? This phenomenon is known as the tragedy of the commons.[129] Second, environmental economics poses a question on how to account for environmental externalities and social costs.[130] For example, when part of the Amazon rainforest is cut

---

by another Party to fulfil its nationally determined contribution; and (d) To deliver an overall mitigation in global emissions.'

125 *See* for an analysis hereof particularly section 1.3 of Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (MacMillan and Co 1945).

126 *See* generally Richard O Zerbe, *Economic Efficiency in Law and Economics* (Edward Elgar Publishing 2002).

127 Examples include Anna Grear, 'Towards 'Climate Justice'? A Critical Reflection on Legal Subjectivity and Climate Injustice: Warning Signals, Patterned Hierarchies, Directions for Future Law and Policy' (2014) 5 Journal of Human Rights and the Environment 103; Adelman (n 59).

128 Market failures occur when a market fails to allocate this research in such a way as to maximise welfare.

129 Garrett Hardin, 'The Tragedy of the Commons' (2009) 1 Journal of Natural Resources Policy Research 243. This is the republication of the 1968 Article of Hardin, which is a seminal Article on the mainstreaming of the tragedy of the commons.

130 *See* generally Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press 2007). For this particular remark, *see* 27.

down to make way for a soy plantation, the economic analysis will balance the benefits of soy with the costs, such as cutting down trees, planting the seeds, cultivating the land. Such an analysis is often not comprehensive and fails to impose adequate costs on the missed sequestration of carbon (in turn contributing to climate change and costs related to more frequent extreme weather events), nor does it look at social costs such as cultural value of impacted Indigenous peoples and their ability to guide responses to climate change through their close relationship with nature.[131] Analogous to this point is that even if an analysis incorporates these concerns, putting monetary value on nature and the 'services' it provides is already a complex and ethically questionable task.

Within economics, various solutions in the form of liability rules have been proposed to solve these market failures, such as taxes and tariffs,[132] better defined property rights,[133] and imposing quotas – the UNFCCC's chosen plan of attack. Seeing as how environmental economics are defined by its market failures, it seems paradoxical that regulatory success of the climate regime depends on market mechanisms.[134]

From an economic perspective – leaving aside ethical and environmental arguments – imposed quotas such as the UNFCCC's fail to account for transaction costs.[135] Emission trading scheme projects have been met with resistance since some of these projects are associated with environmental degradation and human rights violations.[136] The fact that negotiations of the modalities regarding implementation of the Article 6 mechanism of the PA

131 *See* on the latter point for example Simone Bignall, Steve Hemming and Daryle Rigney, 'Three Ecosophies for the Anthropocene: Environmental Governance, Continental Posthumanism and Indigenous Expressivism' (2016) 10 Deleuze Studies 455.

132 The most well-known account is that of Pigou (Pigouvian Taxes), originally published in 1920 Arthur Cecil Pigou, *The Economics of Welfare* (Palgrave Macmillan 2013).

133 Also known as the Coase Theorem, named after the economist Coase, an analysis hereof in light of climate change can be found in Navraj Singh Ghaleigh, 'Economics and International Climate Change Law' in Kevin R Gray, Richard Tarasofsky and Cinnamon Carlarne (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016) paras 81-83. For a more extensive argument see Coase's republished 1960 paper; Ronald Harry Coase, 'The Problem of Social Cost' (2013) 56 The Journal of Law and Economics 837.

134 *See* for an overview of market mechanisms used in the climate regime Cameron Hepburn, 'Carbon Taxes, Emissions Trading and Hybrid Schemes' in Dieter Helm and Cameron Hepburn (eds), *The Economics and Politics of Climate Change* (Oxford University Press 2011).

135 Ghaleigh (n 133) 87–79.

136 Larry Lohmann and others, *Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power* (Dag Hammarskjöld Centre Uppsala 2006); James Fairhead, Melissa Leach and Ian Scoones, 'Green Grabbing: A New Appropriation of Nature?' (2012) 39 Journal of Peasant Studies 237. Lohmann summarizes impacts of Clean Development Projects under the Kyoto Protocol, observing rights violations. Fairhead et al. look at environmental integrity and impacts of these projects on nature. Violations related to carbon markets projects are well-documented. *See* also, among others, the work of the Business and Human Rights Resource Centre.

took six years (as compared to the three of the rest of the 'rulebook'), further drives up these costs.[137] Uncertainty around the interpretation of rules guiding the market mechanisms, as well as contestation on other grounds will continue to increase transaction costs, which, based on previous experiences under the Clean Development Mechanism,[138] could be perpetual.

While the language of economics confers that economics is a 'hard' science, or a type of maths, it is driven by humans and human interactions. That being said, classic economic theory is contingent on the assumption of the *homo economicus*, the individual as an economic being: rational, efficient, and looking to maximise expected utility.[139] Economic theory often assumes the independent working of the 'market' and does not include an analysis of government interference and vice versa. It is assumed the *homo economicus* will act as to maximise economic efficiency and produce the most welfare. Only in those cases the market is faced with hurdles to this efficiency, should the government intercede to 'correct' this hurdle.[140] General economic theory is inherently individualistic and considered to be globally applicable – all individuals will aim for efficiency and maximum welfare, no regional distinctions necessary. Even though economic theorists might be able to provide relevant, innovative responses to economics or develop new ways of conceptualising the dominant economic model,[141] the reality is that the current global economic order is a long way off 'efficient', and 'welfare' is far from the truth for most of the global population.[142] Inequalities continue to rise and the power of those with the most resources is further imbedded in global politics, continuously promoting self-interest and frenetically holding on to their seized economic power.[143] In a vastly inequal world, relying on the individual to maximise their welfare while urgently tackling climate change is a utopian ideal unobtainable in a 'grossly unfair global economic order

137 *See* Decision 3/CMA.3 (n 92).

138 This is the market-based mechanism under the KP (Article 12).

139 This while research on for example the European Union's Emission Trading Scheme shows that actors consistently act in ways not conventionally rational, *see* for example Douglas MacKenzie, *Material Markets: How Economic Agents Are Constructed* (Oxford University Press 2008) ch 7.

140 Ghaleigh (n 133) Ghaleigh discusses how the Pigouvian taxes and Coase Theorem perceive government intervention. Pigou argues the need to tax externalities, while Coase sees the sole role of the government as creating laws to minimise transaction costs. Others – Stephan, Paterson (n 81) for example – argue that markets themselves are political.

141 For example Kate Raworth, *Doughnut Economics: Seven Ways to Think like a 21st Century Economist* (Chelsea Green Publishing 2018).

142 *See* annual inequality reports of Oxfam Novib, most recently Oxfam Novib, 'Inequality Inc. How Corporate Power Divides Our World and the Need for a New Era of Public Action' (2024).

143 An analysis of history and sources of these persistent power imbalances can be found, for example, in M Rafiqul Islam, 'History of the North-South Divide in International Law: Colonial Discourses, Sovereignty, and Self-Determination' in Shawkat Alam and others (eds), *International Environmental Law and the Global South* (Cambridge University Press 2015).

under which the lion's share of the benefits of the global economic growth flow to the most affluent states'.[144] It is, moreover, a highly exclusionary and biased way of viewing the individual based on false universalisations.[145]

Applied to climate change as a super-wicked problem, an economic approach reveals its shortcomings. Having previously argued the difficulty of economics to account for future costs through discounting techniques, arguments in this section focus on the other characteristics. Arguably, economics puts the responsibility of the economically efficient policies or practices at the level of the *homo economicus*. Conceptually this might be true, however, in reality it is governments that regulate markets, in particular given the need for government intervention where market failures are concerned – something which is, as discussed, specifically relevant to environmental economics.

Additionally, the regulatory framework established by governments is influenced by other economically powerful actors, such as transnational corporations.[146] These actors' functioning is dependent on this framework and they have the means to influence governmental decision-making.[147] This not only reinstates those responsible as those that need solve the issue, it perhaps even enhances the wickedness of this characteristic by providing a leading role to the system that in part created the current crisis. Market capitalism advocating unlimited economic growth as advocated by the Global North has defined the development paradigm in which economic concerns persistently trump environmental ones.[148] Akin to this argument are the justice questions raised by the centralisation of this approach. Applying a system born out of a Western ontology and largely further developed and refined in the Global North to a problem predominantly caused by the Global North is problematic. Moreover, it fails to account for the exploitation of resources through legacies of imperialism and colonialism by lacking justice considerations and economics' inherent forward-looking stance.[149]

---

144 Thomas Pogge, *World Poverty and Human Rights* (Polity 2008) 27.

145 *See* section 2.2.1 in relation to the individual in human rights.

146 Dennis A Rondinelli, 'Transnational Corporations: International Citizens or New Sovereigns?' (2003) 14 Business Strategy Review 13.

147 In the climate regime the influence for example of the fossil fuel industry is well-documented, which has been argued to constitute a conflict of interest. *See* for example 'Finally saying the F-words at UN climate talks' (*Climate Home News*, 16 December 2019) and Irene Banos Ruiz 'Lobbyists push fossil fuels at COP24' (*DW*, 12 December 2018). The fossil fuel industry has also lobbied in relation to discrediting and denying climate science Felicity Lawrence, David Pegg and Rob Evans 'How Vested Interests Tried to Turn the World against Climate Science' (*The Guardian*, 10 October 2019).

148 Ruth Gordon, 'Unsustainable Development' in Shawkat Alam and others (eds), *International Environmental Law and the Global South* (Cambridge University Press 2015) 69–70.

149 Much has been written on this topic, see for example Islam (n 143); Gordon (n 148); Dehm (n 30). More generally, the international school of scholarship on Third World Approaches to International Law (TWAIL) has critically reviewed imperial and colonial roots of international law.

A central authority governing an economic approach is also lacking and, in relation to general economic theory, also undesirable. Economic theory relies on market forces and on free markets that regulate themselves through voluntary exchange and a system of demand and supply, resulting in the most efficient outcomes. Due to its limited mandate and enforcement powers, this is insufficient to qualify as a central authority needed to tackle climate change.

As previously stated, the dominant economic model is deeply flawed, from both an environmental as well as ethical and economic perspective, and would need an overhaul to tackle climate change. Given the limited time left to address global heating, such a transformative economic model cannot guide policy responses as it is yet to be developed and gain traction. Applying the prevalent economic model will not lead to urgent action either, since the required action will demand tremendous economic costs that powerful economic actors are not willing to pay.[150] This does not mean it is argued that economics should be ignored altogether. This research acknowledges that it is a dominant system and needs consideration but should not be the principal lens through which climate change is viewed and approached. The current economic system does not lead to global justice,[151] since it deepens inequalities and largely ignores social and environmental concerns. The use of market mechanisms in the climate regime has proven just that.

1.3.2.3 Distributive and Corrective Justice – a Justice Approach

Preceding sections have highlighted that both the environmental and economic approach are connected to essential justice questions and could benefit from the inclusion of these considerations – even if it is solely to muster necessary state support. A justice approach, therefore, is not just a moral imperative, but is vital for compliance, participation and cooperation.[152] A justice approach does not work towards a specific goal but exposes the 'unjust-ness' of a process to ultimately reach the goal of limiting global warming in a fair manner. Various justice principles have been applied to climate change, most notably distributive and corrective justice.[153]

---

150 For example, the World Economic Forum writes that '[c]ompanies, business groups, and other establishment institutions urge caution and more measured action [and that a] more affordable and gradual path of emissions reduction would be better and still prevent catastrophe, and market instruments operating within the capitalist system could be powerful levers of change.' *See* 'Is Capitalism Incompatible with Effective Climate Change Action?' (*World Economic Forum*, 3 September 2019).

151 For a comprehensive analysis of global justice and international economic law *see* Andreas Buser, *Emerging Powers, Global Justice and International Economic Law: Reformers of an Unjust Order?* (Springer 2021).

152 Bodansky, Brunnée and Rajamani (n 4) 10.

153 Other justice approaches include cosmopolitan justice, procedural justice, transitional justice, criminal justice, retributive justice, cooperative justice. They follow similar trajectories as

This section briefly discusses each of these justice approaches. To this end, it first sketches the underlying unjust patterns of climate change that justice approaches intend to address. Next, the content of environmental justice, as the embodiment of the application of justice principles to the environmental regime, is outlined. Based on this, the benefits of incorporating justice into an approach to climate change are revealed. It concludes with a summary of the shortcomings of this justice approach in relation to the attributes of the super-wicked problem.

Having already alluded to it, climate change, especially for countries of the Global South, encounters several ethical difficulties. Such difficulties include the fact that developed countries are historically more responsible for climate change which raises questions on 1) who is responsible for which part and concomitantly should be obliged to increased mitigation measures; 2) how to respond to the lack of capacity of developing states to adapt to increasing climate impacts; 3) how to correct the asymmetry between the Global North's influence on international decision-making and the Global South; 4) how to account for the historic continued reliance of the Global North on the natural resources of the Global South through exploitation and appropriation that is linked to land-grabbing, environmental degradation and human rights impacts.[154] On a domestic level, climate change also poses questions on the distribution of the burdens, as illustrated by the environmental justice movement.[155] In sum, it confronts us with the persistent and deepening inequalities on the global, regional and national level, perpetuated by the reliance on systems that are thoroughly imbedded with Western philosophical thought.[156]

Justice appraisals can uncover unjust effects of policies and laws on a myriad of parameters such as human health and ecosystem integrity. By heightening (public) awareness, the exposed effects can trigger (a call for) reforms of the unfair policies and/or laws.[157] In the climate regime, justice considerations are embodied in the principles of equity and CBDR. In other

---

they all challenge the way we look at a certain problem and presuppose the idea that policies and laws must be reviewed for their 'fairness' and 'justness'.

154 Carmen G Gonzalez, 'Environmental Justice and International Environmental Law' in Alam Shawkat and others (eds), *Routledge Handbook of International Environmental Law* (2013).

155 *See* generally Jonas Ebbesson and Phoebe N Okowa, *Environmental Law and Justice in Context* (Cambridge University Press 2009).

156 *See* generally Shawkat Alam and others, *International Environmental Law and the Global South* (Cambridge University Press 2015); Upendra Baxi, 'Towards a Climate Change Justice Theory?' (2016) 7 Journal of Human Rights and the Environment 7; Louis Kotzé, Louise Du Toit and Duncan French, 'Friend or Foe? International Environmental Law and Its Structural Complicity in the Anthropocene's Climate Injustices' (2021) 11 Oñati Socio-Legal Series 180.

157 This is extensively discussed in various contexts in contributions to Ebbesson and Okowa (n 155).

treaties justice principles have similarly been incorporated. For example, differential treatment has been anchored in international economic law.[158]

The principle of CBDR is an expression of distributive justice. Climate change has been predominantly phrased as a distributive justice issue.[159] Classically, distributive justice is defined as the just distribution of wealth and income within a state. In the environmental context, it focuses on the global fair distribution of environmental burdens and benefits.[160] Applied to climate change, it refers to both the disproportionate climate impacts between regions and states and to the distribution of mitigation and adaptation measures and costs. Its exact content as it applies to climate change is not well-defined. Generalising the interpretations of distributive justice in the climate context leads to its division in four different rationales 1) those that have the most means should carry the most responsibility, also called the ability to pay principle; 2) adopting a fault-based approach where one reviews the harm or fault, particularly historically, and adjusts burdens accordingly; 3) allocating responsibility to those that have benefitted most from the proliferation of GHG emissions; and, 4) distribution based on the principle of equality.[161] Despite the variability of the exact content and thus ideal application of distributive justice, the international community considers it to at least comprise of the idea that while states have a common responsibility to tackle climate change, the corresponding obligations differ. This shared understanding also indicates that it must be taken into account that states have different capacities to address climate change. This, in turn, has led to the shared understanding that industrialised countries should guide the response to climate change.[162]

Corrective justice (also known as restorative justice) is an extension of distributive justice and as such similarly ill-defined and contested. At its core is the rationale of correcting past wrongs and the process of rectifying an injustice imposed on one entity by another. Corrective justice endeavours to reinstate the situation as it were before the injustice occurred. Therefore, the

158 Gonzalez (n 154) 23–27.

159 Jutta Brunnée, 'Climate Change, Global Environmental Justice and International Environmental Law' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009) 319.

160 Caney (n 118) 748.

161 Caney (n 118); Jeremy Moss, 'Introduction: Climate Justice' in Jeremy Moss (ed), *Climate Change and Justice* (Cambridge University Press 2015); Dinah Shelton, 'Describing the Elephant: International Justice and Environmental Law' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009).

162 Brunnée (n 159) 325. The first aspect is clearly embodied in the incorporation of CBDR in the UNFCCC. The second is related to the third but acknowledged generally by 'equity' but also more clearly in the KP under which solely developed or industrialised countries were obligated to reduce their emissions.

principles can be applied in situations where changing circumstances warrant a readjustment of the initial allocation of rights and interests.[163]

In the climate context, corrective justice encompasses remedying past wrongs of overusing the proverbial tub that is slowly overflowing with GHG emissions. The consideration of corrective justice will lead to the necessity of forms of compensation and sanctioning but can also encompass procedural remedies.[164] Considering the UNFCCC, equity can essentially be conceived as a form of corrective justice.[165] Interpreted more widely, corrective justice can address other wrongs not incorporated within the UNFCCC, for instance (neo)colonialism and other forms of exploitation. Outside of this realm, climate litigation is part of the body of corrective justice.[166]

Environmental justice contains both these justice dimensions as well as procedural justice. The environmental justice movement emanates from the US where it formed a response to the disproportionate environmental impacts on low-income and minority populations.[167] Its theory centralises the need for strong procedural guarantees and to include a wide range of actors in decision-making and implementation processes. Hence, procedural justice is often framed as prerequisite to distributive and corrective justice.[168] In assuring this procedural justice dimension, the theory relies heavily on procedural human rights norms, as established in for example the Aarhus Convention and Escazú Agreement on environmental decision making.[169] The environmental justice movement comprises of a diverse set of ideas, which, besides the summarised general angles, are not universally accepted. Some are more ecocentric, while others look specifically at intergenerational justice and again

163 Karin Mickelson, 'Competing Narratives of Justice in North-South Environmental Relations: The Case of Ozone Layer Depletion' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009) 298–300.

164 Examples include providing standing to those adversely impacted by climate impacts, or Indigenous peoples' right to free, prior, informed consent in policies that can encroach on their lands and livelihoods, something also discussed in sections 5.2 and 5.4 of this study.

165 Dinah Shelton, 'Equitable Utilization of the Atmosphere: A Rights-Based Approach to Climate Change?' in Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press 2009) 121.

166 Stephen Humphreys, 'Competing Claims: Human Rights and Climate Harms' in Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press 2009) 40. An overview of current climate cases can be found in 'Climate Change Litigation Databases' (*Columbia Law School Sabin Center for Climate Change Law*) <https://climatecasechart.com/>.

167 Ludwig Krämer, 'Environmental Justice in the European Court of Justice' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009) 195.

168 *See* generally contributions to Ebbesson and Okowa (n 155).

169 UNECE, 'Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)' [1998] 2161 UNTS 447; UN ECLAC, 'Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement)' [2018] 3397 UNTS.

others look at social justice.[170] Environmental justice appraisals may, nevertheless, 'guide us and (…) spark off social change and reforms of national, international and transnational institutions'.[171]

Application of a justice approach to characteristics of the super-wicked climate problem reveals several vantage points as well as obstacles. There exists ambiguity around whether justice principles either take the state or individual as starting point. International law is state-centric, and some conceptualisations of justice, therefore, aim to be relevant to and applied on this level.[172] Others take the individual as a starting point to adequately account for distributive discrepancies within states, more in line with the rationale of environmental justice.[173] While the latter challenges state borders as an artificial delimitation in international law which fails to account for current realities and adversities of representation,[174] it embarks on an ambitious journey towards mapping distributive and corrective flaws within states, which is at odds with the 'time is running out' characteristic. It also runs the risk of underestimating the influence of transnational practices on national injustices.[175]

As it is unclear where the starting point of a justice approach is located, it is also unclear who is responsible in this approach to solve the issue. If it is states, the approach is again entangled in the difficulty that those responsible also need to solve the issue. If starting from an individual approach, one needs to rely on mechanisms to confer (part of the) responsibility or power onto individuals. Regionally and globally, this translates into reliance upon human rights mechanisms. More generally, the fact that justice considerations are far from uniform, makes it challenging to decide on its specific application which will result in sufficiently limiting global heating.[176] This is furthermore obscured by the lack of a specific authority governing a justice approach. Environmental justice to a degree alleviates this approach by its reliance on legally binding procedural human rights instruments.[177]

The justice approach does have vantage points. It does not rely on CBA to decide appropriate measures – avoiding the trap of irrational discounting. Various justice theories take into account intergenerational equity and rights

170 André Nollkaemper, 'Sovereignty and Environmental Justice in International Law' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009).
171 Ebbesson (n 121) 2.
172 ibid 5.
173 Brunnée (n 159) 320.
174 Caney (n 118) 747.
175 Brunnée (n 159) 320.
176 ibid.
177 This is in line with a human rights approach as set out in the next paragraph. It is, however, more limited since it focuses on procedural norms only – specifically in relation to Aarhus and Escazú. These instruments, in turn, are regional and therefore do not cover the global sphere (Aarhus in principle is open for ratification of non-European countries, although this has been limited to date).

of future generations.[178] A justice approach is generally unscathed by institutional designs and impediments such as borders, treaties and economic gain and thus able to take a macro-view, providing solutions that might have been inundated or dismissed having been proposed within these existing boundaries. In other words, it can provide an analysis of constraints to state sovereignty, without being subjected to state powers to make such a demarcation. Since a justice approach is mostly concerned with the just process of reaching a particular goal – contrary to the consequentialist nature of both the environmental and economic approach – it has the potential to take into account various aspects and other compounding issues, conceivably limiting the emergence of new wicked problems. Illustratively, (environmental) justice concerns have been linked to 'just sustainability',[179] and ultimately move towards global justice.[180] However, when moving towards implementation of such a theoretical analysis, its application within the field of international law would put the Parthian shot with states, who will in their decision-making balance this analysis with broader environmental and economic concerns.

Thus, while a justice approach is an adequate tool to unveil the unjust (root)causes underlying the climate crisis and is indifferent to short-term interests or artificial delineations, another approach is needed to fill some of the remaining gaps. Uncodified and codified justice principles are still ill-defined and mostly aspirational and lack a central authority to move this towards practical implementation. While providing a compelling narrative, it falls short in addressing the urgency required.

1.3.2.4 The Human Rights Approach: Characteristics and Variety of Forms

A human rights approach in essence is a justice approach. More specifically, a human rights approach encompasses both distributive justice and corrective justice, as well as procedural justice as an essential part of environmental justice, given its reliance on procedural human rights norms. In addition, it can enhance the justice approach through the incorporation of expressive justice and transformative justice.[181] As revealed here, the latter might be best suited to define the justice dimension of a human rights approach to climate change.

---

178 For examples of such an analysis, *see* Richard Falk, 'The Second Cycle of Ecological Urgency: An Environmental Justice Perspective' in Jonas Ebbesson and Phoebe N Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press 2009); Caney (n 118); Shelton (n 161); Redgwell (n 56).

179 *See* for example Julian Agyeman, Robert Doyle Bullard and Bob Evans, *Just Sustainabilities: Development in an Unequal World* (MIT Press 2003).

180 Baxi (n 156). Baxi analyses the relationship between environmental, climate and global justice.

181 Carsten Stahn, *Justice as Message: Expressivist Foundations of International Criminal Justice* (Oxford University Press 2020); Erin Daly, 'Transformative Justice: Charting a Path to Recon

Previous sections demonstrated that while climate change is a common concern, indicating our common interest in its mitigation, it does differentiate insofar as culpability and vulnerability goes and is therefore concerned with questions of justice. CBDR and equity, the leading justice principles incorporated in the climate regime, are entrenched in human rights norms. Indeed, equity cannot be achieved without respect for human rights.[182] In similar vein, the pursuit of environmental justice is largely founded on human rights norms, such as that of public participation. Bearing this in mind, what then can be the additional advantage of a human rights approach? Is the issue not better served with a more dedicated approach? Or is it not just '[a] distraction in the climate change venture, one which may ultimately hinder or delay both the adoption of regulatory responses and research into scientific and technological remedies'?[183]

The modern human rights regime can be said to find its origins in the 1689 Bill of Rights as an expression of the need to curb the absolute power of the sovereign.[184] Indeed, many commentators view human rights as a corrective agent to thwart power imbalances, mostly between the individual and the state.[185] When considering the described causes of the climate crisis, it is clear that legacies of colonialism, imperialism and capitalism all concern acute imbalances in power between those that have something to gain from urgent

ciliation' (2001) 12 International Legal Perspective 73. Both forms of justice are mostly discussed in relation to international criminal law and justice. However, the rationale of both is not inextricably tied to its criminal dimension. Expressive justice emphasises the law's ability to confer a narrative instead of its enforcement ability. Transformative justice, on the other hand, 'requires metamorphosis at all levels of society. Victims become survivors; perpetrators become good neighbors; powerful people learn to wield their authority responsibly or become less powerful' (Daly 82, 83).

182 Shelton (n 165) 113–114.

183 Ole W Pedersen, 'Climate Change and Human Rights: Amicable or Arrested Development?' (2010) 1 Journal of Human Rights and the Environment 236, 249.

184 Ed Bates, 'History' in Daniel Moeckli, Sangeeta Shah and Sandesh Sivakumaran (eds), *International Human Rights Law* (Oxford University Press 2010) 19. He also expresses the inherently troubling quest for the exact origins of human rights – an expression of human rights can be traced back to various ancient civilisations and cannot be attributed to one culture or people. This is not the attempt here either, the expression of the Bill of Rights is to underline this idea of the human rights regime as a limitation to sovereign power.

185 As expressed in the works of John Locke, *Locke: Two Treatises of Government* (Cambridge University Press 1967) Chapter IXI para 229. '[Government] should be sometimes liable to be opposed, when they grow exorbitant in the use of their power'; Bates (n 184) 19–20, holding that this is 'arguably the foundational stone upon which all progress in the field of human rights has been built'; Amy Sinden, 'Climate Change and Human Rights' (2007) 27 Journal of Land, Resources & Environmental Law 255, 259-260. Sinden explains 'what evokes the outrage that warrants (…) special treatment [of human rights] is that they're David-and-Goliath stories-stories of the weak being exploited by the powerful'. She also correctly refutes the conceptualisation of human rights as protection of the autonomy and dignity of the individual, as 'autonomy gets invaded anytime any one hits me over the head [however only] when a guy in uniform – with the power and authority of the state behind him – hits me over the head (…) we call it a human rights violation [and not tort]'.

action on climate change and those that – applying a short-term lens as common to global politics – have something to lose. Similarly, on a national level, community perceptions, historical prejudices and institutional discrimination can all create vulnerabilities, further compounded and exacerbated by climate change.[186] Given the disproportionate effects of climate change on those in vulnerable positions, as well as the differences in responsibility and willingness to act, leveraging the human rights tradition to guide a response to climate change may prove imperative. Correct application of the human rights tradition – as a means to correct power imbalances and tip the scale in favour of those most vulnerable – could be a tool towards distributive justice, and, by extension, corrective justice. This 'correct application' also implies that a human rights rationale is not necessarily limited to state obligations *vis-à-vis* its own citizens but could also apply in other relationships where there occur power imbalances, such as individuals *vis-à-vis* a group of states or corporations.[187]

In addition to this rationale of human rights as corrector of power imbalances, the tradition is characterised by several other attributes. Human rights are generally held to be universal and non-discriminatory in character: everyone has a set of inalienable human rights.[188] Although human rights are inalienable, different human rights norms exist on a continuum, representing 'the 'is' and the 'ought''[189] of government intervention.[190] In the realisation of human rights, states do not only have obligations vis-à-vis their own population, but should strive to ensure respect for human rights of individuals in other states.[191] Put differently, human rights norms are *erga omnes* obligations: they are owed by a state towards the international community and each state

186 John C Mutter and Kye Mesa Barnard, 'Climate Change, Evolution of Disasters and Inequality' in Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press 2009) 290.

187 *See* for example Rondinelli (n 146).

188 UNGA, 'Universal Declaration of Human Rights' [1948] 217 A (III) preamble. The preamble of the Universal Declaration of Human Rights (UDHR) reads 'the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world'.

189 Meinhard Doelle, 'Climate Change and Human Rights: The Role of the International Human Rights in Motivating States to Take Climate Change Seriously' (2004) 1 Macquarie Journal of International & Comparative Environmental Law 179, 183.

190 Clear from the division in three generations of rights: Civil and political rights which require a 'hands-off' approach from governments; economic, social and cultural rights which ask for the 'progressive realisation' thereof by governments; and the third generation collective rights which conceptually is discussed in Chapter 2.

191 As, for example, evidenced by the preamble of the UDHR which holds that '[t]he General Assembly, Proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society (…) shall strive by (…) to promote respect for these rights and freedoms and (…) to secure their universal and effective recognition and observance, both among the peoples of Member states themselves and among the peoples of territories under their jurisdiction.'

has an interest in their realisation.[192] Human rights are also said to be inextricably tied to the concept of *jus cogens* norms, compulsory norms that apply to all states regardless of ratification of a treaty containing the norm in question.[193] This link further points to the perceived gravity of such norms within the international community. While the *jus cogens* status of human rights norms are up for debate,[194] this link does indicate further erosion of the Westphalian concept of state sovereignty since *jus cogens* status would weaken the state consent requirement.[195]

The *jus cogens* and *erga omnes* implications of some human rights norms do not detract from the fact that for many other human rights norms, it is possible to deviate from their realization, most commonly in light of times of emergency, the public interest, public order or for the protection of rights and freedoms of others.[196] These limitations, in turn, need to be justified. The human rights regime includes many fora on the international, regional and national level to ensure compliance with human rights norms.[197] The relatively long history of human rights law in international law, and its subsequent development, means that many states – if not all – have in some form domestically dealt with the realisation of rights. This purported universal reach – to all individuals – might be the connecting agent between the Global North and South the climate change discourse warrants. The 'special character' of human rights, moreover, signifies there is no need for reciprocity. Human rights need to be respected, protected and fulfilled regardless of other states' compliance with human rights obligations.

Applying these general characteristics to 'super-wicked climate change' reveals some distinct advantages of the approach. To start, it is better suited to address the urgency of the crisis. In the early 2000s, when the link between human rights and climate change started to be explored more, various actors warned of its obfuscating character. However, since then, years of consecutive climate inaction and the corresponding increased urgency have nullified such

192 ICJ, *Barcelona Traction, Light and Power Company, Ltd (Belgium v Spain),* Judgment (1970) ICJ Rep 3 [33].

193 Andrea Bianchi, 'Human Rights and the Magic of Jus Cogens' (2008) 19 European Journal of International Law 491, 491.

194 An overview of accepted *jus cogens* norms can be found in *Report of the International Law Commission for the 71st Session* (2019) UN Doc. A/74/10, Chapter V.

195 More generally, consequences of the qualification as jus cogens can be found in *Report of the International Law Commission for the 73rd Session* (2022) UN Doc. A/77/10, Chapter IV, E.2, Part Three. On this point specifically *see* 23, 24.

196 These can usually be found in human rights instruments. For example, UNGA, 'International Covenant on Economic, Social and Cultural Rights' [1966] United Nations, Treaty Series, vol. 993 Article 4.

197 *See* generally Part IV 'Protection' in Daniel Moeckli, Sangeeta Shah and Sandesh Sivakumaran, *International Human Rights Law* (Oxford University Press 2010).

criticisms.[198] Contrary to the other three approaches, the human rights regime is well-established and cross-cutting in geographical scope. This not only concerns the understanding of human rights and its gravitas, by providing a 'human face' to the issue, but also the enforcement of rights.[199]

If activities contributing to climate change violate human rights, current practices need to be abandoned. Strong enforcement powers thus mean that human rights dictate what states *must* do, contrary to what they *should* (and, as evidenced by the UNFCCC, too often do not do). Whenever states fail to respond to the framing of climate change as a human rights issue, or to the 'ethical moorings' provided by such a conceptualisation,[200] individuals (and sometimes groups) can rely on human rights norms to either demand participation or take part in relevant decision-making processes, or to subject a state to the scrutiny of human rights organs and the international community.

In the case of rights-based climate litigation, enforcement powers are even greater. Some authors argue that enforcement of human rights is an unobtainable ideal in relation to climate change or that it is subsidiary to its main contribution: to show that climate change is not just a scientific or technical problem whose impacts are remote and to a degree incomprehensible in scale and severity, but already has made victims and is changing peoples' lives.[201] In other words, they reiterate that human rights mainly function as a powerful tool of expressive justice, providing the didactive and communicative means to trigger climate action.[202]

198 Pedersen (n 183) 249; Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary' (n 63) 504–505; Lavanya Rajamani, 'Human Rights in the Climate Change Regime: From Rio to Paris and Beyond' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 244. Bodanksy explicates the positions of states at the outset of the UNFCCC to include any reference to human rights. These objections persisted in the negotiations leading up to the Paris Agreement in 2015, as Rajamani emphasises.

199 Daniel Bodansky, 'Climate Change and Human Rights: Unpacking the Issues' (2010) 38 Georgia Journal of International and Comparative Law 511, 517.

200 Sheila R Foster and Paolo Galizzi, 'Human Rights and Climate Change: Building Synergies for a Common Future' in Daniel A Farber and Marjan Peeters (eds), *Elgar Encyclopedia of Environmental Law, Volume 1: Climate Change Law* (Edward Elgar Publishing 2016) 43.

201 Stephen Humphreys, 'Introduction: Human Rights and Climate Change'in Stephen Humphreys (ed) *Human Rights and Climate Change* (Cambrige University Press 2009) 11; Bodansky, 'Climate Change and Human Rights: Unpacking the Issues' (n 199) 519; Boyle and Ghaleigh (n 69) 41.

202 A form of expressive justice can also be deduced from one of the three 'ecosophies' described by Bignall, Hemming and Rigney (n 131). They identify Indigenous expressivism as a powerful didactive and communicative tool towards change, an aspect which is also highlighted throughout this study.

Relatedly, the human rights approach has a relatively strong central authority, particularly in comparison to the other approaches.[203] It must be noted, however, that possibilities for enforcement fluctuate in different regions of the world. Contrary to Africa, Europe and the Americas (excluding the US), the Middle East and Asia do not have a regional human rights compliance system. While states can wield human rights language, it is ultimately individuals, or groups, who possess rights and, ultimately, are able to enforce them in the existing fora. Still, the extent of this ability does depend on the human rights instruments ratified by the state in question, or to whether it concerns a norm of *jus cogens*.

Notwithstanding the reliance on states' willingness to be a party to human rights regimes, human rights squarely place powers with individuals, rather than relying on states to correct their inadequate policies. More so, through self-identification as human rights actors, the prioritisation of government actors might shift in light of bestowed human rights obligations and duties. In this way, human rights could drive transformative justice – transforming society through a change of (governmental) culture. By changing the institutional mechanisms that had previously guided responses to climate change, transformation can commence, since transformational justice requires 'inculcating new values in the society [where people] will actually believe in democracy, human rights, and the principles of constitutionalism'.[204]

Although states remain the main actors in developing and implementing rights-compliant policies, their discretionary powers are limited through the subjugation to other actors, be it the judicial branch or the 'citizenry'. In this way, states are better equipped to balance competing interests.[205] Rather than 'global political paralysis', human rights produce duties and obligations with which measures must comply, providing the means to retrieving movement in the political limbs and progress to the transformative shift necessary to tackle climate change.

Since human rights are concerned with questions of justice, their universal character implies their application in absence of a CBA. Instead of considering the costs and benefits of a particular measure, human rights can shift the emphasis on how to counteract the underlying power imbalances.[206] Addi-

203 Fora include at the global level the Committees charged with monitoring each of the international human rights treaties, most notably the Human Rights Committee and Committee on Economic, Social and Cultural Rights. At the regional level there are the European Court on Human Rights, the Inter-American Court (and Commission) on Human Rights and the African Court (and Commission) on Human and Peoples Rights. In relation to public participation, the mechanisms established under the Aarhus Convention and Escazú Agreement. Moreover, human rights claims can be pursued in national courts.

204 Daly (n 181) 83.

205 Bratspies (n 5) 331–336.

206 For an analysis of human rights as a corrective to power imbalances, *see* Sinden (n 185) 270–271.

tionally, there are developments taking place towards better recognition of the rights of future generations within the human rights discourse.[207] Further advancing such a recognition can also contribute to a better response to the complex temporal scope of climate change. Human rights' quest for justice through the expression of a set of universal values reduces 'wickedness' by prioritising the needs of the most vulnerable and empowering them to be a part of the decision-making process. Rethinking the social order through such an approach can, in turn, break political deadlocks and avoid the lock-in of further emissions, therefore limiting path dependency.[208]

This potential, however, is dependent on the human rights approach taken. If applied narrowly as just pertaining to states *vis-à-vis* their own citizens, people of developing states can challenge government action, but governments might not have the means to address the issue. However, if conceived as an adaptive regime aiming to restore power balances, a human rights approach can reduce chances of creating new wicked problems, and usher the world towards the achievement of sustainable development and, ultimately, global justice. The Human Rights Council (HRC) expresses a similar conception of the rights-based approach, underlining that it has the potential to 'inform and strengthen international, regional and national policymaking in the area of climate change, promoting policy coherence, legitimacy and sustainable outcomes'.[209]

Various approaches can be distinguished within human rights law in relation to climate change. Consequently, 'the' human rights approach does

---

207 Bridget Lewis, 'Human Rights Duties towards Future Generations and the Potential for Achieving Climate Justice' (2016) 34 Netherlands Quarterly of Human Rights 206, 208. Lewis concludes that 'while it is theoretically possible to conceive of future generations possessing rights, there remain significant practical and legal barriers to a human rights-based approach to climate change which fully achieves justice for future generations.' Future generations have also been incorporated within the work of human rights bodies. See for example; CCPR, 'General Comment No. 36 on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life' [2019] UN Doc. CCPR/C/GC/36 paras 62, '[e]nvironmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life.' Similarly, the Committee on Economic, Social and Cultural Rights expressed concern about a hydraulic fracturing plan, since it 'runs counter to the state party's commitments under the Paris Agreement and would have a negative impact on global warming and on the enjoyment of economic and social rights by the world's population and future generations'; CESCR, 'Concluding Observations: Argentina' [2018] UN Doc. E/C.12/ARG/CO/4 para 13.

208 This also has to do with urgency. While a political stalemate exists at the UNFCCC, GHG emissions continue, which will be in the atmosphere for years to come – the so-called lock-in effect. Human rights can challenge these decisions now, and where successful, avoid further a further lock-in effect. A lock-in effect would reduce the number of pathways (thus solutions) available to limit global warming. *See* for an explanation of path dependency in relation to climate change Ghaleigh (n 133) 89–90.

209 HRC Res 32/33, 'Human Rights and Climate Change' [2016] UN Doc. A/HRC/RES/32/33 para 9.

not exist, just 'a' human rights approach.[210] First, a number of approaches start from the current body of codified human rights and interpret them in light of climate change – a process also referred to as the 'greening' of existing human rights.[211] Second, an increasing call for the recognition of a dedicated environmental human right prevails: a right to a safe, clean, healthy and sustainable environment (RHE).[212] Such a right would more firmly embed the environment as significant public interest within the human rights regime and outside of it.[213] Third, more and more human rights advocates rely on procedural rights norms to take climate cases to court – akin to the theory of environmental justice.[214]

On a more conceptual level, a distinction can be made between a 'comprehensive' and 'narrow' human rights approach – where 'comprehensive' refers to an approach which emphasises the radical shifts required in the existing socio-economic order and a 'narrow' approach to human resilience and the individual as rational decision maker, who acts in a manner as to maximise their own best interest.[215] Conversely, rights-based arguments have also been co-opted and employed by corporations, most notably through SLAPP-lawsuits (Strategic Lawsuits Against Public Participation).[216] In addition, some advocates call for a right to 'subsistence emissions' or a right to pollute, both of which are dangerous concepts – especially when not defined in light of the human rights tradition described here – that can lock-in fossil fuel dependency and hamper progress towards transformative change.[217] The human rights

210 The human rights approach taken in this research is explicated in section 1.5.

211 Alan Boyle, 'Human Rights and the Environment: Where Next?' (2012) 23 European Journal of International Law 613, 614.

212 *See* contributions to John H Knox and Ramin Pejan, *The Human Right to a Healthy Environment* (Cambridge University Press 2018).

213 For an analysis of the role of the RHE *see* also generally the work of the UN Special Rapporteur on the Human Rights to a Healthy Environment <https://www.ohchr.org/en/special-procedures/sr-environment>.

214 For a comprehensive analysis, as well as a valuing study, *see* Jacqueline Peel and Hari M Osofsky, *Climate Change Litigation* (Cambridge University Press 2015).

215 Katherine Lofts, 'Analyzing Rights Discourses in the International Climate Regime' in Sébastien Duyck, Sébastien Jodoin and Alyssa Johl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 19.

216 Grear (n 127) paras 125. For an analysis of the use of SLAPP lawsuits to fuel climate denialism in the US, *see* Robert J Brulle, 'Denialism: Organized Opposition to Climate Change Action in the United States' in David Konisky (ed), *Handbook of Environmental Policy* (Edward Elgar Publishing 2020).

217 Henry Shue, 'Subsistence Emissions and Luxury Emissions' (1993) 15 Law & Policy 39; Humphreys, 'Introduction: Human Rights and Climate Change' (n 201) 26. The important point made in this study is that a 'right' must not be confused with a human right – the latter should only aim towards the empowerment of the powerless. Terms such as 'subsistence emissions' risk utilization to justify any amount of emissions. Even more, the human right to subsistence is integrated in the international human rights regime through the right to self-determination. Chapter 4 of this research explores this particular Article and define what subsistence would entail in the climate context. In any case, this study argues, this

approach of this research incorporates all three general approaches to human rights and climate change to a degree.[218]

It can therefore be said that a human rights approach contains several attributes which make it suitable to address the characteristics of the super-wicked problem and fill the gaps left by the other approaches. This is dependent on the particular approach taken, since human rights have also been co-opted to protect interests of emitting entities. Nevertheless, more than the environmental, economic and justice approach, the well-established human rights tradition is best placed to guide urgent responses and, with some caveats, enforce the response needed to achieve transformative change.

1.4 Climate Change as a Collective Human Rights Issue

To say that the preceding analysis of the human rights approach to climate change prompts the conclusion that the human rights tradition is perfectly suited to tackle climate change, is too simplified of a reasoning. Since its conception, the human rights discourse has been subjected to several critiques which also apply in relation to a human rights approach to climate change.[219] Any approach employed on the basis of human rights must be sensitive towards such critiques and defined to avert negative externalities to optimise human rights' potential. Human rights, when not applied 'correctly' – with the aim to restore power imbalances and protect and empower the most vulnerable – can reinforce unjust systems and root causes of climate change.[220]

This paragraph sets out both conceptual and practical critiques to human rights and their application to the climate issue. In light of these critiques, this section summarises the main *prima facie* vantage points of including collective human rights in any human rights approach to climate change. It concludes by underscoring the need for a collective human rights approach.

1.4.1 The Human Rights Approach: Critiques

Perhaps the most evident critique in connection to climate change refers to the individual character of human rights. Human rights embrace a dichotomy between state and individual, incompatible with a problem which 'require[s]

should not be done in relation to an abstract notion such as emissions, but in line with ontology.

218 The exact approach taken is dealt with more extensively in sections 1.5 and 1.6.

219 *See* generally Marie-Bénédicte Dembour, 'Critiques' in Daniel Moeckli, Sangeeta Shah and Sandesh Sivakumaran (eds), *International Human Rights Law* (Oxford University Press 2010).

220 Atieno Mboya, 'Vulnerability and the Climate Change Regime' (2018) 36 UCLA Journal of Environmental Law & Policy 1, 89.

urgent action from the whole of society – from governments, but also from international organizations, from businesses, from cities and individuals.'[221]

Not only does this seem inconsistent considering the temporal, sectoral and spatial scope of climate change, but the idea of the individual is one born out of neoliberal and, thus, Western thought. Therefore, while an individualist approach might be beneficial to improving democratic legitimacy of policies, it is insufficient to resolve issues of anthropocentrism and moral hardship of applying a Western view with a claim of universality.[222] The application of human rights as an expression of neoliberalism will not lead to global justice, since the promotion of self-interest will further worsen persistent inequalities generated by a Western worldview or ontology consistently prioritising economic growth over social and environmental considerations.[223] Consequently, leaving aside possible practical benefits, a moral imperative exists to pay particular attention to non-Western ontologies and epistemologies and incorporate these views not only in the application of human rights, but in the human rights framework itself.

To return to the individualist critique, the reduction of climate change claims to a single individual case, disregarding fundamental obstacles, lapses in 'methodological individualism' – meaning to explain phenomena or form arguments by starting from an individual case.[224] Such individualism fails to account for impacts on sections of humanity, as well as for the unmeasurable 'value' of other lifeforms and worlds on Earth.[225] Perceiving humans rights as separate from nature augments a presumption that is dominant in not only the human rights and environmental approach, but especially in the economic approach: that nature exists solely to serve humanity and serves no purpose on its own.[226] Furthermore, this individual is not neutral as it is often equated with the Western, white, able-bodied man, failing to account for particular vulnerabilities and to adequately map the dominant power structures that, as previously argued, are at the core of human rights.[227]

Next to these conceptual critiques, the human rights regime also *prima facie* seems inadequate to consider other relevant factors in the complex causal web of climate change. Some of these practical critiques are particularly relevant when considering the effectiveness of policies designed to combat climate

221 António Guterres 'Remarks to the One Planet Summit' (*UN*, 11 January 2021).
222 Ebbesson (n 121) 10.
223 Mboya (n 220); Lofts (n 215); Dembour (n 219) 76.
224 Joseph Heath, 'Methodological Individualism' in Edward N. Zalta & Uri Nodelman (eds.) *Stanford Encyclopedia of Philosophy* (Stanford University 2005).
225 Baxi (n 156) 21, 28. Value here is hyphenated as to not confuse it with economic value, with which value is often equated.
226 Alan Boyle, 'Climate Change, the Paris Agreement and Human Rights' (2018) 67 International and Comparative Law Quarterly 759, 768.
227 *See* for an example of such a critique e.g. Chandra Mohanty, 'Under Western Eyes: Feminist Scholarship and Colonial Discourses' (1988) 30 Feminist Review 61.

change. While it is suggested that human rights are the best cure to address issues arising from a state centric world, human rights obligations are held *vis-à-vis* the state, even though in the climate context people are threatened by actions taken outside states' territories.[228] Dependence on human rights risks further imbedding state centricity into the international plane. Analogous to this critique is the limited extraterritorial application of human rights.[229] This presents various complexities applied to a problem which knows no borders, whose contributions can be traced back decades and can be attributed to a myriad of state and non-state actors. The consideration of non-state actors, moreover, deserves scrutiny given the large share that transnational corporations have in global emissions.[230] Indeed, the power imbalances climate change policies aim to correct are often transboundary and multi-actor.

The fact that human rights are not absolute indicates that states have leeway in balancing human rights with other societal, often economic, objectives. Similar leeway involves the solution to conflicts between rights.[231] To challenge such discretionary powers of states, one must be capable of enforcing their right(s). Enforcement, therefore, is part of the effectiveness of a human rights approach. However, general impediments to access to justice are vast in many parts of the world, and in relation to climate change, enforcement is confronted with several additional procedural hurdles.[232]

These critiques reveal that there are also risks and shortcomings when applying a human rights approach to climate change. Its anthropocentricity, as well as its strong individualist and neo-liberal roots, impair its ability to effectively counteract power imbalances and protect the most vulnerable. Human rights, as they stand, leave room for improvement. Not only in general,

---

228 Humphreys, 'Competing Claims: Human Rights and Climate Harms' (n 166) 64.

229 Humphreys, 'Introduction: Human Rights and Climate Change' (n 201) 5; John H Knox, 'Bringing Human Rights to Bear on Climate Change' (2019) 9 Climate Law 165, 172. Human rights have been applied extraterritorially in cases where either state conduct took place outside its own territory, the action was under 'effective control' of a particular state, or acts committed by private entities under a state's jurisdiction. *See* for application hereof, e.g.; ICJ, *Advisory Opinion Concerning Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* [2004] ICJ Rep 136; CCPR, 'Lopez Burgos v. Uruguay' [1981] UN Doc. CCPR/C/13/D/52/1979. *See* also section 5.3 of this study.

230 *See* for a human rights analysis of the issue, Olivier De Schutter, *Transnational Corporations and Human Rights* (Bloomsbury Publishing 2006); Grear (n 127). In Chapter 2 corporations are dealt with as duty bearers of collective human rights.

231 For a short overview of these concerns, *see* Humphreys, 'Introduction: Human Rights and Climate Change' (n 201) 4–6.

232 For a general analysis of procedural hurdles in climate cases, *see* International Bar Association, 'Model Statute for Proceedings Challenging Government Failure to Act on Climate Change' (2020); César Rodríguez-Garavito, 'A Human Right to a Healthy Environment? Moral, Legal, and Empirical Considerations' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) 158. Rodríguez-Garavito underlines that enforcement powers are not just encapsulated by litigation but include a wide range of strategies.

but specifically in relation to climate change. This is where collective human rights might be able to assist.

1.4.2 The Advantages of Collective Human Rights

While impairing the effectiveness of a human rights approach to climate change, human rights offer enough promise to regard these critiques as an impetus to strengthen the human rights discourse in order to live up to its promise as corrector of power imbalances. It might not be perfect, but it is the best cure against global political paralysis, providing possibilities to deal with state sovereignty as '[t]he largest unresolved problem of political modernity and the biggest impediment to dealing with climate change'[233] in the urgent and transformative manner necessary. An indispensable course of action to achieve its potential, as argued in this research, is to further explore the possible contribution of collective human rights to the human rights approach to climate change.

Collective human rights are no novelty in the human rights regime. Internationally, the concept of collective rights has been debated for some time and is manifested in the right to self-determination.[234] Regionally, the African Charter on Human and Peoples' Rights (ACHPR) recognises several collective human rights, among which a RHE.[235] This right has also been recognised as a collective human right at the national level.[236] In addition, forms of collective human rights appear in several domestic legal systems through for example the recognition of rights of nature (RoN) or of Mother Earth.[237]

Collective human rights have also been linked to specific groups, most notably Indigenous peoples and minorities and more recently to peasants and

233 Sam Adelman, 'Rethinking Human Rights: The Impact of Climate Change on the Dominant Discourse' in Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press 2009) 166–167.

234 *See*, for example, Michael Freeman, 'Are There Collective Human Rights?' (1995) 43 Political Studies 25.

235 African Union, *African Charter on Human and Peoples' Rights* (African Union 1981) [Banjul Charter], Articles 19-24. The right to a healthy environment is incorporated in Article 24.

236 For an overview of incorporation of such a right in national constitution or otherwise, David R Boyd, 'Catalyst for Change: Evaluating Forty Years of Experience in Implementing the Right to a Healthy Environment' in John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press 2018) Table 1.

237 *See* for an analysis Susana Borràs, 'New Transitions from Human Rights to the Environment to the Rights of Nature' (2016) 5 Transnational Environmental Law 113. Also relevant here is World People's Conference on Climate Change and the Rights of Mother Earth, 'Universal Declaration on the Rights of Mother Earth' (2010).

small-scale farmers.[238] Collective rights represent a category of human rights embedded in a spirit of solidarity, a concept more fully embraced by the Global South and rejected by the Global North – terms used throughout this study to highlight power imbalances and not a defined geographical area as historically divisions pointing to these power imbalances have been encapsulated in different terms such as developed/developing or, as related to the history of collective rights, communism/neoliberalism. In this context, these power imbalances refer to the fact that without the consideration of non-atomistic collectives within the human rights discourse, it remains overwhelmingly individualistic and with that, a more accurate reflection of values of those most powerful.[239] However, amidst growing calls for global solidarity to tackle the climate crisis, actors have called for the exploration of the content and contribution of collective human rights.[240]

Next to the awareness of the need for solidarity dimensions within human rights, it is also argued that the relationship between collective human rights and climate change is similarly relevant regarding the 'common concern' or 'global commons' characteristic of the climate.[241] As Raz purports, only collectives can hold rights over collective goods.[242] From this reasoning it is not a big leap to assert their application to the concept of the global commons and thus climate change. Complementary to this point, climate change is characterised as 'tragedy of the commons' – caused by the individual urge to maximise their own benefits at the least costs – and is said to demand a collective solution.[243] Enhancing the understanding and exploring the potential use of collective human rights in this context might prove the coveted solution to enhance the effectiveness of the climate response.

Considering both the critiques to a human rights approach to climate change and the arguments above, this study identifies several additional benefits that accrue from the inclusion of collective human rights in such an

238 Will Kymlicka, 'Beyond the Indigenous/Minority Dichotomy?' in Stephen Allen and Alexandra Xanthaki (eds), *Reflections on the UN Declaration on the Rights of Indigenous Peoples* (Hart Publishing 2011). For rights of peasants and small-scale farmers, see HRC, 'United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas' [2018] UN Doc. A/HRC/RES/39/12. For rights of peasants and small-scale farmers, *see* UNGA, 'United Nations Declaration of Rights of Peasants and other people working in rural areas' (2018) UN Doc. A/RES/73/165.

239 Richard N Kiwanuka, 'The Meaning of 'People' in the African Charter on Human and Peoples' Rights' (1988) 82 American Journal of International Law 80, 82, 83.

240 For examples of scholarly calls, *see* Philippe Cullet, 'Human Rights and Climate Change: Broadening the Right to Environment' in Cinnamon P Carlarne, Kevin R Gray and Richard Tarasofky (eds), *The Oxford Handbook of International Climate Change Law* (Oxford University Press 2016) 497; Doreen Stabinsky, 'Climate Justice and Human Rights' in Sébastien Duyck, Sébastien Jodoin and Alyssa Johl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 289; Adelman (n 233) 173.

241 Schrijver (n 106).

242 Joseph Raz, *The Morality of Freedom* (Clarendon Press 1986) 207–209, 288, 289.

243 Sinden (n 185) 268–269.

approach. On a more conceptual level, there is a need to consider implementing collective human rights to provide for an 'ontological dimension' to the human rights discourse, symbolizing a shift from a rigid doctrine of state sovereignty and civility to one that more closely reflects and addresses the complex and differentiating systems of power and belonging.[244] Relatedly, such a reconceptualization can contribute to tempering some of the conceptual critiques of human rights by creating a space where non-Western approaches to humanity and being are adequately considered in the human rights regime.

Moreover, integration of collective rights can better acknowledge the interconnection between humanity and nature. When considering a collective or community, it is easier to consider their dependence on and relationships with the environment. An individual claim not only upholds the separateness of the individual human entity from non-human entities and the environment but also generates problems arising from the individualisation of nature.[245] When employed as a tool to include the intrinsic worth of nature and more adequately depict planetary boundaries, collective rights can also more adequately balance environmental interests of communities and the (economic) interests of 'the public'. This balancing function does not only emanate from elevating the scale of the problem from an individual issue to one impacting communities, but by bestowing the human rights discourse with more environmental relevance, it recognises the environment as a significant interest in itself.[246]

Next to better depicting the planetary realities, collective rights can bridge and clarify the relationship between the environment, human rights, sustainable development and the use of natural resources.[247] While human rights have the potential to inform and promote sustainable development, the term is heavily tainted by neoliberal and capitalist thought which runs counter to the identified potential of the collective.[248] The collective can shed a light on these biases, revealing a different development model and guiding these terms to a more inclusive and less environmentally damaging interpretation – including

244 ibid, 130.

245 Lofts (n 215); Julia Brannen and Ann Nilsen, 'Individualisation, Choice and Structure: A Discussion of Current Trends in Sociological Analysis' (2005) 53 The Sociological Review 412.

246 Malgosia Fitzmaurice, 'Environmental Degradation' in Daniel Moeckli, Sangeeta Shah and Sandesh Sivakumaran (eds), *International Human Rights Law* (Oxford University Press 2010); Boyle (n 211) 628–629.

247 The latter is not only an important part of the environmental realm generally, in relation to human rights, it is recognised as a collective human rights through incorporation in common Article 1 of the ICESCR and ICCPR, the right to self-determination: 'All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.'

248 *See* for example Adelman (n 59). This is discussed at length in section 3.3.1.2.

the use and incorporation of rights of future generations as a constitutive element to sustainable development.[249] They strengthen this potential by taking into account the interests of future generations when assessing those of a collective.[250] To illustrate, collective rights of Indigenous peoples are not only integral to their current well-being, but also to their existence and subsequent development as peoples.[251] Consequently, they can also address fragmentation of the climate discourse and better address climate change's temporal scope.[252]

As the collective fits uncomfortably within the dominant state/individual dichotomy at the core of human rights, it opens up possibilities within human rights to further debate the place of other (dominant) global actors, such as corporations, possibly extending human rights' application beyond state borders by generating both national and international obligations.[253]

Relatedly, collective human rights could also alter procedural norms that have thus far impaired rights-based climate litigation including causality, legal standing and redressability.[254] As evidenced by the pivotal role of Indigenous peoples in combatting climate change, collectives can be agents of change.[255] Contrary to an individual case, causality in a collective case need 'only' be established in relation to that collective and not the individual in question.[256] Likewise, the standard of proof of the connection between the defendant's

249 As defined by the Brundtland report as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', Gro Harlem Brundtland and others, 'Our Common Future', vol 8 (1987).

250 For example, the individualisation of communities' collective resources is held to fail in capturing resources' intergenerational nature and the limited individual interest held in such resources, Alison Clarke, 'Property, Human Rights and Communities' in Ting Xu and Jean Allain (eds), *Property and Human Rights in a Global Context* (Hart Publishing 2018).

251 Cathal Doyle and Jérémie Gilbert, 'Indigenous Peoples and Globalization: From 'Development Aggression' to 'Self-Determined Development'' (2011) 8 European Yearbook of Minority Issues Online 219, 296. A similar argument can be imaginable in relation to other minorities, but also peasants and farmers, if considering, for example, family farming.

252 Humphreys, 'Competing Claims: Human Rights and Climate Harms' (n 166) 65.

253 Nicolas Lopez Calera, 'The Concept of Collective Rights' (2003) 34 Rechtstheorie 351, 354. Calera observes that, paradoxically, 'economic liberalism has promoted the existence of economic collective groups with enormous power'. The UN Independent Expert on human rights and international solidarity in his report on solidarity and climate change reiterates that solidarity implies responsibilities both nationally and internationally, also for corporations; UNGA, 'Report of the Independent Expert on Human Rights and International Solidarity' [2020] UN Doc. A/HRC/44/44 see specifically part IV B.

254 As addressed extensively in Chapter 5.

255 *See* for an overview of this dimension within the UNFCCC the compilation up to and including 2019 of IIPFCC & CIEL, 'Indigenous Peoples and Traditional Knowledge in the Context of the UN Framework Convention on Climate Change: Compilation of Decisions and Conclusions Adopted by the Parties to the Convention – 2019 Update' (2019). Chapter 2 discusses the Indigenous context in detail.

256 Cullet (n 240) 511. Still, causality is notoriously hard to establish in climate cases but has been established in several cases. This research does not assume it solves the issue altogether but alters the scale/precision required.

conduct and claimants' participation, or *locus standi*, might be lower.[257] Providing collectives with legal subjectivity, moreover, is an empowering tool, allowing people to shape their own destinies and contribute towards global justice.[258]

As opposed to public interest litigation, which has been employed to address climate change, collective rights allow for claims to be brought by the group itself, instead of 'on behalf of', which is often the case with public interest litigation.[259] This would circumvent universalising tendencies and the embedding of power imbalances. Moreover, providing redress to the violation of a specific human right might limit the possibility to consider cumulative climate impacts,[260] whereas collective human rights are more broadly applicable through their status as a prerequisite to the fulfilment of individual rights, as well as the amount of people they concern.[261] The necessary redress may be easier to pinpoint if the scale is altered. This effect is amplified where collective rights are construed as containing international (and extraterritorial) responsibilities, instead of just the state *vis-à-vis* its citizens.

Collective human rights, from this *prima facie* perspective, could better address super-wicked characteristics such as irrational discounting, strengthen the role of various actors in solving the issue, and further reduce the emergence of new wicked problems by accounting for hitherto overlooked societal and planetary systems, including the connection to nature. As analysed in Chapter 2, there are reasons for the lack of a full analysis of the role that collective human rights can play in relation to climate change. Not in the least the fact that their existence is still up for debate and their contents never clearly defined. Nevertheless, this ambiguity has not led to an impasse of the develop-

257 International Bar Association (n 232) 7–9; Clarke (n 250) 33-34. The success of the Urgenda case in the Netherlands is sometimes attributed to its domestic law of allowing interest organisations to bring a collective claim; Hoge Raad, 'Urgenda Foundation v. the Netherlands' [2019] ECLI:NL:HR:2019:2006.

258 Kiwanuka (n 239) 101. Indeed, self-determination as the only internationally recognised collective human right has several procedural dimensions, including, but not limited to, public participation. Moreover, in relation to Indigenous peoples, this empowerment aspect manifests itself through the requirement of free, prior and informed consent.

259 *See*, e.g. Jacqueline Peel and Hari M Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7 Transnational Environmental Law 37. The use of collective human rights instead of public interest litigation, reduces the wickedness of policies developed in relation to judicial outcomes. NGOs, which are often the plaintiffs in public interest litigation, sometimes litigate without consulting those they are supposedly litigating on behalf of. This could have negative impacts, as discussed in section 5.2 of this study.

260 International Bar Association (n 232) 10–11.

261 Antonio Cassese, *Self-Determination of Peoples: A Legal Reappraisal*, vol 12 (Cambridge University Press 1995) 47; John H Knox, 'Constructing the Human Right to a Healthy Environment' (2020) 16 Annual Review of Law and Social Science 79, 13.

ment and application of collective human rights in some form.[262] This research argues that the application of collective human rights is neither far-fetched nor unconvincing. Instead, if provided with a coherent underlying theory reflecting their ability to provide space for non-Western ontologies, they can play an important role in tackling the root causes of climate change, adding to the legitimacy, effectiveness and coherence of climate policies. They can answer not only to a moral call to include a non-Western gaze in the human rights framework but also provide solutions to practical impediments to the effectiveness of responses to climate change.

1.5 Research Aim, Scope and Questions

Having clarified the need for a human rights approach in tackling climate change and the potential thereof, and thus the imperative to carry out further research into the role of collective human rights within this approach, this paragraph clarifies the aim, scope and questions of this research. The main question to be answered in this thesis is:

> *How should collective human rights be conceptualized, interpreted and applied in order to contribute to a more effective human rights approach to climate change?*

A few elements of this question need further clarification. The research question looks at the effectiveness of a human rights approach that incorporates collective human rights. As explained in section 1.3.2.4, within the human rights approach, three varieties can be distinguished: a proceduralization of rights, the greening of rights and the pursuit of a RHE. This research incorporates all three varieties to varying degrees. Two of the three are most dominant in this study: the 'greening' of human rights and the employment of human rights procedure. The latter refers to Chapter 5 of the research dedicated to collective human rights enforcement. Given the well-described urgency of the climate crisis, this research takes the dominant approach of 'greening' existing human rights because of the relatively short timeframe needed for this.[263]

---

262 This is analysed further in Chapter 3. Most notable support for this claim is the increased role of Indigenous peoples in the climate regime and broader effort to tackle climate change, the recognition of collective rights for peasants and small-scale farmers. In the climate discourse itself, albeit not in rights-language, collectives also occupy and important place through the persistent recognition of the relevance of local communities and other vulnerable and marginalised groups. This is emphasised in Chapter 2.

263 Since 2005 until now, there has been a bulk of work just in relation to the Human Rights Treaty Bodies clarifying states' obligations in the climate context. *See* Center for International Environmental Law, 'States' Human Rights Obligations in the Context of Climate Change' (2018). *See also* subsequent annual reports of the Center for International Environmental Law.

This timeframe might be trimmed further due to current knowledge and expertise available at human rights fora in dealing with issues pertaining to climate change. Applied to collective human rights, this involves a particular focus of this research on the 'greening' of self-determination as the only codified international collective human right, as well as on (the interaction with) Indigenous rights and peasant rights. Notwithstanding, this research also explores the recognition of a RHE in part by virtue of its qualification as a collective human right at the regional and national level.[264]

Relatedly, collective human rights (or collective rights) are used as a category of human rights and not as an aggregate term of collective approaches to human rights. It therefore does not encompass or equate to group rights, nor the undefined 'community rights' or community interests. While Chapter 2 defines the content of collective human rights more clearly, the overarching idea from which this dissertation works is that collective rights entail more than the aggregate of individual interests and are not reducible to an individual claim.

Additionally, this study investigates the global application of regionally recognised collective rights in particular the right to development (RtD).[265] This human rights approach is applied in light of the *raison d'être* of human rights identified previously: to correct power imbalances and protect and empower those in marginalised positions.

The 'effectiveness' of this approach is measured through the super-wicked characteristics used in paragraph 1.3 to balance the approach with other approaches (including the general human rights approach itself). Consequently, this research studies the value added of collective rights in light of their ability to 1) address the urgency 2) place the responsibility for solutions with other actors than states 3) attach consequences to non-compliance through a strong central authority, and 4) address the temporal and spatial scope of climate change. Supplementary to this, effectiveness is reviewed by the comprehensiveness of the approach or its ability to limit, through its policies, ensuing new wicked problems. As new wicked problems often emerge out of a one-dimensional view of a particular issue and fail to sufficiently address connecting issues, the most comprehensive framework to assess the emergence of new wicked problems is that of global justice. Global justice is notoriously hard

264 The right is currently recognised through a HRC and UNGA resolution but as an international human right has not been implemented nor clearly defined (although the UN Special Rapporteur has extensively done so in his work). HRC Res 48/13, 'The Human Right to a Clean, Healthy and Sustainable Environment' [2021] UN Doc. A/HRC/RES/48/13; UNGA Res. 76/300, 'The Human Right to a Clean, Healthy and Sustainable Environment' UN Doc. A/76/L.75. The remaining ambiguity means that it can take a long period of time before the right is applied in practice, which is why in this research its predominantly applied in assessing the conceptualization of collective human rights and their environmental relevance.

265 ACHPR, Article 22.

to define, but this study draws parallels to Pogge's account that underlines that contributions to 'unfairness' must be leading in defining obligations. The ultimate goal is the creation of a system that 'give[s] equal consideration to the needs and interests of every human being on this planet'.[266] More specifically, this research focuses on this equal consideration through the lens of ontological flexibility within the rights discourse.

To discover in what way(s) collective human rights could enhance the effectiveness of the human rights approach, the thesis is further divided into three questions. Chapters 2 and 3 answer the following question:

> *In light of climate change, how should collective human rights be conceptualized as a category of rights and to what degree is this reflected in practice?*

Chapter 2 provides a theory of collective human rights, including its beneficiaries and duty bearers, by reviewing the way(s) in which they are currently interpreted, distilling its *raison d'être* and the relevance in the climate context. Based on a philosophical analysis of individual rights, it produces an anthropological account of collective human rights. Next, this theory of collective human rights is tested against the current discourse in Chapter 3 to determine the degree in which collective human rights already address climate change in practice, and to what extent this reflects the theory of collective human rights put forth in Chapter 2. On the basis hereof the potential of collective human rights to the human rights approach to climate change can be deduced when interpreted in line with the conceptualization of this study as compared to the current state of play.

After ascertaining how collective human rights should be conceptualized and have been conceptualized, Chapter 4 studies the application of collective human rights in the climate context, self-determination in particular as the only recognised international collective human right. It answers the question:

> *What is the substantive potential of existing collective international and regional human rights norms in relation to climate change (if any)?*

In particular, it unpacks the relevance of the prohibition contained in the second paragraph of the right to self-determination 'in no case may a people be deprived of their means of subsistence'. The outcome of this analysis is employed to a specific, perhaps most well-known, climate phenomenon: sinking island states. The chapter concludes with an appraisal of the concrete added value of this particular right in the climate context.

---

266 Thomas Pogge, 'Concluding Reflections' in Gillian Brock (ed), *Cosmopolitanism Versus Non-Cosmopolitanism* (Oxford University Press 2013) 298. See also; Thomas Pogge, 'Introduction: Global Justice' (2001) 32 Metaphilosophy 1; Pogge, *World Poverty and Human Rights* (n 144).

Since the effectiveness of a human rights approach is in part dependent on the possibility of enforcement, the human rights approach taken in this research aims to not only look at the substantive benefits of collective human rights, but also at their possible enforcement. This aspect is included in Chapter 5, which answers the question:

> *What is the added value of litigating on the basis of collective human rights compared to individual rights-based climate litigation (if any)?*

This question implies an assessment on how collective human rights alter procedural requirements, and to what degree this is rooted in current practice. Through an analysis of legal standing, extraterritoriality and redress, it evaluates whether collective human rights litigation can overcome some of these commonly identified procedural hurdles in climate litigation.

As this research studies the concept of collective rights and its possible utilisation as to improve the human rights approach to climate change, its aim is not only to contribute to legal knowledge, but also practical in nature. It intends to highlight the full 'lifecycle' of collective human rights to not only abstractly analyse its content but bridge the practical through a substantive and procedural analysis. This is also in line with the 'super-wicked' characteristic of climate change's urgency – it intends to move beyond deepening the understanding of collective rights to showcasing how such an understanding can be applied and judicially enforced.

The research is limited by its focus on climate change. Consequently, this research does not include an extensive analysis of the application of the adopted conceptualization of collective human rights to other issues but climate change, although this author is of the firm belief that this deserves attention in further research. Relatedly, this focus on climate change excludes other specific environmental issues. However, it is difficult – and, as is argued in Chapter 2, undesirable – to crudely distinguish between environmental issues or to see climate change in isolation and seeing these interconnections is similarly required for the intended reduced 'wickedness'. More so, since climate change and human rights is a relative new field of study, particularly when considering collective human rights, recourse to the environmental is necessary to analogously interpret these rights. This research therefore goes into these issues insofar it is relevant in relation to this research's main question. The next section further delineates the structure of this research, discussing in more detail the methodology taken in each of the outlined dimensions of this research to achieve the set-out research aims.

1.6 Research Approach and Methodology

To answer the research questions outlined in the previous paragraph, this research in essence is divided into three distinguishable dimensions. The first, consisting of Chapters 2 and 3, provides the theoretical and conceptual foundations of this research. The next dimension, Chapter 4, looks at the identified substantive issues where collective human rights might prove an effective tool. The last dimension, Chapter 5, covers adjudication of collective human rights in the climate context. This section provides some overarching considerations for this research's chosen approach, after which the methodology of each of these three dimensions is discussed.

1.6.1 Approaching the Research: Disciplinarity and Positionality

This study is part of the Doctorate in Law and aims to better protect people and nature. Legal frameworks, at a minimum human rights, address worldly experiences and should have some grounding in 'reality'. Law, historically, is often relatively self-referential – e.g. on 'law's term alone and not in relation to extra-legal societal forces and processes.'[267] Human rights law in its very nature is about society as it is centred around human beings and their basic needs.[268] Questioning the inclusions and exclusions fostered by human rights (as is done in this research) requires approaching the law in context, in particular its societal context.[269] As the effectiveness defined in this research is also dependent on identifying and addressing root causes and temporality and spatiality – all terms crossing disciplinary borders – the question inherently requires a broader contextual and interdisciplinary approach. This is similarly true for environmental questions (including climate change).

This research, then, is in its entirety best described as socio-legal in nature if socio-legal is defined as viewing law as 'a component part of the wider social and political structure (…) inextricably related to it in an infinite variety of ways, and [only] properly understood if studied in that context.'[270] While this study's aims are similar to 'classic' socio-legal research, it does not apply

267 Reza Banakar, 'On Socio-Legal Design' [2019] available at SSRN 3463028, 2.

268 These terms must be seen in the broadest sense and questioning there meaning and content is central to Chapter 2's conceptualization of collective human rights.

269 In line with 'law in context', which approaches law 'less as a self-sufficient body of doctrine than as part of the wider human sciences, something that can be understood with the aid of a variety of different intellectual disciplines', David Nelken, *Beyond Law in Context: Developing a Sociological Understanding of Law* (Routledge 2017) xii.

270 Phil Harris, 'Curriculum Development in Legal Studies' (1986) 20 The Law Teacher 110, 112. The important thing is that socio-legal design is juxtaposed to doctrinal studies and views not solely the law itself, but its wider context and because of that has a more interdisciplinary nature. This does not per definition have to be sociology, but can also be, for example, anthropology (as is the case in this study).

quantitative research methods itself, but relies on other disciplines to help bridge the social and the legal and vice versa.[271] The research, therefore, is qualitative in nature and predominantly analytical and theory-based, using primary and secondary text-based sources.

1.6.1.1 Practice of Interdisciplinarity

The methodology is defined by the chosen research question. To clarify, sometimes a methodology can be utilised to draw the lines of a research question, e.g. the research will look at a particular question *only* from a perspective of certain actors in a particular empirical research setting. This research's main research question, in providing a comprehensive answer, necessitated the crossing of disciplinary boundaries. As stated previously, both environmental and rights studies in essence require an interdisciplinary lens.[272] As these questions are commonly perceived as wicked problems, they touch upon the very fabric of our every being and cannot be viewed detached from other disciplines. This is echoed by Fisher at al. when they state environmental scholars should be interdisciplinarians.[273] Moreover, this research looks at *effectiveness*. Effectiveness by its very nature is a 'beyond the law-approach' as it needs to somehow measure effects.[274]

1.6.1.2 Positionality

The conducted research refers to different experiences of humanity, with a particular focus on marginalised and often unheard voices, such as those of Indigenous peoples. Because of this, there is an important role reserved for the positionality of the research and researcher.

Generally, the body of scholarly work in English is still predominantly Western-centric and male, both of which constitute dominant critiques on the international human rights regime. While this research endeavours to address these underlying critiques, it is reliant on existing literature and primary sources historically dominated by men of Western origin. Unfortunately, it is currently difficult to conduct a comprehensive research that adequately

271 Banakar (n 269) 19. This does not mean that the research loses its socio-legal character, since its current application goes beyond empirical research.

272 Notwithstanding that they can be approached purely legal or doctrinal. The idea here is that justifying the existence of rights needs to focus on their grounding in practice and that the environment is similarly intertwined with every part of being and thus hard to view in isolation of other disciplinary perspectives.

273 Elizabeth Fisher and others, 'Maturity and Methodology: Starting a Debate about Environmental Law Scholarship' (2009) 21 Journal of Environmental Law 213, 230, 231.

274 A point also made by Darren O'Donovan, 'Socio-Legal Methodology: Conceptual Underpinnings, Justifications and Practical Pitfalls' in Mary-Elizabeth Tumelty (ed), *Legal Research Methods: Principles and Practicalities*, vol 1 (Clarus Press 2016).

balances gender and 'Global North' and 'Global South' perspectives.[275] What this study does attempt, is to aim towards this balance by avoiding any of its main topics to be one-dimensional by actively seeking authors representing these perspectives. Experiences of Indigenous peoples are best described by Indigenous scholars, supplemented by works that have been created in close cooperation with Indigenous peoples. This similarly holds true for the African and peasant contexts addressed in this research. Moreover, this study is mindful when addressing issues mostly concerning the Global South that the literary analysis is not dominated by a 'Western gaze' but favours diverse authors from the Global South.[276]

The latter comment must be seen in conjunction with the positionality of this author.[277] The author is a 30 year-old white, able-bodied, cis-gender female scholar working and living in the Netherlands with a Bachelor's degree in Dutch law and a Master's degree in Public International Law. As a white, Western researcher this author is aware of privileged access to resources, as well as biases that can shape and inform the research. For the purpose of this research, this implies ontological assumptions of naturalism as well as corresponding epistemological frameworks.[278] Mindful of such biases, this research attempts to address biases and mitigate them by questioning and investigating the sources used to describe specific non-Western models of law, and, more broadly, being.[279] It aims to avoid the 'naïve realism' sometimes contained

275 As indicated in section 1.4.2, this study uses Global North and Global South not so much as to indicate a geographical equilibrium but in relation to power dynamics in international law. To clarify, for example, the Saami have been exploited and subjugated to a Western model of development and statehood by actors – from their perspective – from the Global South. As explained by Chimni, '[i]nternational law is playing a crucial role in helping legitimise and sustain the unequal structures and processes that manifest themselves in the growing north-south divide. Indeed, international law is the principal language in which domination is coming to be expressed in the era of globalization.' Bhupinder S Chimni, 'Third World Approaches to International Law: A Manifesto' in Antony Anghie and others (eds), *The Third World and International Order* (Brill Nijhoff 2003) 47. The focus on inequality of power instead of geography is also apparent through the focus of this research on climate change as the UNFCCC makes a similar divide by Annex-I and non-Annex I countries (though this is only used to indicate historical emissions so a narrower term than Global North and South used in this research).

276 *See* on the importance of questioning an epistemological framework, or particular (Western) lens, Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (Bloomsbury Publishing 2021).

277 On the importance of positionality in research, *see* Andrew Gary Darwin Holmes, 'Researcher Positionality – A Consideration of Its Influence and Place in Qualitative Research – A New Researcher Guide' (2020) 8 Shanlax International Journal of Education 1.

278 Chapter 2 contains an elaborate discussion of ontology. Corresponding epistemological frameworks are discussed in Chapter 5. Relevant here is that this study, in essence, is an epistemological product of the West since it is a scientific piece. The way in which knowledge is produced is therefore already biased in and of itself. However, this does not have to negate its value outside the ontological and epistemological framework it is written in.

279 The way in which this is done is described in section 1.6.2.

in scholarly works, where scholars 'unconscious[ly] project (…) their own professional or personal subjectivities onto native peoples [or other non-Western peoples]',[280] by critically assessing histories of erasure while 'staying with the trouble' and not get trapped in past or future but being truly present as 'moral critters entwined in myriad unfinished configurations of place, times, matters, and meanings.'[281]

1.6.2 Methodologies

This socio-legal research's aim is evaluative in nature as it bridges (social) practice through providing a critical and interdisciplinary lens. Its chosen methodology is diverse reflecting this aim and nature of the research. This is in line with a more 'law in context' approach where methodology is more flexible as it is determined contextually,[282] 'treating legal subjects broadly, using materials from other humanities and social sciences, and from any other discipline that helps to explain (…) the particular legal field of legal phenomena under investigation.'[283]

Methodology here is contrasted to methods. While there is confusion on the boundaries of the term and they are sometimes conflated, a methodology could be said to be broader than methods, where a method 'is a road to the solution of a problem or a set of problems',[284] methodology 'gives an account of why this road is appropriate in terms of two sets of reasons: (i) successful methods used in terms of best practices by professionals; and (ii) the conceptual framework of a philosophy of the relevant science.'[285] Instead of fitting this research into a specific 'category' such as law and sociology or legal positivism, this section focuses on why a particular road is taken in each of the three identified dimensions, identifying the methods that provide the building blocks to these roads.

---

280 Christopher Carr, Heather Smyth and Brianna Rafidi, 'Getting to the Soul of Personhood' in Melissa R Baltus and Sarah E Baires (eds), *Relational Engagements of the Indigenous Americas: Alterity, Ontology, and Shifting Paradigms* (Lexington Books 2017) 111.

281 Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press 2016) 1.

282 Socio-legal research and law in context also have a clear and large overlap, but socio-legal study is sometimes more closely associated with a particular methodology, where law in context clearly ties a contextual approach to a broad methodological field and thus easily navigates the quantitative and qualitative realms.

283 As explained at <https://www.cambridge.org/core/series/law-in-context/387EA14AA111E65AB0120DA893AFAFCB>.

284 Rob Van Gestel, Hans-W Micklitz and Miguel Poiares Maduro, 'Methodology in the New Legal World' [2012] EUI Working Papers LAW No. 2012/2013, 2.

285 ibid.

1.6.2.1 Dimension 1: Introduction to Collective Human Rights and Climate Change

Chapters 2 and 3 of the research are analytical and frame the issue at the conceptual level. As elaborated, the content of collective human rights as a category of rights is marked by its indeterminacy. There has been little to no full analysis of why we should have collective rights and who is not (sufficiently) protected when disregarding such rights. In uncovering the *raison d'être* and therefore basic constituents of this category of rights, these chapters attempt to bridge the legal, abstract with concrete, human experiences. To achieve this, they focus on an anthropological analysis of current collective rightsholders and the (mis)translation to the legal realm. Before conducting this translation, it, in line with legal anthropology, studies informal normative orderings to produce an ethnographical foundation of 'law without lawyers, law without sanctions, law without courts, or law without precedent'.[286] On the basis of this body of research, which is doctrinal in nature, a framework of what constitute the normative foundations of collective rights is outlined.

This legal anthropological research is carried out mindful of the researcher's positionality and non-anthropological background. With this in mind, it is based on a literature review of the work of main anthropologists in the field of non-Western worldviews supplemented with anthropological accounts of Indigenous scholars as this study's aim is not to produce an anthropological thesis but to transcribe the anthropological to the legal.

Since collective human rights are a part of the larger human rights system, the positioning of collective human rights cannot be viewed in isolation. The historical development of the human rights regime as reflected in the Bill of Rights is relevant insofar it reveals the worldview that is anchored in (individual) human rights and therefore who the 'individual' is it protects. To determine its content as a *category* of rights as Chapter 2 does, the human rights regime is first subjected to a (critical) discourse analysis, tracing power dynamics embedded within the rights regime.[287] This is particularly relevant as this research looks at effectiveness in relation to root causes and embedded systems that will allow for the unfolding of new, wicked, problems.

The human rights norms of the modern world are the product of philosophical works by predominantly Enlightenment thinkers such as Kant, Locke and Hobbes. Chapter 2 therefore also encompasses a philosophical analysis of individual rights. On the other hand, this study posits that the potential significance of collective rights is linked to their connection to non-Western patterns and perspectives, which is why the discourse analysis is supported

286 Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology* (Basic Books 2008) 168.

287 *See* generally Teun A Van Dijk, 'Critical Discourse Analysis' in Heidi E Hamilton, Deborah Tannen and Deborah Schiffrin (eds), *The Handbook of Discourse Analysis* (John Wiley & Sons 2015).

by various theoretical streams or methods, including feminist theories, TWAIL, posthumanism and new materialism.

Generally, this introduction into collective human rights constitutes 1) a critical discourse analysis that utilises different disciplines insofar necessary to unveil embedded power relations and 2) a bottom-up socio-legal analysis of normative collocations of recognised collective rights holders where the more classical empirical lens associated with socio-legal research is supplanted by anthropological accounts.

1.6.2.2 Dimension 2: Collective Human Rights Solutions to Substantive Climate Problems

Based on the bottom-up sociology of law of the first dimension – establishing why we should have collective human rights – Chapter 4 applies a socio-legal top-down approach. In effect, this bridges the defined theory of collective rights that is based on experiences on the ground, to the more 'classic' doctrinal research that reviews the law itself. However, since this interrogation of the law is paired with the contextual socio-legal framework of Chapter 2, it departs from this doctrinal nature to a top-down socio-legal approach. To more easily accommodate this approach, it similarly borrows from anthropology to help build this bridge between the legal norm and the theory of Chapter 2.

To clarify, this second substantive dimension reviews an existing legal norm (the right to not be deprived of means of subsistence). It applies knowledge from existing literature and international and regional case-law. As a top-down approach, the foundations of the analysis of this dimension are created by a legal doctrinal analysis. In this regard, it follows the methods set out for the interpretation of a legal norm in Articles 31 and 32 of the Vienna Convention on the Law of Treaties (VCLT).[288] Hence, it reviews the ordinary meaning of the term, its object and purpose – assessed in light of the *travaux préparatoires*[289] – and the development of the norm since its codification in the International Covenant on Civil and Political Rights (ICCPR)[290] and International Covenant on Economic, Social and Cultural Rights (ICESCR).

For the inquiry into the development of the norm, international human rights bodies' work is researched by utilising databases to search for the use of 'subsistence'. These include the work of the ICJ, relevant human rights treaty bodies (HRTBs), the Human Rights Committee (CCPR), Committee on Economic, Social and Cultural Rights (CESCR) and the Committee on the Elimination of all Forms of Racial Discrimination (CERD), the Expert Mechanism on

288 United Nations, 'Vienna Convention on the Law of Treaties' [1969] United Nations, Treaty Series, vol. 1155.

289 As supplementary means of interpretation, *see* Article 32 VCLT.

290 UNGA, 'International Covenant on Civil and Political Rights' [1966] United Nations, Treaty Series, vol. 999.

the Rights of Indigenous Peoples (EMRIP), the relevant special procedures, such as various UN Special Rapporteurs (UNSR). Regionally, it encompasses the European Court of Human Rights (ECtHR), Inter-American Commission on Human Rights (IACmHR) and the Court (IACtHR), as well as the African Commission on Human and Peoples Rights (ACmHPR) and its Court (ACtHPR).

Having determined the doctrinal legal interpretation of the norm, it is provided with a socio-legal character through, as indicated, an analysis in light of Chapter 2 and an anthropological analysis. Together this provides an answer to how the norm *should* be interpreted in light of climate change. While these findings are applicable more broadly, to add to its practical relevance and grounding, this doctrinal and socio-legal framework of means of subsistence is applied to the 'case study' of small island states. This 'case study' relies on legal and non-legal sources.

1.6.2.3 Dimension 3: Adjudication of Collective Human Rights

Chapter 5 is analytical and theory-based and mainly focuses on the analysis of relevant international, regional and national case-law. This focus on adjudication implies the centrality of the legal frameworks in place. The chapter aims to marry this study's theory of collective human rights with procedural hurdles identified in relation to climate litigation.

To analyse these hurdles from an epistemological lens similar to Chapter 2's ontological analysis implies recourse to other disciplines, philosophy and anthropology in particular. This lens is applied to an interpretation of case-law supplemented by scholarly works. The case-law is selected on the basis that either 1) they concern climate litigation (content-based litigation) and/or 2) are based on collective or community-based petitions (applicant-based). Applicant-based cases are utilised specifically to compare and contrast individual cases and public interest cases to community or collective cases.[291] They are identified through the identified databases on the regional and international level. A particular focus is on the regional systems that allow adjudication of collective human rights, the African and Inter-American system. The identification of content-based litigation is based on up-to-date climate litigation database of the Sabin Center of the University.[292]

---

291 Community-based is used here because collective human rights in this research are interpreted as community based and thus not an abstract idea of collective such as the collective of states. To not confuse the use of the collective with such an interpretation community-based is added in this section.

292 *See* <http://climatecasechart.com/> (n 166).