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THE TRANSFORMATIVE POTENTIAL OF CLIMATE CHANGE LITIGATION AND ADJUDICATION IN SOUTH AFRICA

by

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‘I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act. I want you to act as you would in a crisis. I want you to act as if the house was on fire – because it is’.[1]

[1] Greta Thunberg addressing global leaders at the World Economic Forum in Switzerland in 2018. See A Nesmith *et al* ‘Climate Change, Ecology, and Justice’ in A Nesmith et al (eds) *The Intersection of Environmental Justice, Climate Change, Community, and the Ecology of Life* (2021) 2.

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1 Chapter 1: Introduction

The impacts of climate change and the vulnerability of human populations to climate change may vary considerably; however, it is increasingly understood that climate change is 'superimposed on existing vulnerabilities'.[2] Although the Constitution of the Republic of South Africa, 1996 ('the Constitution') envisages the establishment of a truly equal society,[3] South Africa is commonly referred to as 'the most unequal country in the world',[4] and as environmental despoliation worsens, climate change will only deepen existing inequalities and vulnerabilities.[5] Consequently, this dissertation illustrates the need for legal practitioners and the courts to grapple with the justice implications of climate change in South Africa.

There is increasing evidence that human activities are affecting the stability and proper functioning of the pre-industrial Earth system to a degree that threatens the resilience of all forms of life and the Earth system itself.[6] A new epoch has been proposed to describe this period in Earth's geological history, a period characterised by human activities which are accelerating stark and destructive changes to the Earth system: the Anthropocene Epoch.[7] One of the hallmarks of the Anthropocene is human-induced climate change.[8] Since the dawn of the Industrial Revolution, human activities, principally in the Global North,[9] have contributed to the release of carbon dioxide and other greenhouse gases (GHGs) into the atmosphere.[10] GHG emissions have contributed to an extreme rise in the global average temperature, with devastating justice implications, particularly for people in the Global

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2 The World Bank 'Poverty and Climate Change: Reducing the Vulnerability of the Poor through Adaptation' (2012) IX.

3 P Langa 'Transformative constitutionalism' (2006) 17 *Stellenbosch Law Review* 351 353; and I Currie and J De Waal *The Bill of Rights Handbook* (2013) 2.

4 Z Ratshitanga 'New World Bank Report Assesses Sources of Inequality in Five Countries in Southern Africa' 09 March 2022 https://www.worldbank.org/en/news/press-release/2022/03/09/new-world-bank-report-assesses-sources-of-inequality-in-five-countries-in-southern-africa (accessed 23 March 2022).

5 M Murcott *Transformative Environmental Constitutionalism* (forthcoming in 2022) 97.

6 The 'Earth system' refers to the complex interactions between physical, chemical and biological cycles and energy fluxes which collectively (and interrelatedly) provide the conditions to enable and sustain life on Earth. See L Kotzé 'Earth system law for the Anthropocene: Rethinking environmental law alongside the Earth system metaphor' (2020) 11(1-2) *Transnational Legal Theory* 75 82.

7 Humans have become an Earth-shaping force of geological proportions. See A Cardesa-Salzmann and E Cocciolo 'Global Governance, Sustainability and the Earth System: Critical Reflections on the Role of Global Law' (2019) 8(3) *Transnational Environmental Law* 437 439; and W Steffen *et al* 'Stratigraphic and Earth System approaches to defining the Anthropocene' (2016) 4 *Earth's Future* 324 340.

8 W Steffen *et al* 'Planetary boundaries: Guiding human development on a changing planet' (2015) 347 *Science* 6223 736 737; and Murcott (note 5 above) 10.

9 CG Gonzalez 'Racial capitalism, climate justice, and climate displacement' (2021) 11(1) *Oñati Socio-Legal Series* 108 111.

10 Met Office 'What is climate change?' https://www.metoffice.gov.uk/weather/climate-change/what-is-climate-change (accessed 25 January 2022).

South,[11] including, but certainly not limited to the results of extreme storms and flooding, prolonged droughts and biodiversity loss.[12] Ultimately, through various modes of historic, social and economic domination – including colonial subjugation, racialised dispossession and the imposition of a global capitalist order that abuses and exploits the natural environment and human populations – human activities have had far-reaching consequences of geological proportions.[13]

In light of increased international concerns about the emerging threat of climate change, the Paris Agreement to the United Nations Framework Convention on Climate Change was adopted ('the Paris Agreement').[14] The Paris Agreement accepts, amongst other things, that in order to minimise the adverse impacts of climate change, the increase in global average temperature needs to be held to well below 2 degrees Celsius above pre-industrial levels.[15]

According to the 2022 report published by the Intergovernmental Panel on Climate Change (IPCC), climate risks are appearing more rapidly and severely than ever before.[16] Moreover, available evidence on anticipated climate risks suggests that when the global average temperature reaches 1.5 degrees Celsius above pre-industrial levels – which, on our current trajectory, we are likely to meet in the early 2030s – the opportunities for effective adaptation will become increasingly constrained, with the efficacy of existing adaptive measures being severely curtailed.[17]

One of the foremost assumptions in my dissertation is that climate change is not only an environmental issue; rather, it is an existential issue for humanity, particularly those most

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11 CG Gonzalez 'Environmental Justice, Human Rights and the Global South' (2015) 13 *Santa Clara Journal of International Law* 151 163.

12 M Burger *et al* 'The Law and Science of Climate Change Attribution'(2020) 45(1) *Columbia Journal of Environmental Law* 57 93.

13 Gonzalez (note 9 above) 114.

14 Paris Agreement to the United Nations Framework Convention on Climate Change, 12 December 2015 ('the Paris Agreement').

15 Paris Agreement (note 14 above) art 2(1)(a).

16 Intergovernmental Panel on Climate Change 'Climate Change 2022: Impacts, Adaptation and Vulnerability' 27 February 2022 https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf (accessed 18 April 2022).

17 M Grose *et al* 'IPCC says Earth will reach temperature rise of about 1.5° in around a decade. But limiting any global warming is what matters most' https://theconversation.com/ipcc-says-earth-will-reach-temperature-rise-of-about-1-5-in-around-a-decade-but-limiting-any-global-warming-is-what-matters-most-165397#:~:text=We%20believe%20in%20the%20free%20flow%20of%20information&text=Of%20all%20the%20troubling%20news,limit%20in%20the%20early%202030s. 09 August 2021 (accessed 18 April 2022).

vulnerable, that is deeply embedded in notions of (in)justice.[18] For instance, climate change will further reduce access to potable water and exacerbate food insecurity in many regions around the world and, in light of South Africa's socio-economic and environmental context, the country is particularly vulnerable to the effects of climate change.[19] Therefore, insofar as the South African judiciary is obliged to respect, protect and promote the rights in the Bill of Rights,[20] I argue that courts of competent jurisdiction ought to, *ex mero motu* or of their own accord,[21] critically engage with the justice implications of climate change in climate litigation,[22] with a view to advance the project of transformative constitutionalism in South Africa.[23]

1.1 ***Main research question and sub-questions***

This dissertation addresses the following central question: *Can transformative adjudication, through transformative environmental constitutionalism, enhance a social justice-oriented approach to climate litigation in South Africa?*

Subsequent research questions that flow from this main question, and which are the foundations of each of the ensuing chapters, include:

(1) What is climate litigation?

(2) How is climate litigation occurring in South Africa?

(3) What is transformative environmental constitutionalism?

(4) What is the value of transformative environmental constitutionalism in South African climate litigation?

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18 Office of the United Nations High Commissioner 'Understanding Human Rights and Climate Change' https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf (accessed 02 February 2022).

19 The World Bank (note 2 above) X.

20 S 7(2) of the Constitution of the Republic of South Africa, 1996 ('the Constitution') stipulates that the state, including the judiciary, must respect, protect, promote and fulfill the rights in the Bill of Rights; and s 8(1) of the Constitution provides that the Bill of Rights is binding on the judiciary, as well as on the legislature and executive. In addition, s 39(2) of the Constitution provides that when interpreting any legislation, every court must promote the spirit, purport and objects of the Bill of Rights.

21 *CUSA v Tao Ying Metal Industries and Others* 2009 (2) SA 204 (CC) (hereafter *CUSA*) para 67; *Director of Public Prosecutions, Transvaal v Minister for Justice and Constitutional Development and Others* 2009 (4) SA 222 (CC) (hereafter *Director of Public Prosecutions, Transvaal*) paras 33-40; and *City of Tshwane Metropolitan Municipality v Link Africa (Pty) Ltd and Others* 2015 (6) SA 440 (CC) (hereafter *Link Africa*) paras 33-36.

22 This would include the social, environmental and climate justice implications of climate change.

23 Murcott (note 5 above) 38.

(5) How can transformative climate adjudication advance the imperatives of environmental, social and climate justice in South Africa?[24]

1.2 *Hypothesis and assumptions*

Proceeding from the point of departure that climate change is a scientific reality with significant justice implications for human populations and the environment,[25] particularly in the Global South, this dissertation is premised on the following central hypothesis, which it seeks to prove by answering the research questions: *transformative climate adjudication, adopting an Earth systems approach, is consistent with (and could be embedded within), a legal theory of transformative environmental constitutionalism*.[26]

As Bosselmann argues, the ecological or Earth system is 'the most encompassing system' known to humans, to the extent that it is the bedrock of all other systems, including socio-economic and legal systems.[27] Borne from the concept of 'planetary boundaries' – ecological and geophysical thresholds that, if crossed, would thrust the Earth into a fundamentally changed and unknown state – the notion of Earth system law is emerging as a regulatory response to the environmental challenges of the Anthropocene.[28] For some authors, Earth system law is an essential component of Earth system governance and is described as an:[29]

> organised human response to Earth system transformation, in particular the institutions and agents that cause global environmental change and the institutions, at all levels, that are

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24 Within an environmental context, the term 'justice' has various meanings including justice between people in the same or different generations (inter- and intra-generational justice, respectively), as well as justice between different species (inter species justice). Moreover, Ebbesson describes environmental justice as:

> decisions pertaining to health, the environment and natural resources, as well as concerns for the opportunities of those potentially affected, to participate in such law-making and decision-making in the first place.

See, generally: D Scholsberg and L Collins 'From environmental to climate justice: climate change and the discourse of environmental justice' (2014) 5(3) *WIRES Climate Change* 359; and see: J Ebbesson 'Introduction: Dimensions of Justice in Environmental Law' in J Ebbesson and P Okowa (eds) *Environmental Law and Justice in Context* (2009) 7.

25 Nesmith *et al* (note 1 above) 2.

26 Kotzé (note 6 above) 83.

27 K Bosselman 'The ever-increasing importance of ecological integrity in international and national law' in L Westra *et al* (eds) *Ecological Integrity, Law and Governance* (2018) 225 225.

28 Steffen *et al* (note 8 above) 736; and J Rockström *et al* 'Planetary Boundaries: Exploring the Safe Operating Space for Humanity' (2009) 14(2) *Ecology & Society* 472 472.

29 R Kim and L Kotzé 'Planetary Boundaries at the Intersection of Earth System Law, Science and Governance: A State-of-the-Art-Review' (2020) 30(1) *Review of European, Comparative and International Environmental Law* 13; and F Biermann '"Earth System Governance" as a Crosscutting Theme of Global Change Research' (2007) 17 *Global Environmental Change* 326 328.

created to steer human development in a way that secures a 'safe' co-evolution with natural processes.

Within the context of environmental law and governance, an Earth system approach refers to an analytical framework to describe, understand and respond to the complex interactions between components of the Earth system (including humans), that departs from the prevailing, anthropocentric orientation of environmental law.[30] An Earth system approach elevates the status of non-human components of the Earth system to entities with intrinsic value and worthy of legal protection, independent of their utility to humans or the effects that the diminishment of these components would have on human populations.[31] This approach rejects the notion of disciplinary demarcation – between different branches of law, academic disciplines and social actors – and strives to develop a comprehensive and systems-oriented understanding of environmental and climate-related issues.[32] Furthermore, an Earth system approach embodies the notion that legal boundaries are necessary to 'delimit acceptable levels of human activity' that keep us within a safe operating space.[33] Within the context of this dissertation, the legal boundaries are those imposed by judges in pursuing the goals of transformative constitutionalism, through transformative climate adjudication, which is described in greater detail below.

In chapters 3 and 4, I argue that the courts ought to adopt a holistic and integrated approach to the adjudication of climate-related cases, by acknowledging that individual components of the Earth system cannot be 'separated out' or harmed without causal effects for other components.[34] Therefore, environmental and climate-related harms ought to be evaluated in terms of the impacts on specific component(s) of the Earth system, as well as on the functioning of the Earth system as a whole.[35] This necessarily implies that, on an Earth system approach, litigants in environmental and climate-related cases need not necessarily point to direct and proximate harm to human subjects, in order to establish that

30 As above.

31 J Gellers 'Earth system law and the legal status of non-humans in the Anthropocene' (2021) 7 *Earth System Governance* 1 6. See generally, T Cadman *et al Earth System Law: Standing on the Precipice of the Anthropocene* (2021).

32 L Kotzé *et al* 'Earth system law: Exploring new frontiers in legal science' (2022) 11 *Earth System Governance* 1 4-5.

33 M Sandberg 'Sufficiency transitions: A review of consumption changes for environmental sustainability' (2021) 293(1) *Journal of Cleaner Production* 1 2; and G Chapron *et al* 'Bolster legal boundaries to stay within planetary boundaries' (2017) 1 *Nature, Ecology & Evolution* 1.

34 Kim and Kotzé (note 29 above) 14.

35 As above; and R Kim and B Mackey 'International environmental law as a complex adaptive system' (2014) 14(1) *International Environmental Agreements* 5 5. See, in general: J Ruhl 'Panarchy and the Law' (2012) 17(3) *Ecology and Society* 31.

other components of the Earth system, upon which the harm falls, are equally valuable and worthy of legal protection.[36]

Similarly to an Earth system approach, the 'socio-ecological systems perspective' refers to a conceptual framework for understanding human-nature relationships.[37] Central to the socio-ecological systems perspective – and implicit in an Earth system approach – is the acknowledgement that human development (and flourishing) is intrinsically dependent on a well-functioning environment.[38] In other words, should socio-economic and legal systems fail to protect the Earth system, human development (and flourishing) will also falter.[39] Eminent environmental scholars argue that instead of compartmentalising social and ecological systems, they ought to be viewed in an interdisciplinary and integrated manner that considers (and responds to) complex interactions amongst systems.[40] For example, Murcott contends that the value of the socio-ecological systems perspective lies in the interconnectedness between human and non-human life and how concerns for protection of the Earth system can expose social, environmental and climate injustices.[41]

Both the Earth system approach and the socio-ecological systems perspective are aimed at guiding environmental law's transformation for the Anthropocene and one thing is clear: human and natural systems are not independent at all; rather, they are deeply intertwined, intrinsically dynamic and constantly evolving.[42] In this dissertation, I apply an Earth system lens to the socio-ecological systems perspective to emphasise the importance of situating social, environmental and climate injustices within the broader context of the Earth system, and imposing legally enforceable limits on certain human activities.[43]

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36 Kotzé (note 6 above) 83.

37 S Partelow 'A review of the socio-ecological systems framework: Applications, methods, modifications and challenges' (2018) 23(4) *Ecology and Society* 36 36; and Murcott (note 5 above) 8.

38 Within the context of this dissertation, 'human flourishing' denotes the ability to live a good life. See M Hannis 'The Virtues of Acknowledged Ecological Dependence: Sustainability, Autonomy and Human Flourishing' (2015) 24(2) *Environmental Values* 145 152.

39 In *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007 (6) SA 4 (CC) (hereafter *Fuel Retailers*) para 44, the court held that 'development cannot subsist on a deteriorating environmental base'. Furthermore, in *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* 2017 (2) SA 519 (GP) (hereafter *Earthlife)* para 82*,* the court held that 'short-term needs must be evaluated and weighed against long-term consequences'. See also: Bosselman (note 27 above) 225-229.

40 Bosselman (note 27 above) 225; Kim and Kotzé (note 29 above) 4; and Murcott (note 5 above) 9.

41 Murcott (note 5 above) 133.

42 See, generally: B Walker and D Salt *Resilience Thinking: Sustaining Ecosystems and People in a Changing World* (2006); M Cote and A Nightingale 'Resilience thinking meets social theory: Situating social change in socio-ecological systems (SES) research' (2011) 36(4) *Progress in Human Geography* 475; and Kim and Kotzé (note 29 above) 3.

43 Gonzalez (note 9 above) 114; Y Malhi 'The Concept of the Anthropocene' (2017) 42 *Annual Review of Environment and Resources* 77 95; and Bosselman (note 27 above) 225.

This dissertation is based on the following assumptions:

(1) Changes or disturbances within the Earth system have 'knock-on' effects for other components of the Earth system.[44]

(2) The adverse impacts of anthropogenic climate change are most severely felt by poor and vulnerable people, particularly in the Global South, owing to their high dependence on natural resources and limited capacity to adapt to climate change.[45]

(3) Climate litigation is typically occurring through judicial review of administrative action in South Africa.[46]

(4) A critical analysis of judicial review is a useful tool for assessing the transformative potential of climate litigation and adjudication in South Africa.[47]

(5) Transformative environmental constitutionalism is a valuable tool to enhance a social justice-oriented approach to climate litigation and adjudication in South Africa.[48]

(6) Social, environmental and climate justice are interconnected and mutually reinforcing concerns.[49]

(7) The adverse impacts of anthropogenic climate change will hinder the project of transformative constitutionalism in South Africa.[50]

(8) Climate litigation is an important, yet largely under-utilised, component of transformative constitutionalism in South Africa.[51]

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44 Steffen *et al* (note 8 above) 737.

45 'Adaptive capacity' refers to the potential or capability of environmental and/or human systems to adapt to the impacts of anthropogenic climate change. See B Smit and O Pilifosova 'Adaptation to Climate Change in the Context of Sustainable Development and Equity' (2001) *Intergovernmental Panel on Climate Change* 893; and The World Bank (note 2 above) 13.

46 *Earthlife* (note 39 above); *The Trustees of the groundWork Trust v Acting Director-General: Department of Water and Sanitation and ACWA Power: Khanyisa Thermal Power Station (RF) (Pty) Ltd* (WT06/11/2015) [2020] ZAWT 1 (18 July 2020) (hereafter *ACWA Power*); and *Philippi Horticultural Area Food & Farming Campaign and Another v MEC for Local Government, Environmental Affairs and Development Planning: Western Cape and Others* 2020 (3) SA 486 (WCC) (hereafter *Philippi*).

47 Considering that many environmental law disputes are adjudicated in the context of judicial review proceedings founded in the Promotion of Administrative Justice Act 3 of 2000 (PAJA), and that there is scope within judicial review proceedings for the environmental right (and other constitutionally enshrined substantive rights), to be interpreted and applied by the judiciary, a critical analysis of judicial review proceedings is relevant for purposes of my discussion on transformative climate adjudication. See Murcott (note 5 above) 84-85.

48 M Murcott 'Introducing Transformative Environmental Constitutionalism' in E Daly *et al* (eds) *New Frontiers in Environmental Constitutionalism* (2017) 280 288.

49 Murcott (note 5 above) 86-87.

50 Murcott (note 5 above) 180.

51 Murcott (note 5 above) 113-114.

1.3 *Structure of the dissertation*

The dissertation proceeds as follows: chapter 2 explores the concept of climate litigation and how climate litigation has occurred in South Africa. Chapter 3 examines the legal theory of transformative environmental constitutionalism, as an incident of transformative constitutionalism, as well as its application to climate litigation and adjudication in South Africa. Here, the dissertation discusses Murcott's criteria for the framing of environmental law disputes.[52] In chapter 4, I will demonstrate the value of transformative environmental constitutionalism as a legal framework for climate adjudication by conducting a critical analysis of the challenges to Shell's seismic blasting on South Africa's Wild Coast. This is followed by a short conclusion in chapter 5 that reflects on the transformative potential of climate litigation and adjudication in South Africa.

2 Chapter 2: Climate litigation and its occurrence in South Africa

2.1 *Introduction to climate litigation*

In conjunction with international efforts to strengthen environmental protection in the Anthropocene, national courts are increasingly being called upon to adjudicate environmental and climate-related disputes.[53] Furthermore, since the adoption of the Paris Agreement,[54] so-called 'climate litigation' has emerged as a global phenomenon, in terms of which courts are becoming increasingly important participants in multilevel climate governance.[55]

According to Eskander *et al*, 'climate litigation' refers to 'lawsuits brought before administrative, judicial and other investiga[tive] bodies that raise issues of law or fact regarding the science of climate change and climate change mitigation and adaptation efforts'.[56] Alternatively, and more broadly, 'climate litigation' typically engages with the phenomenon of climate change and/or addresses arguments concerning climate change

52 Murcott (note 5 above) 132-170.

53 M Banda and S Fulton 'Litigating Climate Change in National Courts: Recent Trends and Developments in Global Climate Law' (2017) 47(2) *Environmental Law Reporter* 1 1; and United Nations Environment Programme 'Global Climate Litigation Report: 2020 Status Review' (2020) *Sabin Center for Climate Change Law* 5.

54 Paris Agreement (note 14 above).

55 J Peel and J Lin 'Transnational Climate Litigation: The Contribution of the Global South' (2019) 113(4) *The American Journal of International Law* 679 681.

56 S Eskander *et al* 'Global Lessons from Climate Change Legislation and Litigation' in M Kotchen *et al* (eds) *Energy Policy and the Economy, Volume 2* (2021) 44 50.

mitigation or adaptation.[57] For purposes of this dissertation, 'climate litigation' is conceived of both narrowly and broadly. Although, narrowly speaking, climate litigation refers only to those cases that raise issues of law or fact regarding the science of climate change, as well as mitigation and adaptation efforts,[58] there are other cases where the links to climate change are clear but tangential to the issues in dispute and as a result, can be regarded as climate litigation in a broader sense.[59] An Earth system approach resists a narrow interpretation of 'climate litigation' because the climate, as a central component of the Earth system, is relevant – even indirectly – to most cases concerning the environment, owing to the temporal and spatial reach of its impacts.[60]

Within the context of this dissertation, 'climate adjudication' bears two interrelated meanings: first, it refers to the process of dispute resolution in climate litigation;[61] and secondly, it refers to a form of expository justice, in terms of which the role of judges (or other adjudicators) is to 'tell us how to conform our behaviour to our fundamental values' by norm-setting.[62]

According to the 2021 report published by the Grantham Research Institute on Climate Change and the Environment, climate litigation is on the rise.[63] Once described as a 'creative lawyering strategy',[64] climate litigation has since evolved into a transnational regulatory mechanism, at differing levels of environmental governance.[65] This global rise in climate litigation is attributable to number of factors, including: national commitments under the Paris Agreement;[66] greater levels of public awareness of the myriad justice and other implications of climate change impacts and vulnerabilities;[67] new and evolving legal duties

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57 M Murcott and E Webster 'Litigation and regulatory governance in the age of the Anthropocene: the case of fracking in the Karoo' (2020) 11(2) *Transnational Legal Theory* 144 146.

58 Eskander *et al* (note 56 above) 50.

59 M Dupar 'Climate change litigation – a rising tide?' 3 May 2012 https://cdkn.org/story/postcard-from-london-rising-tide-of-climate-change-litigation (accessed 18 April 2022).

60 R Lazarus 'Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future' (2009) 94(5) *Cornell Law Review* 1153 1157-1158.

61 E Fisher *et al* 'The Legally Disruptive Nature of Climate Change' (2017) 80(2) *The Modern Law Review* 173 197.

62 As above.

63 J Setzer and C Higham 'Global trends in climate change litigation: 2021 snapshot' (2021) *Grantham Research Institute on Climate Change and the Environment* 11 12.

64 W Burns and H Osofsky 'Overview: The Exigencies That Drive Potential Causes of Action for Climate Change' in W Burns and H Osofsky (eds) *Adjudicating Climate Change: State, National and International Approaches* (2009) 2.

65 Burns and Osofsky (note 64 above) 20; and E Barritt 'Consciously transnational: Urgenda and the shape of climate change litigation: *The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Urgenda Foundation*' (2021) 22(4) *Environmental Law Review* 296 297.

66 Setzer and Higham (note 63 above) 17.

67 O Rumble and A Gilder 'Climate Change Litigation on the African Continent' (2021) *Konrad Adenauer Stiftung* 5.

owed by public and private entities;[68] advances in climate science;[69] and an improved understanding about the ways in which climate change affects the enjoyment of constitutional and human rights.[70]

Whilst an overwhelming majority of climate litigation, in the narrow sense, has occurred in the Global North,[71] there are an increasing number of climate cases,[72] as well as a growing body of climate-related jurisprudence, in the Global South.[73] According to Peel and Lin, climate litigation in the Global South is distinguishable from climate cases in the Global North for a number of reasons, some of which are explained herein.[74] First, in the Global South, climate change is often treated as a peripheral issue in cases concerning the environment more generally.[75] Secondly, constitutional and human rights arguments are often central features of climate litigation in the Global South.[76] Thirdly, climate cases in the Global South tend towards implementing and enforcing existing laws and policies, as opposed to relying on litigation to drive regulatory change.[77] Peel and Lin contend that by adjusting the 'lens' through which we view climate litigation, away from a Global North-characterisation of the term, we will be better suited to understanding the justice implications of climate change, as well as the barriers to climate justice in the Global South.[78]

Although the term 'climate litigation' denotes a relatively heterogeneous group of cases,[79] commentators in the Global North often classify cases according to the intent of the

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68 As above.

69 As above.

70 Setzer and Higham (note 63 above) 17.

71 According to Joana Setzer, there is global 'North and South imbalance' in climate litigation, which she has attributed to a shortage of legal expertise, unavailability of data, limitations on financial resources and increasing threats to environmental activists and lawyers in the Global South. See Setzer and C Higham (note 63 above) 11; and Z Pikoli 'Strategic litigation a powerful tool to fight the climate crisis, webinar told' 25 November 2021 https://www.dailymaverick.co.za/article/2021-11-25-strategic-litigation-a-powerful-tool-to-fight-the-climate-crisis-webinar-told/ (accessed 02 February 2022).

72 Even more than high-profile cases, some authors have highlighted the critical significance of low-profile or 'unsexy' cases in establishing global coherence in climate change policy. See K Bouwer 'The Unsexy Future of Climate Change Litigation' (2018) 30(3) *Journal of Environmental Law* 483 504; and Cardesa-Salzmann and Cocciolo (note 7 above) 454.

73 Peel and Lin (note 55 above) 689; Global Network for Human Rights and the Environment 'Climate Litigation in the Global South Project' https://gnhre.org/climate-litigation-in-the-global-south/ (accessed 18 September 2022).

74 A detailed discussion of the differences between climate litigation in the Global North and Global South falls beyond the scope of this dissertation; however, see generally, Peel and Lin (note 55 above) for a discussion of the Global South's contribution to transnational climate jurisprudence; and the work of the Global Network for Human Rights and the Environment (note 65 above).

75 Peel and Lin (note 55 above) 703-704.

76 Peel and Lin (note 55 above) 711-714.

77 Peel and Lin (note 55 above) 714-716.

78 Peel and Lin (note 55 above) 683.

79 Setzer and Higham (note 63 above) 12.

claimant(s):[80] first, 'non-strategic' cases;[81] and secondly, 'strategic' cases.[82] Insofar as 'non-strategic' litigation is concerned, the claimants' primary incentive is a desire for the resolution of issues that are (largely) relevant to the parties involved in the matter.[83] On the other hand, 'strategic' cases include those where the claimants' overarching motivation supersedes the concerns of individual litigants and aims to achieve broader societal transformation.[84] According to Giabardo, strategic cases are often part of a larger 'political manifesto' aimed at compelling national governments and corporations to take more decisive legislative action and to adopt more exacting climate rules in corporate governance, respectively.[85] There are, however, also cases that do not neatly conform to the aforementioned characterisation and instead, seem to straddle both categories, which is illustrative of the inherent limitations of the Global North-characterisation of climate litigation elsewhere in the world, including South Africa. For example, in *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* (hereafter *Earthlife*),[86] the applicants successfully prevented the construction of a proposed coal-fired power station (non-strategic component);[87] and simultaneously influenced broader climate governance in South Africa, by introducing the requirement of a

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80 This distinction is largely based on the characterisation of climate change litigation in the Global North, based on what is considered 'non-strategic' and 'strategic' in Europe and North America; however, it ought not to be uncritically applied within a Global South context. See Setzer and Higham (note 63 above) 12; J Peel and H Osofsky 'A Rights Turn in Climate Change Litigation?' (2018) 7(1) *Transnational Environmental Law* 37 66; and J Setzer and R Byrnes 'Global trends in climate change litigation: 2020 snapshot' (2020 *Grantham Research Institute on Climate Change and the Environment* 4.

81 For example, the litigation in *Normandien Farms (Pty) Limited v South African Agency for Promotion of Petroleum and Exploitation SOC Limited* 2017 JDR 0831 (WCC) (hereafter *Normandien Farms HC*) was pursued by private actors in response to the state's approach to the regulation of hydraulic fracturing in the Karoo basin. Although *Normandien Farms HC* is not strictly 'climate litigation' for purposes of Eskander *et al*'s definition, the applicant challenged the state's climate change mitigation efforts, albeit indirectly. See Murcott and Webster (note 57 above) 146.

82 Setzer and Higham (note 63 above) 12.

83 Setzer and Higham (note 63 above) 13.

84 One of the most prolific examples of 'strategic' litigation is *Urgenda Foundation v State of the Netherlands [2015] HAZA C/09/00456689* (hereafter *Urgenda*). In *Urgenda*, a Dutch environmental organisation – the Urgenda Foundation – as well as 900 Dutch citizens sued the Dutch government for its insufficient greenhouse gas (GHG) emissions reduction targets. In this case, the Hague District Court (later upheld by the Hague Court of Appeal and the Supreme Court of the Netherlands), concluded that by failing to reduce GHG emissions, the Dutch government was acting in contravention of a number of rights contained in the European Convention on Human Rights, including the rights to life, private life and home. Furthermore, 'strategic litigation' coincides with what Bouwer refers to as the 'three overlapping waves' in climate litigation, namely: the tort wave; the public trust wave; and the 'carbon majors' wave. See Bouwer (note 72 above) 489.

85 C Giabardo 'Climate Change Litigation and Tort Law: Regulation through Litigation?' (2019) *Diritto E Processo – Right & Remedies* 361 363.

86 *Earthlife* (note 39 above).

87 Centre for Environmental Rights 'Celebrating a major climate victory: Court sets aside approval for Thabametsi coal power plant' 1 December 2020 https://cer.org.za/news/celebrating-a-major-climate-victory-court-sets-aside-approval-for-thabametsi-coal-power-plant (accessed 19 June 2022); and Life After Coal 'Major climate impacts scupper another coal power plant' 11 November 2020 https://lifeaftercoal.org.za/media/news/major-climate-impacts-scupper-another-coal-power-plant (accessed 19 June 2022).

climate change impact assessment into environmental authorisation processes (strategic component).[88] Likewise, in *Trustees of the groundWork Trust and Another v Minister of Environmental Affairs and Others* (hereafter *Deadly Air*),[89] the applicants secured the implementation of regulations aimed at addressing toxic air quality in the Highveld Priority Area (non-strategic component);[90] whilst the judgment also affirmed that air pollution is a violation of the environmental right enshrined in section 24 of the Constitution (strategic component).[91] Interestingly, even in the narrow sense, *Deadly Air* would not constitute climate litigation, as it neither raises issues of law or fact regarding climate science nor addresses mitigation or adaptation efforts;[92] however, this does not detract from the strategic value of the judgment far beyond the parties, and is an excellent example of how issues of justice can be used to motivate for greater care towards the environment (and the climate), particularly where vulnerable and marginalised communities are concerned.

2.2 ***Climate litigation in South Africa***

Although climate litigation could raise issues of private law (i.e., delict or contract),[93] in South Africa, climate litigation has typically occurred as an incident of public law, through the

88 *Earthlife* (note 39 above) paras 6 and 90-91.

89 *Trustees of the groundWork Trust and Another v Minister of Environmental Affairs and Others* (29724/2019) [2022] ZAGPPHC 208 (18 March 2022) (hereafter *Deadly Air*).

90 *Deadly Air* also has far-reaching consequences for other affected communities fighting for their rights to clean air in South Africa, such as those in the Vaal Triangle and the Waterberg Bojanala priority areas. See *Deadly Air* (note 89 above) paras 241.2, 241.3 and 241.4; and Centre for Environmental Rights 'Major court victory for communities fighting air pollution in Mpumalanga Highveld' 18 March 2022 https://cer.org.za/news/major-court-victory-for-communities-fighting-air-pollution-in-mpumalanga-highveld (accessed 18 June 2022).

91 S 24 of the Constitution provides that everyone has the right, inter alia, to: (a) an environment that is not harmful to their health or wellbeing; and (b) have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures. Although the court recognised that not all forms of air pollution violate the right to a healthy environment, the court held that the dire impact of the Highveld Priority Area's toxic air amounted to a breach of the residents' constitutional right to an environment that is not harmful to their health and wellbeing. See *Deadly Air* (note 89 above) paras 10, 76 and 241.1.

92 Eskander *et al* (note 56 above) 50.

93 For example, when the Department of Mineral Resources and Energy (DMRE) announced its intention to conclude 27 outstanding contracts for the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) in 2018, various labour and civil society organisations approached the High Court for an urgent interdict, restraining the Minister of Mineral Resources and Energy ('the Minister') and Eskom from concluding the contracts. The applicants' contentions related to potential job losses linked to the departure from a fossil fuel-based economy and the limited opportunities likely to be created by the REIPPPP. Ultimately, the case was dismissed for lack of urgency; however, insofar as the applicants attempted to inhibit the transition to renewable energy by delaying the contractual process, this case is an example of climate litigation that raised issues of private law relating to labour relations. See Department of Mineral Resources and Energy 'Media Statement by the Honourable Jeff Radebe, Minister of Energy on the Independent Power Producer Programmes' 13 March 2018 http://www.energy.gov.za/files/media/pr/2018/MediaStatement-by-the-Minister-on-the-IPP-programme.pdf (accessed 18 June 2022); C Mukonza and G Nhamo 'Wind energy in South Africa: A review of policies, institutions and programmes' (2018) 29(2) *Journal of Energy in Southern Africa* 21 26; Giabardo (note 85 above) 374; and Banda and Fulton (note 53 above) 9.

judicial review of public power.[94] Judicial review refers to the process in terms of which judges are enjoined to review the constitutionality of legislative, executive and (sometimes) private action and declare such actions invalid, to the extent that they are inconsistent with higher-order law, namely the Constitution.[95] Judicial review establishes a number of procedural safeguards to challenge environmental decision-making that is not transparent, participatory, lawful, fair and/or reasonable or rational.[96] There are two main pathways to administrative law judicial review in South Africa:[97] first, the right to just administrative action, as enshrined in section 33 of the Constitution and given effect by the Promotion of Administrative Justice Act 3 of 2000 (PAJA);[98] and secondly, the principle of legality, as an incident of the rule of law.[99]

Since its enactment, various disputes surrounding environmental decision-making have been adjudicated on the basis of PAJA, because it is generally accepted that the implementation of the National Environmental Management Act 107 of 1998 (NEMA) – as well as the Specific Environmental Management Acts (SEMAs) – amounts to administrative action in terms of PAJA.[100] Within the context of climate litigation, some scholars have argued that judicial review is 'possibly the best method' for bringing climate-related issues before a court.[101]

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94 For example: *Earthlife* (note 3939 above)*; Philippi* (note 46 above); and the ongoing *#CancelCoal* case involving a challenge to the South African government's plans to develop 1500 megawatts of new coal-fired electricity production, which was brought on two legal bases: first, a constitutional challenge on the basis of an unjustifiable limitation of basic constitutional rights; and secondly, a review application based on PAJA, and alternatively, the principle of legality. See Centre for Environmental Rights 'Cancel Coal: Legal Challenge of Government's Plan for New Coal-Fired Power Capacity' https://cer.org.za/programmes/pollution-climate-change/litigation/cancel-coal-legal-challenge-of-governments-plan-for-new-coal-fired-power-capacity (accessed 19 June 2022).

95 Murcott (note 5 above) 82; and C Hoexter and G Penfold *Administrative Law in South Africa* (2021 3rd ed) 213-214.

96 Murcott (note 5 above) 84.

97 Furthermore, there is also: review of the proceedings of lower courts; automatic review; judicial review in the constitutional sense, in terms of which courts are empowered to review and declare unconstitutional any type of legislation or state conduct that infringes the rights in the Bill of Rights or otherwise offends against the precepts of the Constitution; and special statutory review in various legislation. See Hoexter and Penfold (note 95 above) 142-144.

98 S 33 of the Constitution provides for the right to just administrative action; and PAJA was enacted to, amongst other things, give effect to s 33.

99 S 1(c) of the Constitution.

100 National Environmental Management Act 107 of 1998 (NEMA). Examples of Specific Environmental Management Acts (SEMAs) include: the National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA); the National Environmental Management: Air Quality Act 39 of 2004 (NEMAQA); the National Environmental Management: Waste Act 59 of 2008 (NEMWA); and the National Environmental Management: Integrated Coastal Management Act 24 of 2008 (NEMICMA). See *Fuel Retailers* (note 39 above) para 38; *Earthlife* (note 39 above) para 10; and Murcott (note 5 above) 85.

101 D Markel and J Ruhl 'An Empirical Analysis of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' (2012) 15(64) *Florida Law Review* 74; O Rumble and R Summers 'Climate Change Litigation' in T Humby *et al* (eds) *Climate Change Law and Governance in South Africa* (2016) 6-16; and J Ashukem 'Setting the scene for climate change litigation in South Africa: Earthlife Africa

In addition to judicial review, interdictory relief applications also play an important role in enforcing environmental compliance and preventing environmentally-harmful conduct in South Africa.[102] Interdictory relief may be granted under circumstances involving an unlawful interference (or threat of such interference) with someone's rights, either on an interim or final basis.[103] Within the context of climate litigation, a number of rights may be implicated, including the rights to life,[104] environment,[105] cultural, religious and linguistic communities,[106] and just administrative action.[107]

Whilst an interim interdict is a court order preserving or restoring the status quo, pending a final determination of rights between the parties;[108] a final interdict is a court order based upon a final determination of the parties' rights.[109] To obtain interim interdictory relief, an applicant must prove the following four requirements: first, that they have a clear right and if not clear, at least a prima facie right, which they seek to protect; secondly, if the right is only prima facie established, that there is a well-ground apprehension of irreparable harm, if the relief is not granted; thirdly, that the balance of convenience favours the granting of an interdict; and finally, that there is no alternative, satisfactory remedy available to the applicants.[110] Alternatively, to obtain a final interdict, an applicant must prove: first, that they have a clear right; secondly, that an injury was actually committed or is reasonably apprehended; and lastly, the absence of similar protection by any other ordinary remedy.[111] Unlike interim interdicts, irreparable harm is not a requirement for the grant of a final interdict.[112]

Climate legislation is typically regarded as an essential component of climate change governance.[113] Although South Africa currently has little in the way of legislation that directly

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Johannesburg v Minister of Environmental Affairs and Others [2017] ZAGPPHC 58 (2017) 65662/16' (2017) 13(1) *Law, Environment and Development Journal* 37 41.

102 M Kidd 'Alternatives to the criminal sanction in the enforcement of environmental law' (2002) 9 *South African Journal of Environmental Law and Policy* 21 42.

103 DE Van Loggerenberg *Jones & Buckle: The Civil Practice of the Magistrates' Courts in South Africa* (2012, 10th ed) 71.

104 S 10 of the Constitution.

105 S 24 of the Constitution.

106 S 31 of the Constitution.

107 S 33 of the Constitution.

108 D Harms *Civil Procedure in the Superior Courts* (2022) Service Issue 74, July 2022 A5.6.

109 Harms (note 108 above) A5.2.

110 *LF Boshoff Investments (Pty) Ltd v Cape Town Municipality; Cape Town Municipality v LF Boshoff Investment (Pty) Ltd* 1969 (2) SA 256 (C) at 267B-E (*LF Boshoff Investments*).

111 *Setlogelo v Setlogelo* 1914 AD 221 227; and *Masuku v Minister of Justisie* 1990 (1) SA 832 (A) 840-841.

112 Harms (note 108 above) A5.2.

113 Eskander *et al* (note 56 above) 44.

and explicitly addresses climate change issues,[114] considering that the climate is part of the Earth system, laws governing the environment more broadly could constitute 'climate change laws' on adoption of an Earth system approach. Moreover, South Africa has an extensive national climate change governance framework aimed at setting the country's overall direction of climate action.[115] Some of the components of this framework include: the National Climate Change Response Policy (NCCRP), which was outlined in the National Climate Change Response White Paper (NCCRWP) and approved by Cabinet in 2011;[116] the National Development Plan (NDP), which provides a long-term plan for South Africa, including an environmentally-sustainable energy sector;[117] and the Integrated Resource Plan (IRP), which determines South Africa's strategy for energy production and electricity infrastructure development.[118] Although a detailed analysis of the components of this framework exceeds the scope of this dissertation, it is noteworthy that South Africa has adopted an array of national and sectoral policies, plans and strategies aimed at strengthening the country's response to climate change in different ways.[119]

Until relatively recently, the role of the courts as participants in multilevel climate governance in South Africa has been somewhat limited.[120] However, despite its relatively short judicial history, climate litigation has met with notable success in various forums.[121] For example, in *Earthlife*, the court was tasked with establishing whether a decision to authorise the construction of a new coal-fired power station, without considering the impacts

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114 This statement is qualified by the existence of the Climate Change Bill published in Government Gazette No. 41689 of 8 June 2018 (hereafter 'Climate Change Bill'), which aims to, amongst other things, build South Africa's climate change response, as well as the Carbon Tax Act 15 of 2019 which provides for, amongst other things, the imposition of a tax on the carbon dioxide equivalent of greenhouse gas emissions in South Africa (hereafter 'Carbon Tax Act').

115 A Averchenkova *et al* 'Governance of climate change policy: A case study of South Africa' *Grantham Research Institute on Climate Change and the Environment* 12-15.

116 Department of Forestry, Fisheries and the Environment 'National Climate Change Response White Paper' October 2021 https://www.gov.za/sites/default/files/gcis_document/201409/nationalclimatechangeresponsewhitepaper0.pdf (accessed 18 April 2022).

117 National Planning Commission 'National Development Plan 2030: Our future – make it work' https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf (accessed 18 June 2022).

118 Integrated Resource Plan (IRP2019) published in Government Gazette No. 42778 of 18 October 2019. See also Department of Energy 'Integrated Resource Plan (IRP2019) https://www.gov.za/sites/default/files/gcis_document/201910/42778gon1359.pdf October 2019 (accessed 18 June 2022).

119 For example, see: Department of Environmental Affairs 'Long Term Adaptation Scenarios' June 2013 https://www.dffe.gov.za/sites/default/files/docs/summary_policymakers_bookV3.pdf (accessed 18 April 2022); and the South African Government 'Renewable Independent Power Producer Programme' https://www.gov.za/about-government/government-programmes/renewable-independent-power-producer-programme (accessed 19 June 2022).

120 The landmark ruling in *Earthlife* – which is commonly regarded as South Africa's first climate change case – was handed down in 2017. See *Earthlife* (note 39 above).

121 M Kidd *Environmental law* (2nd ed 2011) 321.

of climate change, was lawful, reasonable and rational.[122] Ultimately, the High Court held that climate change impact assessment reports are necessary for the authorisation and construction of new coal-fired power stations; and that the impacts of climate change are relevant factors that must be considered before such environmental authorisations can be lawfully granted.[123] Thereafter, *Trustees of the groundWork Trust v Acting Director-General: Department of Water and Sanitation and ACWA Power: Khanyisa Thermal Power Station (RF) (Pty) Ltd*, concerned an appeal against a decision to grant a water-use license to a proposed coal-fired power station, in terms of which the Water Tribunal – in setting the decision aside due to inadequate public participation – acknowledged that water scarcity will be one of the foremost impacts of climate change in Southern Africa.[124] In 2020, in *Philippi Horticultural Area Food & Farming Campaign and Another v MEC for Local Government, Environmental Affairs and Development Planning: Western Cape and Others*, the High Court held that the decision to allow urban development in a designated horticultural area, without adequately considering the impacts of climate change on a local aquifer, was neither rational nor reasonable as a matter of administrative law.[125] At the end of 2021, in *Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (hereafter *Sustaining the Wild Coast: Part A*), the High Court interdicted the conduct of seismic survey operations on South Africa's Wild Coast, for reasons including the effects of oil and gas exploration and production on climate change.[126] Additionally, in 2022, in *Deadly Air*, the High Court affirmed that air pollution is a violation of the environmental right enshrined in section 24 of the Constitution and that 'poor air quality falls disproportionately on the shoulders of marginalised and vulnerable communities…'[127]

Owing to the increased frequency of climate litigation in South Africa, it is important to consider the 'proper' role of the courts in climate adjudication, with reference to the transformative mandate of the Constitution and Murcott's theory of transformative environmental constitutionalism.

3 Chapter 3: Transformative environmental constitutionalism as a foundation for transformative climate litigation and adjudication in South Africa

122 *Earthlife* (note 39 above) para 10.
123 *Earthlife* (note 39 above) paras 6 and 90-91.
124 *ACWA Power* (note 46 above) para 81.
125 *Philippi* (note 46 above) paras 134-135.
126 *Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2021] ZAECGHC 118 (28 December 2021) (hereafter *Sustaining the Wild Coast: Part A*) para 15.
127 *Deadly Air* (note 89 above) paras 9, 10, 76 and 241.1.

3.1 *Introduction*

In this chapter, I examine Murcott's legal theory of transformative environmental constitutionalism, as an incident of transformative constitutionalism, as well as its application to climate litigation and adjudication in South Africa. Furthermore, I discuss Murcott's criteria for the framing of environmental law disputes,[128] to foreground my case analysis in chapter 4 below.

3.2 *The legal theory of transformative environmental constitutionalism*

South Africa's constitutional dispensation is directed at social and economic transformation, including the eradication of poverty and the achievement of substantive equality.[129] The preamble to the Constitution contains an expressly transformative mandate, aimed at 'heal[ing] the divisions of the past and establish[ing] a society based on democratic values, social justice and fundamental rights'.[130] Klare describes the transformative mandate of the Constitution as a project of 'transformative constitutionalism', characterised by:[131]

> constitutional enactment, interpretation and enforcement…committed to transforming [South Africa's] political and social institutions and power relationships…through processes grounded in law.

Though the scope, meaning and success of transformative constitutionalism is widely contested,[132] I concur with those scholars who argue that the Constitution ought to be utilised as a vehicle for poverty alleviation, the fulfilment of socio-economic rights and the pursuit of social justice.[133] Beyond that, however, a robust constitutional jurisprudence that endorses an Earth system approach to law, which appreciates that we are a *part of* and not

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128 Murcott (note 5 above) 7.

129 Broadly speaking, the notion of 'substantive equality', as opposed to formal equality, denotes that laws, policies and practices ought to treat individuals as substantive equals, recognising and accommodating their differences. See A Smith 'Equality constitutional adjudication in South Africa' (2014) 14 *African Human Rights Law Journal* 609 613; and Langa (note 3 above) 352.

130 Preamble to the Constitution.

131 K Klare 'Legal Culture and Transformative Constitutionalism' (1998) 14(1) *South African Journal on Human Rights* 146 150.

132 S Sibanda 'Not Purpose-Made! Transformative Constitutionalism, Post-Independence Constitutionalism and the Struggle to Eradicate Poverty' (2011) 3 *Stellenbosch Law Review* 482 486; J Modiri 'Law's Poverty' (2015) 18(2*) Potchefstroom Electronic Law Journal* 224 249-250; and Murcott (note 5 above) 51.

133 See generally: Sibanda (note 132 above); J Brickhill and Y Van Leeve 'Transformative Constitutionalism – Guiding Light or Empty Slogan' (2015) *Acta Juridica* 141; T Hodgson 'Bridging the gap between people and the law: Transformative constitutionalism and the right to constitutional literacy' (2015) *Acta Juridica* 189; Murcott (note 5 above) 19; and S Sibanda 'When do you call time on a compromise? South Africa's discourse on transformation and the future of transformative constitutionalism' (2020) 24(1) *Law, Democracy & Development* 384.

apart from the natural environment, and appreciates the necessity of imposing tangible limits on certain human activities, could foster greater responsiveness to the effects that the impacts of climate change will have on the fulfilment of constitutional rights – particularly for poor and vulnerable people in South Africa.[134]

There is increasing evidence that climate change represents a significant obstacle to the sustained eradication of poverty.[135] However, as Murcott argues, although the Constitutional Court has acknowledged the disproportionate impacts of hardship on poor and vulnerable South Africans,[136] the intersection between social, environmental and climate justice has not yet been established as a distinct imperative of transformative constitutionalism.[137]

The importance of cultivating an environmentally and climate-sensitive approach to social justice is encapsulated by Mr Eliot Levine, director of the Environment, Energy and Climate at Mercy Corps when he says that:[138]

> climate change is going to amplify the already existing divide between those who have resources and those who do not…as global temperatures and sea levels rise, as the oceans acidify and precipitation patterns get rearranged, people living in poverty are [going to be] the most severely impacted. Since climate change affects everything from where a person can live, to their access to healthcare, millions of people could be plunged further into poverty as environmental conditions worsen.

Over time, the interface between human rights and the environment has strengthened considerably in both national and international jurisprudence.[139] At the conclusion of his term

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134 As Murcott argues:

> even when courts adjudicate environmental law disputes that are not directly concerned with the plight of the poor, but with the state of the environment more generally, they ought to be cognisant that well-functioning socio-ecological systems create the conditions in which humans can flourish, vulnerabilities can be addressed and social justice can occur.

See Murcott (note 5 above) 35; Kotzé (note 6 above) 82; and *Sustaining the Wild Coast: Part A* (note 126 above).

135 S Hallegatte *et al* 'Shock Waves: Managing the Impacts of Climate Change on Poverty' (2016) *World Bank Group: Climate Change and Development Series* 2.

136 See, generally: *Carmichele v Minister of Safety and Security* 2001 (4) SA 938 (CC); *Minister of Finance v Van Heerden* 2004 (6) SA 121 (CC); *Kaunda v President of the Republic of South Africa* 2005 (4) SA 235 (CC); and *Agri South Africa v Minister for Minerals and Energy* 2013 (4) SA 1 (CC).

137 Murcott (note 5 above) 55.

138 F Sultana 'Critical climate justice' (2021) 188 *The Geographical Journal* 118 119; Gonzalez (note 9 above) 118; and J McCarthy 'Why Climate Change and Poverty Are Inextricably Linked' 19 February 2020 https://www.globalcitizen.org/en/content/climate-change-is-connected-to-poverty/ (accessed 20 April 2022).

139 C Carlarne 'Climate Change, Human Rights and the Rule of Law' (2020) 25(1) *UCLA Journal of International Law and Foreign Affairs* 11 30-31.

as the Independent Expert and Special Rapporteur on Human Rights and the Environment, John Knox declared as follows:[140]

> there can no longer be any doubt that human rights and the environment are interdependent… A healthy environment is necessary for the full enjoyment of many human rights, including the rights to life, health, food, water and development… The relationship between human rights and the environment has countless facets, and our understanding of it will continue to grow for many years to come.

According to Carlarne, these very same connections are 'present, visible and urgent' in respect of climate change,[141] and as indicated above, my dissertation is premised on the assumption that that climate change is not merely an environmental issue; rather, it is an existential issue that is deeply embedded in notions of (in)justice.[142]

For purposes of this dissertation, I align with Murcott's contention that climate justice has both substantive and procedural dimensions.[143] According to Murcott, the substantive dimensions of climate justice are concerned with the equitable distribution of climatic benefits and burdens, in pursuit of human development and flourishing.[144] On the other hand, the procedural dimensions of climate justice include equitable and meaningful participation in environmental and climatic decision-making.[145] In this dissertation, procedural justice is conceived as a complement to, rather than a substitute for, substantive climate justice.[146] Therefore, conversely, climate injustice refers to the unequal distribution of climate burdens,[147] and how those who have borne the brunt of historic and contemporary injustices will likely be the most exposed to climatic harms – particularly when they are

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140 Office of the United Nations High Commissioner for Human Rights 'Framework Principles on Human Rights and the Environment' (2018) https://www.ohchr.org/sites/default/files/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUserFriendlyVersion.pdf (accessed 24 April 2022); and Office of the United Nations High Commissioner for Human Rights 'UN expert calls for global recognition of the right to a safe and healthy environment' 5 March 2018 https://www.ohchr.org/en/press-releases/2018/03/un-expert-calls-global-recognition-right-safe-and-healthy-environment (accessed 24 April 2022).

141 Carlarne (note 139 above) 31.

142 Office of the United Nations High Commissioner 'Understanding Human Rights and Climate Change' https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf (accessed 02 February 2022).

143 This is consistent with the provisions of NEMA which provide for both the substantive (distributional) and procedural dimensions of environmental justice. See ss 2(2) and 2(4)(c), (d), (f), (g), (h) and (k) of NEMA (note 100 above); Murcott (note 5 above) 18. See, generally: J Agyeman *Introducing Just Sustainabilities: Policy, Planning, and Practice* (2013); and D Schlosberg *Defining Environmental Justice: Theories, Movements, and Nature* (2007).

144 Murcott (note 5 above) 18; and Hannis (note 38 above) 152.

145 Murcott (note 5 above) 18-19.

146 D Boyd *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (2012) 66-67; E Daly 'Constitutional Protection for Environmental Rights: The Benefits of Environmental Process' (2012) 17(2) *International Journal of Peace Studies* 71 73; and Murcott (note 5 above) 19.

147 Murcott (note 5 above) 23.

excluded from environmental decision-making processes.[148] Murcott contends that by virtue of the Constitution's transformative mandate, the judiciary is enjoined (and arguably, obliged) to be cognisant of and responsive to the justice implications of climate change in the interpretation and application of environmental laws,[149] in order to vindicate other constitutional rights and advance the project of transformative constitutionalism in South Africa.[150]

As a Global South-oriented extension of the concept of environmental constitutionalism,[151] Murcott presents the theory of transformative environmental constitutionalism as an interpretative approach for engendering greater judicial responsiveness to the plight of the poor and the state of environmental degradation in South Africa.[152] Transformative environmental constitutionalism requires that environmental law and governance be rooted in the Constitution and committed to the pursuit social, environmental and climate justice.[153] According to Murcott, an approach to transformative adjudication that embraces the legal theory of transformative environmental constitutionalism could contribute towards the emergence of a social justice-oriented approach to environmental law and governance.[154] This approach could also be more responsive to the conditions of the Anthropocene, including the adverse impacts of climate change.[155]

Although the judiciary has acknowledged that all rights are interconnected,[156] environmental rights violations are not generally treated as violative of other constitutional

148 For example, in *Bengwenyama Minerals (Pty) Ltd and Others v Genorah Resources (Pty) Ltd and Others* 2011 (4) SA 113 (CC), which dealt with an application for a prospecting right in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) – although substantive environmental issues were less of a consideration – the court affirmed that consultation with affected communities is an integral part of the fairness of the application process. Moreover, in *Sustaining the Wild Coast: Part A* (note 126 above), as discussed below, one of the applicants' main contentions related to the top-down consultation process employed by the respondents and how this had excluded them from environmental development decisions on the Wild Coast. See T Sgqolana 'This fight isn't over, activists warn as court hears case against Shell's quest for Wild Coast gas' 30 May 2022 https://www.dailymaverick.co.za/article/2022-05-30-shells-quest-for-wild-coast-gas-the-fight-isnt-over-activists-warn-at-court/ (accessed 26 June 2022).

149 Murcott (note 5 above) 135.

150 Murcott (note 5 above) 57.

151 Environmental constitutionalism refers to the process of developing, implementing and incorporating environmental rights, policies and procedures into national constitutions around the world. See E Daly *et al* 'Introduction to Environmental Constitutionalism' in E Daly *et al* (eds) *New Frontiers in Environmental Constitutionalism* (2017) 30 30.

152 Murcott (note 5 above) 134.

153 As above.

154 Murcott (note 5 above) 146.

155 Murcott (note 5 above) 169.

156 *The Government of the Republic of South Africa and Others v Grootboom and Others* 2001 (1) SA 46 (CC) paras 23-24.

rights and instead, as Murcott argues, tend to be compartmentalised by legal practitioners and the judiciary.[157] However, Murcott contends that there is latitude for the environmental right (including environmental and climate-related laws) to be interpreted and applied alongside other constitutional rights.[158] For example, in light of the urgency of the climate crisis, as well as South Africa's vast socio-economic disparities and limited adaptive capacity to climate hazards,[159] climate change will invariably impact numerous constitutional rights, including the rights to life, equality, dignity, environment, food, water and culture.[160] This is especially so for poor and rural communities who are more directly dependent on natural resources and ecosystem services and as a result, are also more exposed to climatic harms and disaster events.[161] Murcott asserts that this necessarily entails responding to the socio-economic hardships experienced by poor and vulnerable people in South Africa, through legal means grounded in the Constitution.[162] These hardships, according to Murcott, are 'also environmental issues to which environmentalism must respond',[163] because '…when the environment suffers, people suffer… [and] the poor and vulnerable are first and hardest hit by environmental problems'.[164]

3.3 *Murcott's framing of environmental law disputes within the context of transformative environmental constitutionalism*

Murcott defines an 'environmental law dispute' as a dispute before a court that is:[165]

157 Murcott (note 5 above) 92.

158 Murcott (note 5 above) 86.

159 For example, the people who were the hardest hit by the recent flooding in the eThekwini Metropolitan Municipality were people living in townships, rural areas and informal settlements and according to the Mail & Guardian, of Durban's 550 informal settlements, at least 164 are situated in floodplains. See M Galvin and P Bond 'Flood-prone Durban ill-equipped to weather the climate crisis' 19 April 2022 https://mg.co.za/top-six/2022-04-19-flood-prone-durban-ill-equipped-to-weather-the-climate-crisis/ (accessed 20 April 2022); and Hallegatte *et al* (note 135 above) 4.

160 Throughout Africa, including South Africa, adaptive capacity to climate change is low due to widespread poverty, inequitable land distribution, vulnerability to sea-level rise, coastal erosion and extreme weather events. See The World Bank (note 2 above) 3.

161 According to Winsemius *et al*, this is known as the 'poverty exposure bias' which suggests that poor and vulnerable people are over-exposed to climatic harms and disaster events, such as droughts and urban floods. See H Winsemius *et al* 'Disaster Risk, Climate Change, and Poverty: Assessing the Global Exposure of Poor People to Floods and Droughts' November 2015 *World Bank Group: Climate Change Cross-Cutting Solutions Area* 21.

162 Murcott (note 5 above) 132.

163 Murcott (note 5 above) 133.

164 Murcott (note 5 above) 7. It is increasingly accepted that the initial brunt of environmental crises are borne by the poorest countries and the most vulnerable communities. Nesmith *et al* refer to the notion of 'initial environmental crises' because eventually everyone, including the wealthy and privileged, will suffer the adverse impacts of anthropogenic climate change and concomitant environmental collapse. See Nesmith *et al* (note 1 above) 1; and Intergovernmental Panel on Climate Change 'Special report: Global warming of 1.5°C' 2018 https://www.ipcc.ch/sr15/ (accessed 20 June 2022).

165 Murcott (note 5 above) 7.

> …concerned with…the functioning of a particular socio-ecological system, including…conflict about the distribution of environmental benefits and burdens…climate change vulnerabilities and impacts… concerns about participation in environmental decision-making…and/or a lack of recognition of the equal moral worth of people in environmental decision-making.

This definition, according to Murcott, encompasses the notion of climate litigation – both broadly and narrowly speaking.[166]

To give effect to transformative environmental constitutionalism, Murcott contends that environmental litigation and adjudication ought to bear the following characteristics:[167] first, environmental law disputes should be framed in a justice-oriented manner;[168] secondly, a substantive, rights-based approach to environmental law disputes ought to be adopted, which includes: (i) placing meaningful reliance on the justice-oriented provisions contained in NEMA;[169] as well as (ii) developing the normative content of the environmental right;[170] and thirdly, the indivisibility of the environmental right and other substantive rights ought to be embraced and advanced.[171] Within the context of South Africa's project of transformative constitutionalism, Murcott submits that environmental law disputes that display these characteristics are 'transformative'.[172] Consequently, this is the meaning that I have ascribed to any references to Murcott's characteristics of 'transformative environmental (or climate) litigation or adjudication', below. [173]

According to Murcott, environmental law disputes invariably (even if only implicitly) have justice implications.[174] In this regard, Murcott contends that transformative environmental constitutionalism demands a so-called 'justice-oriented framing' of environmental law disputes that treats environmental concerns as 'a set of interconnected ecological pressures that require a similarly interconnected economic, social…political [and legal] response'.[175] Such framing entails, amongst other things, that the justice implications of the dispute are not merely technical or procedural arguments (or lines of reasoning) and

166 Murcott (note 5 above) 7; Eskander *et al* (note 56 above) 50; and Murcott and Webster (note 57 above) 146.
167 Murcott (note 5 above) 136.
168 Murcott (note 5 above) 137-141.
169 Murcott (note 5 above) 141-151.
170 Murcott (note 5 above) 151-161.
171 Murcott (note 5 above) 162-168; and B Lay *et al* 'Timely and Necessary: Ecocide Law as Urgent and Emerging' (2015) 28 *The Journal Jurisprudence* 431 442.
172 Murcott (note 5 above) 137.
173 As above.
174 As above.
175 Murcott (note 5 above) 139.

instead, are central to the dispute (or outcome) itself.[176] Furthermore, Murcott emphasises the importance of placing relevant evidence of social, environmental and climate justice issues before the court;[177] however, even where this is not done, Murcott argues that the courts are empowered to take judicial notice thereof, which is described in greater detail below.[178]

Secondly, Murcott asserts that a substantive, rights-based approach to environmental law disputes ought to be adopted.[179] According to Murcott, transformative environmental constitutionalism demands that the adjudication of environmental law disputes departs from an overly-procedural and formalistic orientation, to one that is concerned with the substantive realisation of social, environmental and climate justice.[180]

According to Murcott, this form of adjudication can be achieved by placing meaningful reliance on NEMA's justice-oriented provisions, particularly those concerned with environmental justice and public trusteeship.[181] By engaging with these provisions, Murcott argues that the courts could explicitly pursue the social justice imperatives of the Constitution.[182]

Additionally, Murcott argues that the normative content of the environmental right should be developed by the judiciary to protect '[a]ll of our environments…that are being stressed, polluted and commodified…'[183] In this regard, Murcott alleges that the normative potential of the environmental right is largely under-utilised by the judiciary and that, pursuant to section 39(2) of the Constitution – even when the environmental right is indirectly applicable – the courts ought to meaningfully engage with (and develop) its normative content.[184] Murcott contends that more deliberate engagement with the notions of ecological sustainability and inter- and intra-generational equity, in particular, would facilitate greater judicial responsiveness to the conditions of the Anthropocene.[185]

176 As above.
177 As above.
178 As above.
179 Murcott (note 5 above) 141-151.
180 Murcott (note 5 above) 142 and 169.
181 The environmental justice provisions are contained in ss 2(2) and 2(4)(c), (d), (f), (h) and (k) of NEMA, whilst public trusteeship is provided for in s 2(4)(o) of NEMA.
182 Murcott (note 5 above) 143.
183 Murcott (note 5 above) 151-161.
184 Murcott (note 5 above) 151.
185 Murcott (note 5 above) 152.

Lastly, Murcott refers to the necessity for 'mutual reinforcement' or indivisibility between the environmental right and other substantive rights.[186] Considering that environmental destruction has vast implications for the enjoyment and fulfillment of various constitutional rights – including socio-economic entitlements like food, water and housing – Murcott asserts that the environmental right ought to be used in conjunction with other rights to address social, environmental and climate injustices.[187]

To demonstrate the value (and potential) of transformative environmental constitutionalism as an interpretative approach to climate adjudication, I apply Murcott's characteristics of transformative environmental adjudication to two recent examples of climate litigation in South African case law.[188]

4 Chapter 4: Critical analysis of the challenges to Shell's seismic blasting on South Africa's wild coast

4.1 *Introduction*

In this chapter, I demonstrate the value (and potential) of transformative environmental constitutionalism as a legal framework for climate adjudication, with reference to the following cases:[189] first, *Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others* (hereafter *Border Deep Sea Angling Association*);[190] and secondly, *Sustaining the Wild Coast: Part A*.[191] These cases – both involving challenges to marine seismic surveying on South Africa's Wild Coast – are useful examples for my study because oil and gas are two of the world's main sources of fossil fuel-driven energy,[192] and seismic surveying is promoted by the oil and gas industry as an indispensable – and comparably 'safe' – activity for meeting global energy demands.[193]

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186 Within the context of this dissertation, I have chosen to use the word 'indivisibility' (as derived from the indivisibility doctrine in international human rights law), interchangeably with Murcott's reference to 'mutual reinforcement' to emphasise the inherent interconnectedness between human and natural systems. See Murcott (note 5 above) 162.

187 As above.

188 Murcott (note 5 above) 136.

189 A Pandey *et al* 'How the oil and gas industry can turn climate-change ambition into action' https://www.strategyand.pwc.com/m1/en/strategic-foresight/sector-strategies/energy-chemical-utility-management/climate-change-ambition.html (accessed 04 February 2022).

190 *Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others* (3865/2021) [2021] ZAECGHC 111 (03 December 2021) (hereafter *Border Deep Sea Angling Association*).

191 *Sustaining the Wild Coast: Part A* (note 126 above).

192 Energy Information Administration 'What is energy? Sources of energy' 7 May 2021 https://www.eia.gov/energyexplained/what-is-energy/sources-of-energy.php (accessed 21 April 2022).

193 Seismic surveys allegedly reduce associated safety and environmental risks, as well as the overall footprint of oil and gas exploration activities. See K Lowery 'Seismic Surveys 101' 8 November 2016

According to the International Association of Geophysical Contractors (IAGC) – an international trade association that represents the providers of geophysical services to the oil and gas industry – modern seismic technologies ensure that oil and gas deposits are found, drilled and produced with the least possible costs, safety hazards and ecological impacts.[194] The IAGC contends that accurate seismic mapping prevents the need for further drilling, thereby minimising the environmental impacts of the oil and gas exploration.[195] In particular, in the oil and gas industry, marine seismic surveying is regarded as the one of the most valuable processes available for mapping prospective fuel reserves beneath the seabed.[196] However, according to the International Energy Agency (IEA), the global oil and gas industry is responsible for almost 45 percent of global GHG emissions, which begs the question: in light of South Africa's international commitments under the Paris Agreement, as well as its expressed intention towards a just transition away from fossil fuels, why would South Africa be actively pursuing activities that *will* exacerbate the conditions of anthropogenic climate change?[197] In 2021, the International Energy Agency, to which South Africa is an associate member, stated that:[198]

> the energy sector is the source of around three-quarters of [GHG] emissions today and holds the key to averting the worst effects of climate change, perhaps the greatest challenge humankind has faced. Reducing global carbon dioxide emissions to net zero by 2050 is consistent with efforts to limit the long-term increase in global average temperatures to 1.5°C. This calls for nothing less than a complete transformation of how we produce, transport and consume energy.

Considering that the Department of Mineral Resources and Energy has grand designs for South Africa's energy future – one powered by trillions of cubic feet of shale gas beneath our oceans and the Karoo – it is likely that similar cases will come before our courts in the foreseeable future.[199]

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https://www.api.org/news-policy-and-issues/blog/2016/11/08/seismic-surveys-101 (accessed 21 April 2022).

194 International Association of Geophysical Contractors (IAGC) 'Environmental Benefits of Seismic Surveys' http://internationalgeophysicaltxprod.weblinkconnect.com/uploads/4/5/0/7/45074397/iagc_1_pager_seismic_benefits_final_approved_2014_06_12.pdf (accessed 11 September 2022).

195 IACG (note 194 above).

196 R Przelslawski *et al* 'An integrated approach to assessing seismic impacts: Lessons learnt from the Gippsland Marine Environmental Monitoring Project' (2018) 160 *Ocean & Coastal Management* 117 117.

197 *Sustaining the Wild Coast: Part A* (note 126 above).

198 International Energy Agency 'Net Zero by 2050: A Roadmap for the Global Energy Sector' May 2021 https://www.iea.org/reports/net-zero-by-2050 (accessed 11 September 2022).

199 Gas Amendment Bill B9-2021; Department of Mineral Resources and Energy 'South African Gas Master Plan: Basecase Report (v 01)' 14 December 2021 http://www.energy.gov.za/files/media/explained/Gas_Master_Plan_Basecase_Report.pdf (accessed

4.2 *The one that got away: The case of Border Deep Sea Angling Association*

At this juncture, I must indicate that *Border Deep Sea Angling Association* would not, on a narrow interpretation of the concept, be regarded as an instance of 'climate litigation',[200] because it does not explicitly or directly raise issues of law or fact regarding the science of climate change or mitigation and adaptation efforts.[201] The applicants' concerns, however, are rooted in the impacts of seismic surveying as a means of fossil fuel extraction, and are directed at challenging an industry that is said to account for approximately 45 percent of anthropogenic GHG emissions.[202] Therefore, on a broader interpretation, *Border Deep Sea Angling Association* could be construed as an effort in climate litigation.[203] In contrast, *Sustaining the Wild Coast: Part A* most certainly constitutes climate litigation insofar as it explicitly addresses the phenomenon of climate change and addresses arguments concerning climate change mitigation.[204]

In *Border Deep Sea Angling Association*, Govindjee AJ described seismic surveys as geological studies in which: [205]

> seismic waves generated through compressed air are used to image layers of rock below the seafloor in search of geological structures to determine the potential presence of naturally occurring hydrocarbons [namely oil and gas].

In spite of the oil and gas industry's claims to the perceived advantages of seismic surveying – including reduced risks in relation to safety and environmental damage – vociferous opposition has been levelled against these activities around the world, owing primarily to adverse impacts on the marine environment and on the lives of all those dependent on the health of our oceans for their livelihoods.[206] For example, seismic surveys are known to have

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19 June 2022); and S Comrie 'Gwede Mantashe's vision for South Africa's energy future is powered by gas' 27 January 2022 https://www.dailymaverick.co.za/article/2022-01-27-gwede-mantashes-vision-for-south-africas-energy-future-is-powered-by-gas/ (accessed 19 January 2022).

200 This statement is made with reference to Eskander *et al*'s, as well as Murcott and Webster's definitional assessments of the concept of 'climate litigation. See Eskander *et al* (note 56 above) 50; and Murcott and Webster (note 57 above) 146.

201 Eskander *et al* (note 56 above) 50.

202 Pandey *et al* (note 189 above).

203 Dupar (note 59 above).

204 *Sustaining the Wild Coast: Part A* (note 126 above) para 15.

205 *Border Deep Sea Angling Association* (note 190 above) para 1.

206 This would include aspects of cultural life. Moreover, in 2017, three climate activists – including Greenpeace New Zealand's Executive Director, Russel Norman – threw themselves into the sea in front of the Amazon Warrior, an immense offshore oil exploration vessel, in protest of prospective oil exploration activities by Statoil and Chevron off the Wairarapa coast. Thereafter, earlier this year, following extensive seismic surveying in and around Murchison Falls National Park in Uganda, TotalEnergies and Chinese oil developer CNOOC commenced the construction of an oil feeder pipeline inside the national park. However, in France, a lawsuit brought by Friends of the Earth, as

some of the following effects on marine biodiversity: damage to fish with air bladders;[207] hearing impairment in dolphins and turtles;[208] destruction of eggs and larvae laid by marine wildlife;[209] mortality of zooplankton;[210] adverse changes in or cessation of vocalisations in whales;[211] and physiological changes such as stress responses in seals.[212] In assessing the environmental impacts of seismic surveys, the National Resources Defence Council aptly described the situation as follows:[213]

> the ocean is an acoustic world. Unlike light, sound travels extremely efficiently in seawater, and marine mammals and many fish depend on sound for finding mates, foraging, avoiding predators, navigating, and communicating – in short, for virtually every vital life function. When we introduce loud sounds into the ocean, we degrade this essential part of the environment.

In addition to impacting the marine environment, seismic surveys also have serious consequences for the health and proper functioning of fisheries.[214] For example, catch rates of various commercial species have been shown to reduce by 40 to 80 percent, over thousands of square kilometres around a single seismic survey array.[215] In response to

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well as other NGOs, is set for trial later this year, in terms of which the plaintiffs allege that TotalEnergies failed to uphold its 'duty of vigilance' to protect the environment and human rights in Uganda, which is an obligation under French law. See BBC News 'Greenpeace activist has 'no regrets' over New Zealand protest' 16 November 2018 https://www.bbc.com/news/uk-wales-46222685 (accessed 21 April 2022); and L Hook 'The oil giants drilling among the giraffes in Uganda' 12 April 2022 https://www.ft.com/content/e1670042-11bd-4c68-9bde-a599d94bd8c0 (accessed 21 April 2022).

207 A Caroll *et al* 'A critical review of the potential impacts of marine seismic surveys on fish & invertebrates' (2017) 114 *Marine Pollution Bulletin* 9 12; A Popper *et al* 'Effects of Exposure to the Sound from Seismic Airguns on Pallid Sturgeon and Paddlefish' (2016) 11(8) *PLoS One* 1 15; and A Govender 'Seismic testing and the effect on our marine environment' 24 September 2017 https://www.bowmanslaw.com/insights/shipping-aviation-and-logistics/seismic-testing-effect-marine-environment/#:~:text=Such%20surveys%20disturb%20the%20communication,away%20from%20the%20affected%20area (accessed 23 April 2022).

208 L Weilgart 'A review of the impacts of seismic airgun surveys on marine life' (2013) Submitted to the Convention on Biological Diversity's Expert Workshop on Underwater Noise and its Impacts on Marine and Coastal Biodiversity, 25-27 February 2014, London https://www.cbd.int/doc/meetings/mar/mcbem-2014-01/other/mcbem-2014-01-submission-seismic-airgun-en.pdf (accessed 23 April 2022).

209 Govender (note 207 above).

210 As above.

211 National Resources Defence Council 'Boom, Baby, Boom: The Environmental Impacts of Seismic Surveys' May 2010 https://www.nrdc.org/sites/default/files/seismic.pdf (accessed 23 April 2022).

212 Govender (note 207 above).

213 National Resources Defence Council (note 211 above).

214 As above.

215 An 'array' is a system of interlinked seismometers (or instruments that detect and record geological movements such as earthquakes) arranged in a specific pattern, to increase sensitivity to oil and gas detection. See Park Seismic 'What is Seismic Survey?' https://www.parkseismic.com/whatisseismicsurvey/#:~:text=There%20are%20three%20major%20types,type%20of%20waves%20being%20utilized (accessed 23 April 2022); A Engås *et al* 'Effects of seismic shooting on local abundance and catch rates of cod (*Gadus morhua*) and haddock (*Melanogrammus aeglefinus*)' (2011) 53(10) *Canadian Journal of Fisheries and Aquatic Sciences*

diminished catch rates, likely attributable to habitat abandonment and reduced reproductive performance in commercially harvested fish, fishermen in some parts of the world have sought industry compensation for their losses.[216] According to official statistics, the South African fisheries sector is worth around R6 billion per annum and directly employs approximately 27 000 people, with indirect employment in industries associated with the fisheries sector estimated to be between 81 000 and 100 000 people.[217] In addition to commercial fisheries, there are thousands of subsistence and artisanal fishers in South Africa, who directly depend on marine life to meet their daily needs.[218] Subsistence and artisanal fishers along South Africa's coastline often live in relatively small communities and are affected by poverty, food insecurity and the effects of overfishing.[219]

Anthropogenic interventions in the marine environment are likely to have vast and complex ramifications for both human and non-human components of the Earth system. For humans, these include food insecurity and livelihood challenges, as well as diminished enjoyment (or even extinguishment) of customary practices and spiritual relationships with the sea.[220] On the other hand, seismic surveying is also known to adversely impact marine biodiversity and exacerbate the effects of climate change, by contributing to the production of fossil fuel-driven energy.[221] Oceans, as the largest heat sinks on Earth, play a critical role in regulating the climate system; however, as global temperatures increase, oceans are

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2238 2239; and J Skalski *et al* 'Effects of sounds from a geophysical survey device on catch-per-unit-effort in a hook-and-line fishery for rockfish (*Sebastes ssp*)' (1992) 49(7) *Canadian Journal of Fisheries and Aquatic Sciences* 1357 1360.

216 A Pernivi 'Reimbursements to fishermen for loss of catches: A study on legality of damages available to Norwegian fishermen for types of effects resulting from seismic shootings' (2015) Essay submitted for the Directorate of Fisheries, Region Vest, Måløy https://fdir.brage.unit.no/fdir-xmlui/bitstream/handle/11250/276225/Reimbursements-to-fishermen_Pernevi-2015.pdf?sequence=1&isAllowed=y (accessed 23 April 2022).

217 South African Government 'Fisheries' https://www.gov.za/about-sa/fisheries#:~:text=In%20South%20Africa%2C%20the%20%EF%AC%81sheries,people%20in%20the%20commercial%20sector (accessed 23 April 2022); and K Brick and R Hasson 'Valuing the socio-economic contribution of fisheries and other marine uses in South Africa: A socio-economic assessment in the context of marine phosphate mining' https://cer.org.za/wp-content/uploads/2016/08/Socio-economic-Report_Web.pdf (accessed 23 April 2022).

218 M Kashorte 'Moving subsistence fisheries to commercial fisheries in South Africa' (2013) Dissertation, The United Nations University 10.

219 Food and Agricultural Organisation of the United Nations 'Increasing the contribution of small-scale fisheries to poverty alleviation and food insecurity' (2005) https://www.fao.org/3/a0237e/a0237e.pdf (accessed 24 April 2022); and Western Cape Government 'Overfishing' (2018) https://www.westerncape.gov.za/general-publication/overfishing#:~:text=increased%20bycatch%2C%20which%20are%20species,source%20for%20poorer%20coastal%20communities (accessed 24 April 2022).

220 J Mann 'Proposed seismic surveys off the Wild Coast – some facts' 18 November 2021 https://www.saambr.org.za/proposed-seismic-surveys-off-the-wild-coast-some-facts/ (accessed 11 September 2022).

221 J Singh *et al* 'Marine seismic surveys for hydrocarbon exploration: What's at stake?' (2022) 118(3-4) *South African Journal of Science* 1 3.

becoming less effective at absorbing excess atmospheric heat and less conducive for marine biodiversity.[222] These interactions are significant features of both the Earth system approach and the socio-ecological systems perspective and ought to be critically engaged with in cases involving marine seismic surveying, in an attempt to mediate the effects of environmentally-harmful conduct through the law.[223]

In November 2021, various individuals, environmental and civil society organisations, scientists and politicians voiced their concerns about the imminent arrival of the Amazon Warrior, an immense offshore oil exploration vessel, in South Africa's coastal waters.[224] Following a protracted authorisation process dating back to 2013,[225] three entities associated with oil giant, Shell plc (collectively, 'Shell'),[226] prepared for the commencement of seismic surveying activities on 1 December 2021.[227] The Amazon Warrior was commissioned by Shell to conduct seismic surveys along the Wild Coast, stretching from the Kei River in the Eastern Cape, to the uMtamvuna River on the border of Kwa-Zulu Natal.[228]

Out of concerns for marine integrity, several community and environmental organisations launched the *Border Deep Sea Angling Association* urgent application out of the High Court in Makhanda, in the hopes of interdicting Shell from commencing its seismic survey, pending the determination of a final review application.[229]

In relation to the requirements for an interim interdict, the court in *Border Deep Sea Angling Association* held that the applicants carried prima facie prospects of success in the

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222 The World Bank 'What You Need to Know About Oceans and Climate Change' 8 February 2022 https://www.worldbank.org/en/news/feature/2022/02/08/what-you-need-to-know-about-oceans-and-climate-change (accessed 11 September 2022); and United States Environmental Protection Agency 'Climate Change Indicators: Ocean' https://www.epa.gov/climate-indicators/oceans#:~:text=As%20greenhouse%20gases%20trap%20more,climate%20patterns%20around%20the%20world (accessed 11 September 2022).

223 L Kotzé and R Kim 'Earth system law: The juridical dimensions of earth system governance' (2019) 1 *Earth System Governance* 1 3.

224 B Jordan 'Stop Shell's Wild Coast survey, top SA scientists beg Ramaphosa' 2 December 2021 https://www.timeslive.co.za/sunday-times-daily/news/2021-12-02-stop-shells-wild-coast-survey-top-sa-scientists-beg-ramaphosa/ (accessed 21 April 2022).

225 The protracted authorisation process included the application for an exploration right from the Petroleum Agency of South Africa (PASA), the preparation of a draft environmental management programme (EMPr), and public participation and consultation processes. See *Border Deep Sea Angling Association* (note 190 above) paras 16-23.

226 The three entities are Shell Exploration and Production South Africa BV ('Shell'), Impact Africa Limited ('Impact Africa') and BG International Limited. See *Sustaining the Wild Coast: Part A* (note 126 above) para 3.

227 *Border Deep Sea Angling Association* (note 190 above) para 4.

228 S Burger 'Green Connection speaks out against Wild Coast seismic survey by oil and gas multinational' 22 November 2021 https://www.engineeringnews.co.za/article/green-connection-speaks-out-against-wild-coast-seismic-survey-by-oil-and-gas-multinational-2021-11-22 (accessed 23 April 2022).

229 See generally: *Border Deep Sea Angling Association* (note 190 above).

determination of a final review application and that there was no alternative remedy available to them.[230] In this regard, the court held that the applicants had established prima facie rights to procedurally fair administrative action and participation in environmental decision-making.[231] Moreover, the court was satisfied that the objects of interdicting the seismic survey before its commencement would be futile if the applicants were first required to exhaust alternative remedies.[232] However, the court held that there was limited evidence to support the applicants' contentions that a reasonable apprehension of irreparable harm existed.[233] In the absence of objective proof of irreparable environmental harm, the court concluded that the applicants' submissions were 'speculative at best'.[234] Furthermore, failing sufficient proof of harm, the court held that the balance of convenience did not favour the granting of an interdict because Shell would miss the opportunity to complete its seismic survey within the environmentally appropriate 'window', following millions of dollars in expenditure.[235] Ultimately, the court rejected the application with costs.[236]

To assess the value of transformative environmental constitutionalism as a legal framework for climate adjudication, I will apply each of Murcott's characteristics for transformative environmental adjudication to *Border Deep Sea Angling Association*.[237] First, Murcott argues that environmental law disputes ought to be framed in a justice-oriented manner.[238] In *Border Deep Sea Angling Association*, the dispute was framed by the applicants and the court as one of consequential environmental damage, flowing directly from the seismic survey.[239] Issues of justice did not feature even as technical or procedural points – much less as a substantive framing of the justice implications of seismic surveying – save for passing mention of the right to have the environment protected for the benefit of present and future generations.[240] Regrettably, the court also makes no reference to the effects that the seismic survey will have on other non-human components of the Earth system, including the climate, save for briefly referring to the applicants' submissions in respect of marine biodiversity.[241] By failing to adopt an Earth system approach, the court missed an important opportunity to situate seismic surveys (and the effects thereof) within

230 *Border Deep Sea Angling Association* (note 190 above) paras 27-31.
231 *Border Deep Sea Angling Association* (note 190 above) paras 28-31.
232 *Border Deep Sea Angling Association* (note 190 above) para 7.
233 *Border Deep Sea Angling Association* (note 190 above) paras 32-36.
234 *Border Deep Sea Angling Association* (note 190 above) paras 34-35.
235 *Border Deep Sea Angling Association* (note 190 above) paras 8, and 37-39.
236 *Border Deep Sea Angling Association* (note 190 above) paras 41-42.
237 Murcott (note 5 above) 137.
238 Murcott (note 5 above) 137-141.
239 *Border Deep Sea Angling Association* (note 190 above) para 7.
240 *Border Deep Sea Angling Association* (note 190 above) para 39.
241 *Border Deep Sea Angling Association* (note 190 above) para 7.

the broader context of the Earth system, as an activity with direct impacts on the marine environment and fisheries sectors, as well as indirect impacts on climate change, through the ultimate combustion of fossil fuels.[242]

Secondly, Murcott affirms that a substantive, rights-based approach to environmental law disputes ought to be adopted, which includes placing meaningful reliance on the justice-oriented principles contained in NEMA, particularly those provisions aimed at environmental justice and public trusteeship, where relevant.[243] The applicants, in a supplementary affidavit filed *after* the hearing, introduced their reliance on the principle of public participation in environmental governance, as contained in section 2(4)(f) and on the requirement of procedural justice in environmental decision-making, envisaged by section 2(4)(g) of NEMA.[244] In this affidavit, the applicants contended that Shell's conduct fell short of the standard of public participation required by NEMA, as well as the relevant guidelines, including Guideline Series 7 on Public Participation in the Environmental Impact Assessment Process published in Government Gazette Number 35769 of 10 October 2012.[245] However, these provisions only address the procedural dimensions of environmental justice – as a complement to, rather than a substitute for, substantive justice – and by their very nature, only advance a very limited vision of environmental justice.[246] Although the applicants referred to two of NEMA's procedural justice-oriented principles, one could hardly describe the reliance thereon as 'meaningful', as this first came to bear in an affidavit filed by the applicants after the hearing and only impacted the court's reasoning to the extent that the existence of the right to procedural environmental justice rendered the applicants' prospects of success in a final review application, more likely.[247] Accordingly, save for sections 2(4)(f) and 2(4)(g) of NEMA, no mention is made of any of the other provisions aimed at environmental justice or public trusteeship.[248]

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242 Pandey *et al* (note 189 above).

243 Murcott (note 5 above) 141-151.

244 S 2(4)(f) of NEMA provides that: 'the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured'; whilst s 2(4)(g) of NEMA provides that: 'decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge'. See paragraph 8 of the supplementary affidavit deposed to by Ricky William Stone on 2 December 2021; and NEMA (note 100 above).

245 See paragraphs 3 and 4 of the supplementary affidavit deposed to by Ricky William Stone on 2 December 2021.

246 Boyd (note 146 above) 66-67; Daly (note 146 above) 73; and Murcott (note 5 above) 19.

247 *Border Deep Sea Angling Association* (note 190 above) para 30.

248 See generally: *Border Deep Sea Angling Association* (note 190 above); and Murcott (note 5 above) 148-151.

In pursuing transformative environmental adjudication, Murcott also argues that the normative content of the environmental right should be developed.[249] Murcott asserts that in the adjudication of environmental disputes, the judiciary tends to 'pay little more than lip service to the content of the environmental right'.[250] The same can be said of the court in *Border Deep Sea Angling Association* where only passing reference is made to section 24 of the Constitution in considering whether the balance of convenience favoured the granting of the interdict.[251] Regrettably, the court's reasoning is limited in a number of respects. First, the court did not go far enough in responding to the threats posed to the 'wellbeing' of those communities who depend on sustainable marine and coastal ecosystems.[252] Secondly, the court ought to have considered the ways in which the local communities' traditions, customs and practices are congruous with the notion of 'ecologically sustainable development' – and how the seismic survey may impact these traditions, customs and practices.[253] Thirdly, the court's reasoning undermined the imperatives of conserving fragile habitats that support high ecological diversity,[254] as well as the customary practices and beliefs of local communities in the survey area.[255]

Lastly, Murcott contends that in climate adjudication, the indivisibility of the environmental right and other substantive rights ought to be embraced and advanced because climate change will invariably impact numerous constitutional rights.[256] Considering the urgency of the climate crisis, even when courts adjudicate disputes that are not directly related to the socio-economic challenges of the poor and vulnerable – but are explicitly concerned with the state of the environment (including coastal health and marine life) – they ought to be cognisant that a safe climate is a vital precondition for human development and flourishment, as well as absolutely essential for the attainment of social justice.[257]

When discussing the 'proper' role of judges in pursuing the goals of transformative constitutionalism, Murcott contends that South Africa's unique model of the separation of powers empowers the judiciary to play a relatively activist role.[258] According to Murcott, a

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249 Murcott (note 5 above) 151-161.

250 See Murcott's discussion of the trend revealed in *Propshaft Master (Pty) Ltd v Ekurhuleni Metropolitan Municipality* 2018 (2) SA 555 (GJ) (hereafter *Propshaft*) and *Umfolozi Sugar Planters Ltd v iSimangaliso Wetland Park Authority* (2017) 2 All SA 947 (KZD); and Murcott (note 5 above) 117-121.

251 *Border Deep Sea Angling Association* (note 190 above) para 39.

252 M van der Linde and E Basson 'Environment' in S Woolman and M Bishop (eds) *Constitutional Law of South Africa* (2nd ed 2012) 17-18.

253 Murcott (note 5 above) 201.

254 Mann (note 203 above).

255 *Sustaining the Wild Coast: Part A* (note 126 above) para 32.

256 See Murcott (note 5 above) 162; and The World Bank (note 2 above) 3.

257 Carlarne (note 139 above) 31.

258 Murcott (note 5 above) 40.

degree of judicial activism is warranted in environmental and climate-related disputes, given that environmental degradation will exacerbate existing socio-economic inequalities and injustices.[259] Furthermore, although the parties to a dispute must, in general, identify and present the issues to be determined by a court themselves,[260] transformative adjudication may require the courts to raise certain issues *ex mero motu*, even when the parties themselves have not done so.[261] Where the issues have not been sufficiently canvassed and established by the facts – and where a determination on the point is necessary for the proper adjudication of a case – the court may raise them *ex mero motu.*[262] Once issues have been raised *ex mero motu*, the court is then entitled to request that the parties submit arguments in respect thereof.[263] The rationale for permitting a court to raise certain issues *ex mero motu* is rooted in the supremacy of the Constitution.[264] Considering that it is the duty of all courts to uphold the Constitution,[265] a court may raise constitutional issues of its own accord.[266] Therefore, insofar as climate change *will* impact on constitutional rights, judges are required to critically engage with the justice implications of climate litigation,[267] in order to advance the project of transformative constitutionalism in South Africa.[268]

In *Border Deep Sea Angling Association*, no reference to or engagement with any other constitutional right (other than the environmental right) was made or embarked on.[269] However, rights that were mutually reinforcing of and related to the environmental right – which ought to have been raised by the court *ex mero motu* – include the rights to: access to sufficient food;[270] culture and cultural practices;[271] and just administrative action.[272]

In *Border Deep Sea Angling Association*, the court's reasoning and outcome were misaligned with the imperatives of transformative environmental constitutionalism, which

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259 As above.

260 *South African Police Service v Solidarity obo Barnard* 2014 (6) SA 123 (CC) (hereafter *Barnard*) paras 217-218.

261 See, generally: s 39(2) of the Constitution; and *Link Africa* (note 21 above) paras 33-36. See also Murcott (note 5 above) 60.

262 *Barnard* (note 260 above) paras 217-218.

263 As above.

264 *Matatiele Municipality and Others v President of the Republic of South Africa and Others* 2006 (5) SA 47 (CC) para 67; and *Alexkor Ltd and Another v Richtersveld Community and Others* 2004 (5) SA 460 (CC) para 44.

265 *Daniels v Campbell and Others* 2004 (5) SA 331 (CC) para 45; and *Director of Public Prosecutions, Transvaal* (note 21 above) para 35.

266 *CUSA* (note 21 above) para 132; and *Director of Public Prosecutions, Transvaal* (note 21 above) para 35.

267 This would include the social, environmental and climate justice implications of climate change.

268 Murcott (note 5 above) 152.

269 See, generally: *Border Deep Sea Angling Association* (note 190 above).

270 S 27(1)(b) of the Constitution.

271 Ss 30 and 31 of the Constitution.

272 S 33 of the Constitution.

treat social, environmental and climate injustices as interconnected and mutually reinforcing concerns.[273] By implication, the court's reasoning and outcome were also substantially inconsistent with Murcott's conception of transformative environmental adjudication. Ultimately, the court also failed to impose sufficient limits on an environmentally-harmful activity, as would be required by an Earth system approach.[274]

4.3 *Stemming the tide: The case of Sustaining the Wild Coast: Part A*

In December 2021, on substantially similar facts to *Border Deep Sea Angling Association*,[275] various non-profit companies, natural persons and a community property association launched an application out of the High Court in Makhanda, in the hopes of interdicting Shell from proceeding with its seismic survey, pending (and subject to) the grant of an environmental authorisation under NEMA.[276]

In relation to the requirements for an interim interdict, the court in *Sustaining the Wild Coast: Part A* held that the applicants carried prima facie prospects of success in respect of a number of rights and that there were no alternative remedies available to them.[277] In this regard, the court held that the individuals and communities who would be affected by the seismic survey had a right to be meaningfully consulted, and that Shell's failure to do so amounted to a violation of a right deserving of protection.[278] The court also held that the applicants had reasonable prospects of success in relation to their claim that their rights under NEMA had been violated.[279] In proving irreparable harm, the applicants adduced a sizable body of evidence, comprising ten experts from different fields, including marine science, behavioural ecology, ichthyology and impact investment.[280] The court was satisfied that there was extensive evidence to support the applicants' contentions that a reasonable

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273 Murcott (note 5 above) 162.

274 Steffen *et al* (note 8 above) 736; Rockström (note 28 above) 472; and Malhi (note 43 above) 95.

275 In addition to the facts in *Border Deep Sea Angling Association* regarding Shell's authorisation process and the arrival of the Amazon Warrior in South Africa's coastal waters, in *Sustaining the Wild Coast: Part A*, the applicants also adduced extensive evidence pertaining to, amongst other things, the cultural and spiritual importance of marine integrity for traditional coastal communities, deficiencies in Shell's consultation process and the adverse impacts of seismic surveying on numerous components of the Earth system. See, for example: *Sustaining the Wild Coast: Part A* (note 126 above) paras 5-7, 12-14, 16-19, 22-26, 44-45, and 52-63.

276 *Sustaining the Wild Coast: Part A* (note 126 above) para 2.

277 *LF Boshoff Investments* (note 110 above) 267B-E; *Border Deep Sea Angling Association* (note 190 above) para 11; and *Sustaining the Wild Coast: Part A* (note 126 above) paras 7-36; and 74-77.

278 *Sustaining the Wild Coast: Part A* (note 126 above) paras 33-34.

279 The court refrained from determining the applicants' rights in this regard; and instead, left this determination for the court in Part B of the application. See *Sustaining the Wild Coast: Part A* (note 126 above) paras 8; and 36.

280 *Sustaining the Wild Coast: Part A* (note 126 above) paras 44-65.

apprehension of irreparable harm existed.[281] Although the court recognised that Shell would miss the opportunity to complete its seismic survey and would incur great financial losses, the court held that the balance of convenience favoured the granting of an interim interdict because constitutional rights were at stake.[282] Ultimately, the court upheld the application with costs.[283]

Sustaining the Wild Coast: Part A is largely consistent with an Earth system approach in a number of distinct ways. First, by illustrating the effects of the seismic survey on other non-human components of the Earth system,[284] including the marine environment and the climate system, the court is implicitly aware of the need for legal intervention for their protection.[285] This is also illustrative of the extent of the court's cognisance of the interconnected justice issues arising from the seismic survey, which greatly exceed the likely effects on humans.[286] Secondly, by affirming the customary practices and spiritual relationship that the affected communities have with the sea, the court is affirming the intrinsic relationship between humans and the natural environment.[287] Thirdly, by stipulating the role of the courts in vindicating those customary practices where human conduct impacts negatively on the environment, the court is mindful of its contribution to mitigating the impacts of the Anthropocene.[288] Finally, by interdicting the seismic survey, the court is imposing tangible limits on environmentally-damaging conduct.[289]

On application of Murcott's characteristics for transformative environmental adjudication, it is evident that the court's reasoning in *Sustaining the Wild Coast: Part A* is steeped in justice considerations, including the substantive and procedural dimensions of environmental (and climate) justice, inter-generational justice, and interspecies justice.[290] For example, in recognising the disproportionately negative impact of the seismic survey on

281 *Sustaining the Wild Coast: Part A* (note 126 above) para 65.
282 *Sustaining the Wild Coast: Part A* (note 126 above) paras 68-73.
283 *Sustaining the Wild Coast: Part A* (note 126 above) para 80.
284 The court held that the applicants' evidence establishes that, 'without intervention by the court, there is a real threat that the marine life [including humpback whales and their calves, turtle hatchlings, zooplankton and benthic reefs] would be irreparably harmed by the seismic survey'. See *Sustaining the Wild Coast: Part A* (note 126 above) para 64.
285 The court held that: 'the full impacts to ecosystems components, like plankton…as well as to extensive unseen benthic reefs…cannot be monitored or mitigated by the monitors and are not adequately addressed by either of the reports [in the environmental management programme]'. See *Sustaining the Wild Coast: Part A* (note 126 above) para 32.
286 As above.
287 *Sustaining the Wild Coast: Part A* (note 126 above) para 32.
288 As above.
289 *Sustaining the Wild Coast: Part A* (note 126 above) paras 34, 35, 64, 73, 77 and 82; and Malhi (note 43 above) 95.
290 See, generally: *Sustaining the Wild Coast: Part A* (note 126 above).

the livelihoods of small-scale fishers arising from the harm to marine life, the court pursued the substantive (distributional) dimensions of environmental justice.[291] Moreover, when referring to one of the applicants – Mr Ntsindiso Nongcavu, an artisanal fisherman from the Sicambeni Village near Port St Johns – the court made explicit reference to his community's system of customary regulation that pursues ecological sustainability and by extension, inter-generational equity, when they fish.[292] Furthermore, as Murcott *et al* argue, the court advanced climate justice through the recognition of the communities' concerns about the adverse impacts of climate change.[293]

When referring to the public participation process, the court held that Shell's reliance on the fact that it had placed English and Afrikaans advertisements in four newspapers for public notification purposes, was misplaced.[294] By failing to publish advertisements in isiZulu or isiXhosa, the court held that Shell's actions were both exclusionary and inadequate.[295] In so doing, the court promoted justice as 'recognition',[296] by affording the affected communities a seat at the proverbial table through meaningful public participation in environmental decision-making.[297] Additionally, when referring to the impacts of seismic surveys on sentient marine animals like humpback whales and their calves, the court acknowledges, albeit implicitly, the interspecies justice implications of seismic surveys.[298] However, despite this, I would argue that the court did not go far enough in illustrating the complexity of these interactions from a climate-justice perspective and, in Murcott's words, discounted the importance of treating 'social, environmental and climate justice as interconnected concerns'.[299]

In advancing the social justice imperatives of the Constitution, Murcott argues that meaningful reliance ought to be placed on the justice-oriented principles contained in NEMA, particularly those provisions aimed at environmental justice and public trusteeship.[300] As indicated above, in *Sustaining the Wild Coast: Part A*, the court's reasoning is broadly

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291 *Sustaining the Wild Coast: Part A* (note 126 above) para 38.
292 *Sustaining the Wild Coast: Part A* (note 126 above) para 17.
293 M Murcott *et al* 'What the ECtHR could learn from courts in the Global South' 22 March 2022 https://verfassungsblog.de/what-the-ecthr-could-learn-from-courts-in-the-global-south/ (accessed 28 June 2022).
294 *Sustaining the Wild Coast: Part A* (note 126 above) paras 22 and 24.
295 IsiZulu and isiXhosa are the main languages spoken by the communities in question. See *Sustaining the Wild Coast: Part A* (note 126 above) para 22.
296 Murcott *et al* (note 293 above).
297 *Sustaining the Wild Coast: Part A* (note 126 above) para 33.
298 *Sustaining the Wild Coast: Part A* (note 126 above) paras 54-57.
299 Murcott (note 5 above) 35.
300 Murcott (note 5 above) 143-151.

expositive of environmental justice in both a substantive and procedural sense.[301] Substantively, the court recognised that seismic surveying would threaten the livelihoods, food security and traditions of various communities along the Wild Coast – many of whom live in accordance with customary law and regard the sea as holding vast spiritual significance.[302] In a procedural sense, the court focused on deficiencies in Shell's public participation and consultation processes and affirmed the importance of, amongst other things, customary consensus-seeking processes and meaningful consultation with affected communities.[303] However, notwithstanding the above, like *Border Deep Sea Angling Association*, the court did not explicitly engage with the provisions of NEMA aimed at substantive environmental justice or public trusteeship.[304]

In *Sustaining the Wild Coast: Part A*, the court contributes towards developing the normative content of the environmental right in several ways. In relation to the requirement in section 24 of the Constitution that environmental protection must be pursued through reasonable legislative and other measures, the court recognised that without its intervention, as a so-called 'other measure', there would be a real threat to marine life, as well as the livelihoods and traditions of affected communities.[305] Insofar as the court focused on the internal sustainability measures of the affected communities,[306] the judgment is illustrative of the importance of enhancing community resources in the pursuit of ecological sustainability.[307] Regarding the requirement that the environment be protected for the benefit of present and future generations, the court considered the cultural significance of customary fishing practices and the spiritual relationship that many affected communities have with the sea, to justify its intervention in Shell's activities.[308] In other words, significant

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301 S 2(4)(c) of NEMA provides that environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons. See NEMA (note 100 above); and Murcott (note 5 above) 143-151.

302 *Sustaining the Wild Coast: Part A* (note 126 above) paras 12-19.

303 Although not explicitly mentioned, the judgment is consistent with s 2(4)(f) of NEMA which provides that the participation of all interested and affected parties in environmental governance must be promoted and that all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured. See *Sustaining the Wild Coast: Part A* (note 126 above) paras 21, 25-26.

304 See, generally: *Border Deep Sea Angling Association* (note 190 above); and Murcott (note 5 above) 143-151.

305 *Sustaining the Wild Coast: Part A* (note 126 above) para 65.

306 For example, the court refers to the Amadiba traditional community as 'the conservationists of the sea' and how Mr Ntsindiso Nongcavu's customary community follows sustainable fishing practices. See *Sustaining the Wild Coast: Part A* (note 126 above) paras 13, and 17.

307 Murcott (note 5 above) 155.

308 In this regard, the judgment is consistent with s 2(4)(g) of NEMA which stipulates that decisions must consider the interests, needs and values of all interested and affected parties, including the recognition

marine disturbances would likely affect the ability of these communities (including those yet to be born) to benefit from and live in harmony with the sea.[309] Therefore, the court's reasoning is expositive of several principled conclusions regarding the content of the environmental right. First, the courts are required to actively respond to circumstances where activities adversely impact on the 'wellbeing' of communities who depend on protected and sustainable ecosystems.[310] Secondly, interference with customary practices and beliefs must be factored into the calculus of cases involving environmentally-harmful human conduct.[311] Lastly, courts ought to expand the ambit of their enquiries to non-human components of the Earth system, insofar as the extent of environmental harm is concerned.[312]

In *Sustaining the Wild Coast: Part A*, the environmental right and two cultural rights worked together to strengthen the applicants' claim, namely: the right to language and culture; and the right to cultural, religious and linguistic communities.[313] Considering that the cultural life of the affected communities is heavily dependent on the sustainability and flourishing of the marine environment, in recognising this interrelatedness, the court embraced the indivisibility of the environmental right and other substantive rights.[314]

Following the judgment in *Sustaining the Wild Coast: Part A*, in which the applicants were ultimately successful,[315] Shell terminated its contract with the company responsible for conducting the seismic surveys and the Amazon Warrior left South Africa's waters.[316] At the

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of all forms of knowledge, including traditional and ordinary knowledge. See *Sustaining the Wild Coast: Part A* (note 126 above) paras 17, and 65.

309 *Sustaining the Wild Coast: Part A* (note 126 above) para 13.

310 This conclusion is illustrative of the socio-ecological systems perspective. See Murcott (note 5 above) 165. The criterion of 'wellbeing' does not yet seem to be settled in South African law; however, certain authors are of the view that both the Constitution and NEMA recognise those 'aesthetic properties and conditions of the physical environment that positively influence human wellbeing and that the notion of wellbeing captures 'economic, social, aesthetic and emotional considerations'. However, the High Court held in *HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism and Others* (24371/05) [2006] ZAGPHC 132 (28 March 2006) that an entitlement to wellbeing must, at a minimum, be construed as encompassing 'a sense of environmental integrity; a sense that we ought to utilise the environment in a morally responsible and ethical manner'. See van der Linde and Basson (note 252 above) 17-18.

311 *Sustaining the Wild Coast: Part A* (note 126 above) para 32.

312 Murcott (note 5 above) 160.

313 Ss 30 and 31 of the Constitution.

314 Murcott (note 5 above) 162-170.

315 Citing *Propshaft* (note 250 above) at par 10.7, the court held that where constitutional rights are at stake, the balance of convenience favours the protection of those rights over purely financial interests. See *Sustaining the Wild Coast: Part A* (note 126 above) para 68.

316 P Leon *et al* 'Shell prevented from proceeding with seismic survey offshore of South Africa's Eastern Cape Province' 10 January 2022 https://hsfnotes.com/africa/2022/01/10/shell-prevented-from-proceeding-with-seismic-survey-offshore-of-south-africas-eastern-cape-province/ (accessed 21 April 2022).

end of May 2022, Part B of the application was argued before the High Court in Gqeberha.[317] The applicants sought the review and setting aside of the Minister of Mineral Resources and Energy's ('the Minister') decisions to: (i) grant the exploration right; (ii) renew the exploration right on two separate occasions; and (iii) allow Shell to commence the seismic survey without having obtained an environmental authorisation under NEMA.[318] Additionally, the applicants sought declaratory and interdictory relief prohibiting Shell from undertaking seismic survey operations under the exploration right in question.[319]

In September 2022, judgment on Part B of the application was delivered, in which the court held that the Minister's decisions were liable to be set aside in terms in terms of section 8 of PAJA because the decisions were not preceded by a fair procedure;[320] relevant considerations were not taken into account;[321] and relevant legal prescripts were not complied with.[322] However, the court refrained from determining the applicants' entitlement to the declaratory and interdictory relief because the review and setting aside of the Minister's decisions would have the effect of removing the right to conduct the seismic survey.[323] Therefore, the applicants' successfully prevented Shell from undertaking any further seismic surveying under the exploration right in question, which may, in turn, also materially influence Shell's future activities in South Africa.[324]

4.4 *Final reflections on Border Deep Sea Angling Association and Sustaining the Wild Coast: Part A*

I accept that the transformative failings of *Border Deep Sea Angling Association* are attributable to more than apparent flaws in judicial reasoning. In *Border Deep Sea Angling Association*, the applicants failed to provide a sufficient evidentiary basis for their contention that the seismic survey would have 'an extremely detrimental environmental impact'.[325] Furthermore, the applicants had applied for an interim interdict pending the return date of a

317 Sgqolana (note 148 above); and Natural Justice 'Save the Wild Coast: Court adjourned, judgment reserved' 31 May 2022 https://naturaljustice.org/save-the-wild-coast-court-adjourned-judgment-reserved/ (accessed 25 June 2022).

318 Natural Justice 'Factsheet: Shell seismic surveys off the Wild Coast of South Africa' May 2022 https://naturaljustice.org/wp-content/uploads/2022/05/Factsheet_Saving-the-Wild-Coast-Summary-1.pdf (accessed 26 June 2022).

319 Natural Justice (note 318 above).

320 *Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2022] ZAECMKHC 55 (1 September 2022) (hereafter *Sustaining the Wild Coast: Part B*) paras 85-105.

321 *Sustaining the Wild Coast: Part B* (note 320 above) paras 106-132.

322 *Sustaining the Wild Coast: Part B* (note 320 above) paras 133-136.

323 *Sustaining the Wild Coast: Part B* (note 320 above) paras 137-138.

324 Natural Justice (note 318 above).

325 *Border Deep Sea Angling Association* (note 190 above) para 7.

rule *nisi* – in terms of which they intended to provide further evidence at a later stage – so arguably, the applicants' chosen procedure was also not fit for purpose.[326] On the other hand, in *Sustaining the Wild Coast: Part A*, the applicants successfully adduced a sizable body of expert evidence that proved the existence of a reasonable apprehension of irreparable harm and that the mitigation measures relied upon by Shell were inadequate.[327]

These judgments, when compared, illustrate the importance of placing evidence of relevant social, environmental and climate justice issues before the courts in environmental and climate-related disputes.[328] However, as Murcott argues, even where evidence of this nature is not placed before the courts, the law of evidence empowers the courts to take judicial notice thereof.[329] Judicial notice 'allows a judicial officer to accept the truth of certain facts which are known to [them], even when no evidence was led to prove these facts'.[330] According to Schwikkard and Van der Merwe, judicial notice may be taken in two circumstances: first, where the facts are general knowledge, so as not to be issues of reasonable dispute; and secondly, where the facts are 'notorious among all reasonably well-informed people in the area where the court sits', or are readily ascertainable by accurate sources.[331]

Moreover, Murcott contends that climate change impacts and vulnerabilities are becoming sufficiently notorious facts for judicial notice for several reasons, including that:[332] South Africa has adopted an array of national and sectoral policies, plans and strategies aimed at strengthening the country's response to climate change in different ways;[333] the country has incurred international obligations under the Paris Agreement;[334] and climate litigation has met with notable success in various forums.[335]

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326 For example, the applicants 'promise[d] further expert testimony in due course' from one of their marine experts, instead of adducing relevant evidence before the present court; therefore, in the absence of an objectively reasonable apprehension of irreparable harm, the court refused to grant an interim interdict. See *Border Deep Sea Angling Association* (note 190 above) para 34.

327 *Sustaining the Wild Coast: Part A* (note 126 above) para 65.

328 Murcott (note 5 above) 139.

329 As above; and P Schwikkard and S Van der Merwe *Principles of Evidence* (4th ed 2016) 482.

330 M McGregor 'Judicial notice: Discrimination and disadvantage in the context of affirmative action in South African workplaces' (2011) 8 *De Jure* 111 121; and Schwikkard and Van der Merwe (note 329 above) 481.

331 Schwikkard and Van der Merwe (note 329 above) 482.

332 Murcott (note 5 above) 140.

333 Averchenkova (note 115 above) 12-15.

334 Department of Forestry, Fisheries and the Environment 'South Africa signs Paris Agreement on Climate Change in New York' 22 April 2016 https://www.dffe.gov.za/mediarelease/southafricasignsparisagreementonclimate (accessed 03 July 2022).

335 Kidd (note 121 above) 321.

There is mounting scientific evidence indicating the existence of ecological and geophysical thresholds – or planetary boundaries – that, if crossed, would thrust the Earth into a fundamentally changed and unknown state.[336] These changes will undoubtedly be unfavourable for human development and flourishment.[337] In light of these planetary boundaries, it is imperative that the adjudication of environmental disputes be alive to the impacts that environmental and climatic harms will have on the establishment of a 'truly equal society', as envisaged by the Constitution.[338] Therefore, I propose that an Earth system approach – that situates social, environmental and climate harms within the broader context of the Earth system as a whole – be applied to both legal argument and judicial reasoning, to keep us within a safe operating space.[339]

Greater judicial engagement with Earth system-thinking would, in addition to affirming the role of the courts as increasingly important participants in multilevel environmental (and climate) governance, place the courts in a better position to assess the justice implications of human activities on the environment by, for example, taking judicial notice of relevant social, environmental and climate facts.[340] Furthermore, by adopting an Earth system approach, the courts would be promoting and protecting (even prophylactically) other rights in the Bill of Rights, because environmental law disputes, including climate cases, invariably have broad, constitutional rights implications.[341]

Whilst an Earth system approach enables the courts to be pre-emptive in analysing and *seeing* the interconnections between human and natural systems that occur on different levels and at different scales;[342] by applying the socio-ecological systems perspective, the courts are also encouraged to engage with the socially-differentiated nature of environmental and climate injustices.[343] This arguably places the courts in a better position to strike an appropriate balance between anthropocentric and environmental interests, by facilitating a holistic and integrated approach to the adjudication of climate-related cases.[344]

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336 Steffen *et al* (note 8 above) 736; and Rockström (note 28 above) 472.

337 Steffen *et al* (note 8 above) 736; Malhi (note 43 above) 95; and Kim and Kotzé (note 29 above) 4.

338 P Magalhães *et al* 'Why do we need an Earth system approach to guide the Global Pact for Environment?' (2019) *Common Home of Humanity* 3; Langa (note 3 above) 353; and Currie and De Waal (note 3 above) 2.

339 Steffen *et al* (note 8 above) 736; Rockström (note 28 above) 472; and Malhi (note 43 above) 95.

340 Peel and Lin (note 55 above) 681; and Murcott (note 5 above) 139-141.

341 This is derived from the constitutional notion of 'remedial incorporation' which occurs when a court defines a right to include a prophylactic remedy that is not itself part of the right, but is necessary to ensure that the 'core' of the right is not violated. See M Bishop 'Remedies' in S Woolman and M Bishop (eds) *Constitutional Law of South Africa* (2nd ed 2012) 32.

342 L du Toit *et al* 'Guiding Environmental Law's Transformation into Earth System Law through the Telecoupling Framework' (2021) 30(3) *European Energy and Environmental Law Review* 104 113.

343 Kim and Kotzé (note 29 above) 4.

344 Kim and Kotzé (note 29 above) 14.

5 Chapter 5: Conclusion

Climate litigation is on the rise and the courts have an increasingly important role to play in mitigating the effects of the Anthropocene.[345] In being called upon to adjudicate environmental and climate-related disputes, national courts are uniquely placed to catalyse the necessary shift away from environmentally destructive conduct towards lasting sustainability.[346]

South Africa, as Africa's largest carbon emitter, is a significant contributor to climate-related jurisprudence in the Global South;[347] however, the transformative potential of climate litigation in South Africa remains largely untapped, owing to the prevailing trend in environmental law disputes towards under-utilising the environmental right and compartmentalising justice issues.[348] As Murcott argues, when the courts overlook (or compartmentalise) relevant justice considerations, they are less likely to develop a law that is 'fit-for-purpose' in the Anthropocene.[349] In this regard, I submit that more deliberate application of Murcott's criteria for transformative climate litigation and adjudication, within the broader context of complex Earth system interactions, could radically reconfigure the resolution of climate-related disputes in South Africa, towards the establishment of a truly equal society.[350]

In South Africa, judges are constitutionally mandated to advance the project of transformative constitutionalism, in the pursuit of social justice.[351] However, as the so-called 'arbiters of justice in the Anthropocene',[352] judges are also required to grapple with the reality of South Africa's socio-economic and environmental context, and its distinct vulnerabilities to the effects of climate change.[353] This necessarily involves a radical transformation in the interpretation and application of environmental laws, as well as an acute sensitivity to the complicity of the law in creating the conditions of the Anthropocene.[354] Central to this transformation is an enhanced judicial understanding of the impacts that climate change will

345 Kotzé and Kim (note 223 above) 10.

346 L Collins 'Judging the Anthropocene: Transformative adjudication in the Anthropocene Epoch' in L Kotzé (ed) *Environmental Law and Governance for the Anthropocene* (2017) 309 310.

347 Statista 'CO2 emissions per capita in Africa 2020, by country' https://www.statista.com/statistics/1268403/co2-emissions-per-capita-in-africa-by-country/ (accessed 20 September 2022).

348 Murcott (note 5 above) 35, 92 and 126.

349 Murcott (note 5 above) 130.

350 Murcott (note 5 above) 206.

351 Murcott (note 5 above) 41.

352 Collins (note 350 above) 311.

353 The World Bank (note 2 above) X.

354 Kotzé (note 6 above) 75; and J Viñuales 'The Organisation of the Anthropocene: In our Hands? (2018) 1 *Brill Research Perspectives in International Legal Theory and Practice* 1 2.

have on the fulfilment of constitutional rights.[355] Additionally, judges ought to deliberately engage with the Earth system metaphor, including the associated aspects of the planetary boundaries, to 'translate the physical reality of a finite world into law and thereby delimit acceptable levels of human activity'.[356]

As Hoexter observes, judges are indeed 'social engineers' who are responsible for the distributive consequences of their decisions.[357] However, in the Anthropocene, judges are also 'environmental engineers' that have the potential to radically transform environmental governance (and advance the imperatives of social justice) in the public interest.[358] Ultimately, transformative climate adjudication is central to Earth system governance and only time will tell whether the South African courts will meet the moment of the Anthropocene and adequately respond to the threat of climate change or whether they will be 'mere spectators in the ongoing process of environmental degradation'.[359]

355 Murcott (note 5 above) 11; and *Sustaining the Wild Coast: Part A* (note 126 above).

356 Kim and Kotzé call for more deliberate (and active) legal engagement with the Earth system metaphor and planetary boundaries framework. See Kim and Kotzé (note 29 above) 14.

357 C Hoexter 'Judicial Policy Revisited: Transformative Adjudication in Administrative Law' (2008) 24(1) *South African Journal on Human Rights* 281 283.

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