

ARTICLES

DEMYSTIFYING ENVIRONMENTAL CONSTITUTIONALISM

BY
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In an age of pervasive environmental crisis, a vast majority of the world's constitutions now include environmental provisions. But how does environmental constitutionalism improve environmental governance? Constitutionalization tells us little about how states should manage the environment. Instead, environmental constitutionalism is capable of many different meanings and legal forms. This Article draws out three different paradigms: liberal-conservative, technocratic, and transformational. Each paradigm corresponds to a different set of legal institutions, constitutional provisions, and approaches to interpretation, making drastically different demands of constitutional drafters and judges. Environmental constitutionalism calls for urgent and high-level action, without revealing a clear agenda for environmental governance. Before answering its call, we should demystify its meaning.

Environmental constitutionalism's near universal turn to rights and courts presents another danger. Like all forms of constitutional entrenchment, such a turn comes at the expense of democratic participation. But it is precisely this high energy democracy that is

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necessary to truly transform the institutions which have brought us to environmental crisis. This Article argues for the reconstruction of environmental constitutionalism as constitutional environmental democracy. Drawing on traditions of popular and political constitutionalism, constitutional environmental democracy emphasizes the role of participatory institutions outside the judicial branch. This Article sketches out a future research agenda centered on legislative mandates, deliberative assemblies, and constitutional experimentalism. In the Anthropocene, constitutions matter: but they matter beyond the world of rights and courts.

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I. INTRODUCTION

Environmental crisis pervades our lives. An overwhelming scientific consensus warns that human-induced climate change is leading to rising

sea levels, extreme weather events, and public health disasters.¹ Despite over thirty years of international agreements, global carbon dioxide emissions *rose* 70% between 1990 and 2020.² Biodiversity is collapsing at an “unprecedented” rate: one million animal and plant species face complete destruction within decades, primarily because of human activities.³ And despite extensive domestic regulation, global rates of air, land, and water pollution remain stubbornly high. Almost all air breathed by humans exceeds World Health Organization Guideline limits;⁴ by 2010, global plastic pollution exceeded 275 million tonnes;⁵ and industrial actors discharge up to 400 megatonnes of waste into water each year.⁶ This “triple-planetary crisis”⁷—comprising interrelated crises of climate change, biodiversity loss, and widespread pollution—is epoch-defining. We live in the “Anthropocene,”⁸ an age in which no corner of the globe is free from traces of human impact,⁹ traces that will linger on in the fossil record of the future.¹⁰

The urgency of crisis calls into question existing environmental law. For many, statutes and regulations are not enough: states must entrench environmental concerns as supreme constitutional norms, binding the

¹ See Richard P. Allan et al., *Summary for Policymakers*, in INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE [IPCC], CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS: CONTRIBUTION OF WORKING GROUP I TO THE SIXTH ASSESSMENT REPORT 3, 5, 8, 24 (Valérie Masson-Delmotte et al. eds. 2021), <https://perma.cc/936G-G9YV> (linking human activities to rising sea levels and extreme weather events); SANDRA DÍAZ ET AL., INTERGOVERNMENTAL SCI.-POL’Y PLATFORM ON BIODIVERSITY & ECOSYSTEM SERVS., THE GLOBAL ASSESSMENT REPORT ON BIODIVERSITY & ECOSYSTEM SERVICES: SUMMARY FOR POLICYMAKERS 22 (2019), <https://perma.cc/Z87B-7WEF> (linking human activities to increasing public health disasters).

² U.N. ENV’T PROGRAMME, EMISSIONS GAP REPORT 2022: THE CLOSING WINDOW—CLIMATE CRISIS CALLS FOR RAPID TRANSFORMATION OF SOCIETIES, at 5 (2022), <https://perma.cc/6HFX-ZJMB> (recording 1990 emissions levels at 38 GtCO_{2e} and 2020 emissions levels at 54 GtCO_{2e}, expected to be higher in 2021–2022).

³ See DÍAZ ET AL., *supra* note 1, at 11–12. The primary causes of this species collapse include land and sea use changes, direct exploitation, climate change, pollution, and introduction of alien species. *Id.* at 12.

⁴ *Air Pollution*, WORLD HEALTH ORG., <https://perma.cc/DQ4Y-SPCY> (last visited Oct. 22, 2023).

⁵ Hannah Ritchie & Max Roser, *Plastic Pollution*, OUR WORLD IN DATA, <https://perma.cc/J23R-8W4X> (Apr. 2022).

⁶ *International Initiative on Water Quality (IIWQ): The Global Water Quality Challenge & SDGs*, UNESCO, <https://perma.cc/P6NU-D56V> (last visited Feb. 2, 2023).

⁷ Inger Andersen, Chair, Comm. of Perm. Reps., Speech Prepared for Delivery to the Sub-Committee: The Triple Planetary Crisis: Forging a New Relationship Between People and the Earth (Jul. 14, 2021), *transcribed at* U.N. ENV’T PROGRAM, <https://perma.cc/Q8FN-CUNP>.

⁸ Nobel Laureate Paul Crutzen popularized this term in Paul J. Crutzen, *Geology of Mankind*, NATURE, Jan. 2, 2002, at 23, 23 (2002). See also generally JEDEDIAH PURDY, AFTER NATURE: A POLITICS FOR THE ANTHROPOCENE (2015) (discussing the term’s use, history, and interpretation).

⁹ For a prominent argument to this effect, see BILL MCKIBBEN, THE END OF NATURE, at xv–xvi (Anchor Books 2d ed. 1999).

¹⁰ Gaia Vince & Andrew Luck-Baker, *Leaving Our Mark: What Will be Left of Our Cities?*, BBC NEWS (Nov. 1, 2022) <https://perma.cc/2H72-8MNZ>.

entire legal system. This demand, often termed “environmental constitutionalism,”¹¹ has borne fruit. While historically marginal in constitutional theory and practice, environmental provisions can now be found in a majority of the world’s constitutions,¹² and are increasingly a

¹¹ See, e.g., ENVIRONMENTAL CONSTITUTIONALISM IN THE ANTHROPOCENE: VALUES, PRINCIPLES AND ACTIONS (Domenico Amirante & Silvia Bagni eds., 2022) (compiling writings on environmental constitutionalism); Lovleen Bhullar, *Environmental Constitutionalism and Duties of Individuals in India*, 34 J. ENV’T L. 399, 399–400 (2022) (discussing environmental constitutionalism and noting “[e]nvironmental constitutionalism is concerned with constitutional protection of the environment” and “is a broad concept encompassing rights as well as duties of the State and individuals”). The term “environmental constitutionalism” has been used extensively across literature and is a topic of academic discussion. See generally Hao Shen, *Environmental Constitutionalism with Chinese Characteristics*, 34 J. ENV’T L. 353 (2022); ENVIRONMENTAL CONSTITUTIONALISM/LE CONSTITUTIONNALISME ENVIRONMENTAL (Jochen Sohnle ed., 2019); James R. May, *Subnational Environmental Constitutionalism and Reform in New York State*, 38 PACE L. REV. 121 (2017); Lael K. Weis, *Environmental Constitutionalism: Aspiration or Transformation?*, 16 INT. J. CONST. L. 836 (2018); Louis J. Kotzé & Paola Villavicencio Calzadilla, *Somewhere between Rhetoric and Reality: Environmental Constitutionalism and the Rights of Nature in Ecuador*, 6 TRANSNAT’L ENV’T L. 401 (2017); Roderic O’Gorman, *Environmental Constitutionalism: A Comparative Study*, 6 TRANSNAT’L ENV’T L. 435 (2017); LOUIS J. KOTZÉ, GLOBAL ENVIRONMENTAL CONSTITUTIONALISM IN THE ANTHROPOCENE (2016) [hereinafter KOTZÉ, ANTHROPOCENE]; Erin Daly & James R. May, *Robinson Township v. Pennsylvania: A Model for Environmental Constitutionalism*, 21 WIDENER L. REV. 151 (2015); Elizabeth Fisher, *Towards Environmental Constitutionalism: A Different Vision of the Resource Management Act 1991*, RES. MGMT. THEORY & PRAC. 63 (2015); Blake Hudson, *Structural Environmental Constitutionalism*, 21 WIDENER L. REV. 201 (2015); Louis J. Kotzé, *The Conceptual Contours of Global Environmental Constitutionalism*, 21 WIDENER L. REV. 187 (2015) [hereinafter Kotzé, *Conceptual Contours*]; JAMES R. MAY & ERIN DALY, GLOBAL ENVIRONMENTAL CONSTITUTIONALISM (2015) [hereinafter MAY & DALY, GLOBAL ENVIRONMENTAL]; Sheila Jasanoff, *A World of Experts: Science and Global Environmental Constitutionalism*, 40 B.C. ENV’T AFFS. L. REV. 439 (2013); Louis Kotzé, *Arguing Global Environmental Constitutionalism*, 1 TRANSNAT’L ENV’T L. 199 (2012) [hereinafter Kotzé, *Arguing Global*]; DOUGLAS KYSAR, REGULATING FROM NOWHERE: ENVIRONMENTAL LAW AND THE SEARCH FOR OBJECTIVITY 229–54 (2010) [hereinafter KYSAR, REGULATING FROM NOWHERE]. For related terms, including “ecological,” “green,” and “climate” constitutionalism, see, for example, LYNDIA COLLINS, THE ECOLOGICAL CONSTITUTION: REFRAMING ENVIRONMENTAL LAW (2021); Valentina Durán Medina, *¿Hacia una constitución ecológica?*, 15 REVISTA DE DERECHO AMBIENTAL 1 (2021); Kristian Skagen Ekeli, *Green Constitutionalism: The Constitutional Protection of Future Generations*, 20 RATIO JURIS 378 (2007); John Barry, *Towards a Green Republicanism: Constitutionalism, Political Economy, and the Green State*, 17 THE GOOD SOC’Y, no. 2, 2008, at 1; Navraj Singh Ghaleigh, Joana Setzer & Asanga Welikala, *The Complexities of Comparative Climate Constitutionalism*, 34 J. ENV’T L. 517 (2022); RESEARCH HANDBOOK ON GLOBAL CLIMATE CONSTITUTIONALISM (Jordi Jaria-Manzano & Susana Borrás eds., 2019); Aileen McHarg, *Climate Change Constitutionalism? Lessons from the United Kingdom*, 2 CLIMATE L. 469 (2011).

¹² Within the database of Constitute, which collects the world’s constitutions, the search term “environment” restricted to constitutions “in force” reveals that the constitutions of 142 UN member states, as well as the non-UN member states of Kosovo and Palestine, make reference to environmental matters (New Zealand and Bosnia & Herzegovina excluded as the references to “environment” refer only to matters not related to the *natural* environment). See CONSTITUTE, <https://perma.cc/7R4L-K26S> (last visited Oct. 17, 2023) (search using the terms and criteria described); see also *Member States*, U.N. <https://perma.cc/2GSD-SNYC> (last visited Dec. 15, 2023) (listing UN Member States which does not include Kosovo and Palestine).

site of contestation in constitutional design, amendment, and interpretation.¹³ Explicit environmental *rights*—often phrased as the right to live in a “healthy” environment—are widespread.¹⁴ In addition to rights, courts and governments face a range of constitutional environmental questions, including those related to federalism,¹⁵ separation of powers,¹⁶ and representation.¹⁷

The desire for action drives the constitutionalization of the environment. If the environment is a matter of supreme importance, should the supreme law not reflect as much? But beyond this general commitment to the *importance* of the environment—and the entrenchment of at least some environmental decisions beyond the reach of ordinary majorities¹⁸—the mere act of constitutionalization tells us little about how states should govern, protect, and imagine the environment. Like other forms of “constitutionalism,” “*environmental constitutionalism*” is a conceptual frame capable of many different meanings, institutional forms, and justifications. This Article draws out three different paradigms: liberal-conservative, technocratic, and

¹³ See, e.g., Alexander Proelss, “*Environmental Constitutional Law*” in *Germany: Legal Nature, Scope and Content of the Principle of Environmental Protection*, in ENVIRONMENTAL CONSTITUTIONALISM: WHAT IMPACT ON LEGAL SYSTEMS? 94–96 (Jochen Sohnle ed., 2019) (discussing the amendment of the German Constitution to include what is now Article 20A of the Basic Law); Alexandra Huneeus, *Win or Lose, Chile’s Draft Constitution Heralds a New Era of Climate Constitutionalism*, VERFASSUNGSBLOG (Aug. 31, 2022), <https://perma.cc/9SBE-27FJ> (discussing the contentious inclusion of environmental provisions in Chile’s 2022 rejected draft constitution).

¹⁴ See David R. Boyd (Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment), *Right to a Healthy Environment: Good Practices*, ¶ 10, U.N. Doc. A/HRC/43/53 (Dec. 30, 2019) [hereinafter *Special Rapporteur Good Practices Report*] (suggesting the national constitutions of 110 United Nations member states recognize the right).

¹⁵ See, e.g., References re Greenhouse Gas Pollution Pricing Act, [2021] S.C.C. 11, para. 1, 3, 221 (Can.) (dismissing a challenge to Canada’s federal greenhouse gas pricing mechanism on the basis that such power was reserved to Canada’s provinces); Hudson, *supra* note 11, at 202 (noting that nations that divide regulatory authority between national and sub-national governments face constraints on regulatory environmental efforts at each level of government).

¹⁶ See, e.g., *Juliana v. United States*, 947 F.3d 1159, 1165, 1169, 1171, 1175 (9th Cir. 2020) (finding that plaintiffs lacked standing to bring a constitutional challenge against the federal U.S. government’s inaction on climate change).

¹⁷ See, e.g., *About the Citizens’ Assembly on Biodiversity Loss*, AN TIONÓL SAORÁNACH /THE CITIZENS’ ASSEMBLY, <https://perma.cc/QX98-HY5L> (last visited Oct. 16, 2023) (describing how Ireland recruited a representative sample of the Irish public to provide input on biodiversity loss); Shannon Osaka, *Can “the People” Solve Climate Change? France Decided to Find Out*, GRIST (Nov. 15, 2021), <https://perma.cc/D7NK-DXGF> (discussing examples of deliberative models of representation charged with making decisions on national environmental matters).

¹⁸ See Mark Tushnet & Bojan Bugarić, *Populism and Constitutionalism: An Essay on Definitions and Their Implications*, 42 CARDOZO L. REV. 2345, 2353 (2021) (arguing for a “barebones” definition of constitutionalism which includes a bifurcated policy sphere in which “certain substantive decisions—identified in the constitution—cannot be made pursuant to the rules governing the policy domain”); MARTIN LOUGHLIN, AGAINST CONSTITUTIONALISM 2 (2022).

transformational. These differences matter. Appeals to “constitutionalism” carry normative weight.¹⁹ Different versions compete with one another, vying to emerge as the dominant paradigm. What framers and judges understand when they are “doing” environmental constitutionalism influences how governments draft, and courts interpret, constitutional provisions. As long as the concept remains vague, environmental constitutionalism is potentially dangerous, calling for urgent and high-level action on environmental issues without revealing what sort of action is required. Before answering its call, we should demystify its meaning.

Environmental constitutionalism remains potentially dangerous for another reason as well. Environmental constitutionalism almost universally involves a turn to rights and courts as the vanguard of environmental protection, despite taking many forms. Such a turn comes at the expense of democratic participation. Yet it is precisely this high energy democracy that is necessary to truly transform the institutions which have brought us to the point of environmental crisis. Demystifying the plural meanings of environmental constitutionalism reveals what is missing—a program of constitutional environmental *democracy*. This Article thus reveals the stakes of competing claims to “environmental constitutionalism,” while simultaneously exposing environmental constitutionalism’s limits as a transformative program of legal and environmental change. In the Anthropocene, constitutions matter: but they matter beyond the world of rights and courts.

In Part II, I analyze the extraordinary global spread of constitutional environmental law and set out a framework for understanding its possible meanings. In Part III, I demystify environmental constitutionalism. Environmental constitutionalism is not a singular movement or program,²⁰ but instead appears in at least three different strands, each with significant consequences for constitutional theory, design, and interpretation. Each strand answers the same fundamental question: Why environmental constitutionalism?

A first strand, the liberal-conservative strand, provides the following answer: because environmental matters fall within existing conceptions and traditions of mainstream constitutional theory. In other words, environmental constitutionalism can be accommodated within the existing conceptual toolbox. Because liberal ideas have historically

¹⁹ See, for example, the influential account of Giovanni Sartori, Giovanni Sartori, *Constitutionalism: A Preliminary Discussion*, 56 AM. POL. SCI. REV. 853, 855 (1962) (describing the conduct-guiding power of constitutions as a “good word”).

²⁰ *Contra* Amber Polk, *The Unfulfilled Promise of Environmental Constitutionalism in the United States*, 74 HASTINGS L.J. 123, 127, 174 (2023) (referring to an “environmental constitutionalism *movement*,” while conceding that “the contemporary environmental constitutionalism movement is not particularly clear in what it thinks an environmental right should accomplish for the people” (emphasis added)).

dominated constitutional theory (especially in the Global North),²¹ this strand stresses the *coherence* of environmental rights with existing bases for constitutional rights generally, as well as existing theoretical frameworks, such as political process theory. These devices have been perhaps surprisingly productive in generating a broad range of normative constitutional arguments, many of which national courts have adopted.

The second paradigm is technocratic, providing the following answer: because environmental governance requires a high degree of expertise, which is beyond the capacity of electoral majorities. The technocratic strand values constitutions—as generally supreme and entrenched bodies of law—as tools that transcend ordinary politics, and instead locate decision-making power in expert institutions. Drawing on a discourse of “administrative rationalism,” the strand constructs the environment as a stock of resources that can be managed without reference to political value judgments.²² The logic of the technocratic strand is visible in court decisions which justify judicial intervention on the basis of the court’s own relative institutional capacity or where courts act to strengthen the institutional capacity of the bureaucracy.

A third paradigm claims to be transformative. In response to the question, “Why environmental constitutionalism?” the transformative paradigm provides the answer: because environmental crises require fundamental changes in interrelated social, political, and economic systems, and constitutions can embody the necessary legal and aspirational framework for such transformation. The philosophical sources of transformative environmental constitutionalism are eclectic, going beyond liberal political theory and drawing on environmental ethics, political economy, ecological sciences, and Indigenous knowledge systems.

In Part IV, I argue that these different paradigms matter. First, they reveal that environmental constitutionalism—much like constitutionalism more generally—can operate as a conceptual framework for many different projects and discourses. Different conceptions of environmental constitutionalism are sometimes mutually reinforcing, connected together in particular proposals for constitutional design or interpretation. Drafters and judges cobble together available conceptual tools, even if those tools originate in different paradigms. This bricolage of different ideas need not weaken proposals for constitutional environmental governance; indeed, it may sometimes strengthen them.²³

²¹ See Tom Ginsburg et al., *The Coming Demise of Liberal Constitutionalism?*, 85 U. CHI. L. REV. 239, 239 (2018). (“In the wake of World War II, liberal constitutionalism emerged as a default design choice for political systems across Europe and North America.”).

²² See JOHN DRYZEK, *THE POLITICS OF THE EARTH: ENVIRONMENTAL DISCOURSES* 20, 75–100 (4th ed. 2022).

²³ See Mark Tushnet, *The Bricoleur at the Center*, 60 U. CHI. L. REV. 1071, 1071 (1993) (describing the *bricoleur* as “mak[ing] do with ‘whatever is at hand,’ that is to say with a set of tools and materials which is . . . heterogenous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all

But at times, the three strands conflict with one other or produce different consequences in design and interpretation. As the concept of “environmental constitutionalism” gains normative, conduct-guiding salience, paying attention to these differences will be crucial. Drafters, judges, and scholars should be alert to the different options and conclusions provided within each discourse and consider the extent to which they may be appropriately applied in different circumstances.

The demystification of existing environmental constitutionalism also opens the way for reconstruction of the concept, revealing that existing notions of environmental constitutionalism retain a fundamental distrust in popular decision-making. In this sense, all three strands remain locked into many of the assumptions of existing constitutional practice, including a preoccupation with rights and courts. In Part V, I sketch out the possibility of a new mode of environmental constitutionalism: constitutional environmental democracy. This conception shifts attention away from courts and instead emphasizes the role of participatory institutions such as legislatures and citizens’ assemblies. Constitutional environmental democracy thus draws on a longstanding tradition of popular and political constitutionalism.²⁴ I offer this sketch as something of an ideal theory, intended for societies where scope conditions allow for meaningful deliberation and rough conditions of equality. Such a society may simply not exist. Nevertheless, there is value in imagining the possibilities for constitutional law. While a more democratic form of environmental constitutional governance may not yet be operationalizable, its imagining may open up new ways of thinking and opportunities for experimentation. This Article starts to embark on such a project, though a fully worked through program demands an extensive future research agenda. The urgency of the moment requires nothing less.

II. DEFINING ENVIRONMENTAL CONSTITUTIONALISM

Environmental constitutional provisions have proliferated dramatically in national constitutions over the last fifty years. In this section, I trace the spread of these provisions, situating them within broader currents of comparative constitutional law. Scholars have labeled these developments “environmental constitutionalism.”²⁵ There is, however, no clear understanding of what this label means. I argue that we can apply the term in both a descriptive and a normative sense. In the normative sense, environmental constitutionalism typically incorporates an argument that at least some matters of environmental governance

the occasions there have been to renew or enrich the stock” (quoting CLAUDE LÉVI-STRAUSS, *THE SAVAGE MIND* 17 (1966)).

²⁴ See, e.g., MARK TUSHNET, *TAKING THE CONSTITUTION AWAY FROM THE COURTS*, at ix–x (1999); LARRY D. KRAMER, *THE PEOPLE THEMSELVES: POPULAR CONSTITUTIONALISM AND JUDICIAL REVIEW* 8 (2004).

²⁵ See, e.g., works cited *supra* note 11 (collecting literature discussing environmental constitutionalism and related terms like ecological constitutionalism).

should be placed beyond the reach of ordinary majorities. But as I argue in Part III, this simple normative claim masks a wide range of different ideas and discourses of justification, with important implications for constitutionalism writ large. Environmental constitutionalism is a concept in need of demystification.

A. *The Rise of Constitutional Environmental Law*

Over the past fifty years, the environment has taken on an increasingly prominent role in constitutional design and adjudication. The growing number of national constitutions containing environmental provisions clearly reveals this. In 1972, only eight national constitutions made reference to environmental concerns.²⁶ By 1992, this number had increased to seventy-seven.²⁷ Today, the constitutions of at least 142 U.N. member states expressly address environmental issues,²⁸ including 110 constitutions which either explicitly or implicitly recognize a *right* to an environment of a particular quality, such as a “healthy”²⁹ or “ecologically-balanced”³⁰ environment.³¹

While some environmental provisions have a provenance of up to fifty years, many were marginal or dormant for years or decades after enactment.³² Indeed, many national environmental provisions remain unadjudicated³³ or have been found largely non-justiciable.³⁴ More

²⁶ See DAVID R. BOYD, *THE ENVIRONMENTAL RIGHTS REVOLUTION* 50 tbl.3.1 (2012) [hereinafter BOYD, *REVOLUTION*] (recording that the constitutions of Italy (1948), Madagascar (1959), Kuwait (1962), Malta (1964), Guatemala (1965), Switzerland (1971), the United Arab Emirates (1971), and Panama (1972) were the first constitutions to make reference to environmental matters).

²⁷ *Id.*

²⁸ *Special Rapporteur Good Practices Report*, *supra* note 14, at Annex II.

²⁹ See, e.g., CONSTITUTION DE LA RÉPUBLIQUE DU TCHAD May 4, 2018, art. 51 (Chad), translated in *Chad’s Constitution of 2018*, CONSTITUTE (2022), <https://perma.cc/PMX7-HNDE> (“Every Person has the right to a healthy environment.”).

³⁰ See, e.g., CONSTITUCIÓN POLITICA DE 1949 Nov. 7, 1949, art. 50 (Costa Rica), translated in *Costa Rica 1949 (rev. 2020)*, CONSTITUTE, (Maria del Carmen Gress trans., William S. Hein & Co. ed., 2016), <https://perma.cc/V54N-6Q5D>.

³¹ See, e.g., *Special Rapporteur Good Practices Report*, *supra* note 14, at Annex II; David R. Boyd, *The Implicit Constitutional Right to Live in a Healthy Environment*, 20 REV. EUR. CMTY. & INT’L ENV’T L. 171, 171 (2011) (discussing “implicit” rights to a healthy environment); MAY & DALY, *supra* note 11, at 70–72; Joshua C. Gellers, *Explaining the Emergence of Constitutional Environmental Rights: a Global Quantitative Analysis*, 6 J. HUM. RTS. & ENV’T 75, 76 figs.1 & 2 (2015) (including graphic depictions of this proliferation).

³² See MAY & DALY, *supra* note 11, at 89 (“[W]hile some courts have avoided engaging in environmental constitutionalism, there is noticeable and steady progress toward recognition of environmental rights.”).

³³ See U.N. ENV’T PROGRAMME, *ENVIRONMENTAL RULE OF LAW: SECOND GLOBAL REPORT* 94 (2023), <https://perma.cc/34DR-28KU> (recording that the right to a healthy environment has been adjudicated by courts in only 76 of the 110 countries whose constitutions recognize a right to a healthy environment).

³⁴ See, e.g., *Natur og Ungdom v. Staten v/Olje- og energidepartementet* [Nature and Youth Norway v. State represented by the Ministry of Petroleum and Energy] (Norwegian Arctic Oil Case), *Noregs Høgsterett* [Supreme Court], No. 20-051052SIV-HRET, HR-2020-

recently, however, environmental matters have become more central to constitutional practice and theory. Rather than being brief or minor references, many recently-drafted constitutions have centered environmental matters, devoting entire chapters to both substantive obligations (such as environmental rights), as well as the scope and division of the state's power to regulate the natural environment.³⁵ In Chile's recent constitutional convention, for example, environmental matters were central: the convention included a "Commission on the Environment, Rights of Nature, Natural Common Goods and Economic Model" tasked with making recommendations to the plenary.³⁶ Environmental matters have also become significant sites of constitutional litigation, reaching the apex courts of Canada,³⁷ Colombia,³⁸ Ecuador,³⁹ Nepal,⁴⁰ South Africa,⁴¹ Norway,⁴² Costa Rica,⁴³ Brazil,⁴⁴ Papua New Guinea,⁴⁵ and Hungary,⁴⁶ among others.⁴⁷ Even where environmental rights are not contained in a constitutional text,

2079-P, HR-2020-2472-P, ¶¶ 13, 241–42 (2020) (Nor.) (unoff. Eng. tran.), <https://perma.cc/6UN7-ULYG> (the Supreme Court of Norway finding that the government was entitled to a wide margin of deference).

³⁵ This is particularly true in several constitutions in Latin America. *See, e.g.*, CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] 1988, rev. 2017, ch. VI, art. 225 (Braz.); CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] Feb. 7, 2009, pt. IV, tit. II, chap. 1, (Bol.), *translated in Bolivia (Plurinational State of)'s Constitution of 2009*, CONSTITUTE (Max Planck Inst. trans., 2022), <https://perma.cc/4UCZ-X884>. For examples outside of Latin America, see 'DRUK-GI CHA-THRIMS-CHEN-MO [CONSTITUTION] Jul. 18, 2008, art. 5 (Bhutan); 1958 CONST. CHARTE DE L'ENVIRONNEMENT, arts. 1–10 (Fr.).

³⁶ *See* Law No. 43.076, Convención Constitucional, art. 66, Octubre 13, 2021, DIARIO OFICIAL [D.O.] (Chile), (Aprueba Reglamento General de la Convención Constitucional).

³⁷ *See* References re Greenhouse Gas Pollution Pricing Act, [2021] S.C.C. 11 (Can.).

³⁸ *See, e.g.*, Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (Colom.), *translated in DIGNITY RIGHTS PROJECT, DELAWARE LAW SCHOOL* (2019), <https://perma.cc/6BN8-6S3D>.

³⁹ *See, e.g.*, Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2021, Sentencia Caso No. 1149-19-JP/20 (Ecuador).

⁴⁰ *See, e.g.*, Padam Bahadur Shrestha v. Prime Minister, (2019) 3 NKP 61 (Nepal).

⁴¹ *See, e.g.*, *Fuel Retailers Ass'n of S. Afr. v. Dir. Gen.: Env't Mgmt., Dep't of Agriculture, Conservation & Env't, Mpumalanga Province* 2007 (10) BCLR 1059 (CC) (S. Afr.).

⁴² *See, e.g.*, *Natur og Ungdom v. Staten v/Olje- og energidepartementet* [Nature and Youth Norway v. The State represented by the Ministry of Petroleum and Energy], *Noregs Høgsterett* [Supreme Court] Dec. 22, 2020, Case No. 20-051052SIV-HRET, HR-2020-2079-P, HR-2020-2472-P (unofficial English translation), ¶¶ 3, 5 (2020) (Norway).

⁴³ *See, e.g.*, Sala Constitucional de la Corte Suprema de Justicia [Constitutional Chamber of the Supreme Court] Jun. 13, 2014, No. 13-015334-0007-CO, Resolution No. 08486-2014, ¶ 1 (Costa Rica), <https://perma.cc/9QU3-4TWA> (English translation).

⁴⁴ *See, e.g.*, S.T.F., *Arguição de Descumprimento de Preceito Fundamental 708*, Relator: Luís Roberto Barroso, 4.7.2022 (Braz.).

⁴⁵ *See, e.g.*, *Medaing v. Ramu Nico Management (MCC) Ltd.*, National Court of Justice, Jul. 26, 2011, PGNC 95, ¶ 7–8 (Papua N.G.).

⁴⁶ *See, e.g.*, *Alkotmánybíróság (AB)* [Constitutional Court] 28/1994 V.20 (Hung.) (Hungarian Forests Case), *translated in CONSTITUTIONAL COURT OF HUNGARY*, <https://perma.cc/NW35-2PSF> (last visited Jan. 9, 2023).

⁴⁷ *See* MAY & DALY, *supra* note 11, at 379–388 (bibliography of cases).

several courts have recognized them through the interpretation of related constitutional provisions.⁴⁸

This proliferation of environmental provisions sits at the intersection of three interrelated developments.⁴⁹ The first is the rise of constitutionalism more generally. The mid-late twentieth century witnessed an extraordinary global convergence on a particular template of constitution-making, involving a codified and entrenched constitutional text (generally including supermajority amendment requirements), checks on the scope of government power (such as federalism, separation of powers, and judicial review), and a basic commitment to representative democracy tempered by a bill of rights enforceable against both legislatures and executives.⁵⁰ This template—or “script of modernity”⁵¹—was broadly structured around liberal principles of democracy and individual liberty, produced in part by extensive borrowing between different jurisdictions.⁵² Relatedly, the spread of environmental constitutional provisions coincided with the increasing popularity of rights doctrine and discourse at both the constitutional and international levels.⁵³ In international law, the nexus between human rights and the environment was formally recognized for the first time in the (non-binding) Stockholm Declaration of 1972⁵⁴ and was recently affirmed in unopposed resolutions of both the United Nations Human Rights Council and General Assembly recognizing the existence of a right

⁴⁸ *Id.* at 118–22 (defining these rights as “derivative environmental rights”). For examples, see *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1985) AIR 652 SC (India), <https://perma.cc/HHK6-DQTX>; *Minors Oposa v. Factoran*, G.R. No. 101083, 296 Phil. 694 (Jul. 30, 1993) (Phil.), <https://perma.cc/YX8P-ZNHG>; *Zia v. WAPDA*, (1994) PLD (SC) 693 (Pak.), translated in *Ms. Shehla Zia v. WAPDA*, ESCR-NET, <https://perma.cc/MZ6H-8L4B> (select PDF listed under “Ruling:” “zia_v.wapda_transcript.pdf”). For unsuccessful arguments to this effect, see *Friends of the Ir. Env’t v. Ireland* [2020] IESC 49, ¶ 1.2, 9.5 (Ir.); *Medaing*. PGNC 95, ¶ 122; *Juliana*, 947 F.3d 1159, 1179–80 (9th Cir. 2020).

⁴⁹ BOYD, *REVOLUTION*, *supra* note 26, at 1–12 (2012) (noting the three developments: global shifts towards constitutional democracies, the “rights revolution,” and the recent “emergence of a global environmental crisis”).

⁵⁰ See Tom Ginsburg, *The Global Spread of Constitutional Review*, in *THE OXFORD HANDBOOK OF LAW AND POLITICS* 82, 82–89 (Keith E. Whittington et al. eds., 2008); Ghaleigh et al., *supra* note 11, at 521.

⁵¹ VICKI C. JACKSON, *CONSTITUTIONAL ENGAGEMENT IN A TRANSNATIONAL ERA 2* (2010) (quoting TOM GINSBURG, *JUDICIAL REVIEW IN NEW DEMOCRACIES: CONSTITUTIONAL COURTS IN ASIAN CASES* 26 (2003); quoting John W. Meyer et al., *World Society and the Nation State*, 103 AM. J. SOCIO. 144, 145, 149 (1997)). On the convergence of constitutional concerns on a standard set of roughly similar issues, see generally David S. Law, *Generic Constitutional Law*, 89 MINN. L. REV. 652 (2004).

⁵² See generally JACKSON, *supra* note 51 (comparing judicial powers in various nations); Günter Frankenberg, *Constitutional Transfer: The IKEA Theory Revisited*, 8 INT’L J. CONST. L. 563 (2010) (describing how constitutions borrow concepts from other constitutions).

⁵³ See Ginsburg, *supra* note 50, at 87.

⁵⁴ U.N. Conference on the Human Environment, *Stockholm Declaration on the Human Environment*, chap. 1, ¶ 1, UN Doc. A/CONF. 48/14 (June 16, 1972).

to a healthy environment.⁵⁵ The rise of environmental constitutional provisions also tracks with increasing environmental awareness promoted by global social movements and high-profile environmental disasters in the 1970s.⁵⁶ The mid-late twentieth century witnessed the rise of environmental law generally, as well as the consolidation of global environmental civil society; the World Wildlife Fund was founded in 1961, and Greenpeace in 1971, for example.⁵⁷ These movements rallied around growing scientific awareness of chemical pollution⁵⁸ and resource limits,⁵⁹ and were influential in the creation of early domestic statutes⁶⁰ and international agreements.⁶¹

B. Forms and Adjudication of Environmental Constitutionalism

As with many other constitutional norms and practices,⁶² transnational trends have clearly influenced environmental constitutionalism. The standard template of constitution-drafting now includes environmental provisions.⁶³ Many provisions, particularly those which adopt the formula of “a human right to a healthy environment,” are strikingly similar, suggesting a high degree of migration between jurisdictions⁶⁴ and espousal of international law.⁶⁵ Empirical studies

⁵⁵ Human Rights Council Res. 48/13, U.N. Doc. A/HRC/48/13, ¶ 1 (Oct. 18, 2021); G.A. Res. 76/L.75, ¶ 1 (July 26, 2022).

⁵⁶ BOYD, *REVOLUTION*, *supra* note 26, at 9–12 (2012).

⁵⁷ *History*, WORLD WILDLIFE FUND, <https://perma.cc/QT3Z-DJMS> (last visited Oct. 16, 2023); *History and Successes: our Story*, GREENPEACE, <https://perma.cc/Y25J-LED6> (last visited Oct. 16, 2023).

⁵⁸ *See, e.g.*, RACHEL CARSON, *SILENT SPRING* (1962) (describing the universal contamination from chemicals).

⁵⁹ *See, e.g.*, DONELLA H. MEADOWS ET AL., *THE LIMITS TO GROWTH: A REPORT FOR THE CLUB OF ROME’S PROJECT ON THE PREDICAMENTS OF MANKIND* (1972).

⁶⁰ For examples in the United States, see, for example, National Environmental Policy Act of 1969, 42 U.S.C. § 4331 (2018); Clean Air Act Amendments of 1970, Pub L. 91-604, 84 Stat. 1676; Federal Water Pollution Control Amendments of 1972 (Clean Water Act), 33 U.S.C. §§ 1251–1388 (2018).

⁶¹ *See e.g.*, *Stockholm Declaration on the Human Environment*, *supra* note 54; United Nations Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Annex I (Aug. 12, 1992).

⁶² On the power of “isomorphic processes” to drive convergence across different institutions, see generally Paul J. DiMaggio & Walter W. Powell, *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*, 48 AM. SOCIO. REV. 147 (1983).

⁶³ *See* Christopher Jeffords, *Constitutional Environmental Human Rights: A Descriptive Analysis of 142 National Constitutions* 29 (Hum. Rts. Inst. U. Conn. Working Paper No. 16, 2011). Although empirical analysis suggests that “no two environmental rights provisions are worded the same across countries,” all provisions identified by Jeffords fall into one of seven categories. *Id.* at 29.

⁶⁴ For further discussion of the processes of “migration” or “borrowing” of constitutional ideas between different jurisdictions, see generally JACKSON, *supra* note 51.

⁶⁵ *See, e.g.*, *Stockholm Declaration on the Human Environment*, *supra* note 54, princ. 1 (“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being.”).

suggest that environmental rights provisions are more likely to surface where domestic constraints permit constitutional drafters to select from a wide global menu of design options and where transnational civil society has a strong presence in the country.⁶⁶

The relatively high degree of homogeneity and borrowing between jurisdictions allows for global-scale comparisons and taxonomies. Such taxonomizing may refer to both the legal *form*, as well as the underlying ideology, imaginary, or purpose of the provision. In terms of their form, environmental constitutional provisions can be grouped into four main categories. The first category involves *rights*. By one recent count, at least ninety-two constitutions expressly contain provisions protecting a right to an environment of a certain quality.⁶⁷ Rights provisions may encompass environmental *procedural* rights, such as the rights to environmental information, participation in decision-making, or access to justice,⁶⁸ as well as *substantive* rights. Even when not expressly codified, in seventeen further jurisdictions, courts have found environmental rights implied in other constitutionally-protected rights, such as the rights to life or health.⁶⁹ Relatedly, constitutional environmental provisions may be drafted as constraints on other rights, particularly property rights. Article 53, section 5(f) of the Constitution of Papua New Guinea, for example, carves out an exception to limitations on takings where such taking might be “reasonably necessary for the preservation of the environment.”⁷⁰

Justiciable environmental rights have received the lion’s share of attention in scholarly literature.⁷¹ However, a review of constitutions

⁶⁶ See Gellers, *supra* note 31, at 93–94 (“[T]he analysis suggests that the greater the presence of international civil society in a country, the more likely it is to adopt a constitutional environmental right [T]he global emergence of constitutional environmental rights is influenced by conditions internal to the state.”). See also generally JOSHUA C. GELLERS, THE GLOBAL EMERGENCE OF CONSTITUTIONAL ENVIRONMENTAL RIGHTS (2017) (arguing that the emergence of constitutional environmental rights resulted from “international norms that *constrain* constitution drafting processes”).

⁶⁷ See *Special Rapporteur Good Practices Report*, *supra* note 14, annex II (listing countries recognizing a legal right to a healthy environment).

⁶⁸ See, e.g., KUSHTETUTA E REPUBLIKËS SË SHQPËRISË [CONSTITUTION] Nov. 28, 1998, art. 56 (Alb.), translated in *Albania’s Constitution of 1998 with Amendments Through 2016*, art. 56, CONSTITUTE (2022), <https://perma.cc/3SXD-HP4V> (“Everyone has the right to be informed about the status of the environment and its protection.”).

⁶⁹ *Special Rapporteur Good Practices Report*, *supra* note 14, at annex II. While Boyd observes that 18 jurisdictions have followed this path, *id.*, the Irish Supreme Court has since overruled a lower court decision interpreting the national constitution to imply an environmental right. See Friends of the Irish Environment, [2020] IESC 49, [2020] 2 ILRM 233).

⁷⁰ CONSTITUTION OF THE INDEPENDENT STATE OF PAPUA NEW GUINEA, Sept. 16, 1975, art. 53, § 5(f).

⁷¹ See discussion *infra*, notes 93–97 and accompanying text (discussing courts’ role in environmental constitutionalism); see also, e.g., Rachel Pepper & Harry Hobbs, *The Environment is all Rights: Human Rights, Constitutional Rights, and Environmental Rights*, 44 MELB. U. L. REV. 634, 649 (2020) (“[S]ome states incorporate explicit rights relating to environmental protection that may be justiciable or not.”); Elizabeth Fisher, *Is the Precautionary*

across the globe reveals at least three other types of constitutional environmental provisions.

A second category of constitutional environmental provisions are *structural* in nature.⁷² Several constitutions establish or clarify the powers of national⁷³ or subnational⁷⁴ governments to legislate for environmental protection. The scope of such power can be highly consequential. Constitutions affect environmental governance not only through judicial adjudication of substantive rights, but also by allocating and limiting the regulatory powers of state institutions and laying out the rules and institutional frameworks for setting environmental policy and mediating conflicts.⁷⁵ Uncertainty over these structural matters can limit the ability of governments to address environmental challenges. In Canada, for example, the federal government was only able to implement a national greenhouse gas pricing scheme after a resolution by the

Principle Justiciable?, 13 J. ENV'T L. 315, 316 (2001) (“[I]t seems that the precautionary principle is not justiciable.”).

⁷² Hudson, *supra* note 11, at 202; *see also* Kotzé, *Conceptual Contours*, *supra* note 11, at 193–95 (discussing “thin” environmental constitutionalism as, among other things, the establishment of environmental governance and procedures).

⁷³ *See, e.g.*, BUNDES-VERFASSUNGSGESETZ [B-VG] [CONSTITUTION] BGBL No. 1/1930, as last amended by Bundesverfassungsgesetz [BVG] BGBL I Nr. 222/2022, art. 10 § 12 (Austria) translated in *Austria's Constitution of 1920, Reinstated in 1945, With Amendments Through 2013*, art. 10, CONSTITUTE (2022); CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] Feb. 7, 2009, art. 298 § I(20), 299 § II(1) (Bol.), translated in *Bolivia (Plurinational State of)'s Constitution of 2009*, CONSTITUTE (Max Planck Inst. trans., 2022), <https://perma.cc/K28M-Y8PU>; CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] 1988, rev. 2017, art. 23 § VI, art. 24 § VI (Braz.); CONSTITUTION DE LA REPUBLIQUE GABONAISE [CONSTITUTION] Jan. 12, 2011, art. 47 (Gabon), translated in *Gabon's Constitution of 1991 with Amendments through 2011*, CONSTITUTE (2022), <https://perma.cc/S6BC-PP4M> (last visited Jan. 7, 2023); Constitución Política de los Estados Unidos Mexicanos [CP] [CONSTITUTION], art. 73 § XXIX-G, Diario Oficial de la Federación [DOF] 05-02-1917, últimas reformas DOF 06-06-2023 (Mex.), translated in *Mexico's constitution of 1917 with Amendments through 2015*, CONSTITUTE (M. Fernanda Gomez Aban trans. 2023) <https://perma.cc/5U2X-W2LK>; S. AFR. CONST., 1996 art. 146 § 2.c.vi; CONSTITUIÇÃO DE TIMOR-LESTE [CONSTITUTION] May 20, 2002, art. 96 § 1 (Timor-Leste), translated in *Timor-Leste's constitution of 2002*, CONSTITUTE (Gisbert H. Flanz trans., 2022) <https://perma.cc/WWC4-8VBY>.

⁷⁴ *See, e.g.*, CONSTITUTION DE L'UNION DES COMORES [CONSTITUTION] Jul. 31, 2018, art. 102, (Comoros) translated in *Comoros's Constitution of 2018*, CONSTITUTE (2022) <https://perma.cc/C827-XF7K>; CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 300 § 2, translated in *Colombia's Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Max Planck Inst. & Comp. Const. Proj. trans., 2022) <https://perma.cc/R73C-4KV6>; ŚRĪ LAMKĀ ĀNDUKRAMA VYAVASTHĀVA [CONSTITUTION] Sept. 7, 1978, art. 154G, Ninth Sched. (Sri Lanka); CONSTITUTION DE LA RÉPUBLIQUE DU CONGO [CONSTITUTION] Nov. 6, 2015, art. 210 (Congo), translated in *Congo (Republic of the) 2015*, CONSTITUTE (Maria del Carmen Gress trans., William S. Hein & Co. ed., 2016) <https://perma.cc/T9HH-UR5Z>; India Const. art. 243W, sched. 12; CONSTITUCIÓN DE LA REPÚBLICA DEL PARAGUAY [CONSTITUTION] Jun. 20, 1992, art. 168 (Para.), translated in *Paraguay's Constitution of 1992 with Amendments through 2011*, CONSTITUTE (2022) <https://perma.cc/QL4D-NLSU>; S. AFR. CONST., 1996 art. 152 § 1.

⁷⁵ *See* Fisher, *supra* note 11 (discussing the conception of environmental constitutionalism).

country's Supreme Court.⁷⁶ In some cases, constitutions establish or clarify the powers of executive institutions or other accountability institutions which sit outside the traditional three branches of government.⁷⁷ While these structural issues have received less attention in the comparative literature than have constitutional environmental rights,⁷⁸ they have significant consequences.

The third form of constitutional environmental provisions are *substantive principles*. The constitutions of Bolivia and Ecuador include the concept of “buen vivir/vivir bien,” or “living well”—a principle which draws on Indigenous Andean philosophies—as a substantive obligation,⁷⁹ while the Constitution of China makes reference to the principle of “ecological civilization.”⁸⁰ States have also codified, or recognized as possessing constitutional status, principles derived from international environmental law, such as the precautionary principle.⁸¹ These principles can act as guiding values for administrative agencies and may give rise to binding obligations. They may also play a role in judicial interpretation. In some cases, courts have derived governmental constitutional duties from pre-existing constitutional doctrines and principles. The Supreme Court of Sri Lanka, for example, has drawn on the longstanding common law public trust doctrine to fashion constitutional environmental protection obligations.⁸²

⁷⁶ References re Greenhouse Gas Pollution Pricing Act, [2021] S.C.C. 11, at para. 4–5 (Can.).

⁷⁷ See, e.g., CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 300 § 2, translated in *Colombia's Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/A7LY-Z5WE> (setting out the Controller-General's obligation to present an annual report to Congress on the state of the environment); *id.* at art. 277 § 4 (setting out the obligation of the General Prosecutor to “defend the collective interests, especially the environment”); S. AFR. CONST., 1996 art. 184 § 3 (requiring the Human Rights Commission of South Africa to “require relevant organs of the state to provide the Commission with information on the measures they have taken towards the realisation of the rights in the Bill of Rights concerning . . . the environment”).

⁷⁸ See discussion *infra* at notes 93–97 and accompanying text.

⁷⁹ See CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, tit. II, ch. 2, translated in *Ecuador 2008 (rev. 2021)*, CONSTITUTE, <https://perma.cc/SJU8-VXKX> (last visited Oct. 11, 2023); CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] Feb. 7, 2009, art. 8 (Bol.), translated in *Bolivia (Plurinational State of)'s Constitution of 2009*, CONSTITUTE (Max Planck Inst. trans., 2022), <https://perma.cc/EW9E-55Y3>.

⁸⁰ See XIANFA [CONSTITUTION] art. 89 § 6 (2018) (China) translated in *China (Peoples Republic of) 1982 (rev. 2018)*, CONSTITUTE (NPC Observer trans.), <https://perma.cc/663T-MRGB> (last visited Oct. 11, 2023) (“[t]he State Council exercises the following functions and powers . . . [t]o direct and administer economic affairs, urban and rural construction and ecological civilization construction”).

⁸¹ See, e.g., 1958 CONST. CHARTE L'ENVIRONNEMENT, art. 5 (Fr.); Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (Colom.), translated in DIGNITY RIGHTS PROJECT, *supra* note 38.

⁸² See, e.g., *Bulankalama v. Secretary, Ministry of Industrial Development* (2000) 3 Sri L.R. ¶ 243, 253 (Sri Lanka); *Watte Gedera Wijebanda v. Conservator-General of Forests* (2007) 1 Sri L.R. 337, 358 (Sri Lanka).

Finally, many constitutions frame environmental provisions as aspirations or unenforceable legislative (or even individual) duties.⁸³ These provisions are often contained in constitutional preambles⁸⁴ or in sections dealing with directive principles of state policy.⁸⁵ In some cases, such provisions may impose a duty on legislatures to enact environmental legislation.⁸⁶ Unlike substantive principles, these provisions are generally nonjusticiable, although they may nevertheless have important normative force.⁸⁷

We should resist overdrawing the distinctions between the four categories, however. Provisions concerning substantive principles, aspirations, and government duties bear on judicial interpretation, and some courts have used such provisions as a source for the development of justiciable rights.⁸⁸ In other cases, provisions which appear to confer justiciable rights are located in sections of the constitution which render them unenforceable.⁸⁹ The full panoply of constitutional provisions, however, demonstrates that environmental matters have become an increasingly important feature of constitutional practice.

C. What is “Environmental Constitutionalism”?

Propelled by increasing global environmental awareness and the proliferation of templates for constitutional design, constitutional environmental provisions have increased in both number and prominence

⁸³ See e.g., ‘DRUK-GI CHA-THRIMS-CHEN-MO [CONSTITUTION], Jul. 18, 2008, art. 5 § 1 (Bhutan) (discussing how every citizen has a fundamental duty to protect the environment). See generally Bhullar, *supra* note 11, at 413, 418 (discussing how Indian citizens have aspirational, yet highly unenforceable, duties to protect the environment). See also Weis, *supra* note 11, at 846 (describing such provisions as “contrajudicative,” “[t]hat is, they are not designed to be given effect by direct judicial enforcement”).

⁸⁴ See, e.g., CONSTITUTION OF THE REPUBLIC OF TUNISIA, Jan. 26, 2014, Preamble (Tunis.), translated in *Tunisia 2014*, CONSTITUTE (IDEA ed., UNDP trans.), <https://perma.cc/H62K-FSL7> (last visited Oct. 12, 2023).

⁸⁵ See, e.g., CONSTITUTION OF THE INDEPENDENT STATE OF PAPUA NEW GUINEA, Sept. 16, 1975, art. 4; CONSTITUCIÓN ESPAÑOLA [CONSTITUTION] Dec. 29, 1978, art. 45, B.O.E. n. 311 (Spain); India Const. art. 48A (amended by The Constitution (Forty-second Amendment) Act, 1976).

⁸⁶ See, e.g., DAEHANMINKUK HUNBEOB [HUNBEOB] [CONSTITUTION] Oct. 29, 1987, art. 35 § 2 (S. Kor.).

⁸⁷ See Weis, *supra* note 11, at 853–59 (arguing that such provisions suggest an alternative model of constitutionalism based on “constitutionally obligatory legislation,” the enactment of which is constitutionally mandated).

⁸⁸ See, e.g., Rural Litigation and Entitlement Kendra Dehradun & Ors. v. State of U.P., (1985) AIR 652, 1985 3 SCR 169 (India); *Minors Oposa*, G.R., No. 101083, 296 Phil. 694 (July 30, 1993); *Zia*, (1994) 693 PLD (SC) (Pak.). For unsuccessful arguments to this effect, see *Friends of the Irish Environment*, [2020] IESC 49, ¶ 9.4–9.5 (Ir.); *Medaing*, PGNC 95, N4340, ¶ 1–5 (Papua N.G.); *Juliana*, 947 F.3d 1159, 1164–65 (9th Cir. 2020); see also Boyd, *The Implicit Constitutional Right to Live in a Healthy Environment*, *supra* note 31.

⁸⁹ See, e.g., CONSTITUCIÓN ESPAÑOLA [CONSTITUTION] Dec. 29, 1978, pt. 1, ch. 3, art. 45, B.O.E. n. 311 (Spain) (phrased as an individual right, but located within a section of the Spanish Constitution which concerns directive principles and is generally unenforceable).

over the last fifty years. Yet, beyond a general commitment to environmental protection, the precise goals and objectives of the turn to constitutions as a source of environmental norms remains obscure. One of the striking features of most constitutional environmental provisions is their generality: whether as rights, principles, or duties, their language is broad and open-textured and therefore capable of a wide range of different meanings.⁹⁰ While the scholarly literature has developed the concept of “environmental constitutionalism” to describe these developments, there is no clear consensus as to what the term means. Rather than a unitary normative project, I argue that environmental constitutionalism offers a framework for competing projects and discourses, three of which Part III will untangle.

The growth of constitutional environmental law has spawned a growing literature on environmental constitutionalism. The phrase has proliferated discernibly in English-language legal scholarship over the past fifteen years⁹¹ and is regularly deployed to describe the inclusion of environmental *rights* in national constitutions (the first of the four categories discussed above) or judicial engagement with those rights.⁹² “Environmental constitutionalism” as a descriptive term for environmental rights is perhaps clearest in the work of James May and Erin Daly, whose 2015 book, *Global Environmental Constitutionalism*, was the first monograph to position the phrase as its central object of analysis.⁹³ May and Daly deploy the term “constitutionalism” as defining the work of courts, and after some brief normative discussion concerning the value of environmental rights,⁹⁴ devote the majority of the book to describing ways in which courts have interpreted and adjudicated those rights.⁹⁵ May and Daly succinctly define environmental constitutionalism as “the recognition that the environment is a proper subject for protection in constitutional texts and for vindication by constitutional courts

⁹⁰ See Mauricio Guim & Michael A. Livermore, *Where Nature’s Rights Go Wrong*, 107 VA. L. REV. 1347, 1356 (2021) (“[R]ecent environmental rights-making has some defining characteristics that separate it from prior approaches. Perhaps most important is *generality* . . .”).

⁹¹ The Google Books Ngram Viewer, which tracks word usage in Google’s corpus of digitized books, suggests that the phrase has exponentially increased in usage—from comprising 0.0000000417% of words in the 2010 corpus, to 0.0000016658% in 2019, a roughly fortyfold increase. *Google Books Ngram Viewer*, GOOGLE, <https://perma.cc/9837-J3UK> (last visited Oct. 14, 2023). Furthermore, at the time of editing, a search of the term “environmental constitutionalism” on the Hein Online Law Journal Library database returns 455 results. HEIN ONLINE, <https://perma.cc/6WFQ-ZZBP> (type “environmental constitutionalism” in search bar; then click submit) (last visited Feb. 28, 2024).

⁹² For a similar assessment, see Bhullar, *supra* note 11, at 399–400 (reviewing justiciability of environmental constitutional rights).

⁹³ MAY & DALY, *supra* note 11; see Articles *supra* note 11 (demonstrating that early mentions of environmental constitutionalism or related terms start in the late 2000’s while much of the literature was written in the last decade).

⁹⁴ See MAY & DALY, *supra* note 11 at 55–84 (chapter 2: Textualizing environmental constitutionalism).

⁹⁵ See *id.* at 85–272 (discussing adjudication, enforcement, remedies, and the future of environmental constitutionalism).

worldwide”⁹⁶ and “a way forward when other legal mechanisms fall short.”⁹⁷

May and Daly’s conception of rights and courts as the essential core of environmental constitutionalism has been influential in the scholarly literature.⁹⁸ However, several scholars have employed the term in a broader descriptive sense, discussing non-rights forms of constitutional provisions and institutions other than courts. Louis Kotzé⁹⁹ and Blake Hudson¹⁰⁰ each observe that the concept embraces both “thick” or “fundamental” as well as “thin” or “structural” components. That is, constitutions respond to environmental challenges not only through judicial or substantive rights and doctrinal adjudication, but also by entrenching powers and setting the rules for lawmaking. Other scholars have gone further, arguing that environmental constitutionalism is distinctive precisely because of its reach beyond rights¹⁰¹ or best conceived of as an “open regulatory field where social conflicts find provisional solutions and governance is affected.”¹⁰²

This conceptual confusion is not merely semantic. Because the concept of environmental constitutionalism remains obscure, it is difficult to understand its intrinsic values, normative projects, and potential as a mode of environmental governance. Environmental constitutionalism is a concept in need of demystification. As a preliminary step, I suggest that the concept has two dimensions. In the first, *descriptive* sense, environmental constitutionalism simply describes the interaction between constitutional law, theory and design, and environmental issues. The global spread of constitutional environmental provisions enables these interactions. The primary focus of this Article, however, is on the “-ism” in environmental constitutionalism: the phrase implies a *normative* claim that at least some environmental issues call for special regulation, divorced from ordinary politics. This normative claim may drive constitutional drafters to enact environmental provisions and influence judicial interpretation. Normative environmental constitutionalism is also a mode of justification, seeking to explain *why*

⁹⁶ *Id.* at 1.

⁹⁷ *Id.* at 18.

⁹⁸ See, e.g., Ademola Oluborode Jegede, *Climate Change and Environmental Constitutionalism A Reflection on Domestic Challenges and Possibilities*, in IMPLEMENTING ENVIRONMENTAL CONSTITUTIONALISM: CURRENT GLOBAL CHALLENGES 86 (James R. May & Erin Daly eds., 2018) (citing MAY & DALY, *supra* note 11, at 269); Elizabeth Macpherson et al., *Where Ordinary Laws Fall Short: “Riverine Rights” and Constitutionalism*, 30 GRIFFITH L. REV. 438, 441–42 (2021) (drawing extensively on May & Daly’s conception of environmental constitutionalism as a means of seeking judicial redress where “ordinary laws fall short”).

⁹⁹ See Kotzé, *Conceptual Contours*, *supra* note 11, at 190.

¹⁰⁰ See Hudson, *supra* note 11, at 201–02.

¹⁰¹ See Weis, *supra* note 11, at 837 (describing environmental constitutionalism as an “alternative to existing, rights-based models of social values of constitutionalism within the legal constitutionalist tradition”).

¹⁰² JORDI JARIA-MANZANO & SUSANA BORRÀS, THE RESEARCH HANDBOOK ON GLOBAL CLIMATE CONSTITUTIONALISM 1, 4 (2019).

environmental matters are of constitutional concern. As demonstrated in Part III, once the core normative claim of environmental constitutionalism is identified, it becomes possible to draw out the different conceptions and discourses which exist within the broad conceptual frame. In Parts IV–V, this exercise in demystification reveals importance lessons for constitutional drafting and interpretation, as well as future possibilities for constitutional design.

D. The Convergence of Two Concepts

Understanding the normative claim inherent in the term “environmental constitutionalism” requires understanding each term. Both are highly contested concepts which mean different things to different people.¹⁰³ Rather than clearly defined ideologies or projects, they are conceptual frameworks which can accommodate several different conceptions.

“Environment” is a term of relatively recent origin.¹⁰⁴ At the most general level, the term has come to refer to the natural world that humans interact with through habitation, recreation, and resource extraction. Law and policy scholars often employ “environment” as a framework which ties together several different imagined policy challenges.¹⁰⁵ Far from a fixed or immutable idea, the concept was constructed in large part by social movements in the mid-twentieth century.¹⁰⁶ As Jedidiah Purdy has pointed out, the environment is imagined as a “master narrative,” often operating in opposition to industrial modernization, and links together many movements and challenges that are not obviously related—from anti-nuclear protestors to biodiversity conservationists to consumer advocates.¹⁰⁷ The environment can be imagined in different ways and encompasses different ideas about humankind’s relationship with the natural world. For example, environmentalism in the United States has always been divided between at least two different

¹⁰³ Indeed, they could be described as “essentially contested concepts”—that is, concepts “the proper use of which inevitably involves endless disputes about their proper use on the part of their users.” See W.B. Gallie, *Essentially Contested Concepts*, in 56 PROCEEDINGS OF THE ARISTOTELIAN SOCIETY 167, 169 (1956).

¹⁰⁴ See PAUL WARDE ET AL., *THE ENVIRONMENT: A HISTORY OF THE IDEA* 8–14 (2018) (tracing the origins of the contemporary usage of “environment” to the late 1940s).

¹⁰⁵ See, e.g., Lynton K. Caldwell, *Environment: A New Focus for Public Policy?*, 23 PUB. ADMIN. REV. 132, 138 (1963) (“Examination of the recent literature of human ecology, public health, natural resources management, urbanism, and development planning suggests a growing tendency to see environment as a policy framework within which many specific problems can best be solved.”).

¹⁰⁶ See Jedidiah Purdy, *The Politics of Nature: Climate Change, Environmental Law, and Democracy*, 119 YALE L.J. 1122, 1174 (2010).

¹⁰⁷ *Id.* at 1177 (describing the mid-20th century “discovery or invention of the environment as a unified phenomenon and the use of environmental crisis as a moral master narrative of modern life”).

conceptions.¹⁰⁸ On the one hand, more radical environmentalists have advanced ideas about the equality of human beings with other living creatures and ecosystems, assigning intrinsic value to the natural world.¹⁰⁹ On the other hand, more utilitarian approaches emphasize the role of human beings as “wise use” managers, imagining the natural world as a stock of resources to be drawn on for human benefit (albeit in a long-term “sustainable” manner).¹¹⁰ Both could reasonably be described as conceptions of environmentalism. To describe a particular approach to policy or government (such as constitutionalism) as “environmental” may therefore invoke different ideas, depending on how the relationship between human beings and the natural world is imagined.

The term “constitutionalism” is perhaps even more open to contestation. The term is used in such a broad array of contexts—often modified with various adjectives¹¹¹ such as “popular,”¹¹² “liberal”¹¹³ and “transformative”¹¹⁴—that “constitutionalism” risks “degenerat[ing] into an empty slogan.”¹¹⁵ As Jeremy Waldron has observed, at times the term “conveys no theoretical content at all” and “seems to just mean the thoughtful and systematic study of constitutions and various constitutional provisions.”¹¹⁶ At other times, “constitutionalism” is simply “a label for referring to a constitutional doctrine.”¹¹⁷

When employed in the sense referred to by Waldron, constitutionalism is a *descriptive* concept: *environmental*

¹⁰⁸ See RICHARD N. L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF THE AMERICAN ENVIRONMENTAL POLICY* 123–42 (3d ed. 2020) (discussing the “Progressive Era” and the “multiple use” approach advocated by Gifford Pinchot, conflicting with the more radical approach of John Muir and the early Sierra Club).

¹⁰⁹ See, e.g., HENRY DAVID THOREAU, *WALDEN; OR, LIFE IN THE WOODS passim* (Dodd, Mead & Co., 1946) (arguing for greater recognition of mankind as an aspect of nature); ALDO LEOPOLD, *A SAND COUNTRY ALMANAC, WITH OTHER ESSAYS ON CONSERVATION FROM ROUND RIVER* 219–20, 229–30 (Oxford Univ. Press, 1966) (arguing for the development of a “land ethic”).

¹¹⁰ See, e.g., ANDREWS, *supra* note 108, at 125–27 (describing the utilitarian ethos of early 20th-century progressive environmental governance); WILLIAM F. BAXTER, *PEOPLE OR PENGUINS: THE CASE FOR OPTIMAL POLLUTION* 36 (1974) (setting out an expressly utilitarian and anthropocentric approach to pollution control).

¹¹¹ On “adjectival constitutionalism,” see Mark Tushnet, *Editorial*, 14 INT’L J. CONST. L. 1 (2016).

¹¹² See, e.g., KRAMER, *supra* note 24, at 8 (“It is the story of this practice of “popular constitutionalism” that emerges through our study of judicial review.”); Robert Post & Reva Siegel, *Popular Constitutionalism, Departmentalism, and Judicial Supremacy*, 92 CAL. L. REV. 1027, 1027 (2004) (discussing other scholars’ work arguing for popular constitutionalism).

¹¹³ See, e.g., Cass Sunstein, *Liberal Constitutionalism and Liberal Justice*, 72 TEXAS L. REV. 305 (1993) (generally discussing liberal constitutionalism); Rosalind Dixon & Julie Suk, *Liberal Constitutionalism and Economic Inequality*, 85 U. CHI. L. REV. 369 (2018) (same).

¹¹⁴ See, e.g., Karl E. Klare, *Legal Culture and Transformative Constitutionalism*, 14 S. AFR. J. ON HUM. RTS. 146 (1998).

¹¹⁵ JEREMY WALDRON, *POLITICAL THEORY: ESSAYS ON INSTITUTIONS* 23 (2016).

¹¹⁶ *Id.* at 24.

¹¹⁷ *Id.*

constitutionalism describes the analysis of the text and interpretation of national constitutions as applied to “the environment,” broadly construed. Yet in other contexts, the phrase “constitutionalism” embodies a normative theory or ideology. The phrase is often used in a pejorative sense, either as a critique of a particular mode of governance which limits the space open to ordinary politics or even as an ideology of limited government.¹¹⁸ This argument is forcefully made by Martin Loughlin, who argues that constitutionalism is “a theory that promotes a certain ethos of governing . . . to constrain governmental power and maximize individual liberty.”¹¹⁹ In Loughlin’s view, constitutionalism is, by definition, an ideology which negates the possibility for democratic politics beyond the doctrines and principles expressed in the constitutional text, restricts government to a representative, non-participatory constrained form, and subjects the standards of “constitutional legality” to adjudication by judges.¹²⁰ For Loughlin, therefore, adjectival forms of constitutionalism such as “popular,” “political,” and “authoritarian” constitutionalism are misnomers: constitutionalism itself is an ideological project which leaves little room for variation.¹²¹ Indeed, for Loughlin, “constitutionalism” as an ideology is the antithesis of “constitutional government,” limiting rather than enabling the power of democratic politics.¹²²

Despite such attempts to cast constitutionalism as a specific project or ideology, the concept is capable of many different meanings. This is true both of constitutionalism as a scholarly term of analysis, as well as the practices of constitution-drafting, theorizing, and interpreting. Nicholas Barber, for example, stresses the role of constitutions not as limits on state power and popular democracy, but as “positive” enablers of effective state institutions.¹²³ This need not be achieved through any particular constitutional form: whether allocating greater powers to judges or legislatures, or whether in any of the four forms discussed above, constitutions embody principles of governance.¹²⁴ Indeed, part of the power and attraction of “constitutionalism” (in both descriptive and normative terms) is its ability to accommodate a range of different discourses and ideas within a unifying conceptual framework.

¹¹⁸ *Id.* at 30–33.

¹¹⁹ LOUGHLIN, *supra* note 18, at 2.

¹²⁰ *Id.* at 5; *see also id.* at 5–6 (describing constitutionalism as advancing “a conception of collective self-government that transforms the very idea of democracy”).

¹²¹ *Id.* at 7.

¹²² In particular, *see id.* at 131 (“The total constitution signals the transformation of the legislative state into a juristocracy. This is a regime in which judges perform the critical role of ensuring that all powers are exercised with due respect for constitutional values.”).

¹²³ N.W. BARBER, *THE PRINCIPLES OF CONSTITUTIONALISM* 1 (2018) (“[T]hose who see constitutionalism entirely in terms of constraints on state power miss an important aspect of the doctrine. Constitutionalism also requires the creation of an effective and competent set of state institutions; it has a positive dimension.”).

¹²⁴ *Id.* at 11–18. (discussing six key principles: sovereignty, the separation of powers, the rule of law, subsidiarity, democracy, and civil society).

Constitutionalism does, however, have some conceptual limits, meaning more than simply the existence of a constitutional document or body of law.¹²⁵ While capable of encompassing many different versions, constitutionalism, in essence, describes a mode of governance with three features.¹²⁶ First, “the policy sphere is divided into two domains,” with one governed by roughly majoritarian politics and the other insulated from those politics.¹²⁷ The constitutional domain shapes what the domain of ordinary politics can achieve.¹²⁸ Often, this involves special rules of decision-making. Rather than permitting simple majority rule, for example, constitutional decision processes may demand “inclusive” majoritarianism: a higher degree of consensus, embodied in special decision procedures or constitutional amendment thresholds.¹²⁹ Constitutionalism may thus constrain majoritarian power, but that does not mean it is inherently power-limiting: it may in fact require institutions to exercise power to pursue certain ends or guarantee certain rights.¹³⁰ Constitutionalism thus conceived is a limit on simple majoritarianism or “ordinary” politics, rather than *power* per se. Secondly (and relatedly), constitutionalism incorporates a political system and set of institutions that are governed according to rules set out in the constitutional domain, rather than the bare force of political power. Finally, where disputes arise as to the rules governing the “constitutional” domain, decision makers resolve such disputes with reference to a particular set of rules, conventions, or norms. These rules are often (although not always) enacted as laws, entrenched in a written constitution, and adjudicated by judges.¹³¹ In the descriptive form, “constitutionalism” describes and analyzes how these features operate in a legal system or systems. In the normative form, “constitutionalism” is a normative claim that these features ought to be adopted as part of a state’s system of governance.

¹²⁵ See Sartori, *supra*, note 19, at 853 (discussing the distinction between “a constitution” and “constitutionalism”).

¹²⁶ Tushnet & Bugarič, *supra* note 18, at 2353–54.

¹²⁷ *Id.* at 2353.

¹²⁸ See Stephen Holmes, *Precommitment and the Paradox of Democracy*, in CONSTITUTIONALISM AND DEMOCRACY 195, 196 (Jon Elster & Rune Slagstad eds., 1988) (“Constitutionalism, from this perspective, is essentially antidemocratic. The basic function of a constitution is to *remove* certain decisions from the democratic process, that is, to tie the community’s hands.”).

¹²⁹ See Adem Abebe, *The Vulnerability of Constitutional Pacts: Inclusive majoritarianism as protection against democratic backsliding*, in ADEM ABEBE ET AL., INT’L INST. FOR DEMOCRACY & ELECTORAL ASSISTANCE, ANNUAL REVIEW OF CONSTITUTION-BUILDING 21, 28 (2020), <https://perma.cc/UPG7-NDLE>.

¹³⁰ See, e.g., Weis, *supra* note 11, at 844–48 (arguing that environmental constitutionalism gives rise to “contrajudicative” demands requiring the enactment of “constitutionally obligatory legislation”).

¹³¹ This differs slightly from the formula offered by Tushnet and Bugarič who more specifically suggest that “constitutionalism” requires that such disputes “be resolved with reference to the law.” Tushnet & Bugarič, *supra* note 18, at 2354.

Environmental constitutionalism is thus the insulation of some environmental issues from ordinary politics; the consideration of environmental matters and consequences in the design of rules which govern the political process and state institutions; and the resolution of at least some environmental matters with reference to constitutional law. As a normative claim, implicit in *all* conceptions of environmental constitutionalism is the notion that ordinary forms of politics (specifically, simple majoritarian representative democracies) are ill-suited to at least some issues of environmental governance: to “*remove* certain decisions from the democratic process, that is, to tie the community’s hands.”¹³² This is most obvious in the creation of environmental rights adjudicated by unelected judges and enforced against elected legislatures but is also implied in other forms of environmental constitutional provisions. Allocating environmental responsibilities to independent agencies or oversight institutions, or directing the political branches to legislate for environmental protection, suggests a distrust of majoritarian institutions’ ability to focus attention on environmental matters. The entrenchment of particular forms of governance, only amendable with super-majoritarian approval, similarly removes decisions about forms, procedures, and institutions from the hands of ordinary majorities. If roughly majoritarian democratic governance is the default legitimate mode of constitutional governance, such distrust and restraint require justification. Many scholarly and judicial instantiations of environmental constitutionalism focus precisely on this task. Part III thus embarks on an analysis of these modes of justification, revealing a range of different discourses working within the framework of environmental constitutionalism.

III. DEMYSTIFYING ENVIRONMENTAL CONSTITUTIONALISM

Environmental matters are now a firm fixture of comparative constitutional law and theory. Yet beyond a broad commitment to improved environmental governance, the goals and aims of environmental constitutionalism remain unclear. In this section, I demystify environmental constitutionalism. Rather than a “movement”¹³³ or “project,”¹³⁴ the framework of environmental constitutionalism accommodates several different movements and projects. What is common to all these projects is the assumption of a bifurcated policy sphere, together with a justification as to why at least some environmental matters belong to the “constitutional” tier. The former

¹³² Holmes, *supra* note 128, at 196.

¹³³ *Contra* Polk, *supra* note 20, at 127 (discussing the “international environmental constitutionalism movement”).

¹³⁴ *Contra* Francois Venter & Louis J. Kotzé, *The Methodology of Environmental Constitutional Comparison*, in RESEARCH METHODS IN ENVIRONMENTAL LAW 237, 255 (Andreas Philippopoulos-Mihalopoulos & Victoria Brooks eds., 2017) (discussing “the environmental constitutionalism project”).

feature inspires the latter: if some sort of simple majoritarian institution or “ordinary” politics is the perceived starting point, then what justifies placing some matters—institutions, rights, or principles—beyond (or prior to) the reach of those politics? In addition to basic consequentialist justifications, such as the idea that certain conceptions will lead to better environmental outcomes, each conception embeds a particular way of imagining the environment and the role of constitutions.

Constitutional texts alone tell us little about how to understand or integrate constitutional environmental provisions within particular constitutional traditions¹³⁵ and equally little about the expectation of the framers who drafted them. To better understand the discourses surrounding the various conceptions of environmental constitutionalism, I extend my analysis beyond constitutional texts and incorporate analysis of judicial decisions. Judicial decisions are often justificatory: while interpreting constitutional provisions, judges offer explanations as to the purpose and rationale of constitutional texts.

Based on this analysis, I conclude that existing environmental constitutionalism emerges in (at least) three strands: liberal-conservative, technocratic, and transformative.¹³⁶ Each of these three strands embeds particular ideas about the environment, as well as the justifications and aspirations of constitutionalism. Each strand also offers a different discourse of justification, answering a central question: Why environmental constitutionalism?

Significant tensions and variations exist within each strand. There are no firm barriers between them, and we should not treat them as rigid ideologies. Indeed, as I demonstrate in Part IV, a single argument or proposal concerning environmental constitutionalism will often borrow from all three strands. These strands operate as frames for puzzles, projects, and proposals. They matter because they can influence the final forms that environmental constitutionalism might take; guide the interpretation of texts, doctrines, and gaps; and provide a basis for future theorizing the role of constitutions in environmental governance.

¹³⁵ In particular, the text of written constitutions tells us little about the role of the so-called “unwritten” or “small-c” constitution—that is, the vast corpus of ideas, doctrines, and principles which structures constitutional practice. See Zachary Elkins & Tom Ginsburg, *What Can We Learn from Written Constitutions*, 24 ANN. REV. POL. SCI. 321, 328 (2021); Adam Chilton & Mila Versteeg, *Identifying Constitutional Law*, SSRN (Dec. 7, 2021), <https://perma.cc/MTQ3-NFNN> (describing the “small-c” constitution as “the larger set of interpretations, conventions, and laws that surround the constitutional text and that can also be part of constitutional law”).

¹³⁶ This typologizing of environmental discourses owes much to the field of comparative environmental politics. See Dryzek, *supra* note 22, at 14–16 (offering a typology of “environmental discourses”); see also, e.g., ANDREW DOBSON, GREEN POLITICAL THOUGHT: AN INTRODUCTION 37 (1990) (discussing the philosophical foundations of Green politics); ROBYN ECKERSLEY, ENVIRONMENTALISM AND POLITICAL THEORY: TOWARD AN ECOCENTRIC APPROACH (1992) (discussing the development of “ecopolitical thought” and the theories of Ecosocialism and Ecoanarchism).

A. Liberal-Conservative Environmental Constitutionalism

The first response to the question of “Why environmental constitutionalism?” draws on the dominant preexisting paradigm of constitutional law and theory. This liberal-conservative strand emphasizes the *coherence* of environmental matters with existing constitutional ideals and practices. A central goal is to integrate environmental concerns within the conceptual toolbox of liberal constitutional law and theory. This encounter produces some shifts in existing constitutional theory, but incrementally so. The conception of the environment embedded within this strand is fundamentally anthropocentric, imagining the environment as a source of material and metaphysical resources which enable individuals to subsist, flourish, and live out their own conceptions of the good. The discourse is *conservative* insofar as it retains a high degree of faith in the existing institutions and practices of liberal representative democracy. Thus, in some cases, courts have refused to expansively interpret environmental provisions in a way that limits or contradicts the decisions of elected legislatures.¹³⁷ In many other cases, courts have drawn on existing constitutional practice to overrule legislation¹³⁸ or correct the particular pathologies of environmental politics.¹³⁹

The liberal-conservative paradigm practices and justifies these limits on representative democratic politics through a framework of constitutional *rights*. Constitutions provide the textual basis for the enumeration and entrenchment of such rights. They also provide a framework for the resolution of competing rights-claims. This competition is a key feature of the liberal-conservative constitutional imaginary. Rather than asserting collectivist substantive goals, the liberal-conservative constitution acknowledges that conflicts will emerge as individuals pursue their own ends. This is inevitable even if rights “trump” non-rights considerations;¹⁴⁰ conflicts between two or more rights of equal rank will also inevitably come into conflict. A central justification for environmental constitutionalism, therefore, is the argument that the elevation of *environmental* rights to the constitutional tier evens the

¹³⁷ See, e.g., *Norwegian Arctic Oil Case*, No. 20-051052SIV-HRET, HR-2020-2472-P, ¶¶ 39–40, 248, 251 (2020) (Nor.) (Supreme Court of Norway finding that the Norwegian legislature was entitled to a very wide margin of deference in its decision to permit marine oil exploration).

¹³⁸ See, e.g., BVerfG [Federal Constitutional Court], 1 BvR 2656/18, 1 BvR 78/20, 1 BvR 96/20, 1 BvR 288/20, Mar. 24, 2021, (Neubauer) (Ger.), <https://perma.cc/UF3X-CDEQ> (finding the federal legislation which failed to identify concrete interim targets for reductions in greenhouse gas emissions violated the German Basic Law).

¹³⁹ See, e.g., *id.* ¶ 206 (noting that “environmental protection is elevated to a matter of constitutional significance because the democratic political process is organized along more short-term lines based on election cycles, placing it at structural risk of being less responsive to tackling the ecological issues that need to be pursued over the long term. It is also because future generations—those who will be most affected—naturally have no voice of their own in shaping the current political agenda.”).

¹⁴⁰ RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* xi (1977).

playing field between environmental considerations and other interests which have long been constitutionally-protected.¹⁴¹ Environmental rights, for example, will often clash with constitutionally-protected rights to property or development. Within such a framework, some degree of environmental degradation is inevitable: the challenge becomes identifying where to strike the balance between competing rights.¹⁴² Constitutional adjudication balances competing claims as the environment joins the fray of the battle between competing rights.

For the liberal-conservative strand, the puzzle in need of solving is how to accommodate environmental constitutionalism within the framework of representative democracy and liberal neutrality.¹⁴³ In other words, environmental constitutionalism must be *legitimated* not only through consequentialist outcomes, but also through its democratic credentials.¹⁴⁴ The enduring notion that states should be neutral as between contrasting theories of “the good” (substantive goals of the state beyond those selected through a democratic decision procedure) provides the foundation for liberal constitutionalism. This is necessary in order to treat individuals with equal concern in the face of reasonable pluralism and allow them to live out their *own* conceptions of the good.¹⁴⁵ If this is the case (and there are good reasons to be skeptical of liberalism’s claims of substantive neutrality),¹⁴⁶ the puzzle of environmental constitutionalism can be stated as follows: Why should states be

¹⁴¹ See MAY & DALY, *supra* note 11, at 44–45 (“Inclusion of environmental rights in the constitution amounts to a declaration that such rights stand on an equal footing with other fundamental rights and freedoms.” (quoting Ernst Brandl & Hartwin Bungert, *Constitutional Entrenchment of Environmental Protection: A Comparative Analysis of Experiences Abroad*, 16 HARV. ENV’T L. REV. 1, 87 (1992))).

¹⁴² See Robyn Eckersley, *Ecological Democracy and the Rise and Decline of Liberal Democracy: Looking Back, Looking Forward*, 29 ENV’T POL. 214, 216, 230 (2020) (discussing and comparing “iterations” of ecological democracies).

¹⁴³ In this Article, I take the work of John Rawls and Ronald Dworkin as essential statements of liberal neutrality, sometimes referred to as “anti-perfectionist liberalism.” See Tarunabh Khaitan, *Constitutional Directives: Morally-Committed Political Constitutionalism*, 82 MOD. L. REV. 603, 608–10 (2019). It should be noted, however, that other forms of liberalism are available, particularly those in the continental European and Global South traditions. In particular, the facts of pluralism might give way to a *perfectionist* notion of liberalism, whereby rather than being neutral between different conceptions of the good, the State should support a range of different conceptions through value pluralism. *Id.* at 609 (citing JOSEPH RAZ, *MORALITY OF FREEDOM* (1988)). This perfectionist version of liberalism, however, has been less influential in Anglo-American constitutional theory and receives less attention in this Article. Judicial decisions concerning environmental constitutionalism reflect the perfectionist version of liberalism to a lesser extent as well. A full engagement with the environmental possibilities of perfectionist liberal constitutionalism is left for another occasion.

¹⁴⁴ See ROBYN ECKERSLEY, *THE GREEN STATE* 13 (2004).

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 87 (arguing that an environmental critique of the state “draw[s] out the links between democracy and environmental justice and . . . extend[s] our understanding of the category of subjects excluded from any meaningful representation or participation in the liberal state, even though they may be harmed by decisions and actions made in the name of the state”).

constitutionally mandated to promote environmental ends? Constitutional environmental provisions provide precisely this sort of mandate. We can also frame the puzzle as a counter-majoritarian problem for representative democracy: Why should judges, constitutional structures, or policy directives constrain the policy priorities of democratically elected legislatures? As Robert Goodin has provocatively framed the issue, “to advocate democracy is to advocate procedures; to advocate environmentalism is to advocate substantive outcomes.”¹⁴⁷ The starting point for the liberal-conservative strand is the acceptance of electoral representative democracy as a valued norm which may be departed from, but only with special justifications drawing on existing liberal traditions.

Justifying substantive outcomes in a way that coheres with existing liberal constitutional theory frequently involves the kind of “two-tier” conception of constitutionalism outlined in Part II. The most prominent existing tool in the liberal constitutional toolbox is to justify entrenchment in terms of *rights*, grounded in at least two justificatory frameworks: highlighting the interdependence of environmental interests to other interest which have long been constitutionally protected; and through the theoretical framework of political process theory.¹⁴⁸

1. Interdependence with Existing Rights and Interests

The liberal-conservative discourse imagines the environment as a source of human needs and capabilities. Because the environment provides the basis for fundamental human interests, it is worthy of insulation from ordinary politics for the same reasons as many already-recognized fundamental rights and interest are also worthy of insulation.¹⁴⁹ Analogy and coherence are often the explicit discursive basis for this argument: if rights to health, food, life, and dignity are already widely considered to be appropriate bases for constitutional protection, and an adequate environment is a necessary precondition for all these rights, then why should the right to an environment of a certain quality not also be recognized? In other words, “if there are any genuine human rights at all, then the right to an adequate environment can and should be counted among them”; the right meets existing “criteria” for recognition.¹⁵⁰

This strategy of linking emerging environmental rights with more established rights has a strong pedigree in international human rights law. These linkages were made explicit in the landmark 1994 Ksentini

¹⁴⁷ ROBERT GOODIN, GREEN POLITICAL THEORY 168 (1992).

¹⁴⁸ See generally JOHN HART ELY, DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW (1980). For an application of Ely’s ideas in the environmental context, see Katrina Fischer Kuh, *The Legitimacy of Judicial Climate Engagement*, 46 ECOL. L.Q. 731, 755–58 (2019).

¹⁴⁹ See, e.g., MAY & DALY, *supra* note 11, at 44–45 (noting that environmental rights serve basic rights and inclusion of such rights in constitutions notes their importance).

¹⁵⁰ TIM HAYWARD, CONSTITUTIONAL ENVIRONMENTAL RIGHTS 15 (2005).

Report commissioned by the U.N. Commission on Human Rights.¹⁵¹ Subsequent reports by the U.N. Special Rapporteur on Human Rights and the Environment continued to map out this connection,¹⁵² culminating in recent resolutions by the U.N. Human Rights Council and General Assembly.¹⁵³ Stressing these relationships centers the importance of environmental rights and also highlights that their recognition and constitutional entrenchment is of a piece with existing practice.

This logic of coherence is explicit in judicial decisions where courts have determined that a national constitution includes an unenumerated right to a healthy environment;¹⁵⁴ whether other rights include environmental obligations;¹⁵⁵ or whether codified environmental rights give rise to enforceable causes of action.¹⁵⁶ Courts have doubled down on the shared conceptual foundations between the environment and other constitutionally-protected interests. For example, *Fuel Retailers Association v. Director-General, Environmental Management (Fuel Retailers Association)*¹⁵⁷ called upon the Constitutional Court of South Africa interpret the environmental rights provision enshrined in section twenty-four of South Africa's constitution.¹⁵⁸ The South African provision safeguards the right of everyone to "an environment that is not harmful to their health or wellbeing"¹⁵⁹ and requires legislative measures to operationalize such a right, "while promoting justifiable economic and

¹⁵¹ Fatma Zohra Ksentini (Special Rapporteur), Commission on Human Rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, *Review of Further Developments in Fields With Which the Sub-Commission has Been Concerned Human Rights and the Environment*, ¶¶ 4, 6, 8, U.N. Doc. E/CN.4/Sub.2/1994/9 (Jul. 6, 1994).

¹⁵² See, e.g., John H. Knox (Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment), U.N. Human Rights Council, *Mapping Report*, ¶¶ 1, 7, U.N. Doc. A/HRC/25/53 (Dec. 30, 2013); John H. Knox (Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment), U.N. Human Rights Council, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶¶ 1–3, U.N. Doc. A/HRC/37/59 (Jan. 24, 2018).

¹⁵³ H.R.C. Res. 48/13, *supra* note 55, para. 8.

¹⁵⁴ This pattern is particularly common in South Asia. See, e.g., *Rural Litigation and Entitlement Kendra*, AIR 652 SC 652 (Ind.); *Zia*, 1994 PLD (SC) 693, ¶ 15 (Pak.); *Leghari v. Federation of Pakistan (Leghari I)*, (2015) W.P. No. 25501/2015 (Lahore High Court), ¶ 7 (Pak.), <https://perma.cc/BE2V-G8US>; *Leghari v. Federation of Pakistan (Leghari II)*, (2015) W.P. No. 25501/2015 (Lahore High Court), ¶ 23 (Jan. 25, 2018), <https://perma.cc/8XLY-WZDG>; *Wijebanda* (2007) 1 Sri L.R. 337, 356 (Sri Lanka); *Som Prakash Rekhi v. Union of India*, (1981) AIR 212; *M.C. Mehta v. Kamal Nath* (1997) 1 SCC 388 (1996) (Ind.).

¹⁵⁵ See, e.g., *López-Ostra v. Spain*, App. No. 16789/90, ¶¶ 10, 15–17 (Dec. 9, 1994), <https://perma.cc/W24E-WJLB>; *Urgenda Foundation v. Kingdom of the Netherlands*, (Dec. 20, 2019) 19/00135 (English), <https://perma.cc/Z3CL-Z8HH>.

¹⁵⁶ See *Hungarian Forests Case*, Alkotmánybíróság (AB) [Constitutional Court] 28/1994 V.20, Decision ¶ 3.b (Hung.).

¹⁵⁷ 2007 (6) SA 1 (CC) (S. Afr.) ¶ 43.

¹⁵⁸ *Id.*

¹⁵⁹ S. AFR. CONST., 1996 art. 24 § 1.

social development.”¹⁶⁰ The provision thus embraces both a connection and a tension between the environment and development interests. The Court emphasized the interdependence of environmental interests with other protected rights and interests, noting that “the protection of the environment . . . is vital to the enjoyment of the other rights contained in the Bill of Rights; indeed, it is vital to life itself.”¹⁶¹ The court cited the foundational case of *Government of the Republic of South Africa v. Grootboom*¹⁶² for the proposition that “socio-economic rights that are set out in the Constitution are indeed vital to the enjoyment of other human rights guaranteed in the Constitution.”¹⁶³ *Fuel Retailers Association* observed that “[p]romotion of development requires the protection of the environment. Yet the environment cannot be protected if development does not pay attention to the costs of environmental destruction. The environment and development are thus inexorably linked.”¹⁶⁴ The Court thus stressed that “[t]he Constitution recognizes the interrelationship between the environment and development,” as well as other protected rights.¹⁶⁵

Fuel Retailers Association demonstrates the justificatory strategy of emphasizing the interdependence of environmental and other interests. If civil and political rights, social and economic rights, and development interests are deserving of constitutional protection, and all such rights depend on a minimum standard of environmental protection, then environmental interests must be too. But the case also reflects another aspect of the liberal-conservative discourse: the aggregative and sometimes competing nature of constitutional rights and interests. The Constitutional Court thus recognized that environmental constitutionalism must contain a decision-procedure for weighing competing rights. In the Court’s words, “[o]ur Constitution does not sanction a state of normative anarchy which may arise where potentially conflicting principles are juxtaposed.”¹⁶⁶ A crucial part of the Court’s task was to locate a balancing principle within the framework of environmental constitutionalism, settling on the concept of sustainable development. The Court deployed this concept as a substitute for the proportionality principle, weighing the environmental impact of the development of a gas station against the need for economic development.¹⁶⁷ The Court determined that in considering the application to develop the station, the decision-maker needed to consider not only harm to the local environment, but also to local socio-economic conditions:

¹⁶⁰ *Id.* § 1(b)(iii).

¹⁶¹ FUEL RETAILERS ASSOCIATION, (6) SA 1 (CC) ¶ 102 (S. Afr.)

¹⁶² 2000 (11) BCLR 1169 (CC) (S. Afr.); see also *Fuel Retailers Association*, 2007 (6) SA 1 (CC) ¶ 44 (S. Afr.).

¹⁶³ *Fuel Retailers Association*, 2007 (6) SA 1 (CC) ¶ 44 (S. Afr.) (citing *South Africa v. Grootboom* 2000 (11) BCLR 1169 (CC) (S. Afr.)).

¹⁶⁴ *Fuel Retailers Association*, 2007 (6) SA 1 (CC) ¶ 44 (S. Afr.).

¹⁶⁵ *Id.* ¶ 45.

¹⁶⁶ *Id.* ¶ 93.

¹⁶⁷ *Id.* ¶ 93–94.

the principle of sustainable development allowed for the weighing, and ultimate alignment, of competing interests.¹⁶⁸ In this case, the decision-maker had failed to do so, and the order was accordingly set aside.

In other cases, courts have even claimed that environmental interests are *more* foundational than some already-protected rights and interests because the protection of such interests demands a sufficient environmental base. This rhetorical strategy serves to compensate for the historical exclusion of constitutional environmental interests, thus placing them on a more equal footing where they conflict with other rights. Two cases usefully illustrate this justificatory approach.

The *Hungarian Forests Case*¹⁶⁹ called upon the Constitutional Court of Hungary to determine the constitutional validity of a provision of the Land Reallocation and Land Distributions Committees Act of 1993.¹⁷⁰ The 1993 Act repealed an earlier law which had transferred environmentally-protected areas from the ownership of agricultural cooperatives and into state ownership with special environmental protections.¹⁷¹ The plaintiff argued that the repeal of the earlier law violated then-Article 18 of the Constitution of Hungary, which protected the right to a healthy environment.¹⁷² The constitutional status of the provision was uncertain. Although it referred to a “right” to a healthy environment,¹⁷³ the provision was not located in the chapter of the Hungarian Constitution entitled “Fundamental Rights and Duties,” but rather found in the “General Provisions” chapter.¹⁷⁴ Nevertheless, the Court found for the plaintiff, finding that the protected right precluded the government from reducing any existing levels of environmental protection. The Court justified this conclusion by examining the relationship between the environment and other protected rights, concluding that the right “transgresses the bounds of a mere constitutional duty or state objective” and “is ‘recognized’ and ‘implemented’ by the State as such exactly as the inviolable and inalienable fundamental human rights” (as opposed to mere state objectives).¹⁷⁵ The Court also observed that:

¹⁶⁸ *Id.* ¶ 90, 93–94.

¹⁶⁹ *Hungarian Forests Case*, Alkotmánybíróság (AB) [Constitutional Court] 28/1994 V.20, Decision ¶ 2 (Hung.).

¹⁷⁰ *Id.* Specifically, the Act at issue was 1993. évi II. törvény az földrendező és földkiadó bizottságokról szóló § 13.7.4, (Act II of 1993 on Land Reallocation and Land Distribution Committees (Hung.), of which Paragraph (7) of § 13 was subsequently repealed.

¹⁷¹ *Hungarian Forests Case*, 28/1994 V.20, Decision ¶ 2.

¹⁷² *Id.* Reasoning ¶ 1. In the most recent Constitution of Hungary, the provision is now found in Article 21. See MAGYARORSZÁG ALAPTÖRVÉNYE [THE FUNDAMENTAL LAW OF HUNGARY], ALAPTÖRVÉNY, Dec. 23, 2020, art. 21 (Hung.).

¹⁷³ *Id.* art. 21, <https://perma.cc/9EJ2-LW8J> (then Article 18) (“The Republic of Hungary recognizes and shall implement the individual’s right to a healthy environment.”).

¹⁷⁴ MAGYARORSZÁG ALAPTÖRVÉNYE [THE FUNDAMENTAL LAW OF HUNGARY], ALAPTÖRVÉNY, Dec. 23, 2020 (Act XX of 1949) (Hung.).

¹⁷⁵ *Hungarian Forests Case*, 28/1994 V.20, § III ¶ 2(a)–(b).

“[t]he right to the environment is most closely related to the right to life; for the right to the environment is, in fact, a part of the objective, institutional aspect of the right to life If Art. 18 of the Constitution were absent, the state duties in the area of environmental protection could also be deduced from Art. 54 (1) [protecting the right to life] of the Constitution.”¹⁷⁶

This approach is even more explicit in the Supreme Court of the Philippines’ decision, *Minors Oposa v. Factoran*.¹⁷⁷ In that case, the Court considered a suit brought by several children challenging the government’s failure to address widespread deforestation and seeking orders that the government cancel all timber license agreements in the country.¹⁷⁸ As in Hungary, the Constitution of the Philippines contained an ambiguous environmental provision. Although the provision used the language of rights, it was directed as an obligation toward the government, requiring the state to “protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.”¹⁷⁹ The Constitution’s chapter dealing with “Principles and State Policies” contained the obligation,¹⁸⁰ rather than the “Bill of Rights.”¹⁸¹ The Court nevertheless found that the provision gave rise to an actionable right corresponding to a justiciable government duty and emphasized the provision’s relationship to other rights, finding other rights to be dependent on a background environment of a sufficient quality:

While the right to a balanced and healthful ecology is to be found under the Declaration of Principles and State Policies and not under the Bill of Rights, it does not follow that it is less important than any of the civil and political rights enumerated in the latter. Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self-perpetuation . . . the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, these basic rights need not even be written in the Constitution, for they are assumed to exist from the inception of humankind.¹⁸²

The Court accordingly recognized the plaintiffs’ standing and ordered the requested relief.¹⁸³

¹⁷⁶ *Id.* § III ¶ 3(a).

¹⁷⁷ *Minors Oposa*, G.R. No. 101083, 296 Phil. 694 para. 21 (July 30, 1993).

¹⁷⁸ *Id.* paras. 1–2.

¹⁷⁹ CONST. (1987), art. II, § 16 (Phil.).

¹⁸⁰ *Id.* art. II.

¹⁸¹ *Id.* art. III.

¹⁸² *Minors Oposa*, G.R. No. 101083, 296 Phil. 694, para. 21 (July 30, 1993).

¹⁸³ *Id.* para. 19.

2. Representation Reinforcement

A second liberal-conservative justificatory strategy is “political process” or “representation reinforcement” theory.¹⁸⁴ This approach takes parliamentary politics and representative democracy as an ideal baseline, but acknowledges that representative democracy possesses pathologies such as corruption, discrimination, or insufficient unity of interest between representatives and their constituencies.¹⁸⁵ On this view, constitutionalization of environmental matters *strengthens* representative democracy, fixing these peripheral pathologies while affirming its essential core. Judicial enforcement of constitutional rights frames constitutions as correctives for these failures.¹⁸⁶ Although developed as a theory to address different types of pathologies (such as racism), this framework can be applied to the environmental context, holding that the democratic *process* contains pathologies and blindspots related to environmental decision-making.¹⁸⁷ An approach grounded in representation-reinforcement calls attention to the absence of constituencies such as children, future generations, and Indigenous peoples from the political decision-making process or the lack of incentives for representatives to adequately represent them. As Katrina Kuh has argued, the inability of these groups to participate in the ordinary political process results in a “lock-in of extraordinary and likely irreversible conditions occasioned by the voting in-generation acting narrowly in its own self-interest without input from the nonvoting out-generations in a manner similar to” discrimination against existing protected categories, such as race, gender, or nationality.¹⁸⁸ The absence of representation of children and future generations might lead to the prioritization of short-term resource extraction or economic benefit over long-term conservation and protection of natural resources. Future generations and children are at risk because they cannot vote and because the nature of the electoral cycle incentivizes representatives to

¹⁸⁴ See generally Stephen Gardbaum, *Comparative Political Process Theory*, 18 INT’L J. CONST. L. 1429, 1429–33 (2020) (discussing the influence of such approaches in comparative constitutional law).

¹⁸⁵ See ELY, *supra* note 148, at 103 (developing this theoretical framework and terminology most extensively by identifying two primary pathologies).

(1) [T]he ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out, or (2) though no one is actually denied a voice or a vote, representatives beholden to an effective majority are systematically disadvantaging some minority out of simple hostility or a prejudiced refusal to recognize commonalities of interest. *Id.*

¹⁸⁶ See *id.* at 102–04 (describing courts’ role of intervention). Ely preferred a constitutional solution grounded in substantive rights and judicial enforcement because of the need for a “referee” external to the political process and the difficulty in identifying the motivation of elected officials. *Id.* at 103, 136–48.

¹⁸⁷ See generally Rosalind Dixon, *The Core Case for Weak-Form Judicial Review*, 38 CARDOZO L. REV. 2193 (2017) (discussing the phenomena of legislative “blind spots” and “inertia,” and the role of constitutional review in confronting these phenomena).

¹⁸⁸ Kuh, *supra* note 148, at 756.

pursue short-term, rather than long-term, rewards. In other words, children lack both virtual, as well as actual, representation.¹⁸⁹

Liberal-conservative interventions could address these pathologies within the political branches or specialist institutions, rather than rely on courts. To date, however, there are few examples to point to. The 2022 Draft Constitution of Chile—rejected by voters in September 2022—would have established an “Office of the Ombudsman for Nature”¹⁹⁰ and an “Ombudsman for the Rights of the Child.”¹⁹¹ Hungary possesses an “Ombudsman for the Future,”¹⁹² while the parliaments of both Israel and Finland have at various times created committees devoted to the interests of future generations.¹⁹³ These initiatives have received relatively little scholarly attention but remain important examples of constitutional functions performed within the political branches.

We can also apply the logic of representation-reinforcement to justify the constitutionalization of the interests of future generations, the members of which—whether as existing children or not-yet-existing humans—cannot vote. At least sixty-two national constitutions refer to future generations,¹⁹⁴ often expressly linked to environmental provisions.¹⁹⁵ Courts have drawn on these provisions and others to justify the development and enforcement of environmental rights. In *Minors Oposa*,¹⁹⁶ for example, the Supreme Court of the Philippines justified its expansive approach to constitutional interpretation due to the framers’ “well-founded fear” that,

[U]nless the rights to a balanced and healthful ecology and to health are mandated as state policies by the Constitution itself . . . the day would not be too far when all else would be lost not only for the present generation, but

¹⁸⁹ See ELY, *supra* note 148, at 82–84 (discussing minority or disenfranchised populations lacking virtual or actual representation).

¹⁹⁰ PROPUESTA CONSTITUCIÓN POLÍTICA DE LA REPÚBLICA DE CHILE [Proposed Constitution] art. 148 (Proposed Official Draft Jul. 4, 2022), *translated in Chile 2022—Draft of 4 Jul 2022 Constitution*, CONSTITUTE PROJECT (Rodrigo Delaveau Swett, trans.), <https://perma.cc/X9WX-LEHK> (last visited Oct. 17, 2023).

¹⁹¹ *Id.* art. 126.

¹⁹² See *The Role of the Ombudsman*, OFF. COMM’R FOR FUNDAMENTAL RTS. HUNG., <https://perma.cc/9LL7-SR2X> (last visited Oct. 17, 2023).

¹⁹³ See Axel P. Gosseries, *Constitutions and Future Generations*, GOOD SOC’Y, no. 1, 2008, at 34 (citing the Israeli Knesset for Future Generations, Finnish Parliamentary Committee for the Future, and Hungarian Ombudsman for the Future).

¹⁹⁴ See CONSTITUTE, <https://perma.cc/C89W-E4UX> (last visited Oct. 17, 2023) (search using keyword “future generations” and set status to “In Force”).

¹⁹⁵ See, e.g., Art. 41, CONSTITUCIÓN NACIONAL [CONST. NAC.] (Arg.); S. AFR. CONST., 1996 art. 24; GRUNDGESETZ FÜR DIE BUNDESREPUBLIK DEUTSCHLAND (BASIC LAW) art. 20A, *translation at* <https://perma.cc/SW4U-GVRG>; ‘DRUK-GI CHA-THRIMS-CHEN-MO [CONSTITUTION], Jul. 18, 2008, art. 5 § 1 (Bhutan); CONSTITUTION OF THE REPUBLIC OF TUNISIA, Jan. 26, 2014, Preamble (Tunis.), *translated in Tunisia 2014*, CONSTITUTE (UNDP ed.), <https://perma.cc/8AJ3-HE8U> (last visited Oct. 12, 2023).

¹⁹⁶ *Minors Oposa*, G.R. No. 101083, 296 Phil. 694 (July 30, 1993).

also for those to come—generations which stand to inherit nothing but parched earth incapable of sustaining life.¹⁹⁷

The logic is even more explicit in the recent decision of the German Federal Constitutional Court in *Neubauer v. Germany*,¹⁹⁸ in which plaintiffs, including several children, challenged the constitutionality of Germany’s climate legislation.¹⁹⁹ The legislation set concrete targets for reductions in greenhouse gas emissions up until 2030 and a goal of net-zero emissions by 2045.²⁰⁰ However, Germany did not set any incremental targets in the 2030-2045 period.²⁰¹ Plaintiffs pointed out that the relatively modest cuts in greenhouse gas emissions prior to 2030 implied that significant cuts would be necessary over the following fifteen years.²⁰² The plaintiffs argued that this uneven distribution violated the government’s constitutional obligation in Article 20A of the German Federal Basic Law (*Grundgesetz*),²⁰³ which provides that “[m]indful also of its responsibility towards future generations, the state shall protect the natural foundations of life and animals by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order.”²⁰⁴ The plaintiffs further argued that the deferral of drastic climate mitigation to the future would sharply curtail the fundamental freedoms of future generations.²⁰⁵

The Court accepted the second of these two arguments. Article 20A set a baseline obligation on the government to mitigate climate change, and deferral of significant action would give rise to “advance interference-like effects” (*eingriffsähnliche Vorwirkung*) which would in turn prevent young people from enjoying their rights and freedoms in the future.²⁰⁶ Thus, “fundamental rights have nonetheless been violated because the emission amounts allowed by [the Act] in the current period are capable of giving rise to substantial burdens to reduce emissions in later periods,” and “[t]he duty to afford protection against risks to life and health can also establish a duty to protect future generations.”²⁰⁷ Although such generations “do not yet carry any fundamental rights in the present,”²⁰⁸ “[a]s intertemporal guarantees of freedom, fundamental rights afford the

¹⁹⁷ *Id.* para. 22.

¹⁹⁸ BVerfG [Constitutional Court], 1 BvR 2656/18, 1 BvR 78/20, 1 BvR 96/20, 1 BvR 288/20, Mar. 24, 2021, (*Neubauer*) (Ger.), <https://perma.cc/WP5P-ESAK>.

¹⁹⁹ *Id.* ¶¶ 71, 91–92.

²⁰⁰ *Id.* ¶¶ 4, 198; UNFCCC: GERMAN GOV’T. UPDATE TO THE LONG-TERM STRATEGY FOR CLIMATE ACTION OF THE FEDERAL REPUBLIC OF GERMANY 4 (2022), <https://perma.cc/LW9C-4YR8>.

²⁰¹ *Neubauer*, 1 BvR 2656/18, ¶ 183.

²⁰² *See id.* ¶¶ 121–122 (discussing the carbon reductions as compared to the “remaining budget” of carbon emissions).

²⁰³ *Id.* ¶ 192.

²⁰⁴ Grundgesetz [GG] [Basic Law], translation at <https://perma.cc/AT6H-43YW>.

²⁰⁵ *Neubauer*, 1 BvR 2656/18, ¶¶ 71, 192.

²⁰⁶ *Id.* ¶ 183.

²⁰⁷ *Id.* ¶¶ 142, 146.

²⁰⁸ *Id.* ¶ 146.

complainants protection against [burdens] . . . being unilaterally offloaded onto the future.”²⁰⁹

The Court’s rationale rested strongly on representation-reinforcement theory. As a starting point, the Court recognized the fundamental primacy of representative democracy, observing that “the legislative process gives the required legitimacy to the necessary balancing of interests” inherent in any legislative exercise related to climate change.²¹⁰ Nevertheless, “[t]he legislator is not entirely free.”²¹¹ Constitutional environmental duties

“provide a counterweight to the political process . . . [where] environmental protection is elevated to a matter of constitutional significance because the democratic political process is organized along more short-term lines based on election cycles, placing it at structural risk of being less responsive to tackling the ecological issues that need to be pursued over the long term. It is also because future generations—those who will be most affected—naturally have no voice of their own.”²¹²

Upon the acknowledgement of this baseline constitutional duty, all government action in pursuit of that duty must be in accordance with the fundamental rights and freedoms guaranteed by the Basic Law, including the right to life.²¹³ For the Court, therefore, the core justification of environmental constitutionalism was the protection of interests not otherwise represented in the political process.

3. The “Conservative” in “Liberal-Conservative”

These justificatory strategies illustrate the possibilities for normative environmental constitutionalism within the liberal tradition. This tradition has dominated much of constitutional theory and practice, particularly in the Global North.²¹⁴ But it is also a *conservative* approach, implying an appeal to existing institutions and traditions in a discursive mode of coherence and incremental change. Arguments advanced within this discourse often take on a legalistic tone, appealing to precedents and traditions as forms of authority valuable for their own sake. Otherwise, there would be no reason to locate environmental constitutionalism (and especially, environmental *rights*) within them. The liberal-conservative strand is ultimately conservative in a Burkean sense: the maintenance of

²⁰⁹ *Id.* ¶ 183.

²¹⁰ *Id.* ¶ 213.

²¹¹ *Id.* ¶ 211.

²¹² *Id.* ¶ 206.

²¹³ See Grundgesetz [GG] [Basic Law], art. 2 § 2, translation at <https://perma.cc/2BN9-NDUJ> (“Every person shall have the right to life and physical integrity. Freedom of the person shall be inviolable. These rights may be interfered with only pursuant to a law.”).

²¹⁴ Philipp Dann, Michael Riegner & Maxim Bönnemann, *The Southern Turn in Comparative Constitutional Law*, in THE GLOBAL SOUTH AND COMPARATIVE CONSTITUTIONAL LAW 1, 20 (Philipp Dann et al. eds., 2020).

existing constitutional traditions have value in and of themselves and provide a source of stability and shared understandings, allowing for the extension of constitutionalism to new fields.²¹⁵ Some may adopt this approach for strategic reasons. Judges value precedent; and lawyers will necessarily attempt to situate their arguments within existing normative and doctrinal approaches.

The discourse therefore becomes unavoidably incrementalistic. Over time, consideration of environmental matters could lead to gradual changes in constitutional practice, such as the inclusion of nonhuman interests underpinned by representation-reinforcement justifications. But in drawing on existing conceptual tools, the liberal-conservative strand eschews the possibility of radical and immediate break with the existing order, instead embodying what Bruno Latour has described as the “homeostatic” quality of law: new ideas and arguments must be subsumed into an existing “legal edifice” by drawing on the coherence and integrity inherent in conventional legal reasoning.²¹⁶ Such an approach offers stability in the face of the extreme physical, social, and legal disruption posed by many environmental crises²¹⁷ and coheres with traditional assumptions concerning both the role and *rule* of law²¹⁸: in maintaining a link with predictable and well-established legal practices, liberal-conservative constitutionalism provides a measure of certainty.

But the dominance of liberalism in constitutional law and theory has been challenged in recent years as scholars have revealed a range of other ideas and practices, including varieties of “post-liberal constitutionalism.”²¹⁹ These constitutional approaches call for a more fundamental reevaluation of the functions and justifications for constitutionalism and a more pluralist approach to constitutional theory.²²⁰ While not necessarily anti-liberal, such projects at least call for significant revisions to, or extensions of, the existing conceptual framework. At least two such variants are evident in the context of environmental constitutionalism: one *technocratic* and the other *transformative*.

²¹⁵ The sense of stability across time conveyed by the conservative approach bears a resemblance to Edmund Burke’s views on the English constitution, conceiving of the text as “a partnership not only between those who are living, but between those who are dead, and those who are to be born,” with interests shared across generations. See EDMUND BURKE, REFLECTIONS ON THE REVOLUTION IN FRANCE 368 (Oxford Univ. Press rev. ed. 2009) (1790).

²¹⁶ Elizabeth Fisher, et al., *The Legally Disruptive Nature of Climate Change*, 80 MOD. L. REV. 173, 199 (2017) (citing BRUNO LATOUR, THE MAKING OF LAW: AN ETHNOGRAPHY OF THE CONSEIL D’ETAT 242–43 (Marina Brilman et al. trans., Polity Press, Cambridge 2010)).

²¹⁷ *Id.*

²¹⁸ *Id.* at 176–77 (citing JEREMY WALDRON, THE RULE OF LAW AND THE MEASURE OF PROPERTY 53 (2012)).

²¹⁹ For a discussion of the pluralization of constitutional law and theory in the context of climate change, see Ghaleigh et al., *supra* note 11, at 522–23.

²²⁰ *Id.* at 528.

B. Technocratic Environmental Constitutionalism

1. Administrative Rationalism

Technocratic environmental constitutionalism answers the question “Why environmental constitutionalism?” with the response that, “environmental matters require the application of technical expertise, and so will sometimes need to be placed beyond the reach of ordinary majorities.” In this discourse, the role of a constitution is to allocate power to those institutions which possess the greatest technical capacity for decision-making. In other words, the problem with environmental decision-making in ordinary politics is the lack of expertise. Legitimacy is grounded in managerial capacity rather than democratic credentials or rights protection. Whether because of a lack of training or susceptibility to cognitive bias,²²¹ ordinary people—and therefore ordinary politics—cannot be trusted. Technocratic environmental constitutionalism converts this discourse into principles of, and justifications for, constitutional design and interpretation.

The prominent role of expertise is not unique to the technocratic strand. The liberal-conservative strand also involves assumptions about expertise: judges have a special role because of their perceived ability to adjudicate conflicts, apply laws and precedents, or make moral judgments. It is because of this expertise that judges take on liberal representation-reinforcing or rights-protecting roles. The technocratic appeal to expertise, however, is different. Technocratic environmental constitutionalism assigns responsibility to those actors best able to make rational decisions concerning the management of natural resources. This assumes an instrumentalist attitude toward the natural environment, conceived of as a stock of resources which experts must manage in accordance with technical standards concerning human welfare.²²² This move toward technocracy is part of a broader trend in environmental law and governance, which the environmental politics scholar John Dryzek has described as a discourse of “administrative rationalism.”²²³ In this discourse, governing is “not political, let alone participatory, but about rational management in the service of a clearly defined public interest, informed by the best available expertise.”²²⁴ Rather than recognizing intrinsic value in environmental features or acknowledging values-based disagreement about how humans should interact with the environment, the technocratic strand reduces environmental governance to a mode of

²²¹ See, e.g., Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1161–62, 1164–68, 1170–87 (2009) (summarizing scientific, cognitive, and institutional barriers to effective climate legislation, including various heuristics which make climate change difficult to conceptualize for non-expert decision-makers).

²²² KYSAR, REGULATING FROM NOWHERE, *supra* note 11, at 246–47 (making this observation in respect of environmental law more generally).

²²³ Dryzek, *supra* note 22, at 75–76.

²²⁴ *Id.* at 89.

technical problem-solving and optimization. Through the application of problem-solving techniques such as cost-benefit analysis and environmental impact assessment, administrative rationalism simultaneously regulates and *constitutes* the environment through what Julia Dehm has described as “world-making’ powers: the way law produces the ‘object’ it governs, even if this constitutive role of law is often disavowed, and law is presented as merely regulating a pre-given world.”²²⁵ The role of *constitutional* law is to allocate power to experts and insulate them from ordinary politics, ensuring that expertise is not only “on tap” but “on top.”²²⁶ In doing so, the technocratic discourse aligns the authority of law and science, presenting both as value-free and uncontested endeavors.²²⁷

This instrumentalist orientation presumes that “environmental protection” is of critical importance, justifying elevation into the “constitutional” tier and “elevating concern for the environment above a mere policy choice.”²²⁸ But this approach also assumes that environmental protection (or measures of “environmental quality”) involves value-free assessments which do not require political contestation: instead, experts can measure, assess, and implement optimal environmental outcomes. Technocratic environmental constitutionalism takes for granted the existing basic structure of contemporary economic and political systems.²²⁹ In environmental law more broadly this manifests in the rise of cost-benefit analysis as a primary tool of governance, where the expert quantifies and balances various environmental implications of any government policy while remaining grounded in existing preferences and values based on economic models.²³⁰ Legislative and even constitutional²³¹ obligations to perform environmental impact assessments also reflect this approach, putting

²²⁵ Julia Dehm, *One Tonne of Carbon Dioxide Equivalent (1tCO_{2e})*, in INTERNATIONAL LAW’S OBJECTS 305, 317–18 (Jessie Hohmann & Daniel Joyce eds., 2018) (specifically discussing the construction of “one tonne of carbon dioxide equivalent” in the international climate change regime).

²²⁶ See JOHN S. DRYZEK & JONATHAN PICKERING, *THE POLITICS OF THE ANTHROPOCENE* 121 (2018) (providing an example of the commonplace distinction between experts as being “on tap” rather than “on top” through the IPCC’s descriptions of findings as “policy relevant” but not “policy prescriptive”).

²²⁷ See Jasanoff, *supra* note 11, at 445 (critiquing the dissenting judgment of Justice Scalia in *Massachusetts v. Environmental Protection Agency (Mass. v. EPA)*, 549 U.S. 497 (2007), as contending “that law trumps when there is a contest of authority between science’s right to declare the state of the world and law’s right to declare *who* declares the scientific state of the world”).

²²⁸ Dinah Shelton, *Whiplash and Backlash—Reflections on a Human Rights Approach to Environmental Protection* 13 SANTA CLARA J. INT’L L. 11, 22 (2015).

²²⁹ Dryzek, *supra* note 22, at 89 (“Administrative rationalism is a problem-solving discourse, and so takes the structural status quo of liberal capitalism as given.”).

²³⁰ See generally KYSAR, *REGULATING FROM NOWHERE*, *supra* note 11, at 230–32, 235–39 (discussing environmental law’s heavy reliance on economics, among other factors, and how such reliance affects its achievements and success).

²³¹ See, e.g., CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] 1988, rev. 2017, art. 225 § 1(IV) (Braz.); CONSTITUTION art. 69 § (1)(f) (2010) (Kenya).

faith in expert bureaucratic decision-makers to weigh evidence gathered from a range of stakeholders. The logic of technocracy underpins much of U.S. administrative and environmental law, where the *Chevron* doctrine has granted expert agencies broad discretion in the interpretation of statutes.²³²

2. Technocratic Constitutional Design

Once expert management is afforded primacy, the justification for environmental constitutionalism lies in allocating decision-making authority to the actors and institutions possessing the greatest expertise. The puzzle for theorists and drafters is *how* constitutions can produce these structures. Existing approaches include the constitutional creation of specialized environmental agencies or the allocation of environmental powers to existing expert institutions. Article 268(7) of the Constitution of Colombia, for example, requires the Controller-General to present an annual report to Congress on the state of the environment,²³³ while Article 184(3) of the Constitution of South Africa requires the national Human Rights Commission to exercise oversight with respect to environmental matters.²³⁴ However, these developments are fairly modest. As noted below, judicial decisions provide a more comprehensive reflection of technocratic environmental constitutionalism.

Some constitutions reflect this logic by entrenching minimum standards of environmental quality²³⁵ or environmental management processes. This entrenchment binds all levels of government to a standardized model of environmental regulation. Rather than confining environmental provisions to open-ended rights and principles adjudicated by judges, these constitutions elaborate detailed standards which center the role of executive agencies. Chapter VI of the Constitution of Brazil, for example, not only guarantees a broadly-phrased environmental right, but also a set of detailed prescriptions for implementation.²³⁶ The Brazilian Constitution directs these prescriptions to the executive branch and includes a requirement that government agencies carry out environmental impact studies²³⁷ and restore mining activities “in accordance with technical solutions required by the proper governmental agencies.”²³⁸ Similarly, the Constitution of Kenya contains an open-ended

²³² *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 862 (1984). The future of the *Chevron* doctrine, however, is in doubt. See, e.g., *Loper Bright Enters. v. Raimondo*, 45 F.4th 359, 365 (D.C. Cir., 2022), cert. granted (U.S. May 1, 2023) (No. 21-5116).

²³³ CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 268 § 7, translated in *Colombia's Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/TY8D-WZWA>.

²³⁴ S. AFR. CONST., 1996. art. 184(3).

²³⁵ See *infra* note 423–427.

²³⁶ CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] 1988, rev. 2017, ch. VI, art. 225, § V (Braz.) art. 225.

²³⁷ *Id.* art. 225 ¶ 1(IV).

²³⁸ *Id.* art. 225 ¶ 2.

environmental right,²³⁹ which also includes specific obligations related to environmental governance, such as an obligation to “establish systems of environmental impact assessment, audit and monitoring of the environment.”²⁴⁰ These provisions foreground the role of expert agencies and techniques of environmental management and offer a framework to aid and guide expert decision-making as “an overarching legal-normative frame for directing environmental policy.”²⁴¹

3. A Role for Courts?

Examples of technocratic constitutional design beyond judicial adjudication, however, are relatively rare. As with the other two strands of environmental constitutionalism, technocratic environmental constitutionalism relies in large part on courts. This may come as a surprise: judiciaries often act as counterweights to executive power, adjudicating individual rights claims in the face of technical bureaucratic determinations of collective interests or evaluating executive action against a range of norms which extend beyond technical standards. Judges may be experts in law but lack environmental expertise. A prominent judicial role might therefore be inimical to technocratic faith in the application of expertise, unencumbered by countervailing values and rationalities.²⁴² Nevertheless, the discourse of technocratic environmental constitutionalism may include a role for courts in at least three ways. Each embraces courts as part of the technocratic enterprise, either by casting judges as possessors of *relative* managerial expertise or by harnessing the distinctive expertise of courts and litigation to improve the administrative state. By coopting the judiciary into the executive locus of technocratic power, constitutional law enhances the legitimacy of that power and corrects the state’s marginal failures while simultaneously affirming its primacy within the constitutional system of environmental governance.

First, a role could be justified for courts as institutions possessing managerial expertise—or at least expertise superior to that of other institutions, especially where state bureaucracies lack sufficient capacity.²⁴³ Expertise could arise from the litigation process or from judges’ “maximum power to compel compliance.”²⁴⁴ Courts are cast as experts not only in their ability to access and apply technical expertise, but also in their ability—grounded in both their legal authority and their

²³⁹ CONSTITUTION art. 42 (2010) (Kenya).

²⁴⁰ *Id.* art. 69 § f. For a decision implementing this provision, see *Baadi v. Kenya* (2018) eK.L.R., Petition No. 22 of 2012 (Ken.), <https://perma.cc/MRM3-CCFQ>.

²⁴¹ HAYWARD, *supra* note 150, at 6.

²⁴² See ECKERSLEY, *supra* note 144, at 92.

²⁴³ In addition to the cases discussed here, such an argument could be made based on courts’ relative insulation from disinformation as compared to the political branches. For an argument to this effect, see Kuh, *supra* note 148, at 760.

²⁴⁴ See May & Daly, *supra* note 98, at 2. Despite May and Daly’s claim, this is clearly not a universal feature of apex courts.

relative insulation from political pressures and incentives—to implement that expertise through law. This in turn provides a justification for environmental rights, and especially procedural rights, as a mode of accessing that expertise through litigation—particularly if such rights can be shown to improve environmental quality.²⁴⁵ As with many claims of expertise, this will often be a *relative* claim: that courts are more likely than executives to translate technical expertise into action and accordingly produce better environmental outcomes.

The Supreme Court of India’s prolonged management of air pollution caused by New Delhi’s vehicular transport fleet provides one example of courts performing this function.²⁴⁶ The Court has assumed an expert administrative role deriving from India’s constitutionally-protected right to life.²⁴⁷ That open-ended right has been converted into a highly prescriptive constitutional regime of environmental management. Initially filed in 1985, and following a range of orders issued in the mid-

²⁴⁵ Several quantitative studies have identified a correlation between the constitutionalization of environmental rights and substantive obligations and particular environmental outcomes. David Boyd’s 2011 study was the first to conclude that constitutional environmental provisions correlate with reductions in negative environmental measures, such as ecological footprints and greenhouse gas emissions. See BOYD, *supra* note 49, at 256–77. These findings, however, should be treated with caution. For example, countries with constitutional environmental rights are more likely to be recently-independent states with lower levels of development, and therefore lower baseline ecological footprints, for reasons unrelated to constitutional enactments. Boyd accepts that his findings do not demonstrate the directionality of his suggested causation, and he acknowledges the possibility that “a nation with strong environmental policies and broad public support for environmental protection may be more likely to entrench constitutional provisions related to environmental protection.” *Id.* at 276. Another more technically complex study has suggested a causal relationship based on a causal pathway whereby constitutional environmental rights “affect policymaker incentives, which in turn promotes specific statutory law and regulations that are sensitive to the country’s particular circumstances.” Chris Jeffords & Lanse Minkler, *Do Constitutions Matter? The Effects of Constitutional Environmental Rights Provisions on Environmental Outcomes*, ECOLOGICAL ECON., 2021, No. 108049 at 1. Although more complex than Boyd’s study, Jeffords & Minkler utilize an instrumental variable methodology, see *id.* at 296, which may not be well-suited to comparative constitutional law. See Holger Spamann, *Empirical Comparative Law*, 11 ANN. REV. L. & SOC. SCI. 131, 142–43 (2015). Jeffords & Minkler’s study is also linked by the lack of consistent and reliable measures of environmental performance, including problems associated with their chosen metric, the Environmental Performance Index developed by the Yale Center for Environmental Law and Policy. See Jeffords & Minkler, *supra* note 245, at 295, 309. Another study concludes that environmental rights lead to reductions in greenhouse gas emissions by setting credible commitments and increasing the salience of environmental issues for voters. See Alessandra Cepparulo, Giuseppe Eusepi & Lusia Giuriato, *Can Constitutions Bring About Revolutions? How to Enhance Decarbonization Success*, 93 ENV’T SCI. & POL’Y 200, 206 (2019). Another study has concluded that environmental rights might improve environmental outcomes by providing additional mechanisms for citizen action. See Chris Jeffords, *On the Relationship Between Constitutional Human Rights and Sustainable Development Outcomes*, 186 ECOLOGICAL ECON. 1, 14–15 (2021).

²⁴⁶ For a succinct summary (and powerful critique) of the complex and long-running litigation, see generally ANUJ BHUWANIA, *COURTING THE PEOPLE: PUBLIC INTEREST LITIGATION IN POST-EMERGENCY INDIA* 52–58 (2017).

²⁴⁷ India Const. art. 21.

1990s, the Delhi vehicular pollution case remains ongoing.²⁴⁸ In this longstanding case, the Court has consistently used the litigation process to establish and empower expert institutions and directly drive environmental decision-making through its own expertise. First, in addition to court-appointed amicus curiae, it created an expert body—the Environmental Pollution (Prevention and Control) Authority (EPCA)—as a fact-finding institution to make recommendations to the Court.²⁴⁹ In a 1998 ruling, the Court evaluated the findings of that Commission and issued a highly detailed set of orders—much like an expert administrator—including the expansion of public transport services fueled by non-diesel fuels, the elimination of leaded petrol, and the establishment of independent fuel testing laboratories.²⁵⁰ As the case continues to metastasize, the Court has assumed ongoing supervision of New Delhi’s air quality through technical and specific remedies, as well as through the direct consideration and weighing of scientific evidence and frequent dismissal of competing conclusions of executive agencies as lacking in technical rigor.²⁵¹ Sometimes drawing on EPCA’s advice (and sometimes rejecting it), the Court continues to attempt to manage New Delhi’s air pollution crisis.²⁵² This supervision is founded upon the Court’s own assessment of its superior technical competence relative to other institutions. In one judgment, for example, the Court castigated the relative lack of expertise located in the executive branch, criticizing the government for establishing a committee in which “none of its members was either a doctor, or an expert in public health.”²⁵³ In a more recent intervention, the Court concluded that expert agencies “miserably failed to discharge their liability ... [t]ime has come when we have to fix the accountability for this kind of situation.”²⁵⁴

Secondly, judicial intervention follows the logic of technocratic environmental constitutionalism where courts bolster the executive’s technical capacity. The High Court of Lahore adopted such an approach in *Leghari v. Federation of Pakistan (Leghari I & II)*.²⁵⁵ The case concerned a claim brought against the Pakistani government for failing to develop and implement an effective climate adaptation policy. The

²⁴⁸ BHUWANIA, *supra* note 246, at 52, 58.

²⁴⁹ *Id.* at 52–53.

²⁵⁰ M.C. Mehta v. Union of India & Ors, Unreported Judgments, Pet. No. 939 of 1996, decided on Jul. 28, 1998 (SC) (India), <https://perma.cc/Y3ST-BYUM> (last visited Oct. 15, 2023).

²⁵¹ *See e.g.*, M.C. Mehta v. Union of India & Ors, (2002) 2 SCR 963, 970–974 (SC) (India) (issuing specific emissions regulations for vehicles, while also refuting the government’s findings with scientific evidence).

²⁵² *See e.g.*, Order, MC Mehta vs Union of India (Mehta 2019 Order), Unreported Judgments, Pet. No 13029 of 1985, decided on Nov. 4, 2019 (SC) (India), <https://perma.cc/R2MB-WH73>.

²⁵³ *M.C. Mehta*, (2002) 2 SCR 963.

²⁵⁴ *Mehta 2019 Order*, Pet. No 13029 of 1985, decided on Nov. 4, 2019.

²⁵⁵ *Leghari I*, (2015) W.P. No. 25501/2015 (Lahore High Court) (Sept. 4, 2015) (Pak.), <https://perma.cc/9EP3-Q9YX>; *Leghari II*, (2015) W.P. No. 25501/2015 (Lahore High Court) (Jan. 25, 2018) (Pak.), <https://perma.cc/FQN9-Q297>.

petitioner argued that this failure violated several constitutional rights and principles, including rights to life, human dignity, property, and information.²⁵⁶ Following an evaluation, the Court found the technical performance of the government bureaucracy lacking. Specifically, the Court reviewed a government national climate change policy and framework for implementation, which established over 700 action items.²⁵⁷ The Court concluded that three years after the establishment of the plan, government departments had failed to carry out the action points.²⁵⁸ The Court elected to bolster the executive's technical capacity, ordering the creation of a Climate Change Commission comprised of "Technical Experts" in addition to government officials.²⁵⁹ The Court criticized the "delay and lethargy" of the State in failing to implement its own policies, and formally supervised policy implementation, asserting that it possessed "the necessary judicial toolkit to address and monitor the Government's response to climate change."²⁶⁰ The Court eventually relaxed its level of supervision three years later, only once it was satisfied that the Commission had achieved the goal of "developing human capacity to face the challenges of climate change," and that the government had sufficiently invested in its own technical capacity by establishing a Climate Change Authority.²⁶¹ The Court accordingly disbanded and replaced the Commission with a less intensive "Standing Committee."²⁶²

Thirdly, courts adjudicate competing institutional claims to superior environmental expertise, including between different branches of government. Such adjudication might involve acts of judicial self-abnegation: judges denying their own authority to adjudicate a claim out of deference to another branch's superior capacity.²⁶³ Technocratic environmental constitutionalism may therefore allow courts to reinforce their role in environmental governance as arbiters of expertise, even while recognizing the superior expertise of other branches. In *Juliana v. United States*,²⁶⁴ for example, the Ninth Circuit determined that plaintiff children lacked standing to claim that the political branches' lack of action on climate change amounted to a violation of several constitutional rights,²⁶⁵ including an alleged substantive due process right to a "climate system capable of sustaining human life."²⁶⁶ The court concluded that a judicial order could not redress the injuries suffered by the plaintiff

²⁵⁶ *Leghari I*, W.P. No. 25501/2015 ¶¶ 2, 7 (Sept. 4, 2015).

²⁵⁷ *Id.* ¶ 2.

²⁵⁸ *Id.* ¶¶ 7–8; *see also* discussion in ROSALIND DIXON, RESPONSIVE JUDICIAL REVIEW 120 (2023).

²⁵⁹ *Leghari I*, W.P. No. 25501/2015 ¶ 9 (Sept. 4, 2015).

²⁶⁰ *Id.* ¶¶ 7, 8.

²⁶¹ *Leghari II*, *supra* note 154, ¶ 19.

²⁶² *Id.* ¶¶ 24–25.

²⁶³ *See supra* note 227.

²⁶⁴ 947 F.3d 1159 (9th Cir. 2020).

²⁶⁵ *Id.* at 1165, 1169, 1171, 1175.

²⁶⁶ *Id.* at 1164.

children because the court lacked the institutional capacity “to order, design, supervise or implement the plaintiffs’ requested remedial plan.”²⁶⁷ The Ninth Circuit further observed that the court lacked the ability to set “metrics” or manageable standards for enforcing the plaintiffs’ rights and that “[n]ot every problem posing a threat ... can be solved by federal judges.”²⁶⁸ The court’s judgment thus reflects an assessment of relative technical expertise, concluding that its own capacity was inferior to that of the other branches.

The Supreme Court of India in the *Delhi Air Pollution* case, the High Court of Pakistan in *Leghari*, and the Ninth Circuit Court of Appeals in *Juliana* each performed different functions. While the Court in *Leghari* acted to boost the technical capacity of the executive, the Supreme Court of India substituted the executive’s administrative role with that of its own, while the Ninth Circuit concluded that the required expertise was beyond the reach of the court. But in all cases, the justifications for environmental constitutionalism embedded in the courts’ reasoning were closely related: each identified which institution possessed the greatest capacity or level of expertise and located decision-making authority in that institution. This is of a piece with the underlying discourse of administrative rationalism. Each decision rested on an assumption that environmental governance requires a sufficient level of expert management applied a politically-neutral way. The focus on *expertise* is distinct from the liberal-conservative modes of justification discussed above. Rather than addressing questions of rights or democratic credentials, the focus is on the technical capacity of decision-makers. Technocratic environmental constitutionalism is also distinct from another mode of post-liberal justification—transformative environmental constitutionalism.

C. Transformative Environmental Constitutionalism

The third discourse is transformative. In response to the same question asked of the other two strands, the transformative strand answers “because environmental crises require fundamental changes in interrelated social, political and economic systems, and constitutions can embody the necessary legal and aspirational framework for such transformation.” Rather than emphasizing *coherence* between environmental constitutionalism and existing approaches, the transformative strand stresses a *break* with existing practices. The need for such a break hinges on both the urgency and causes of environmental crises, which business-as-usual legal systems cannot effectively address. This discourse emphasizes the finiteness of natural resources and the limits of the Earth’s capacity to sustain life.²⁶⁹ It locates causes of

²⁶⁷ *Id.* at 1171.

²⁶⁸ *Id.* at 1174.

²⁶⁹ See, e.g., *Planetary Boundaries*, STOCKHOLM RESILIENCE CTR., STOCKHOLM UNIV. <https://perma.cc/MS6N-ADJ5> (last visited Jan. 10, 2023) (concluding that six of the nine

environmental crises not only in discrete human activities, but in human economic systems—and specifically, global capitalism premised on resource extraction, consumption, and economic growth. Unlike the liberal-conservative strand, which affirms the value of representative democracy while seeking to correct its pathologies, the transformative strand frames existing forms of democracy as hopelessly constrained and limited by economic systems.²⁷⁰ And unlike the technocratic strand, which conceives of the environment in value-free terms, the transformative strand stresses particular political, social and cultural values underpinning the worth of natural systems. In the transformative discourse, the goal of environmental constitutionalism is not to “manage” the environment through the application of expertise, but rather an explicit commitment to transformational projects: the environment is embedded in a set of interrelated social, economic and political systems, all in need of transformation.

Implicit in the transformative strand is a particular conception of the environment. Drawing on systems theory and ecological science,²⁷¹ it stresses the complex interconnection of social, cultural, political, legal, and environmental systems, conceiving of “the environment” not only as a set of resources but as a complex web (or even organism),²⁷² from which humans cannot be separated. Relatedly, transformative constitutionalism embraces biocentric or ecocentric values. Within this framework, environmental degradation is the product of exploitative human systems. Liberal constitutionalism is part of the problem—by prioritizing individual rights and free market institutions, it has facilitated the spread of global capitalism.²⁷³ Rather than bringing environmental matters within existing structure, therefore, the transformative environmental constitution is a frame for radical change and reconstruction. It offers a non-anthropocentric framing of human/Nature relations, rejecting the mastery of humanity over nature, as well as the human/Nature dualism that such mastery presumes.

“planetary boundaries” within which human beings must live in order to sustain long-term human life, have been exceeded).

²⁷⁰ See LOUGHLIN, *supra* note 18, at 61–69 (arguing that constitutionalism was co-opted by neoliberal theorists in the mid-twentieth century as a tool for protecting a highly individualistic conception of liberty and the global free market system).

²⁷¹ See, e.g., MEADOWS ET AL., *supra* note 59 at 23 (applying systems-based frameworks in concluding that there exist ecological limits to economic growth); James Gustave Speth & Kathleen Courrier, *Introduction*, in *THE NEW SYSTEMS READER 1* (James Gustave Speth & Kathleen Courrier eds., 2021) (explaining the value of a systems-based approach in the design of environmental law and policy).

²⁷² See, e.g., Christopher D. Stone, *Should Trees Have Standing? Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 499 (1972).

²⁷³ See LOUGHLIN, *supra* note 18, at 61–69 (explaining that liberal constitutionalism has evolved to prioritize the protection of free markets and individual liberty through governmental action).

These ideas draw on the broader concept of “transformative constitutionalism.”²⁷⁴ Developed by Karl Klare as a theory of adjudication of the 1996 Constitution of South Africa, transformative constitutionalism draws attention to two important dynamics. The first is the relationship between the enactment of a new constitution (or significant constitutional amendment), and impetus for broader legal or social change. Enactment, amendment, and subsequent adjudication permits “a long-term project of constitutional, interpretation and enforcement committed . . . to transforming an country’s political and social institutions.”²⁷⁵ Secondly, transformative constitutionalism holds that judges and lawyers should treat the enactment of a new constitution as a signal to inject expressly political values and substantive ends into legal practice, shifting a “depoliticized conception of law” into a “more politicized understanding of the rule of law and adjudication that can coexist with and support transformative hopes.”²⁷⁶ Transformative *environmental* constitutionalism carries these ideas into the expressly environmental domain. The ambitious goal of this strand is nothing less than a comprehensive transition away not only from a particular system of law, but also the social, political, and economic systems that have produced widespread environmental crises.

Transformative environmental constitutionalism thus embraces a somewhat utopian function for constitutions as frameworks for developing new norms of environmental governance. The ambiguity and open-endedness of constitutional norms can be bent toward a transformative agenda. As Francois Venter and Lous Kotzé have argued, “[g]iven its relative infancy, its indeterminability, its apex nature . . . *constitutionalism* offers a promising alternative within which the norms collected under the rubric ‘environmental’ law may be assayed.”²⁷⁷ The enactment or amendment of a constitution can signify a break from the past, operating as a “constitutional moment” for the creation of a new legal and ethical order.²⁷⁸ It is precisely this break from the past, rather than the liberal-conservative emphasis on continuity, which gives transformative environmental constitutionalism its power.

²⁷⁴ Klare, *supra* note 114 at 150; *see also* MELANIE MURCOTT, TRANSFORMATIVE ENVIRONMENTAL CONSTITUTIONALISM (2023) (further discussing the link to the South African tradition of transformative constitutionalism, as well as a critique of environmental constitutional practice in South Africa to date).

²⁷⁵ Klare, *supra* note 114, at 150.

²⁷⁶ *Id.*

²⁷⁷ Venter & Kotzé, *supra*, note 134, at 238 (emphasis in original).

²⁷⁸ *Id.* (citing Louis Kotzé, *The Anthropocene’s Global Environmental Constitutional Moment*, 25 Y.B. INT’L ENV’T L. 24, 44–47 (2014)). The phrase “constitutional moment” owes its popularization to Bruce Ackerman. BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS 267 (1991).

1. Transformational Codification and Adjudication

Transformative environmental constitutionalism is thus, in large part, an aspirational project. But it also manifests in more concrete terms in constitutional texts and decisions, particularly in Latin America. Environmental issues feature prominently in what legal scholarship has described as the “new Latin American constitutionalism.”²⁷⁹ Over the last thirty-five years, several Latin American countries have adopted a distinct model of constitution-making, either through the enactment of new constitutions²⁸⁰ or the extensive amendment of existing ones.²⁸¹ These constitutions generally share several features. First, they include extensive bills of rights, incorporating not only social and economic rights but also a range of relatively novel rights.²⁸² Furthermore, many established rights are given a collective component and specific state obligations—the Constitution of Colombia, for example, enshrines not only a right to health, but also a state obligation to ensure “access to services that promote, protect and restore health.”²⁸³ In many cases, these have been extensively enforced by courts.²⁸⁴ Many of these obligations also have environmental components. For instance, the Colombian health rights provision states that “[p]ublic health and environmental protection

²⁷⁹ Rodrigo Uprimny, *The Recent Transformation of Constitutional Law in Latin America: Trends and Challenges*, 89 TEX. L. REV. 1587, 1951, 1605–06 (2011).

²⁸⁰ See, e.g., CONSTITUIÇÃO FEDERAL [C.F.] 1988, rev. 2017 (Braz.); CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION], translated in *Colombia’s Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/XH56-ZUCY>; CONSTITUCIÓN DE LA REPÚBLICA DEL PARAGUAY [CONSTITUTION] Jun. 20, 1992 (Para.), translated in *Paraguay’s Constitution of 1992 with Amendments through 2011*, CONSTITUTE (2022) <https://perma.cc/N3AN-MPEB>; CONSTITUCIÓN DE LA REPÚBLICA BOLIVARIANA DE VENEZUELA [Constitution], Dec. 20, 1999, translated in *Venezuela (Bolivarian Republic of) 1999 (rev. 2009)*, CONSTITUTE (William S. Hein & Co. & Jefri J. Ruchti trans., 2012), <https://perma.cc/S8WP-72WK>; CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] FEB. 7, 2009 (Bol.), translated in *Bolivia (Plurinational State of)’s Constitution of 2009*, CONSTITUTE (Oxford Univ. Press ed. 2022), <https://perma.cc/4JWH-VVRG>.

²⁸¹ See Uprimny, *supra* note 279, at 1587 (referring to 1989 Amendments to the Constitution of Costa Rica; 1992 Amendments to the Constitution of Mexico; and 1994 Amendments to the Constitution of Argentina).

²⁸² See, e.g., CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 44, translated in *Colombia’s Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/EVR7-X225> (last visited Nov. 8, 2023) (setting out express rights for children); *id.* art. 46 (setting out express rights for the elderly); *id.* art. 78 (establishing consumer rights); *id.* art. 52 (establishing a right to recreation).

²⁸³ *Id.* art. 49.

²⁸⁴ See, e.g., David Landau, *The Reality of Social Rights Enforcement*, 53 HARV. INT’L. L.J. 189, 236–38 (2012) (arguing that individualized enforcement of social rights is distributionally regressive, and that greater utilization of structural injunctions is a better alternative); OCTÁVIO LUIZ MOTTA FERAZ, HEALTH AS A HUMAN RIGHT: THE POLITICS AND JUDICIALIZATION OF HEALTH IN BRAZIL 225–74 (2021) (arguing that the beneficiaries of the constitutional right to health in Brazil are disproportionately concentrated among middle- and upper-class litigants).

are public services for which the State is responsible,”²⁸⁵ in addition to four provisions which expressly protect rights related to the environment.²⁸⁶ These constitutions therefore flesh out more prescriptive and collective obligations on states than would a single open-ended provision.

Secondly, through concepts such as “plurinationality,” these constitutions recognize the role of plural and Indigenous legal systems, decentering traditional Western constitutionalism.²⁸⁷ These provisions often sit alongside separate provisions protecting the particular rights of Indigenous peoples, or rights related to ethnic and cultural diversity.²⁸⁸ The constitutions of Bolivia and Ecuador have gone further in recognizing specific alternative economic models.²⁸⁹ The principle of *Buen Vivir* (Ecuador)/*Vivir Bien* (Bolivia), or living well, emphasizes collective welfare and heterogeneity over economic growth.²⁹⁰ These principles codify Indigenous philosophies of *sumak kawsay*, which stress the interdependence of physical, social and natural systems.²⁹¹ Furthermore, these alternative economic models are directly linked to environmental

²⁸⁵ CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 49, *translated in Colombia’s Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/4S9U-GXE3>.

²⁸⁶ CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] arts. 79–82, *translated in Colombia’s Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/EU7T-QPP6>.

²⁸⁷ See Uprimny, *supra* note 279, at 1589 (explaining that new constitutions are emphasizing multiple cultures and recognizing the belief systems of indigenous peoples in new drafts); *see, e.g.*, CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] FEB. 7, 2009, art. 1 (Bol.), *translated in Bolivia (Plurinational State of)’s Constitution of 2009*, CONSTITUTE (Oxford Univ. Press ed. 2022), <https://perma.cc/B9DG-ACGR>; CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, art. 6, *translated in Ecuador 2008 (rev. 2021)*, CONSTITUTE, <https://perma.cc/763Y-9Z2M> (last visited Oct. 11, 2023).

²⁸⁸ *E.g.*, CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] Feb. 7, 2009, art. 1 (Bol.), *translated in Bolivia (Plurinational State of)’s Constitution of 2009*, CONSTITUTE (Oxford Univ. Press ed. 2022), <https://perma.cc/5WN7-9BXV>, art. 1; CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] 1988, rev. 2017, art. 215 (Braz.); CONSTITUCIÓN POLÍTICA DEL PERÚ [CONSTITUTION] 1993, art. 2, § 19, *translated in Peru 1993 (rev. 2021)*, CONSTITUTE, <https://perma.cc/7DEQ-3HMK>.

²⁸⁹ *See* CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, pmbl., arts. 10–15, 250, 275, 387, *translated in Ecuador 2008 (rev. 2021)*, CONSTITUTE, <https://perma.cc/7RS3-K9HC> (last visited Oct. 11, 2023) (Articles recognizing the role that economics and economic systems have in Ecuador); CONSTITUCIÓN POLÍTICA DEL ESTADO [CPE] [CONSTITUTION] FEB. 7, 2009, art. 8 § 1, 306 (Bol.), *translated in Bolivia (Plurinational State of)’s Constitution of 2009*, CONSTITUTE (Oxford Univ. Press ed. 2022), <https://perma.cc/L39U-QKX2> (recognizing Bolivia’s economic model as plural with a focus on human beings and redistribution of wealth to support basic human needs).

²⁹⁰ *See, e.g.*, Pablo Solón, *Vivir Bien: Old Cosmovisions and New Paradigms*, GREAT TRANSITION INITIATIVE (Oct. 24, 2023), <https://perma.cc/7A8A-CT3S> (writing, by a former senior Bolivian government official and architect of the 2009 Constitution, that these projects ultimately were cooped by dominant systems of capitalism and populist-extractivism without transforming social attitudes toward the environment).

²⁹¹ *E.g.*, CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, art. 14, *translated in Ecuador 2008 (rev. 2021)*, CONSTITUTE, <https://perma.cc/3QNA-8ADW> (last visited Oct. 11, 2023).

interests. Article 14 of the Constitution of Ecuador, for example, recognizes that “[t]he right of the population in a healthy and ecologically balanced environment that guarantees sustainability and the good way of living (sumak kawsay).”²⁹²

The environmental constitutional jurisprudence of many Latin American courts reflects these developments. Two cases from Colombia offer useful illustrations. In T-622/16 (*Rio Atrato Decision*), the Constitutional Court of Colombia considered alleged violations of a range of rights related to the serious degradation of the Atrato River and its surrounding basin.²⁹³ Various illegal forestry and mining practices, including dredging, backhoeing, and the use of mercury had caused appalling deforestation, toxic pollution, and water degradation.²⁹⁴ In addition to the violation of environmental rights, plaintiffs alleged that the government’s failure to prevent these activities amounted to violations of the fundamental rights to life, health, water, food security, and the culture and territory of the neighboring Indigenous and Afro-Colombian communities.²⁹⁵ These rights violations arose primarily from extractive industries such as intensive mining and illegal logging and the government’s failure to regulate such activities.²⁹⁶ Drawing on earlier jurisprudence, the Court developed the concept of the “ecological constitution” (*constitución ecológica*), a transversal principle of interpretation which draws on thirty different provisions of the Colombian Constitution.²⁹⁷ Environmental protection thus “radiates the entire legal order”, including through state duties and collectively-held rights.²⁹⁸ Applying this principle, the Court interpreted the Colombian constitution as demanding a break from anthropocentric jurisprudence whereby “the only thing that matters is the survival of the human being and only to this extent should the environment be protected.”²⁹⁹ Instead,

[T]he greatest challenge of contemporary constitutionalism in environmental matters is to achieve the safeguarding and effective protection of nature, the cultures and life forms associated with it, and biodiversity, not by the simple, material, genetic or productive utility that these may represent for the human being, but because a living entity composed of other multiple forms of life and cultural representations, they are the subject of rights ... only from an attitude of deep respect and humility

²⁹² *Id.*

²⁹³ C.C., noviembre 10, 2016, Sentencia T-622/16, *translated in* DIGNITY RIGHTS PROJECT, *supra* note 38.

²⁹⁴ *Id.* ¶ 9.1.

²⁹⁵ *Id.* ¶ 2.10.

²⁹⁶ *Id.* ¶ 2.1.

²⁹⁷ *Id.* ¶ 5.2–5.4. (defining the concept as “far from being a simple rhetorical statement insofar as it comprises a precise normative content composed of principles, fundamental rights and obligations on charge of the State”).

²⁹⁸ *Id.* ¶ 5.5.

²⁹⁹ *Id.* ¶ 5.7.

with nature, its members and their culture, is it possible to enter into relationships with them in fair and equitable terms.³⁰⁰

It founded such an approach upon “the interdependence that connects us to all living beings on earth; that is, recognizing ourselves as integral parts of the global ecosystem—the biosphere—rather than from normative categories of domination, simple exploitation, or utility.”³⁰¹

The Court sought to reconstruct the rights at issue in the case as “biocultural rights,” harmonizing both the rights of humans and of Nature itself.³⁰² The “biocultural rights” approach “integrates in one place scattered provisions regarding rights to natural resources and the culture of ethnic communities” across a range of constitutional provisions.³⁰³ The Court found that these rights entitled the Indigenous and Afro-Colombian communities of the Atrato River basin to maintain distinct cultural practices, on the basis that such practices are “essential for the planet’s biological diversity and cultural diversity.”³⁰⁴ The Court expressly framed the protection of such rights as the assertion of a different paradigm of development and property rights, one which centers “a relationship of profound unity between nature and the human species,” which depended on non-Western “forms of being, perceiving and apprehending the world to survive.”³⁰⁵

The Court declared that these findings, taken together, demanded recognition of the river itself as a “subject of rights.”³⁰⁶ The Court ordered the establishment of a governance body for the protection of the river and required that body to provide semiannual compliance reports to the Court to ensure its progress.³⁰⁷

In another case, the Supreme Court of Colombia considered a claim brought by twenty-five young people challenging the government’s failure to combat illegal deforestation of the Colombian Amazon Rainforest.³⁰⁸ The plaintiffs argued that deforestation’s contribution to global climate change violated their constitutionally protected rights. The Court framed the problem in terms of broader social systems, observing that “[h]umanity is the main cause of this scenario, its hegemonic planetary position led to the adoption of an anthropocentric and selfish model, whose characteristics features are harmful to environmental stability.”³⁰⁹ The Court expressly endorsed the need for a shift to an “ecocentric”

³⁰⁰ *Id.* ¶ 5.10.

³⁰¹ *Id.*

³⁰² *Id.* ¶ 5.11.

³⁰³ *Id.* ¶ 5.12.

³⁰⁴ *Id.* ¶ 5.14.

³⁰⁵ *Id.* ¶ 5.14–5.18.

³⁰⁶ *Id.* ¶ 9.28.

³⁰⁷ *Id.* ¶ 10.2.

³⁰⁸ Corte Suprema de Justicia [C.S.J] [Supreme Court], Sala. Civ. abril 5, 2018, M.P: L.A. Tolosa Villabona, Expediente STC4360-2018, at 2 (Colom.), <https://perma.cc/GF7R-M5YQ>.

³⁰⁹ *Id.* at 16 (text translated by author).

society,³¹⁰ as well as the need to shift “from a ‘private ethics’, focused on the particular good, to a ‘public ethics’, understood as the implementation of moral values that seek to achieve a certain conception of social justice,” conceiving of rights as “rights-duties.”³¹¹ Read in this way, the Court found that the Constitution gives rise to an “obligation of direct solidarity with nature,”³¹² and affirmed that environmental rights in the constitution were “fundamental and collective in nature.”³¹³ The Court cited no fewer than twenty constitutional provisions in support of this obligation.³¹⁴ Applying this approach, the Supreme Court followed the lead of the Constitutional Court in recognizing the Amazon Rainforest as a subject of rights and issued several orders for its restoration and ongoing judicial oversight.³¹⁵

The transformational strand is not exclusive to the Global South. Social movement demands to reimagine constitutional theory, such as the Matike Mai project in Aotearoa/New Zealand, draw on many similar themes.³¹⁶ An ecocentric, transformational strand has also long been influential in Germany,³¹⁷ culminating in the enactment of Article 20a of the *Grundgesetz*. This provision, which requires the state to “protect the natural foundations of life and animals” rather than explicitly human interests, reflects a compromise between the liberal-conservative and transformational strands.³¹⁸

2. Reconstructing Rights

The transformative strand eschews neutrality and embraces substantive national commitments. Rather than a roadmap for mediating presumptively equally valid competing interests, an environmentally transformative constitution sets out a particular conception of environmental governance and values.³¹⁹ Its legitimacy rests on the value of those commitments rather than appeals to an idealized form of

³¹⁰ *Id.*

³¹¹ *Id.* at 18 (citing Gregorio Peces-Barba Martínez, *Ética pública-ética privada*, ANUARIO DE FILOSOFIA DEL DERECHO, 1996–97, at 531 (1997)).

³¹² C.S.J., abril 5, 2018, STC4360-2018, at 21.

³¹³ *Id.* at 29.

³¹⁴ *Id.* at 26 (citing CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] arts. 1, 8, 49, 58, 63, 67, 79, 80, 88, *translated in Colombia’s Constitution of 1991 with Amendments Through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/GNB8-HB5H> (last visited Oct. 21, 2023); *id.* art. 95 § 8; *id.* arts. 215, 226; *id.* art. 268, § 7; *id.* art. 277, § 4; *id.* art. 289; *id.* art. 300, § 2; *id.* arts. 310, 311; *id.* art. 313, § 9).

³¹⁵ C.S.J., abril 5, 2018, STC4360-2018, at 45–50.

³¹⁶ See MATIKE MAI AOTEAROA, INDEP. WORKING GRP. ON CONST. TRANSFORMATION, HE WHAKAARO HERE WHAKAUMU MŌ AOTEAROA 65 (Feb. 6, 2016), <https://perma.cc/BS4Q-HJFC>.

³¹⁷ Louis Jacobus Kotzé, *Global Environmental Constitutionalism in the Anthropocene 194–97* (2017) (Doctoral Thesis, Tilburg University), <https://perma.cc/QKN5-A95B> (discussing the influence of Hans Jonas, Michael Kloepper, and Klaus Bosselmann).

³¹⁸ Grundgesetz [GG] [Basic Law], art. 20a, translation at <https://perma.cc/Y6HV-45TE> (Ger.). For a historical account of this compromise, see Proelss, *supra* note 13, at 95–96.

³¹⁹ MAY & DALY, GLOBAL ENVIRONMENTAL, *supra* note 11, at 49.

representative democracy.³²⁰ Indeed, transformative environmental constitutionalism defines itself with reference to a departure from a broken past, drawing values from sources beyond liberal constitutional theory.³²¹

Despite its revolutionary tone, however, the transformative strand continues the traditional preoccupation with *rights* as a central form of substantive constitutional commitments, coupled together with a prominent role for courts.³²² In this respect, it resembles the other two forms of environmental constitutionalism discussed in this Part. It does, however, go further in two respects. First, rights are reconstructed as more ecocentric or collective. The concept of “Rights of Nature” most dramatically reflects this, whereby nature or other nonhuman objects are recognized as rights-bearers.³²³ Elsewhere, environmental rights may expressly limit the scope of property rights protections and emphasize its collective dimensions. Article 58 of the Constitution of Colombia, for example, provides that “[p]roperty has a social dimension which implies obligations. As such, an ecological dimension is inherent to it.”³²⁴

Secondly, transformative environmental constitutionalism often rejects doctrinal boundaries and categories, instead framing rights as transversal principles which generate radical change across all areas of law. The transversal concept of the Colombian *constitución ecológica* offers one such example: the Court has recognized that “nature and the environment are a cross cutting element of the Colombian constitutional order.”³²⁵ Rights thus reinforce the positive entitlement of communities to collective goods, as well as the intrinsic value of the environment,³²⁶ constructing a legal imaginary or “master narrative” of the environment that can guide programs for radical change.³²⁷ In addition to rights,

³²⁰ See *id.* at 42–44 (explaining that environmental rights are appropriately enshrined as constitutional rights because they have the same weight as other such rights).

³²¹ See Kotzé, *supra* note 314, at 212–13 (describing environmental constitutionalism as an entirely new stage in constitutional development).

³²² See MAY & DALY, GLOBAL ENVIRONMENTAL, *supra* note 11, at 107–08 (noting that courts have enforced environmental rights despite the conceptual and practical challenges associated with articulating these rights).

³²³ See, e.g., CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, arts. 71–74, translated in *Ecuador 2008 (rev. 2021)*, CONSTITUTE, <https://perma.cc/V5G5-W76E> (last visited Oct. 11, 2023) (“Nature has the right to be restored.”); C.C., noviembre 10, 2016, Sentencia T-622/16, translated in DIGNITY RIGHTS PROJECT, *supra* note 38.

³²⁴ CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.] [CONSTITUTION] art. 58, translated in *Colombia’s Constitution of 1991 with Amendments through 2015*, CONSTITUTE (Oxford Univ. Press ed. 2022) <https://perma.cc/5TG6-EV8P>.

³²⁵ C.C., noviembre 10, 2016, Sentencia T-622/16, translated in DIGNITY RIGHTS PROJECT, *supra* note 38.

³²⁶ *Id.* at 31–32.

³²⁷ See Purdy, *supra* note 106, at 1176–77 (describing “environmental degradation” as “a moral master narrative, able to organize vice and virtue, hubris and comeuppance, crisis and imperative response, across a variety of particulars”).

principles such as *Buen Vivir/Vivir Bien*, sustainability,³²⁸ and precaution³²⁹ could provide guiding visions to structure legal orders.

Because of its commitment to many of the same institutions as liberal constitutionalism (especially rights and courts), the transformative strand is best conceived of as an extension of liberal constitutionalism, or an instantiation of *post* liberalism. Part IV further considers the relationship between all three strands.

IV. UNDERSTANDING ENVIRONMENTAL CONSTITUTIONALISM

Environmental constitutionalism tells us that environmental interests and challenges are important enough to belong in the “constitutional” tier of governance. But there is much it does not tell us. The identification of three different strands of environmental constitutionalism suggests different purposes that it might serve. Is it meant to bring environmental considerations into the pre-existing system of balancing and weighing competing interests? Is it intended to allocate decision-making power to expert institutions? Or does it signify a break from the past and a radical reconstruction of not only environmental governance, but of constitutionalism itself? These questions can be answered only once the possible meanings of environmental constitutionalism are made clear.

Demystification reveals two important payoffs. The first, discussed in this Part, concerns the value of “constitutionalism” as a framework. Rather than a perfectly coherent system, environmental constitutionalism can be a bricolage of different justifications, legal forms, and ideological projects.³³⁰ Its deployment can follow one of two patterns. The different strands of environmental constitutionalism can be rearranged into shifting yet cogent conceptual arrangements, producing different constitutional provisions and arguments.³³¹ In this sense, the

³²⁸ See, e.g., S. AFR. CONST., 1996 art. 24, § b(iii) (“Everyone has the right . . . to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other means that . . . secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development”). See generally KLAUS BOSSELMANN, *THE PRINCIPLE OF SUSTAINABILITY: TRANSFORMING LAW AND GOVERNANCE* 1 (2d ed. 2017).

³²⁹ See, e.g., KYSAR, *REGULATING FROM NOWHERE*, *supra* note 11, at 250–54 (arguing for a “precautionary principle” that warns against an individualistic approach to environmental policymaking and alternatively promotes a conception of political communities as actors within history that are inherently connected with the “environmental other”—including foreign citizens, future-generations, and nonhuman life-forms).

³³⁰ For more on the concept of “constitutional bricolage,” see Tushnet, *supra* note 23, at 1071; EUGÉNIE MÉRÉAU, *CONSTITUTIONAL BRICOLAGE: THAILAND’S SACRED MONARCHY VS. THE RULE OF LAW* 9–10, 20–23 (2022) (arguing for the value of constitutional bricolage as a means to counter hegemony by highlighting various political, religious, and legal ideologies that are “readily at hand in the immediate environment”).

³³¹ See KYSAR, *REGULATING FROM NOWHERE*, *supra* note 11, at 20–21, 242–47 (“an environmental constitutionalism, in which certain needs and interests of present and future generations, the global community, and other forms of life are given foundational legal

story of environmental constitutionalism can be one of *convergence*. But on the other hand, different versions of environmental constitutionalism can act as distinct conduct-guiding normative discourses.³³² These can in turn imbue seemingly similar legal provisions with different possible meanings,³³³ and give rise to different forms of constitutional design. This is a story of *divergence*. As environmental constitutionalism becomes a firm fixture of comparative constitutional law, so too will its normative conduct-guiding value. It is important to pay attention to precisely what the claim of environmental constitutionalism is advocating for, and to specify the forms and versions that are most desirable.

Secondly, demystification of environmental constitutionalism allows for its reconstruction. It reveals that environmental constitutionalism is not an inevitably transformative project, and that even in its transformative form, it relies in large part on preexisting institutions—and in particular, rights and courts. It may thus merely reinforce existing models of constitutionalism, or the logics of technocracy; and above all, it reinforces justifications for placing environmental decisions beyond the reach of ordinary politics. A different constitutional vision, however, may be necessary in the face of environmental crisis. In Part V, I begin to sketch out such a vision, and an agenda for a possible fourth conception of environmental constitutionalism: constitutional environmental democracy.

A. *Convergence*

Environmental constitutionalism is not a unitary concept. Instead, it is a framework that accommodates at least three different strands. These strands are sometimes convergent: they can be deployed as normative justifications for similar constitutional institutions, provisions, or doctrines. Attempts to persuade judges, drafters, or citizens of their legitimacy will often draw strength from each strand. The technocratic strand calls attention to the value of institutional capacity in constitutional design and interpretation.³³⁴ From the liberal-conservative strand, arguments establish coherence with existing legal traditions, providing a framework of stability in the face of the disruptive force of

importance, would help restore conceptual coherence and priority to the subjects of environmental law”).

³³² See Robert M. Cover, *Foreword: Nomos and Narrative*, 97 HARV. L. REV. 4, 4–5, 17–18, 28–29 (1983) (arguing that, in the normative world, “law and narrative are inseparably related”).

³³³ See *id.* at 4, 5, 17, 21 (“Every prescription is insistent in its demand to be located in discourse—to be supplied with history and destiny, beginning and end, explanation and purpose All Americans share a national text in the first or thirteenth or fourteenth amendment, but we do not share an authoritative narrative regarding its significance. . . . [I]n order to understand any legal civilization one must know not only what the precepts prescribe, but also how they are charged.”).

³³⁴ See DRYZEK, *supra* note 22, at 98.

new environmental challenges and constitutional provisions.³³⁵ And because of pervasive environmental crises, the presentation of proposals as “transformational” is also likely to render them more persuasive. Many expressions of environmental constitutionalism are Janus-faced, simultaneously searching for coherence and legitimacy in the past while seeking transformation and efficacy in the future.³³⁶ The Supreme Court of Mexico has thus observed a “double dimension” inherent in environmental constitutionalism: an individualized, traditional component, as well as a more radical, collective, and ecocentric component.³³⁷ In the Court’s jurisprudence, these two components exist side-by-side, and the violation of either component constitutes a constitutional violation.³³⁸

Thus, although environmental constitutionalism is often presented as a break from a broken past, core concepts frequently draw on an established tradition. This includes transformational articulations: transformational environmental constitutionalism engages in a process of “retrospective reinterpretation,” turning to the past in order to reconstruct the future.³³⁹ This process is manifest in the framing of arguments for rights of Nature, such as those recognized in the Colombian cases discussed above.³⁴⁰ These arguments fuse together all three strands in a mutually reinforcing argument. A typical justificatory strategy claims that rights of Nature are no different from existing rights held by other nonhumans (such as corporations),³⁴¹ or that Nature represents the culmination of a gradually expanding circle of recognized rightsholders.³⁴² In the *Atrato River Decision*, although the Court presented rights of Nature as a radical new vision for the future, it nevertheless emphasized the coherence between such rights and more traditional concepts of Colombian constitutional doctrine, such as the

³³⁵ See Fisher et al., *supra* note 216, at 199 (citing LATOUR, *supra* note 216, at 242–43) (discusses the legal ramifications and challenges posed by climate change. It highlights the significant impact climate change has on legal frameworks and regulations).

³³⁶ See, e.g., El orden de planeación y elaboración del proyecto denominado “construcción del parque temático ecológico laguna del carpintero,” también llamado “parque ecológico centenario,” Primera Sala de la Suprema Corte de Justicia [SCJN], Undécima Época, Noviembre de 2018, Expediente 307/2016, página 43 (Mex.) translated in Human Rights Office of Mexico’s Supreme Court of Justice, Extract of the Amparo en revisión 3-7/2016, Mexico [*Carpintero Lagoon Decision*] (discussing both the protection of the environment as an asset (future) and the restoration of nature (past) that is part of the human right to the environment).

³³⁷ *Id.*; see also *id.* at 44 (citing *Advisory Opinion OC-23/17*, Inter-Am. Ct. H.R. (ser. A) No. 23, para. 59).

³³⁸ *Id.* at 45–46.

³³⁹ See CHARLES TAYLOR, MODERN SOCIAL IMAGINARIES 109–12 (3d ed. 2005) (discussing the phenomenon of retrospective reinterpretation in the context of the United States Constitution).

³⁴⁰ See *supra* notes 293–315 and accompanying text.

³⁴¹ See, e.g., Stone, *supra* note 272, at 452–53, 464–65.

³⁴² See generally RODERICK NASH, THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS (1989) (discussing the rights of nature and placing it at the top of a historically expanding concept of rights).

“social rule of law” (*estado social de derecho*).³⁴³ This was even as the Court presented the *constitucion ecologica* as a means of ensuring “that in the shortest possible time a substantial transformation of relations with nature is achieved.”³⁴⁴ Furthermore, rights of Nature may offer solutions to problems of institutional capacity, requiring the creation of new governance institutions, or judicial interventions to reconfigure the existing regimes. The courts’ orders reflected this in both the *Atrato River* and *Amazon Rainforest* decisions, which created new government institutions and bureaucratic programs.³⁴⁵

Just as the framework of transformative environmental constitutionalism draws strength from the past, the conservative conceptual tools of liberal-conservative environmental constitutionalism may give way to more transformational projects. The application of representation-reinforcement theory to pervasive environmental crises (such as biodiversity loss and climate change) can produce significant changes in how membership of the political community is imagined.³⁴⁶ In particular, it forces the question of “who counts” in environmental decision-making. As Douglas Kysar has noted, this version of environmental constitutionalism “rest[s] comfortably beside more firmly established structural and representative aspects of constitutionalism,” but at the same time “force[s] us to abandon complacency about whether we have drawn the circle of dignity as wide as possible.”³⁴⁷ It thus demands a process of ongoing reflection and consideration of who might be missing: once we start asking whose representation a constitution is designed to reinforce, it is inevitable that we start asking who should be represented in the first place.³⁴⁸ Beyond the human categories of children and future generations, the device of representation-reinforcement theory might prompt consideration and eventual inclusion of nonhuman categories, leading to the same conclusions regarding “rights of Nature” as the transformative strand.³⁴⁹ Thus, liberal-conservative environmental constitutionalism contains the latent seeds of a more transformative vision. Slippage between the different strands is inevitable.

³⁴³ C.C., noviembre 10, 2016, Sentencia T-622/16, *translated in* DIGNITY RIGHTS PROJECT, DELAWARE LAW SCHOOL, *supra* note 38, ¶ 4 (beginning with the history of the principle, locating its origins in the early-twentieth century constitutions of Mexico and Weimar Germany).

³⁴⁴ *Id.* ¶ 5.52.

³⁴⁵ *Id.* pt. IV; Corte Suprema de Justicia [C.S.J.] [Supreme Court], Sala. Civ. abril 5, 2018, M.P.: L.A. Tolosa Villabona, Expediente STC4360-2018, at 48 (Colom.), <https://perma.cc/3ZH6-CMEL>.

³⁴⁶ See generally Anita S. Krishnakumar, *Representation Reinforcement: A Legislative Solution to a Legislative Process Problem*, 46 HARV. J. ON LEGIS. 1 (2009) (offering an argument for the power of representation reinforcement).

³⁴⁷ KYSAR, REGULATING FROM NOWHERE, *supra* note 11, at 247.

³⁴⁸ See *id.* at 176–99 (the chapter “Other Forms of Life” explores what implications come from considering animals, nature itself, kids, and future generations in environmental considerations).

³⁴⁹ *Id.*

B. Divergence

The frequent convergence between the different strands of environmental constitutionalism begs an important question: why demystify? Does the identification of different strands of environmental constitutionalism have practical consequences? In this section, I highlight the *divergences* between the different versions. The conflict between these different versions is consequential; despite sometimes borrowing from other strands, each version ultimately vies to be understood as the primary conception of “environmental constitutionalism.” This understanding carries normative weight. “Constitutionalism” has become a dominant and action-guiding ideal—claims represented as “constitutional” carry special weight.³⁵⁰ As Giovanni Sartori has influentially pointed out, “constitution” has become a ‘good word.’ It has favorable emotive properties, like freedom, justice or democracy.”³⁵¹ The claim that a particular framework is one of “environmental constitutionalism” is therefore not merely descriptive, but normative. The three strands are competing claims both of what “constitutional” governance should look like, as well as what it means for a constitutional system to be “environmental.”

Each strand is also an answer to a central question: “*why* environmental constitutionalism?” In other words, “why ought environmental matters be placed beyond the reach of ordinary politics?” The strands appeal to different modes of argumentation: the liberal-conservative strand to coherence and individual or group-based interests; the technocratic strand to problem-solving consequentialism and administrative rationality; and the transformative strand to substantive collective values and a break from existing practice. These discourses are produced by a twofold act of imagination—imagining both constitutionalism and the environment.³⁵² Different actors within a constitutional system—drafters, judges, and politicians—draw on and contribute to these imaginations.³⁵³ This process of shared imagination matters: the discourse through which the environment is discussed, through which constitutionalism is legitimated, and through which environmental matters are embedded in that project of legitimation, guide the practices of actors who are engaged in constitutional practice. Discourses can give rise to particular ideals of government, which can in

³⁵⁰ Mattias Klum, *The Cosmopolitan Turn in Constitutionalism: An Integrated Conception of Public Law*, 20 Ind. J. Glob. Legal Stud. 605 (2013).

³⁵¹ Sartori, *supra* note 125, at 855.

³⁵² Cf. BARBER, *supra* note 123, at 13 (explaining “[t]he principles of constitutionalism depict a state of affairs we have reason to want to bring about but the reasons for wanting this state of affairs are many and varied. The principles of constitutionalism then act as rules standing between the basic values that make life worthwhile and constitutional actors.”).

³⁵³ See BARBER, *supra* note 123, at 12–13 (“[The principles of constitutionalism] provide an idealized, and partial, vision of the form the constitution should take, and then require those working within constitutions to pursue this ideal.”).

turn legitimize (or delegitimize) government actions in not only a legal, but a political or symbolic sense.³⁵⁴

But importantly, discourses are not inevitably hegemonic.³⁵⁵ Like constitutionalism generally, *environmental* constitutionalism can accommodate many different conceptions embedded in many different discourses. They can conflict with or complement one another and produce a range of different institutional forms.³⁵⁶ Tensions between them may produce different results in constitutional drafting and interpretation, as drafters and judges understand constitutional norms in particular ways.³⁵⁷ Which of the three strands is dominant in those understandings will prove consequential.³⁵⁸

First, drafters' understandings as to what they are doing when they design "environmental constitutionalism" will affect the balance of provisions enacted. Where drafters understand environmental constitutionalism as mandating a transformative approach, they are likely to embrace more ambitious and transversal rights and principles. Where environmental constitutionalism is understood as a technocratic project, drafters are more likely to entrench or insulate the power of environmental bureaucracies or set out particular standards for environmental governance. Crucially, different discourses may be more or less appropriate responses to different challenges. Where the primary challenges rest in weak political institutions and a lack of state capacity, framers may wish to adopt a technocratic approach. Where existing political institutions suffer from acute pathologies, the liberal-conservative discourse may be an appropriate guide for constitutional design. And where constitutional drafting takes place in the context of widespread support for a reconfiguration of broader social and political systems, the prescriptions implied by transformative environmental constitutionalism are likely to be more appropriate.

Secondly, understandings of environmental constitutionalism affect how environmental constitutional provisions are interpreted. Seemingly similar text is capable of quite different interpretations. This is particularly true of constitutional rights provisions, which are notoriously laconic and open-ended. The understandings that judges bring to their interpretation of legal texts can thus have quite different results: a "right to a healthy environment" could be interpreted in any number of ways. Furthermore, in the absence of any binding international instrument on environmental rights, there are few sources of authority that judges can rely on in interpreting these norms.

³⁵⁴ See *id.* (discussing principles of constitutionalism as ideals in that they are justifications for propositions that require no further justification).

³⁵⁵ DRYZEK, *supra* note 22, at 22.

³⁵⁶ See Barber, *supra* note 123, at 14 ("The principles of constitutionalism are also partial: they do not seek to produce a single model of a constitution.")

³⁵⁷ See Karin Bäckstrand & Evan Lövbrand, *The Road to Paris: Contending Climate Governance Discourses in the Post-Copenhagen Era*, 21 J. ENV'T POL'Y & PLAN. 519 (2019) (discussing how competing discourses can shape global climate governance).

³⁵⁸ *Id.*

Given the novelty and open-endedness of constitutional environmental provisions, judicial understandings of the normative foundations of environmental constitutionalism may play an influential role in constitutional interpretation. A judge could interpret “right to a healthy environment” narrowly, protecting property interests of private individuals or as a negative bulwark against the power of the state.³⁵⁹ Alternatively, a judge who understands environmental constitutionalism as a transformative project is more likely to interpret such a provision broadly, perhaps as conferring positive entitlements to systemic economic change, including the underlying system of property rights itself.

Environmental constitutionalism is thus not only a descriptive and normative framework, but also an *interpretive* one. At the “gaps” where legal text and precedent end, interpretive concepts such as this become crucial—indeed, they may help define where the “gaps” are perceived in the first place.³⁶⁰ Conceptual understandings and legal culture can influence the willingness of judges to interpret provisions in accordance with normative ideals in the “process of dissolution and reconstitution of legal constraint:” they set the boundaries of permissible interpretations.³⁶¹ The strands of environmental constitutionalism that gain prominence will come to frame the possibilities of textual interpretation.

Finally, the understanding of “environmental constitutionalism” may help to define how public imaginaries perceive the “environment.” Shared, contextual understandings of the environment help shape environmental constitutionalism, but dialectically and dynamically, constitutions may in turn influence those shared understandings and social imaginaries.³⁶² For example, although the constitutions of both Ecuador and Germany draw on transformational themes, they are the products of different constitutional histories, each responding to different environmental values: one (Ecuador) encodes meanings drawn from Indigenous, post-colonial, and revolutionary themes, reacting against extractive developmentalism; the other (Germany) encodes meanings drawn from deep ecology and social democracy, reacting against a history of animal exploitation, nuclear power, and biodiversity loss.³⁶³ As these understandings become entrenched in constitutional law, they can frame

³⁵⁹ See, e.g., *Fuel Retailers Ass’n of S. Afr. v. Dir. Gen.: Env’t Mgmt., Dep’t of Agriculture, Conservation & Env’t, Mpumalanga Province* (Fuel Retailers Association) 2007 (6) SA 1 (CC), at 67 (S. Afr.) (Sachs J. dissenting) (observing that the majority’s conception of “sustainable development” protected under the Constitution of South Africa had morphed into an economic interest held by gas stations in preserving a stable market.)

³⁶⁰ See Klare, *supra* note 114, at 157–62. (explaining how the interpretive nature of environmental constitutionalism works to fill gaps in legal frameworks).

³⁶¹ *Id.* at 160–63.

³⁶² For discussion of the concept of a “social imaginary,” including its relation to a national constitution, see TAYLOR, *supra* note 339, at 23, 109–12, 115.

³⁶³ See Proelss, *supra* note 13, at 92–97 (explaining the development of environmental constitutionalism in Germany); Rosalind Dixon, *Constitutional Rights as Bribes*, 50 CONN. L. REV. 767, 791–801 (2018).

the parameters of legislative and popular debate; whoever can successfully claim that their conception of the environment, and the state's obligations toward it, is given the imprimatur of a "constitutional" claim. By identifying the distinctive strands that exist in tension within the "environmental constitutionalism" concept, we can identify the ways in which national environmental understandings and values become embedded and reified in law, and their potential to frame political debate once entrenched.

V. RECONSTRUCTING ENVIRONMENTAL CONSTITUTIONALISM

A. Constitutional Environmental Democracy

The demystification of environmental constitutionalism clears the path for the reconstruction of constitutional environmental governance. In particular, it demonstrates that environmental constitutionalism, even in its most transformative form, sits in an uneasy tension with participatory democratic politics, and remains wedded to the existing institutions of rights and courts. Yet it is precisely these institutions that have brought us to the point of pervasive environmental crisis. A review of the strengths and weaknesses of each strand helps to construct a new vision for environmental constitutionalism, and some prescriptions for its realization. This is a vision of constitutional environmental democracy.

The technocratic strand has clear strengths. It highlights the importance of technical capacity—any discourse of environmental governance that fails to harness the capacity of the state for effective environmental outcomes is a poor one. It also highlights the importance of building state capacity in institutions, particularly in states with weak existing political or bureaucratic institutions. But the dominance of administrative rationalism is deeply inimical to democratic participation.³⁶⁴ Humans relate to the environment in a wide range of ways. Value-free technical expertise cannot provide a "right" answer to questions of environmental quality.³⁶⁵ Instead, techniques of environmental governance, such as cost-benefit analysis, require a "preanalytic vision" that exists prior to the application of expertise.³⁶⁶ This vision can arise only through debate, discourse, and struggle between the conflicting conceptions of environmental imaginaries that exist within any given polity. Disagreement exists at every level. First,

³⁶⁴ Chiara Armeni, *Participation in Environmental Decision-making: Reflecting on Planning and Community Benefits for Major Wind Farms*, 28 J. ENV'T L. 415, 423 (2016) (defining administrative rationalism and illuminating its impact on democratic participation in the context of wind farms).

³⁶⁵ See, e.g., Douglas Kysar, *Law, Environment, and Vision*, 97 NW. U. L. REV. 675, 693 (2002) [hereinafter Kysar, *Law, Environment, and Vision*] (explaining that questions of environmental quality require democratic discussion).

³⁶⁶ See *id.* at 675, 692–93 (arguing for a new preanalytic vision in environmental law guided by the vision of ecological economics).

there is disagreement as to what constitutes a desirable environment.³⁶⁷ Should governments favor pristine wilderness preservation, for example, or prioritize access to nature and the sustainable integration of human societies with their natural surroundings? Secondly, there is disagreement about competing environmental interests.³⁶⁸ Individuals and group interests will conflict with one another, not only because of ideational or cultural disagreements but also because of fundamental material concerns. Environmental decisions will often produce winners and losers. For example, a transition away from fossil fuels requires the construction of infrastructure such as solar arrays, wind farms, and transmission lines, and lithium mines for batteries.³⁶⁹ Communities living alongside such infrastructure will likely experience a decrease in the quality of their local environment.³⁷⁰ The conflict between the global effects of climate change and the localized effects of renewable infrastructure cannot be resolved by reference to technical expertise or overall utility-maximization alone; such solutions rest on questions of political values and distribution. Technocratic approaches, by themselves, cannot provide answers as to *who* should bear the costs of intra-environmental conflicts: such questions require moral reflection and challenging collective prioritization of value. Thirdly, there are conflicts between environmental and non-environmental interests.³⁷¹ This includes conflict between preserving natural resource or exploiting resources for economic benefit. This conflict is inherent, for example, in the Constitution of South Africa, which directs the government to “secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”³⁷² Mediating these competing interests is not simply a question of costs and benefits; it includes questions of competing values, as well as a moral judgment as to what level of development is “justifiable.”³⁷³

³⁶⁷ See *id.* at 679–80 (“[G]rowth of human economic production is not checked by restrictions imposed by nature.”).

³⁶⁸ *Id.* (noting the need for society to “remain cognizant of the extent and quality of existing resource stocks”).

³⁶⁹ See, e.g., J.B. Ruhl & James Salzman, *What Happens When the Green New Deal Meets the Old Green Laws?*, 44 VT. L. REV. 693, 694–97 (2020) (discussing conflicts between competing environmental priorities, specifically “old” priorities of species and landscape conservation and “new” priorities of renewable energy infrastructure development).

³⁷⁰ *Id.* at 695.

³⁷¹ See *generally id.* (discussing conflicts of environmental and non-environmental interests with green infrastructure development); see also Kysar, *Law, Environment, and Vision*, *supra* note 365 (discussing conflicts of environmental and non-environmental interests in the context of harvest/use of natural resources).

³⁷² S. AFR. CONST., 1996 ch. 2 § 24(b)(iii).

³⁷³ See Kysar, *Law, Environment, and Vision*, *supra* note 365, at 688, 708–10 (showing how the interests involved in promoting sustainable development cannot be accomplished through simple cost-benefit analysis); see also KOTZÉ, ANTHROPOCENE, *supra* note 11, at 216–21 (discussing the competing interests in environmental constitutionalism and the moral judgments it requires).

In addition to these moral and conceptual difficulties, there are also consequentialist objections to the undue primacy of technical expertise as a means of improving environmental quality. Empirical evidence suggests that participatory and democratic forms of environmental governance tend to lead to better environmental outcomes.³⁷⁴ Effective environmental governance requires democratic participation to collect valuable information: the vast scale and conceptual ambiguity of “the environment” means that one place cannot hold such information collectively.³⁷⁵ Environmental challenges, and decisions made in response to them, are necessarily dynamic. New physical and scientific realities demand constantly changing political responses. At minimum, popular participation will be necessary to determine *how to* address environmental challenges, even if it may be less effective in deciding *whether to* address those challenges to begin with.³⁷⁶

Furthermore, the privileging of expertise—whether legal, economic, or scientific—may have the effect of closing out alternative modes of thinking, sapping decision-making of the imaginative vitality necessary to meet novel environmental crises.³⁷⁷ A commitment to political equality necessarily requires some form of “epistemic egalitarianism”—the acceptance that people’s capacity to reason, as well as their particular lived experience and interactions with their natural environment, renders them qualified to play at least some role in environmental

³⁷⁴ See, e.g., *id.* at 236–37, 237 n.30 (“[T]he majority view today is that while democracy is no panacea for environmental protection, the greater the degree to which democracy is entrenched in a polity, the better the environmental quality is likely to be in that state. Reasons for this are that environmental harm and costs tend to be more equally distributed in a democratic society; political leaders and environmental governance officials are usually more accountable in a democracy; the public is better represented in and involved with environmental decisions that affect them; access to environmental information is more readily available; non-governmental organizations that promote environmental interests (especially those of marginalized groups) are tolerated and flourish; civil litigation is more readily available to enforce environmental laws and assert environmental rights claims; and democracies more readily participate in a global society with other states and non-state actors that collectively aim to improve global environmental protection and justice.”). See generally Jesse Worker & Stephanie Ratté, *What Does Environmental Democracy Look Like?*, WORLD RES. INST. (July 29, 2014), <https://perma.cc/W6DV-WSN3> (discussing the concept of “environmental democracy”).

³⁷⁵ See Dryzek, *supra* note 22, at 94–95; see also JAMES C. SCOTT, *SEEING LIKE A STATE* 11–52 (1998) (observing that attempts to comprehensively map the natural world with standardized technical measures amount to mere abstractions with many omissions which are only revealed through local knowledge and experience).

³⁷⁶ See Shelley Welton, *Decarbonization in Democracy*, 67 UCLA L. REV. 56 (2020) (making a similar argument).

³⁷⁷ See Jasanoff, *supra* note 11, at 444–47 (discussing the “blocking routines of technical expertise” embedded in professional legal and judicial discourses, noting that “[d]eeply-embedded technical thinking within our legal and juridical institutions has adverse impacts on making necessary changes”); Douglas A. Kysar, *Politics by Other Meanings: A Comment on “Retaking Rationality Two Years Later”*, 48 HOUS. L. REV. 43, 74–76 (2011) (discussing the way in which welfare economics has narrowed policy imagination).

decision-making.³⁷⁸ And finally, democratic institutions are also necessary to hold technocratic expertise to account. Although constitutionalism may be a check or counterweight to democratic participation, the privileging of administrative expertise inherent in the technocratic discourse suggests a fundamental incompatibility, or even disdain, for democratic governance.³⁷⁹

The transformative strand also has obvious appeal. Of the three, it best encapsulates the scale of environmental challenges, as well as their embeddedness in broader social, cultural, political, and *legal* systems. But the discourse suffers from two challenges. The first is whether the tools, institutions, and language of constitutionalism can be repurposed to achieve environmentally transformational ends.³⁸⁰ In many jurisdictions, constitutionalism has become closely aligned with existing institutions, including those that prioritize the value of individual liberty and, relatedly, the market.³⁸¹ Furthermore, the transformational discourse may overstate the power of constitutional design and adjudication. It seems unlikely that national constitutions can comprehensively address the extraordinarily complex and global structural factors that drive extraction and consumption and, in turn, environmental problems. These are forces that go beyond the power of any single government, and beyond the reach of any particular institutions—including courts, acting upon discrete and intermittent disputes grounded in the language of rights. Effective environmental discourses must reckon with the constraints of basic economic systems, addressing questions of how to restructure political decision making in light of the “imperatives of the system.”³⁸²

This frequently manifests in significant distributional shortcomings in jurisdictions that have endorsed a transformative constitutional project rooted in economic rights.³⁸³ Although the framers of such rights may imagine them as universally accessible to all, the reality of judicial enforcement is that the enforcement of transformative rights agendas is available only to those with the resources to litigate.³⁸⁴ In many

³⁷⁸ On the notion of “epistemic egalitarianism,” see DANIELLE ALLEN, *JUSTICE BY MEANS OF DEMOCRACY* 39–41 (2023).

³⁷⁹ Zachary Liscow & Daniel Markovits, *Democratizing Behavioral Economics*, 39 *YALE J. REGUL.* 1274, 1323 (2022).

³⁸⁰ See, e.g., Lael K. Weis, *Environmental Constitutionalism: Aspiration or Transformation?*, 16 *INT’L J. CONST. L.* 836, 849 (2018) (discussing the difficulties inherent in a right-based approach to environmental constitutionalism).

³⁸¹ See, e.g., LOUGHLIN, *supra* note 18, at 2–3 (“Constitutionalism presents itself today as a method of advancing liberty in a world of total government.”); WALDRON, *supra* note 115, at 31–32 (discussing how defining constitutionalism with reference to governmental “limitation” positions constitutionalism “as such in favor of market provision”).

³⁸² DRYZEK, *supra* note 22, at 231.

³⁸³ See Daniel M. Brinks & Varun Gauri, *The Law’s Majestic Equality? The Distributive Impact of Judicializing Social and Economic Rights*, 12 *PERSPS. POLS.* 375, 385 (2014) (noting how a lack of access to basic services can skew the benefits of progressive litigation away from the underprivileged).

³⁸⁴ David Landau, *The Reality of Social Rights Enforcement*, 53 *HARV. INT’L L. J.* 190, 192 (2012).

jurisdictions, for example, rights to housing and health have primarily benefited middle- and upper-class individuals, without providing much support for those in greatest need.³⁸⁵ Transformative *environmental* constitutionalism has yet to provide an account of why it might not fall into the same problems—indeed, in some instances there are indications that it may produce the same distributional patterns.³⁸⁶

Secondly, as with the technocratic strand, the transformational strand sits in an uneasy relationship with democratic ideals. Its commitment to substantive values and outcomes presents a problem common to many constitutional traditions: if substantive justiciable commitments are made *prior* to the political process, what space is left for democratic contest and legitimation in the face of pluralism and pervasive disagreement? In practice, transformative environmental constitutionalism has often been accompanied by the centralization of executive control, even trading environmental rights as “bribes” to secure the support of key constituencies.³⁸⁷ The confident assertion of a defined ecological vision is often accompanied by the similarly confident assertion of a centralized and largely unrestrained institution that can implement a resulting program.³⁸⁸ In Ecuador and Bolivia, such centralization did not bring about environmental transformation. Instead, it allowed the government to double-down on the earlier economic paradigm of an extraction-driven economy, leaving many of its architects disillusioned with the overall project.³⁸⁹ In China, a transformative constitutional environmental aspiration—the goal of “ecological civilization”—lacks any obvious relationship to democratic governance.³⁹⁰ Indeed, some scholars

³⁸⁵ See, e.g., *id.* at 199–200 (explaining judicial remedies generally tilt toward benefiting middle class and upper income groups); Colleen M. Flood & Aeyal Gross, *Litigating the Right to Health: What Can We Learn from a Comparative Law and Health Care Systems Approach?*, HEALTH & HUM. RTS. J., Dec. 2014, at 62 (2014) (explaining the right to health care in high- and middle-income countries); Brinks & Gauri, *supra* note 383, at 375 (questioning the notion of substantive social justice and equality for the poor as a result of the law’s proceduralism); Alicia Ely Yamin, *Promoting Equity in Health: What Role for the Courts?*, HEALTH & HUM. RTS., Dec. 2014, at 1, 6 (discussing judicial practices surrounding health care are unlikely to be pro-poor); Dixon & Suk, *supra* note 113, at 387 (explaining pro-middle class housing-rights jurisprudence). See generally FERRAZ, *supra* note 284 (arguing that the beneficiaries of the constitutional right to health in Brazil are disproportionately concentrated among middle- and upper-class litigants).

³⁸⁶ See, e.g., ANUJ BHUWANIA, *COURTING THE PEOPLE: PUBLIC INTEREST LITIGATION IN POST-EMERGENCY INDIA* 57–58 (2017) (explaining how in India a version of “bourgeois environmentalism” has been adopted in justifying slum clearances to protect the environmental interests of middle- and upper-class litigations).

³⁸⁷ Dixon, *supra* note 363, at 791–801 (discussing the example of the environmental provisions of the Constitution of Ecuador).

³⁸⁸ See *id.* at 800 (explaining how the Ecuadorian Constitutional Court has rejected challenges to centralized power).

³⁸⁹ See, e.g., Solón, *supra* note 290, at 4–6. Solón, a former senior Bolivian diplomat and key architect of Bolivia’s Constitution and “vivir bien” framework, describes the “cooptation” of this framework by the government of Evo Morales. *Id.*

³⁹⁰ See generally JUDITH SHAPIRO & LIFEI YI, *CHINA GOES GREEN: COERCIVE ENVIRONMENTALISM FOR A TROUBLED PLANET* (2020) (discussing ecological civilization in

have suggested that that the principle has been coopted by the Chinese government as a tool to bolster its own authority and control, giving rise to a form not only of “authoritarian environmentalism,” but “environmental authoritarianism.”³⁹¹

The discourse with the most obvious commitment to democracy is the liberal-conservative strand. Rather than outright distrust of democratic decision-making, this strand casts environmental constitutionalism as a necessary corrective to particular failures of representative democratic institutions.³⁹² By recognizing the need to weigh competing political values and interests, it also plainly wrestles with the social facts of pluralism and disagreement.³⁹³ But it is a strained conception of democracy, centered on institutions of representative governance that have failed to deliver on environmental issues. It is precisely these failures that led to the turn to environmental constitutionalism to begin with.³⁹⁴ Despite decades of attempts to address environmental degradation from within the existing governance paradigm, many environmental crises continue to worsen. This reality is perhaps the most damning indictment of the liberal-conservative strand. Reluctance to acknowledge that the scale of environmental crises requires reevaluation of existing traditions including commitments to ostensible neutrality, particular conceptions of individual liberty, and the ideal of representative democracy itself.³⁹⁵

Furthermore, as with other strands, the liberal-conservative correctives for the perceived pathologies are primarily judicial.³⁹⁶ The reliance diverts attention away from the question of who is initially allocated constitutional power *prior* to the *ex post* review by a court. It

China and its relationship with China’s political and ideological ambitions and authoritarian governance).

³⁹¹ *Id.* at 24 (“The term [authoritarian environmentalism] suggests that authoritarianism is merely a vehicle in service of the honorable goal of sustainability [T]he cases in the book suggest an inverted picture, whereby authoritarianism is the end and environmentalism is the means.”).

³⁹² See ELY, *supra* note 148, at 102–03 (discussing the recommendation of constitutional adjudication as a viable method of intervention when the “political market” is systematically malfunctioning).

³⁹³ See Eckersley, *supra* note 142, at 230 (discussing tensions between the connection of ecology and democracy and their importance as “necessary to maintaining democratic and methodological pluralism”).

³⁹⁴ See *supra* text accompanying note 11 (discussing the urgency created by shortcomings of existing environmental law and the rise of “environmental constitutionalism”).

³⁹⁵ See *supra* Section III.A.3 (discussing the “conservative” aspects of the liberal-conservative strand, including maintenance of existing traditions).

³⁹⁶ It should be noted, however, that whether legislative or judicial institutions are more participative will often depend on context. In some cases, courts may have processes for public hearings and informal participation that are more effective than those in the legislature or executive. The Federal Supreme Court of Brazil, for example, possesses a highly open and deliberative process for public participation, though the openness of this process has been challenged. See Thiago Luis Sombra, *Why Should Public Hearings in the Brazilian Supreme Court Be Understood as an Innovative Democratic Tool in Constitutional Adjudication?*, 17 GERMAN L.J. 657, 664, 668, 670–71, 682, 688–89 (2016).

reflects a broader pattern of constitutional law and theory, placing undue emphasis on rights at the expense of the constitutional organization of power—what Roberto Gargarella describes as the “engine room” of a constitution.³⁹⁷ As Gargarella points out, this has given rise to constitutions, particularly in Latin America, which are internally contradictory—on the one hand they promote the “new, social, democratic, and avant-garde character” through rights charters, while at the same time remaining committed to “elitist, retrograde organization of power” that centralizes executive control, tempered only by tired models of representative democracy and judicial review.³⁹⁸ As Gargarella puts it, “social, participatory, or democratizing reforms do not work well when the organization of powers remains concentrated, traditional, and conservative.”³⁹⁹ These observations made of constitutionalism more generally apply equally to *environmental* constitutionalism, including the transformative strand so influential in Latin America. A truly transformative environmental constitutionalism would need to address itself to questions not only of rights, but also of membership, representation, and power.

B. Envisioning Environmental Constitutional Democracy

The reconstruction of environmental constitutionalism as environmental constitutional democracy requires a new guiding vision. This reconstruction would be transformational not only in its guiding principles and imaginaries, but as a practical project of constitutional design. Such a discourse might not be constitutionalist in the sense described in Part III above: rather than relying on institutions outside the realm of “ordinary” politics, it could seek to harness everyday political disagreement into principles of constitutional design. This reflects the growing attention toward “popular” or “political” constitutionalism in constitutional theory,⁴⁰⁰ as well as a turn towards participatory models of environmental governance based on republican ideals of political equality.⁴⁰¹ More imaginative approaches are required: “democracy can

³⁹⁷ See, e.g., ROBERT GARGARELLA, LAW AS A CONVERSATION AMONG EQUALS 177–78 (2022).

³⁹⁸ *Id.* at 178.

³⁹⁹ *Id.* at 179.

⁴⁰⁰ See generally Tushnet & Bugarič, *supra* note 18, at 2351–52, 2357 (2021) (arguing that populism and constitutionalism do not inherently conflict with one another); KRAMER, *supra* note 24, at 7–8 (discussing the intersection of popular constitutionalism and judicial review); Loughlin, *supra* note 18, at 6, 28 (offering a historical perspective on the development of constitutionalism). For an application of many of these ideas to the context of climate change, see, for example, Alyssa Battistoni & Jedediah Britton-Purdy, *After Carbon Democracy*, 67 DISSENT 51, 58–59 (2020).

⁴⁰¹ See, e.g., ALLEN, *supra* note 378, at 68–69; HAYLEY STEVENSON & JOHN S. DRYZEK, DEMOCRATIZING GLOBAL CLIMATE GOVERNANCE 1, 6–7, 13–14 (2014); Eckersley, *supra* note 142, at 223. For an influential recent discussion of participatory democracy, see HÉLÈNE LANDEMORE, OPEN DEMOCRACY: REINVENTING POPULAR RULE FOR THE TWENTY-FIRST CENTURY 14, 74–75 (2020).

be many more things, can be constructed in many more ways, than those we are familiar with.”⁴⁰² The below account provides a tentative sketch of what such an approach might look like: it sets out an agenda for future work on environmental governance within constitutional law and theory.

The underlying imaginary of environmental constitutional democracy would rest on principles of popular decision-making and participation. Rather than giving primacy to bureaucracies or judges, constitutional environmental democracy would rest on an assumption that many ordinary citizens are well-equipped to make decisions about their natural environments; or, at the very least, that bureaucrats and elected representatives have much to learn from their constituents.⁴⁰³ Environmental decision-making is not a value-free exercise that can be carried out through the application of neutral expertise. Instead, environmental decisions are thick with values, involving conflicts that only the political process can work out.⁴⁰⁴ Such politics ought to play out in a manner that is meaningfully “democratic.”

This imaginary would face the same challenge addressed by existing justifications for environmental constitutionalism: that existing forms of democracy (and in particular, *representative* democracy) have failed to address pervasive environmental crises. Critics often frame environmental objectives to be in sharp conflict with citizens’ preferences.⁴⁰⁵ At present, democracy regards individual voters as preoccupied by short-term material and economic interests, rather than long-term and collective environmental challenges.⁴⁰⁶ Thus, “[i]f citizens accord low priority to ecological values, efforts to strengthen environmental protection and sustainability through democratic processes may falter.”⁴⁰⁷

⁴⁰² Michael Saward, *Constituting Sustainability*, GOOD SOC’Y, no. 2, 2008, at 12, 15.

⁴⁰³ See Jane Mansbridge, *Recursive Representation: The Basic Idea*, in CONSTITUTIONALISM AND A RIGHT TO EFFECTIVE GOVERNMENT? 206, 215 (Vicki C. Jackson & Yasmin Dawood, eds., 2022) (discussing the principle of “recursive representation,” and the duty of representatives not only to seek formal consultation with affected communities, but to engage in a two-way policymaking dialogue).

⁴⁰⁴ See generally JOAN MARTINEZ-ALIER, THE ENVIRONMENTALISM OF THE POOR 68 (2002) (providing examples of the various ways that political processes shape the way society reacts to environmental crises).

⁴⁰⁵ Ingolfur Blühdorn, *The Governance of Unsustainability: Ecology and Democracy After the Post-Democratic Turn*, 22 ENV’T POL. 16, 23 (2013).

⁴⁰⁶ *Id.*

⁴⁰⁷ Jonathan Pickering et al., *Between Environmental and Ecological Democracy: Theory and Practice at the Democracy-Environment Nexus*, 22 J. ENV’T POL’Y & PLAN. 1, 1 (2020); see also Jana von Stein, *Democracy, Autocracy, and Everything in Between: How Domestic Institutions Affect Environmental Protection*, 52 BRIT. J. POL. SCI. 339, 353 (2020) (concluding, on the basis of quantitative empirical analysis, that “the relationship between electoral accountability and eco-friendly outcomes hinges on whether citizens privilege environmental protection as a policy objective”). For seminal (and even dystopian) critiques of democratic approaches to environmental governance, see ROBERT L. HEILBRONNER, AN INQUIRY INTO THE HUMAN PROSPECT 47–54 (1974); WILLIAM OPHULS, ECOLOGY AND THE POLITICS OF SCARCITY (1977).

Some defenders of environmental constitutional democracy point to the fact that, despite these theoretical concerns, existing empirical studies generally observe stronger environmental performance in democracies than non-democracies.⁴⁰⁸ Other defenders of environmental democracy accept that existing structures of democratic environmental governance are failing, but that such failures can be accounted for by not enough, or the wrong kind, of democracy.⁴⁰⁹ On this account, representative democracy is vulnerable to problems of short-termism, apathy, or influence from polluting interests. Rather than creating an institutional framework for social change, existing structures lack the democratic energy needed to face contemporary environmental challenges.⁴¹⁰

Environmental constitutional democracy would thus seek to *disrupt* existing processes of environmental decision-making through an ongoing process of institutional critique and reevaluation.⁴¹¹ Robyn Eckersley has developed an influential example of such an approach. Eckersley argues that a “green democratic constitution” relies on certain discursive practices framed by a concept of “critical ecological reason— . . . that recognizes, protects and rewards ecologically responsible social, economic and political interactions.”⁴¹² While Eckersley acknowledges that the institutionalization of this discourse as a substantive goal of the state would violate some liberal conceptions of neutrality, she nonetheless maintains that it is no less neutral than existing forms of liberalism.⁴¹³ The necessary discourse will not arise through existing representative democracy, but nor does it require a wholesale rejection of representative institutions.⁴¹⁴ It instead requires more engaged direct and deliberative practices, cultivating ethics of citizenship and participation.⁴¹⁵ These democratic practices are advocated as means to reclaim control from oligarchic and corporate elites who dominate parliamentary

⁴⁰⁸ See, e.g., DANIEL J. FIORINO, CAN DEMOCRACY HANDLE CLIMATE CHANGE? (2018); F. HANUSCH, DEMOCRACY AND CLIMATE CHANGE (2018).

⁴⁰⁹ See, e.g., Eckersley, Environmentalism, *supra* note 136, at 173–74 (arguing that stable, centralized governments characterized by representative democracy are better equipped to implement certain environmental reforms compared to decentralized governments characterized by direct democracy, and that this is especially true for reforms that require international coordination and cooperation).

⁴¹⁰ See von Stein, *supra* note 407, at 346 (“First, elections should induce more sustainable policy if this is what citizens want. Secondly, civil liberties protections should yield more eco-friendly outcomes if civil society actors with pro-environment preferences are powerful. In contrast, these very protections may exacerbate outcomes if private actors with anti-environmental preferences hold more power. Finally, political constraints should make changes in environmental policy less prevalent.”).

⁴¹¹ See Weis, *supra* note 11, at 857 (explaining that environmental constitutionalism provides a better way to promote social and economic rights as opposed to solutions related to judicial restraint).

⁴¹² See Eckersley, The Green State, *supra* note 144, at 139–40.

⁴¹³ *Id.* at 105.

⁴¹⁴ *Id.* at 2.

⁴¹⁵ *Id.* at 116–17.

institutions.⁴¹⁶ They would advocate more innovative, localized, and pluralistic governance models, such as the “pluriversal” model advocated by Arturo Escobar, drawing on the *Buen Vivir/Vivir Bien* framework.⁴¹⁷

A green democratic constitution would configure institutions and norms as *reflexive*—that is, as fostering an ongoing process of reevaluation of existing environmental practices, as well as existing assumptions of liberal democracy. As Eckersley points out, this ongoing process of re-examination of “ideals, foundations and institutions of liberal democracy from a critical ecological vantage point” can identify which of these institutions “license unjust and irreversible environmental harm,” and in doing so “offer new democratic imaginaries and/or practices.”⁴¹⁸ For example, as Kysar has suggested, constitutional provisions and processes operate as frameworks for the ongoing questioning of who counts and ought to be represented in national decision-making, and “reflect the fact that no liberal political community should ever view itself as completed, that the community instead should always question whether its vision of harmonious self-ordering could be made to be more inclusive.”⁴¹⁹ Configured in the right way, environmental constitutionalism can become a framework for communal reevaluation of existing legal and political structures. It can give way to constitutional environmental democracy.

C. Operationalizing Environmental Constitutional Democracy

Designing constitutional structures to implement a set of imagined ideals is a challenging task. This section offers only a sketch of some design principles; a full program remains a future research agenda. Nevertheless, principles of disruption and reflexivity could be operationalized in a variety of ways. Four possibilities are sketched below.

First, a constitution could direct its environmental provisions squarely toward legislatures, rather than courts. As Lael Weis has pointed out, this is already true of many existing constitutional environmental provisions.⁴²⁰ Many constitutional environmental provisions mandate the passage of legislation or protect rights that are expressly nonjusticiable.⁴²¹ Currently, however, such mandates may not lead to meaningful legislative action—if legislatures are already failing to enact effective environmental policies, it seems unlikely that

⁴¹⁶ *Id.* at 117–18; see also DRYZEK, *supra* note 22, at 112–14.

⁴¹⁷ See ARTURO ESCOBAR, *DESIGNS FOR THE PLURIVERSE* 148 (2018); ARTURO ESCOBAR, *PLURIVERSAL POLITICS: THE REAL AND THE POSSIBLE* (2020).

⁴¹⁸ Eckersley, *supra* note 142, at 215.

⁴¹⁹ KYSAR, *REGULATING FROM NOWHERE*, *supra* note 11, at 243.

⁴²⁰ See Weis, *supra* note 11, at 859 (legislatures are more equipped to respond to social needs and values than courts).

⁴²¹ See *supra* notes 82–86 and accompanying text (several countries have established legislation that protect and regulate environmental provisions).

unenforceable constitutional provisions might change that state of affairs. Constitutional designers could therefore couple such provisions with renewed attention to the protection of the electoral process more broadly, guarding against interference and capture from commercial interests. Designers could also couple legislative mandates with experiments in the representation of children, young people, and Nature itself, following through on the logic of representation-reinforcement theory, but without resorting to judicial guardians. This could include constitutional mandates to include such constituencies in national legislatures or in constitutionally entrenched independent institutions. The content of legislative directives could also be strengthened: rather than expressing vague environmental protection mandates, constitutional provisions could specify clear minimum environmental standards, followed up by institutional reporting mechanisms. This approach is common in climate legislation, which specifies a particular target (such as net-zero by 2050) and establishes a policy framework and accountability mechanisms but leaves specific climate policy measures unspecified.⁴²² Similar constitutionalized targets for climate, biodiversity, and pollution are also imaginable. As Ron Levy has pointed out, a few examples of such targets already exist.⁴²³ In addition to several examples at the subnational level,⁴²⁴ the constitutions of Bhutan and Kenya both mandate that a certain percentage of the country remain permanently forested.⁴²⁵

These provisions, which Levy describes as “fixed constitutional commitments,”⁴²⁶ represent a more modest form of environmental constitutional democracy. They would retain a key feature of existing constitutional systems (legislatures based on principles of representative democracy and national elections), as well as the central feature of existing environmental constitutionalism: that is, binding the options available to democratically-elected institutions. However, their focus

⁴²² See, e.g., Climate Change Act 2008, c. 27, § 1 (UK) (“It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.”); see also Federal Water Pollution Control Act, 33 U.S.C. § 1251(a)(1)–(2) (2018) (“[I]t is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985; . . . it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.”). Such targets might have important aspirational effects even where they are self-consciously unattainable.

⁴²³ See Ron Levy, *Fixed Constitutional Commitments: Evaluating Environmental Constitutionalism’s ‘New Frontier’*, 46 MELB. U. L. REV. 82, 107 (2022) (identifying a type of constitutional provision that departs markedly from most past constitutional practice in general, and environmental constitutional practice in particular).

⁴²⁴ *Id.* at 92–93 (discussing the examples of New York, United States, and Victoria, Australia).

⁴²⁵ *Id.* at 92 (citing ‘DRUK-GI CHA-THRIMS-CHEN-MO [CONSTITUTION] Jul. 18, 2008, art. 5.3 (Bhutan) (mandating 60% forest cover) and CONSTITUTION art. 69 § (1)(b) (2010) (Kenya) (mandating 10% forest cover)).

⁴²⁶ *Id.* at 84.

primarily on legislative (as opposed to judicial) politics renders them more oriented to democratic decision-making than many of the existing forms of environmental constitutionalism. Such provisions might be democracy-enhancing in three important respects.⁴²⁷ First, such targets can be set in a democratically inclusive and deliberative manner, such as through the deliberative mechanisms discussed below. Secondly, they may address existing pathologies of the democratic process, many of which are also central preoccupation of the three strands discussed in Part III. But more fundamentally, they may allow for more meaningful democratic deliberation to take place on *how* to achieve agreed targets.⁴²⁸ Once the constitutional designers agree on and entrench a headline target, questions of distribution and values can be brought to the fore.

A second (complementary) possibility embraces the deliberative turn in environmental decision-making. The proliferation of mini-publics and citizens' assemblies provide opportunities to extend decision-making beyond existing institutions, providing a forum for disruption and meaningful deliberation. In seeking consensus, such forums offer opportunities for participants to revisit and revise existing conceptions of environmental governance. When situated within national constitutional orders, these modes of decision-making can be highly *disruptive*: they can set new agendas for other institutions to follow, forcing a fundamental reorientation in national policy. The challenge for constitutional designers comes in practical implementation.

Existing examples of these experimentalist constitutional forms are rare. One prominent experiment is the French Citizens' Convention on Climate.⁴²⁹ This Convention was established in the wake of the "Yellow Vests" protests, perceived by many as a reaction to climate policy that ignored distributional consequences and relied heavily on petrol taxes.⁴³⁰ In response to the Convention, the executive promised to reset its approach to climate change decision-making, and convened 159 citizens to prepare constitutional and policy proposals over the course of 2019–2020.⁴³¹ Rather than delegating power to technical bureaucracies, the process allowed ordinary citizens to weigh advice provided by a panel of legal, natural, and social science experts and to develop their own policy proposals, with reference to their own conceptions of environmental and social justice, through a process described as "co-construction."⁴³² The

⁴²⁷ *Id.* at 88 (describing these as the "internal" replies to the democratic objection in relation to fixed constitutional commitments).

⁴²⁸ For an argument on *how* to address environmental challenges best suited to democratic deliberation, see Welton, *supra* note 376, at 98.

⁴²⁹ *The Citizens' Convention on Climate: What is it?*, CONVENTION CITOYENNE POUR LE CLIMAT, <https://perma.cc/HR87-FPER> (last visited Jan. 15, 2024).

⁴³⁰ See Louis-Gaëtan Giraudet et al., "Co-construction" in *Deliberative Democracy: Lessons from the French Citizens' Convention for Climate*, HUMANS. & SOC. SCIS. COMM'NS 2022, No. 207, at 4.

⁴³¹ *Id.* at 4–9 (providing an overview of the process and outcomes).

⁴³² *Id.* at 2 (describing "co-construction"); *id.* at 10 (drawing on empirical research, describing the way in which participants drew on the advice of experts); *id.* at 13 ("Ultimately,

experiment was considered a failure by some.⁴³³ The Convention’s powers were ambiguous; many of the proposals did not pass into law; and in particular, the government eventually abandoned the Convention’s recommendation for a constitutional environmental amendment.⁴³⁴ Significantly, the Convention’s recommendations for environmental constitutional amendments, as well as recognition of the crime of ecocide, were not taken up by the government.⁴³⁵ Other recommendations, such as the imposition of a lower national speed limit and a tax on corporate dividends, were rejected.⁴³⁶ But in learning from the French experience for future democratic experiments, it is important to note that the powers allocated to the Convention’s powers were deliberately circumscribed: it may have been designed to fail. Although President Emmanuel Macron had tasked the assembly with the role of “pre-legislator”⁴³⁷—making recommendations “without filter”⁴³⁸ directly to the legislative and executive branches—and promised that some proposals would be put to referendum, many of the assembly’s recommendations were shelved by the political branches or significantly weakened.⁴³⁹ Had the French legislature been constitutionally required to put the assembly’s recommendations to a referendum, the suggestion of “failure” would likely be less widespread. The process did stimulate public discussion on climate policy and some commentators have linked it to greater voter consciousness on environmental issues.⁴⁴⁰ Several important recommendations were ultimately implemented, including a ban on short-haul domestic flights.⁴⁴¹ The Convention also reframed the *process*

the ‘co-constructive’ approach to the CCC succeeded in the narrow sense of bringing the citizens and policymakers closer together.”).

⁴³³ Charles Girard, *Lessons from the French Citizens’ Climate Convention*, VERFASSUNGSBLOG (Jul. 28, 2021), <https://perma.cc/C5CM-5DHC>; Martina Trettel, *Democratic Innovations Against Climate Change: The French Citizens’ Convention on Climate*, EURAC RSCH. (Jul. 20, 2021) <https://perma.cc/WB8C-BN83>. For a more nuanced view, see Leslie-Anne Duvic-Paoli, *Re-imagining the Making of Climate Law and Policy in Citizens’ Assemblies*, 11 TRANSNAT’L ENV’T L. 235, 254 (2022) (arguing that although the initial goal of the assembly—to produce “unfiltered” lawmaking—was unsuccessful, the assembly nevertheless “evolved from an impossible function of pre-legislator to that of unique participant in the lawmaking process”).

⁴³⁴ Constant Méheut, *France Drops Plans to Enshrine Climate Fight in Constitution*, N.Y. TIMES (Jul. 6, 2021), <https://perma.cc/QH9R-89ER>.

⁴³⁵ Giraudet et al., *supra* note 430, at 6–9.

⁴³⁶ *Id.* at 8.

⁴³⁷ Duvic-Paoli, *supra* note 433, at 254.

⁴³⁸ *Id.* at 254–55 (discussing the vagueness and confusion inherent in the “without filter” concept).

⁴³⁹ *Id.* at 255.

⁴⁴⁰ *E.g.*, Shannon Osaka, *Can ‘The People’ Solve Climate Change? France Decided to Find Out*, GRIST (Nov. 15, 2021), <https://perma.cc/P7KG-P53E>.

⁴⁴¹ Carlton Reid, *France’s Plan to Ban Short-Haul Domestic Flights Wins Approval From European Commission*, FORBES (Dec. 3, 2022), <https://perma.cc/7CJ7-8R2V> (noting that “[a]n almost complete ban on short haul flights was originally proposed by France’s Citizens’ Convention on Climate, and citizens’ assembly tasked with making proposals for reducing the country’s carbon emissions.”). Note, however, that the eventual law is weaker than the

of climate lawmaking, inserting ordinary citizens directly into the national policy debate, and altering relationships and avenues of accountability between politicians and their constituents. Convention participants continued to play an important role in both public and private lawmaking discussions after the assembly concluded.⁴⁴²

The French Convention demonstrates that shifts in representation and organization of power might be able to disrupt the dominant paradigm of environmental governance in ways that could be at least as effective as rights and courts. Other states could emulate this shift: more recently, Ireland has embraced a similar program, convening a Citizens' Assembly on Biodiversity Loss.⁴⁴³ And most recently, the use of public referenda in Ecuador proved highly consequential in environmental governance. In 2023 national elections, voters voted by large margins to oppose oil and gold mining in two highly biodiverse areas, despite significant potential short-term economic benefits.⁴⁴⁴ Although caution and care should accompany the design of any direct participatory process,⁴⁴⁵ these initiatives demonstrate that public participation and deliberation are capable of delivering potentially radically disruptive and strong environmental protections.

Thirdly, environmental constitutional democracy could favor the protection of *procedural* environmental rights. Environmental democracy is only possible where decision-making is open to all. Accordingly, procedural environmental rights have grown in significance, particularly in international environmental law.⁴⁴⁶ Two major environmental

assembly's proposal, affecting only flights with rail alternatives of less than 2.5 hours, rather than four hours. See Duvic-Paoli, *supra* note 433, at 255–56.

⁴⁴² Duvic-Paoli, *supra* note 433, at 256–57 (“By enabling an open debate between citizens selected by lot and elected representatives before the lawmaking stage, the citizens’ assembly played a unique role in the *pre*-construction of the law. In addition, the assembly also influenced the lawmaking process itself.”).

⁴⁴³ See *About the Citizens’ Assembly on Biodiversity Loss*, *supra* note 17. Climate change also featured among a wider range of issues discussed in a previous Irish citizens’ assembly. See Duvic-Paoli, *supra* note 433, at 242.

⁴⁴⁴ Dan Collyns, *Ecuadorians Vote to Halt Oil Drilling in Biodiverse Amazonian National Park*, GUARDIAN (Aug. 21, 2023), <https://perma.cc/D9S8-VS32>.

⁴⁴⁵ Participatory processes (whether referenda or citizens’ assemblies) are inevitably shaped by 1) the information provided to the participants; 2) the structure of the decision-making process; and 3) the relationship to the mediating institution, whether that be the legislature, the executive, or an appointed agency. Where these elements are gamed against effective environmental outcomes, participatory mechanisms risk becoming tools to attract legitimacy for proposals that are ultimately captured or gamed. I am grateful to Tarun Khaitan for reminding me of this important point. Email exchange with Tarun Khaitan, Professor of Pub. L., London Sch. of Econ., to author (Apr. 9, 2023) (on file with author).

⁴⁴⁶ See Pickering et al., *supra* note 407, at 6.

treaties—the Aarhus Convention⁴⁴⁷ and Escazú Agreement⁴⁴⁸—center on a triumvirate of rights concerning access to information, participation in decision-making, and access to justice. Rather than mandating certain environmental outcomes, procedural rights can enhance decision-making by ensuring that affected parties (and citizens generally) have an opportunity to effectively take part, not just through the narrow mechanism of occasional elections, but through direct action, submissions to official bodies, representation in community decision-making, and adjudicative fora where necessary. There is also some empirical evidence that procedural rights are more likely to lead to improvements in environmental quality than environmental rights more broadly.⁴⁴⁹ And the recognition of procedural environmental rights as *constitutional* guarantees would harness many of the benefits of constitutional rights as supreme and directly enforceable.

Importantly, however, the protection of procedural rights must not become a shallow consultation exercise. The realization of participatory rights requires that each person have a genuine and equal opportunity to influence the outcome of a decision.⁴⁵⁰ Taking procedural rights seriously requires far more than formal opportunities to provide inputs and comments on environmental decisions. Instead, states must implement procedural rights in a way which challenges the underlying power structures and political economy of environmental decision-making: “It will not be enough simply to improve notice-and-comment processes or mandate more hearings.”⁴⁵¹ The right to participation in environmental decision-making ought to be interpreted as a design principle counting against the accretion of market power and corporate capture of legislatures and executive agencies. Taken seriously, procedural rights—and in particular, the right to participation in decision-making—are a

⁴⁴⁷ Economic and Social Council Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, U.N. Doc. ECE/CEP/43, at 2–3 (Jun. 25, 1998).

⁴⁴⁸ Economic Commission for Latin America and the Caribbean, Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin American and the Caribbean, U.N. Doc. LC/PUB.2018/8/Rev.1, at 14 (Mar. 4, 2018).

⁴⁴⁹ Joshua C. Gellers & Chris Jeffords, *Toward Environmental Democracy? Procedural Environmental Rights and Environmental Justice*, GLOB. ENV'T POL., Feb. 2018, at 99–100, 110, 116.

⁴⁵⁰ Allen, *supra* note 378, at 33 (“[H]uman flourishing is a matter of both private autonomy and public autonomy, with the latter entailing meaningful participation in collective decision-making, both through participation in the evolution of cultural practices and the structure of civil society and through participation in the institutions of political governance. Only such participation as brings genuine and equally shared opportunities for influence meets the standard of ‘meaningful’ participation.”); *see also* Welton, *supra* note 376, at 99 (“Creating true empowerment around decisions about where our energy should come from, and what requirements should be placed on its use, demands more substantial restructuring of the institutions that shape our energy supply. Citizens must come to feel like they not only have values worthy of expressing with respect to decarbonization, but that it will *matter* if they take the time to express them.”).

⁴⁵¹ Welton, *supra* note 376, at 98.

potentially radical and disruptive set of design principles for environmental democracy.⁴⁵²

Finally, even where practical constraints hamper the embrace of deliberative democracy, it may nevertheless operate as a helpful ideal in guiding the work of more traditional institutions.⁴⁵³ A more imaginative form of environmental democracy could still leave a significant role for courts. But rather than imagining courts' roles as experts, checks on legislative majorities, or as the vanguard of a hegemonic transformational project, courts could be imagined as mediators of value-conflicts and promoters of democratic experimentation.⁴⁵⁴ The *Rio Atrato* decision discussed above, applying a particular conception of the "Rights of Nature," illustrates one possibility.⁴⁵⁵ In a conflict of values and material interests concerning the use of a major river, the Court drew on all three discursive strands to develop a highly innovative and participatory system of remedies, bringing together experts, political institutions, river users, and affected communities to develop a plan for better management of the river, while retaining supervision of the ongoing and dynamic governance.⁴⁵⁶ In this way, environmental constitutional commitments might manifest as what Charles F. Sabel and William H. Simon have influentially described as "destabilization rights"—that is, "rights to disentrench an institution that has systemically failed to meet its obligations and remained immune to traditional forces of political correction."⁴⁵⁷ But rather than the products of centralized government or judicial decision-making, such correctives can emerge from decentralized, bottom-up interactions between individuals, communities, and different branches and levels of government.⁴⁵⁸ Specifically, judicial climate *remedies* can focus on facilitating effective participation, shared learning, and continuous revision based on ongoing interactions, and without preferencing or entrenching the status quo.⁴⁵⁹ Such experiments in shared systems of governance are the product of reflection on different environmental constitutionalist discourses, combined with an underlying concern for the importance of democratic participation.

⁴⁵² See Gellers & Jeffords, *supra* note 449, at 100, 102–03, 116.

⁴⁵³ See, e.g., ECKERSLEY, *THE GREEN STATE*, *supra* note 144, at 130.

⁴⁵⁴ For more on the relationship between constitutional law and democratic experimentation, see Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267 (1998).

⁴⁵⁵ C.C., noviembre 10, 2016, Sentencia T-622/16, *translated in* DIGNITY RIGHTS PROJECT, *supra* note 38, ¶ 9.23.

⁴⁵⁶ *Id.* at 114.

⁴⁵⁷ Charles F. Sabel & William H. Simon, *Destabilization Rights: How Public Law Litigation Succeeds*, 117 HARV. L. REV. 1016, 1016 (2004); see also *id.* at 1055 (citing ROBERTO MANGABEIRA UNGER, *FALSE NECESSITY: ANTI-NECESSITARIAN SOCIAL THEORY IN THE SERVICE OF RADICAL DEMOCRACY* 530 (1987)).

⁴⁵⁸ *Id.* at 1021 n.14.

⁴⁵⁹ *Id.* at 1019.

VI. CONCLUSION

At their best, constitutions have always reflected the contemporary concerns and challenges of the constituencies who framed them. The United States Constitution, for example, responded to the failures of the Articles of Confederation⁴⁶⁰ to harmonize the nascent states, and to act as a bulwark against tyranny in the wake of the experience of British rule.⁴⁶¹ These concerns of the late eighteenth century gave way to different objectives following the United States Civil War. The Reconstruction Amendments instead reflect a concern with antislavery, racial discrimination, and the enforceability of constitutional guarantees against states.⁴⁶² Although the United States Constitution has not been substantially amended since the mid-twentieth century, doctrine and interpretation (enabled by, and responding to, political developments social movements) have continued to change the contours of the constitution in line with contemporary concerns. In each instance, the Constitution has evolved—through amendment or doctrine—to address issues that lacked widespread salience or powerful constituencies even a generation before.

This simple observation is not unique to the United States. The German Basic Law, framed in the wake of Nazi tyranny, reflects an overriding concern with human dignity;⁴⁶³ the post-apartheid Constitution of South Africa reflects concerns of antidiscrimination, universal suffrage, and human rights.⁴⁶⁴ Many other postcolonial constitutions reflect contemporary concerns, emphasizing self-determination and solidarity. The building blocks of classical and contemporary constitutional law have emerged from responses to historically-situated needs.

The breadth and scale of environmental crises necessitate changes in constitutional law and theory in a similar manner to these earlier examples. Constitutions will inevitably play a role in coordinating effective government action, distributing the benefits and burdens of environmental change and policy responses, and providing shared imaginaries for the significant transitions necessary to ensure dignified human lives. Existing domestic and global governance approaches have largely failed to halt the pace of environmental degradation. Instead, the

⁴⁶⁰ ARTICLES OF CONFEDERATION of 1781; see generally *Articles of Confederation: Primary Documents in American History*, LIBR. CONG. RSCH. GUIDE <https://perma.cc/7Z8M-ELYF> (last visited Oct. 25, 2023).

⁴⁶¹ THE FEDERALIST NO. 47 (James Madison) (comparing the structures of various state constitutions and espousing the importance of separating the “three great departments of power” in the United States Constitution to protect against tyranny).

⁴⁶² See Norman W. Spaulding, *Constitution as Countermonument: Federalism, Reconstruction, and the Problem of Collective Memory*, 103 COLUM. L. REV. 1992, 2000 (2003) (describing the injustices that laid the backdrop for the Reconstruction Amendments).

⁴⁶³ Edward J. Eberle, *Human Dignity, Privacy, and Personality in German and American Constitutional Law*, 4 UTAH L. REV. 963, 967 (1997).

⁴⁶⁴ S. AFR. CONST., 1996 art. 1.

Earth is on track to become a drastically hotter and less biodiverse planet⁴⁶⁵ and seems likely to exceed five of its nine planetary boundaries.⁴⁶⁶ These environmental emergencies are the product of gross political and governance failures.

None of the three strands of existing environmental constitutionalism appears sufficient to remedy the shortcomings of existing approaches. Indeed, such a task may be beyond the power of constitutional law, or law in general. The liberal-conservative approach remains tied to an existing paradigm that is proving inadequate to meet contemporary environmental challenges. Although it has been somewhat fruitful in accommodating environmental concerns within the existing paradigm, there is reason to be skeptical that this paradigm can meet the environmental challenge without significant change. The technocratic approach, meanwhile, is a “preanalytic vision”: a standpoint of values from which to evaluate possible futures.⁴⁶⁷ Purely technocratic approaches, although useful in the execution of values-based visions, cannot offer a framework for such choices. The transformative strand, while purporting to signify a fundamental rupture from existing approaches, prescribes many of the same legal solutions.

The environmental challenge is one that will not go away. In order to meet this challenge, environmental constitutionalism—in dialogue with democratic concerns—will need to continue to experiment, change, and generate new modes of constitutional governance grounded in a commitment to environmental democracy. These responses will need to operate at a granular and contextual level, while drawing on more sweeping narratives and imaginaries. It is hoped that the theoretical framework advanced in this paper begins to open ways of thinking about the possible range of responses, as well as the stakes involved in their different normative foundations.

⁴⁶⁵ See Working Grp. I, Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis 6* (2021), <https://perma.cc/Y5EW-6PWP> (“Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years”).

⁴⁶⁶ Planetary Boundaries, Stockholm Resilience Ctr., <https://perma.cc/MM2P-FGY6> (last visited Jan. 17, 2023) (concluding that planetary boundaries related to biosphere integrity, ocean acidification, climate change, land system change, and biochemical flows have all been exceeded).

⁴⁶⁷ Kysar, *Law, Environment, and Vision*, *supra* note 365, at 675 (“[A]nalytic effort is of necessity preceded by a preanalytic cognitive act that supplies the raw material for the analytic effort . . . [T]his preanalytic cognitive act will be called Vision.” (quoting Joseph A. Schumpeter, *History of Economic Analysis* 41 (1954))).