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ARTICLE

'For You Will (Still) Be Here Tomorrow': The Many Lives of Intergenerational Equity

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Abstract

This article traces the various legal incarnations of the intergenerational equity principle. Despite its silent proliferation in international and constitutional laws over the past five decades, the principle dwelled mostly at the margins of inquiry and practice. Recent efforts to counteract global warming have allowed intergenerational claims to gain new traction. Building on a comparison of ten climate-related lawsuits, I analyze the latest advances in the representation, conceptualization, and remediation of future generations' interests. Against the backdrop of growing willingness to engage with intergenerational disputes, legal decision makers will need to confront two thorny challenges going forward. Firstly, evolving doctrines of extraterritoriality and legal subjecthood increasingly require the protective scope of the principle to extend to foreign citizens and non-human persons. Secondly, awareness of dispersed and interlocked long-term risks may trigger the application of intergenerational doctrines beyond a narrow environmental frame. Grappling with these challenges implicates larger reflections about the role of law in contriving our collective future.

Keywords: Intergenerational equity, Future generations, Climate litigation, Sustainable development, Precaution

1. INTRODUCTION

As the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)¹ drew to a close, European Union (EU) Commission Vice-

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New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: https://unfccc.int/resource/docs/convkp/conveng.pdf.

President Frans Timmermans addressed the gathered world leaders and negotiators with an emotional appeal. 'If we fail', he remarked, while holding up a picture of a toddler on his smartphone, '[my one-year-old grandson] will fight with other human beings for water and food. That's the stark reality we face. So 1.5°C is about avoiding a future for our children and grandchildren that is unliveable'.²

Timmermans's *cri de coeur* attests to the growing discursive currency of intergenerational concerns in climate diplomacy and beyond.³ The underlying quest for intergenerational justice – the moral relations spanning different generational collectives – features extensively, if not perennially, across a wide range of philosophical traditions. One of the most influential conceptualizations of this idea hails from John Rawls, who understood intergenerational relations to be governed by egalitarian considerations. From behind the famous 'veil of ignorance', he concludes, it would be intolerable for any single generation to impinge upon the prerogatives of their successors: '[I]n first principles of justice we are not allowed to treat generations differently solely on the grounds that they are earlier or later in time'.⁴

Five decades after Rawls' seminal contribution, calls for long-term thinking are once again *en vogue* across political, legal, and intellectual spheres. Several legislative bills, institutional policies, and pioneering lawsuits have begun to breathe new life into the legal protection of future generations' interests. These developments have reinvigorated interest in the largely forgotten principle of intergenerational equity.

As quoted in F. Harvey et al., 'Cop26 in Extra Time as Leaders Warn of the Deadly Cost of Failure',
The Guardian, 12 Nov. 2021, available at: https://www.theguardian.com/environment/2021/nov/12/
cop26-in-extra-time-as-leaders-warn-of-the-deadly-cost-of-failure. A video snippet of the speech is available at: https://www.youtube.com/watch?v=cg0AIFvAxdI.

A 2018 United Nations General Assembly (UNGA) resolution explicitly links climate change to intergenerational equity: UNGA Res. 73/232, Protection of Global Climate for Present and Future Generations of Humankind, 20 Dec. 2018, UN Doc. A/RES/73/232, available at: https://undocs.org/en/A/RES/73/232. Intergenerational parlance is also omnipresent in the UN Secretary General's Report 'Our Common Agenda' released Sept. 2021, just ahead of COP26: UN, Our Common Agenda: Report of the Secretary General (UN, 2021), available at: https://www.un.org/en/content/commonagenda-report/assets/pdf/Common_Agenda_Report_English.pdf.

⁴ J. Rawls, A Theory of Justice (Harvard University Press, 1999), p. 260.

For an eclectic selection of recent books engaging with these topics, see W. MacAskill, What We Owe the Future (Basic Books, 2022); R. Krznaric, The Good Ancestor: A Radical Prescription for Long-Term Thinking (The Experiment, 2020); T. Ord, The Precipice: Existential Risk and the Future of Humanity (Hachette Books, 2020); K.S. Robinson, The Ministry for the Future (Orbit, 2020); I. González-Ricoy & A. Gosseries, Institutions for Future Generations (Oxford University Press, 2016). As this (non-representative) list reveals, much of this genre has been confined to thinkers located within the epistemic and political context of the global north; see A. Mitchell & A. Chaudhury, 'Worlding beyond "the" "End" of "the World": White Apocalyptic Visions and BIPOC Futurisms' (2020) 34(3) International Relations, pp. 309–32.

See, e.g., the current debate in the House of Commons, 'Wellbeing of Future Generations Bill [HL]' (2021–22), available at: https://bills.parliament.uk/bills/2869. The present proposal partially draws on the experience of earlier Welsh legislation: H. Davies, 'The Well-Being of Future Generations (Wales) Act 2015: A Step Change in the Legal Protection of the Interests of Future Generations?' (2017) 29(1) Journal of Environmental Law, pp. 165–75. See also I. González-Ricoy & F. Rey, 'Enfranchising the Future: Climate Justice and the Representation of Future Generations' (2019) 10(5) WIREs Climate Change, article e598, doi: 10.1002/wcc.598; M.-C. Cordonier Segger, M. Szabó & A.R. Harrington (eds), Intergenerational Justice in Sustainable Development Treaty Implementation: Advancing Future Generations Rights through National Institutions (Cambridge University Press, 2021).

Despite finding repeated mention in international agreements, ⁷ the principle was long dismissed as legally opaque and confined to the limbo of aspirational language, void of tangible implications. ⁸ In the light of today's changing normative topography, that account no longer seems tenable. It is high time for international lawyers to take a fresh look at the history, content, and direction of the principle. ⁹

The unsuspecting scholar (or practitioner, for that matter), however, quickly loses orientation in the conceptual mist shrouding intergenerational equity. For starters, the role of international legal principles more generally is notoriously blurry and normatively contested. As Pierre-Marie Dupuy and Jorge Viñuales aptly observe, the word 'principle' has been used to denote concrete norms, guiding rules of thumb, and abstract concepts alike to serve a variety of functions, from identity generation to architectural-interpretative aid. In addition to its ill-defined legal format, intergenerational equity knows no neat conceptual boundaries; it overlaps with cognate instruments that mediate between present and future, such as the principles of sustainable development, precaution, or the common heritage of humankind. What is more, intergenerational equity has morphed in form and substance many times over its life course, obsuscating its semantic properties with every transmutation. Currently, the principle seems to dominate in a rights-based cloak that casts future generations as rights holders. Common to all these incarnations is an underlying claim to regulate relations between generations (whether currently alive or unborn) on the basis of some equitable distribution.

My objective in this article is to tell the turbulent story of intergenerational equity from a comparative international perspective, ¹³ in the hope that such an account can provide a partial map through the jungled terrain. While there is no dearth of scholarly

For an enumeration of international agreements referring to intergenerational equity, see P. Sands & J. Peel, *Principles of International Environmental Law*, 4th edn (Cambridge University Press, 2018), p. 221.

Vaughan Lowe, e.g., expressed scepticism over the principle's meaning: '[t]he principle of intergenerational equity is, in normative terms, a chimera. It is hard to see what legal content intergenerational equity could have': V. Lowe, 'Sustainable Development and Unsustainable Arguments', in A. Boyle & D. Freestone (eds), *International Law and Sustainable Development* (Oxford University Press, 1999), pp. 19–37, at 27.

⁹ This process of reflection is ongoing; e.g., at the initiative of the University of Maastricht (The Netherlands), a group of human rights scholars are currently drafting a set of principles on the human rights of future generations (Maastricht IV) by Oct. 2022.

See, seminally, W. Friedmann, 'The Uses of "General Principles" in the Development of International Law' (1963) 57(2) American Journal of International Law, pp. 279–99. Ulrich Beyerlin builds on Dworkinian theory to distinguish the meanings of principles in international environmental law: U. Beyerlin, 'Different Types of Norms in International Environmental Law', in D. Bodansky, J. Brunnée & E. Hey (eds), The Oxford Handbook of International Environmental Law (Oxford University Press, 2008), pp. 426–48, at 428. Precisely because of this confusion, the UN International Law Commission is currently elaborating a detailed report on the topic of 'general principles of law', available at: https://legal.un.org/ilc/summaries/1_15.shtml.

P.-M. Dupuy & J.E. Viñuales, *International Environmental Law*, 2nd edn (Cambridge University Press, 2018), pp. 59–60.

For shorter overviews of the principle's history and content in leading international environmental law textbooks, see Sands & Peel, n. 7 above, p. 221; D. Shelton, 'Equity', in Bodansky, Brunnée & Hey, n. 10 above, pp. 640–62, at 643–5; Dupuy & Viñuales, n. 11 above, pp. 88–9.

Situated at the confluence of international law and comparative analysis, the article loosely follows the approach advocated by A. Roberts et al. (eds), Comparative International Law (Oxford University Press, 2018). Regrettably, the role of principles as a whole has been rather neglected by (international)

commentary on the topic, it seems that most contributors have adopted a theoretically informed lens. As a result, extant studies tend to focus on the conceptual and normative dimensions of intergenerational equity, puzzling as they are. My approach, by contrast, is more inductive and practical. It touches upon theoretical issues in so far as they arise in the legal operationalization of the principle. The questions I set out to explore are markedly exploratory; they aim for comparative clarification rather than doctrinal consolidation. What does intergenerational equity mean, and how has its meaning changed over time and in different contexts? How might the principle be given legal and material effect? What are the blind spots and pitfalls of existing operationalizations? To this end, I draw on a range of primary and secondary sources that elucidate the many lives of intergenerational equity.

The remainder of the article is split into three parts. The following section cursorily recounts the evolution of the principle over past decades. Section 3 examines the present revival of intergenerational equity in ten lawsuits across international and domestic jurisdictions. While the dynamics engendered by these cases seem to indicate a renewed role for intergenerational equity, they also shed light on the conceptual nuances and challenges that characterize this development. In the last section of the article I argue that the principle will face two major hurdles in the future: (i) an enlarged class of beneficiaries, and (ii) overcoming its environmental pedigree. The conclusion summarizes.

2. THE PAST: RISE AND DISPERSE

The origins of intergenerational references in modern international law can be traced to the post-World War II period. ¹⁴ The Charter of the United Nations (UN) – entering into force mere weeks after the devastating detonations of two nuclear bombs in the Japanese cities of Hiroshima and Nagasaki in August 1945 – opens with the portentous words: 'We the peoples of the United Nations, determined to save succeeding generations from the scourge of war'. ¹⁵ One year later, the Preamble to the 1946 International Convention for the Regulation of Whaling highlighted the importance of 'safeguarding for future generations the great natural resources represented by the whale stocks'. ¹⁶ It was widely understood, however, that these early preambular invocations of future effects were rhetorical devices and enjoyed no authoritative status.

Fast-forward some 25 years, when environmental preoccupations entered the global agenda with unprecedented force. In 1968, the ecologist Garrett Hardin published a short but enormously influential essay entitled 'The Tragedy of the Commons', in

comparative lawyers; see N. Jain, 'Comparative International Law at the ICTY: The General Principles Experiment' (2015) 109(3) American Journal of International Law, pp. 486–97.

Some authors go back even further to the Fur Seal arbitration decided in 1893: Bering's Sea Fur Seals (United States v. United Kingdom) (1893) 28 RIAA, pp. 263–76, available at: https://legal.un.org/riaa/cases/vol_XXVIII/263-276.pdf; see Sands & Peel, n. 7 above, p. 221.

San Francisco, CA (United States (US)), 26 June 1945, in force 24 Oct. 1945, available at: https://treaties.un.org/doc/publication/ctc/uncharter.pdf.

Washington, DC (US), 2 Dec. 1946, in force 10 Nov. 1948, available at: https://archive.iwc.int/pages/view.php?ref=3607&ck=.

which he warned about the dangers of collective overconsumption, and made the ecological limits of our planetary systems salient to an international audience far beyond scientific circles. ¹⁷ Shortly thereafter, Rawls first expounded his theory of intergenerational equity in the pages of A Theory of Justice. ¹⁸ The progressive Zeitgeist ultimately found legal expression in the 1972 UN Conference on the Human Environment in Stockholm, which concluded with the adoption of 26 principles relating to various environmental and developmental aspects of state activity. 19 Although the Stockholm Declaration did not mould intergenerational equity into a free-standing principle, the final text is replete with cognate ideals, including 'an imperative goal' to 'defend and improve the human environment for future generations', ²⁰ 'a solemn responsibility to protect and improve the environment for present and future generations', ²¹ and the objective of safeguarding natural resources 'for the benefit of present and future generations'. 22 Despite such lofty language, the Declaration stopped short of specifying how the balancing exercise between present and future interests ought to be conducted. While the instrument ultimately reflects the sentiment that international law should incorporate concerns of 'distributive justice'²³ in relation to future generations, its material effects remained fairly limited.

While the field of international environmental law more generally experienced rapid growth in the years following Stockholm,²⁴ the principle of intergenerational equity lay dormant for more than a decade until it reappeared in the Brundtland Commission's famous 1987 definition of sustainable development as 'meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs'.²⁵ For the first time, the Brundtland Report explicitly introduces an element of equity (in abilities to meet needs) to govern the relations between generations. Almost simultaneously, Edith Brown Weiss's formative monograph *In Fairness to Future Generations* presented the first comprehensive academic treatise on the nascent legal principle.²⁶

¹⁷ G. Hardin, 'The Tragedy of the Commons' (1968) 162(3859) Science, pp. 1243-8.

¹⁸ Rawls, n. 4 above.

Declaration of the United Nations Conference on the Human Environment, Stockholm (Sweden), 16 June 1972, available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/29567/ELGP1StockD.pdf.

²⁰ Ibid., Recital 6.

²¹ Ibid., Principle 1. Indeed, earlier drafts of Principle 1 had mentioned *only* future generations (and thus excluded present ones) as beneficiaries of environmental protection; see L.B. Sohn, 'The Stockholm Declaration on the Human Environment' (1973) 14(3) *Harvard International Law Journal*, pp. 423–515, at 454.

²² Stockholm Declaration, n. 19 above, Principle 2.

²³ Sohn, n. 21 above, p. 513.

Next to the Stockholm Declaration, a number of international agreements, negotiated shortly after, adopted some mention of future generations' interests, including the Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), Paris (France), 16 Nov. 1972, in force 17 Dec. 1975, available at: https://whc.unesco.org/archive/convention-en.pdf; and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, DC (US), 3 Mar. 1973, in force 1 July 1975, available at: https://cites.org/sites/default/files/eng/disc/CITES-Convention-EN.pdf.

World Commission on Environment and Development, Our Common Future (Oxford University Press, 1987), p. 51.

E. Brown Weiss, In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity (United Nations University; Transnational, 1988).

Building on the Rawlsian liberalist conception, Brown Weiss conceptualized intergenerational equity as entailing three distinct pillars: equality of (i) options, (ii) quality, and (iii) access of and to environmental resources.²⁷ From these pillars she deduced a number of planetary rights and obligations, ²⁸ which were then applied to four case studies. An appendix to the book also included one of the earliest explorations of an intergenerational approach to climate change.²⁹

The works of Brown Weiss and the Brundtland Commission triggered a new wave of academic and political interest in intergenerational equity.³⁰ At the 1992 UN Conference on Environment and Development (better known as the 'Earth Summit') in Rio de Janeiro (Brazil), the principle found its way into both the Rio Declaration³¹ and the UNFCCC.³² These provisions built on the Brundtland Report in so far as they stipulate that the right to development and the protection of the climate system be met 'equitably' and 'on the basis of equity', respectively, in their relation to future generations. The 1990s also saw the principle making its first appearances in the jurisprudence of international tribunals. For instance, in the International Court of Justice's (ICJ) 1995 Nuclear Tests opinion, Judge Weeramantry's dissent diagnosed intergenerational equity to be an 'important and rapidly evolving principle of contemporary international law'.³³ In both its 1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons³⁴ and in its 1997 decision in Gabčíkovo-Nagymaros, the ICJ stressed the severe risks of modern technologies for future generations:

²⁷ Ibid., pp. 34–46.

But see ibid., p. 30 ('The translation of the expressed concern [in international legal documents] for future generations into normative obligations ... still needs to be done'). See also E. Brown Weiss, 'Our Rights and Obligations to Future Generations for the Environment' (1990) 84(1) American Journal of International Law, pp. 198–207.

E. Brown Weiss, 'Climate Change, Intergenerational Equity, and International Law' (2007) 9(3) Vermont Journal of Environmental Law, pp. 615–28.

In terms of academic uptake, see R.A. Epstein, 'Justice Across the Generations' (1988) 67(7) Texas Law Review, pp. 1465–90; A. D'Amato, 'Do We Owe a Duty to Future Generations to Preserve the Global Environment?' (1990) 84(1) American Journal of International Law, pp. 190–8; C. Redgwell, Intergenerational Trusts and Environmental Protection (Manchester University Press, 1999).

Rio Declaration on Environment and Development, Rio de Janeiro (Brazil), 14 June 1992, Principle 3, available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf. For an in-depth discussion see C. Molinari, 'Principle 3', in J.E. Viñuales (ed.), The Rio Declaration on Environment and Development: A Commentary (Oxford University Press, 2015), pp. 139–56.

N. 1 above, Art. 3. To be precise, the UNFCCC was adopted a month before Rio and was opened for signature at the Conference.

Request for an Examination of the Situation in accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests Case (New Zealand v. France), Order, 22 Sept. 1995, dissenting opinion of Judge Weeramantry, ICJ Reports (1995), pp. 317–62, at 341.

Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 8 July 1996, ICJ Reports (1996), p. 226, paras 29, 35, 36. Judge Weeramantry took the opportunity to deliver yet another scathing dissent: 'This Court, as the principal judicial organ of the United Nations, empowered to state and apply international law with an authority matched by no other tribunal must, in its jurisprudence, pay due recognition to the rights of future generations. If there is any tribunal that can recognize and protect their interests under the law, it is this Court. It is to be noted in this context that the rights of future generations have passed the stage when they were merely an embryonic right struggling for recognition. They have woven themselves into international law through major treaties, through juristic opinion and through general principles of law recognized by civilized nations': ibid., dissenting opinion of Judge Weeramantry, p. 455.

Owing to new scientific insights and to a growing awareness of the risks for mankind – for present and future generations – of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades.³⁵

Interestingly, while previous instruments had chiefly mentioned the 'benefits' for and 'needs' of future generations in the frame of collective action problems, the language of the ICJ in *Gabčíkovo-Nagymaros* marked a semantic shift towards the risks and lingering legacies that present generations could bequeath to their successors.³⁶

Occasional references notwithstanding, however, international courts and states failed to flesh out the precise content of intergenerational equity after Rio. Instead, the principle became subsumed by other principles and instruments in a process that Catherine Redgwell describes as 'creeping intergenerationalization'.³⁷ Perhaps nowhere is this absorption process clearer than in the rise of the sustainable development principle, which ended up carrying much of the political and legal favour of the 1990s and 2000s as a paradigm for mediating between economic and environmental interests.³⁸ In its risk-based incarnation, in turn, intergenerational equity was soon superseded by the precautionary principle.³⁹ The idea of an intergenerational trust, particularly salient in the work of Brown Weiss, ⁴⁰ merged with the broader principle of 'common heritage of mankind'.⁴¹ While one might read the transfusion of intergenerationality into other – often more clearly defined and impactful – legal norms as a sign of its growing maturity and relevance, the principle's fragmentation further diluted the idea of intergenerational balance that lies at its very heart. Weighing up

³⁵ Gabčíkovo-Nagymaros Project (Hungary v. Slovakia), Judgment, 25 Sept. 1997, ICJ Reports (1997), p. 7, para. 140.

A similar preoccupation with the negative legacies of technologies transpires in the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, Vienna (Austria), 5 Sept. 1997, in force 18 June 2001, available at: https://www.iaea.org/sites/default/files/infcirc546.pdf.

³⁷ Redgwell, n. 30 above, p. 126.

V. Barral, 'Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm' (2012) 23(2) European Journal of International Law, pp. 377–400. It is also in the context of sustainable development that intergenerational equity made a re-appearance in the ICJ's jurisprudence in Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, 20 Apr. 2010, ICJ Reports (2010), p. 14, separate opinion of Judge Cançado Trindade, para. 122 ('The need has thus been keenly felt to give clear expression to inter-generational equity, so as to fulfil the pressing need to assert and safeguard the rights of present as well as future generations, pursuant to – in my perception – an essentially anthropocentric outlook. Here, in the face of likely risks and threats, the precautionary principle once again comes into play. Nowadays, in 2010, it can hardly be doubted that the acknowledgement of intergenerational equity forms part of conventional wisdom in International Environmental Law').

On the import of intergenerationality for the precautionary principle, see Redgwell, n. 30 above, pp. 138–40. On the rise of the precautionary principle more generally see O. McIntyre & T. Mosedale, 'The Precautionary Principle as a Norm of Customary International Law' (1997) 9(2) Journal of Environmental Law, pp. 221–42; N. de Sadeleer, Environmental Principles: From Political Slogans to Legal Rules (Oxford University Press, 2002), pp. 91–224. Perhaps not least owing to its rapid spread and rampant popularity, precaution has also come under fire as a risk paradigm: C.R. Sunstein, Laws of Fear: Beyond the Precautionary Principle (Cambridge University Press, 2005).

⁴⁰ E. Brown Weiss, 'The Planetary Trust: Conservation and Intergenerational Equity' (1983) 11(4) Ecology Law Quarterly, pp. 495–582.

⁴¹ See, e.g., K. Mickelson, 'Common Heritage of Mankind as a Limit to Exploitation of the Global Commons' (2019) 30(2) European Journal of International Law, pp. 635–63, at 659.

intergenerational with *intra*generational concerns, such as economic growth, tilted the scales in favour of present interests and allowed states to retain the symbolic value of intergenerational equity without having to commit fully to its content.

Although academic interest never dissipated, the fragmentation and dilution of the principle moved it further away from the conceptually 'thick' version advocated by early proponents. Today, hardly anyone would contend that intergenerational equity constitutes a binding obligation as a matter of positive law; instead, it is better understood as guiding the application and interpretation of 'hard' norms. 42 While international law has largely resisted the widening and deepening of intergenerational equity, the national level has proven much more receptive in terms of legislative and litigative activity. In a quantitative 2021 study, Renan Araújo and Leonie Kössler find that as many as 81 of 196 national constitutions include some reference to future generations, with the majority of these provisions emerging within the past 30 years. 43 This leads the authors to conclude that 'future generations seem to be a significant part of the core of a modern, universalist language of constitution-making. 44 The year 1990 constituted a watershed not only in relation to the quantity of references, it also marked qualitative shifts from 'expressive', preambular language to 'prescriptive', operative articles. 45 The timing of this development curiously coincides with the blossoming of intergenerational equity in international treaties during the 1990s, presumably owed to the wider environmental consciousness of that decade. Indeed, Araújo and Kössler explain that enshrining a 'personified group of [intergenerational] interest[s]' was likely a strategic tool to justify stringent environmental protection without having to adopt a politically more controversial ecocentric outlook. 46

In sum, at least four historical incarnations of intergenerational equity can be distinguished: (i) the principle of intergenerational equity proper, (ii) the principle of sustainable development, (iii) the precautionary principle, and (iv) the rights of future generations. Although the borders between these concepts overlap, each retains a unique connotation. The principle of intergenerational equity refers to the idea that relations between generations ought to follow some form of egalitarian distribution. Even though no strong formulation of this idea has entered positive international law, today the principle retains some authority as an interpretive tool. During the late 1980s, the narrow conception branched out into the principle of sustainable development, which then went on to lead a rich legal life of its own as a restraint on unfettered economic development. At around the same time, the notion that we should avoid engaging in risky activities without clear knowledge of their consequences

⁴² Molinari, n. 31 above, pp. 144–6.

⁴³ R. Araújo & L. Kössler, 'The Rise of the Constitutional Protection of Future Generations' (2021) LPP Working Paper Series No. 7–2021, available at: https://dx.doi.org/10.2139/ssrn.3933683.

⁴⁴ Ibid., p. 10.

⁴⁵ Ibid., p. 14. As the authors highlight, 28 countries impose on state organs some sort of duty to protect future generations, while 15 constitutions mould this protection into actionable rights: ibid., p. 21.

⁴⁶ Ibid., pp. 15-6.

⁴⁷ Barral, n. 38 above.

became increasingly influential through the rise of the precautionary principle. ⁴⁸ The rights of future generations are found mostly in domestic law, ⁴⁹ although there are some internationally recognized rights that may be seen as possessing an intergenerational component, as explained in subsection 3.3. In a sense, the resort to rights language answers the calls of Brown Weiss for a translation of intergenerational equity into actionable categories. The granting of certain rights to future entities, however, does not automatically guarantee an equitable distribution of resources across generations. Instead, it strives to ensure that necessities and needs will continue to be met in the future. In the remainder of this article I focus mainly on the first and the last understanding of intergenerational equity – the principle itself and its transposition into rights of future generations, respectively – as both sustainability and precaution have assumed distinct substantive and legal properties.

3. THE PRESENT: INTERGENERATIONAL LITIGATION IN THE CLIMATE CRISIS

The domestication of intergenerational equity allowed for new pathways to vindicate the principle's ideals.⁵⁰ After the early 1970s and the early 1990s, intergenerational equity currently seems to be experiencing a third wave in legal activity and scholarly attention. While earlier studies registered a slow but steady trickle of intergenerational litigation in jurisdictions around the world since the 1990s,⁵¹ the trickle has grown into a fully fledged stream of legal mobilization in past years. It is this unlikely revival to which I now turn.

The current wave of intergenerational claims is closely tied to the climate crisis. The 'legally disruptive nature' of this crisis, as Liz Fisher and co-authors aptly put it, ⁵² has pushed policymakers, litigants, and judges alike to chart new legal territories. Climate change 'shakes the foundations of doctrinal wisdoms', rendering intergenerational equity an 'attractive legal frame to confront the long-term stakes of the climate crisis'. ⁵³ This sentiment is also mirrored in international legal documents: both the UNFCCC and the 2015 Paris Agreement ⁵⁴ explicitly and implicitly reserve a role for future

⁴⁸ K. Steele, 'The Precautionary Principle: A New Approach to Public Decision-Making?' (2006) 5(1) Law, Probability and Risk, pp. 19–31.

⁴⁹ See Araújo & Kössler, n. 43 above. To my knowledge, there are no explicit internationally recognized rights of future generations.

⁵⁰ Cordonier Segger, Szabó & Harrington, n. 6 above.

See, e.g., the overviews provided by E. Brown Weiss, 'The Theoretical Framework for International Legal Principles of Intergenerational Equity and Implementation through National Institutions', in Cordonier Segger, Szabó & Harrington, n. 6 above, pp. 16–44; Molinari, n. 31 above; Redgwell, n. 30 above.

E. Fisher, E. Scotford & E. Barritt, 'The Legally Disruptive Nature of Climate Change' (2017) 80(2) The Modern Law Review, pp. 173–201.

⁵³ C. Hilson, 'Framing Time in Climate Change Litigation' (2019) 9(3) Oñati Socio-Legal Series, pp. 361–79.

Paris (France), 12 Dec. 2015, in force 4 Nov. 2016, available at: https://unfccc.int/sites/default/files/eng-lish_paris_agreement.pdf.

generations,⁵⁵ a connection reiterated by the UN General Assembly in a 2018 resolution on climate change.⁵⁶

The climate-catalyzed interest in intergenerational equity has triggered a lively normative debate on the desirability of an intergenerational approach to climate law.⁵⁷ Surprisingly, however, there has been relatively scarce in-depth analysis of judicial practice, and practically none from a comparative perspective. 58 To start bridging this gap, I analyze and compare ten intergenerational lawsuits from different international and domestic jurisdictions. The sample was sourced from a textual search of the Sabin Center's Climate Change Litigation Databases for the terms 'future generations' and 'intergenerational'. ⁵⁹ Only lawsuits filed or decided within the past five years (since 2017) were considered with a view to honing in on recent developments. Where the search yielded multiple cases per jurisdiction, only the latest or otherwise deemed most representative instance was included. To complement these results, I also screened secondary literature and academic blogs in the English language. The resulting sample comprises ten cases, as detailed in Table 1. It cannot lay claim to exhaustiveness or representativity; hence, the conclusions reached are explorative and not directly generalizable. 60 While most of the cases included rely predominantly on constitutional provisions rather than international sources of intergenerational equity, I draw no sharp distinction between the two levels. Instead, I argue that national and international norms in this field are best understood as both shaping and being shaped by each other in a dynamic of mutual cross-fertilization. 61 To structure the analysis, I will briefly introduce the selected cases before reflecting on the common threads and distinct pathways they engender with regard to the representation, operationalization, and remediation of intergenerational equity.

⁵⁵ B. Lewis, 'The Rights of Future Generations within the Post-Paris Climate Regime' (2018) 7(1) Transnational Environmental Law, pp. 69–87.

⁵⁶ See UNGA Res. 73/232, n. 3 above.

Such arguments have been made perhaps most forcefully by Brown Weiss, n. 28 above; B.H. Weston & T. Bach, 'Recalibrating the Law of Humans with the Laws of Nature: Climate Change, Human Rights, and Intergenerational Justice' (2009) Vermont Law School Research Paper No #10-06, available at: https://dx.doi.org/10.2139/ssrn.1443243; K. Kuh, 'The Legitimacy of Judicial Climate Engagement' (2019) 46 Ecology Law Quarterly, pp. 731–64.

To my knowledge, the best attempts to date come from L. Slobodian, 'Defending the Future: Intergenerational Equity in Climate Litigation' (2019) 32(3) Georgetown Environmental Law Review, pp. 569–90, and R.S. Abate, Climate Change and the Voiceless (Cambridge University Press, 2019), Ch. 3. However, both overviews predate a number of important decisions considered in this article. See, relatedly, E. Donger, 'Children and Youth in Strategic Climate Litigation: Advancing Rights through Legal Argument and Legal Mobilization' (2022) 11(2) Transnational Environmental Law, pp. 263–89.

⁵⁹ See http://climatecasechart.com/climate-change-litigation. The search was last conducted in Feb. 2022.

On the sampling difficulties faced in international comparative legal inquiry, see K. Linos, 'How to Select and Develop International Law Case Studies: Lessons from Comparative Law and Comparative Politics' (2015) 109(3) American Journal of International Law, pp. 475–85.

On the dual role of national courts as both enforcers and creators of international law, see A. Roberts, 'Comparative International Law? The Role of National Courts in Creating and Enforcing International Law' (2011) 60(1) International & Comparative Law Quarterly, pp. 57–92.

Table 1 Comparative Overview of Analyzed Intergenerational Climate Litigation

Case Name	Jurisdiction	Representation	Intergenerational Anchor	Remedies	Status
Sacchi et al.	UN Committee on the Rights of the Child	Youth	Children's rights	Revision of climate laws and policies	Decided (2021)
Billy et al.	UN Human Rights Committee	Indigenous community	Cultural rights	Adaptation investments	Decided (2022)
Duarte Agostinho et al.	European Court of Human Rights	Youth	Rights to life, privacy, and non-discrimination	Emissions reduction	Filed (2020)
Shrestha	Nepal	Individual citizen	Environmental and ecological justice	Adoption of environmental laws	Decided (2018)
D.G. Khan Cement Company	Pakistan	Public authority	Intergenerational equity, climate justice	Denial of construction permit	Decided (2021)
Gloucester Resources Ltd	New South Wales	Public authority	Intergenerational equity	Denial of construction permit	Decided (2019)
Lozano Barragán	Colombia	Youth	Rights to life, health, a healthy environment, nutrition and water; intergenerational solidarity	Establishing, revising, and enforcing laws and institutions related to deforestation	Decided (2018)
Urgenda	The Netherlands	NGO	Rights to life and privacy	Emissions reduction	Decided (2018)
Juliana	United States	Youth + guardian for future generations	Rights to due process and equal protection; public trust doctrine	Emissions reduction, cessation of fossil fuel subsidies	Decided (2020)
Neubauer	Germany	Youth	'Freedom rights'	Revision of climate law	Decided (2021)

3.1. Ten Tales of Intergenerationality

'Intergenerational litigation' is not a neat label, as the conceptual ecosystem sketched in the first part reveals. Indeed, the ten cases under analysis have little in common at first sight – they are derived from highly diverse legal systems, they invoke various versions of intergenerational equity, and they differ in the emphasis placed on the intergenerational component from marginal *obiter dicta* to central *ratio decidendi*. What unites them, then, is a common focal point: concern for the legal protection of future persons in a radically altered climate. While each case links this concern with different legal mechanisms, the cross-generational dimension reverberates across the board.

International human rights law imposes significant obligations on states to respect the rights of minors and children in the new climatic context. ⁶² In October 2021, these duties came to the forefront in *Sacchi* v. *Argentina*, a complaint brought by 16 children and young persons against five state parties under the Optional Protocol to the Convention on the Rights of the Child (CRC) on a Communications Procedure. ⁶³ The claimants alleged that the respondents' inadequate climate policies were in conflict with Articles 6 (the right to life), 24 (the highest attainable standard of health), and 30 (culture), in conjunction with Article 3 (the 'best interests of the child' principle) of the CRC. ⁶⁴ Although the UN Committee on the Rights of the Child ultimately found the complaints inadmissible for failing to exhaust domestic remedies, it confirmed that a state party may in principle be liable for the detrimental effects of its climatic track record, within and outside its territories. ⁶⁵

A related line of argumentation transpired in *Billy et al.* v. *Australia*, a complaint decided by the UN Human Rights Committee in September 2022, in which a group of Indigenous Torres Strait Islanders challenged the Australian government's insufficient climate change mitigation and adaptation efforts. While the complainants based their claims on, among others, Articles 6 (the right to life) and 24 (the rights of the child) of the International Covenant on Civil and Political Rights (ICCPR)⁶⁷ – similar to the CRC provisions addressed in *Sacchi* – they additionally invoked Article 27 of the same instrument, the right to culture. Consistent judicial practice has confirmed that the right to culture entails the right to conserve and transmit cultural practices and artefacts across generations, making it an auspicious resource for

⁶² Lewis, n. 55 above, pp. 78–82; Donger, n. 58 above.

New York (US), 19 Dec. 2011, in force 14 Apr. 2014, available at: https://www.ohchr.org/sites/default/files/CTC_4-11d.pdf. See in more depth, N. van Dijk, 'From Exacerbating the Anthropocene's Problems to Intergenerational Justice: An Analysis of the Communication Procedure of the Human Rights Treaty System' (2021) 10 Earth System Governance, article 100123, pp. 1–10.

Decision adopted by the Committee on the Rights of the Child under the Optional Protocol to the Convention on the Rights of the Child on a Communications Procedure concerning Communication No. 107/2019, 22 Sept. 2021, UN Doc. CRC/C/88/D/107/2019 (Sacchi), paras 3.4–3.7. In addition to the CRC, the principle of intergenerational equity was invoked to support the claims: 'By supporting climate policies that delay decarbonization, the State party is shifting the enormous burden and costs of climate change onto children and future generations. In doing so, it has breached its duty to ensure the enjoyment of children's rights for posterity and has failed to act in accordance with the principle of intergenerational equity': ibid., para. 3.7.

⁶⁵ Ibid., paras 9.8–9.12.

Views adopted by the Human Rights Committee under Article 5(4) of the Optional Protocol [of the ICCPR] concerning Communication No. 3624/2019, 21 July 2022, UN Doc. CCPR/C/135/D/3624/2019 (Billy), available at: https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CCPR%2fC%2f135%2fD%2f3624%2f2019&Lang=en.

⁶⁷ New York (US), 16 Dec. 1966, in force 23 Mar. 1976, available at: https://www.ohchr.org/sites/default/files/ccpr.pdf.

intergenerational litigation.⁶⁸ While the Committee considered the right to life of future generations,⁶⁹ it ultimately did not find a violation of this right.⁷⁰ It further declined to engage with Article 24.⁷¹ On the right to culture, by contrast, the Committee concluded that:

the State party's failure to adopt timely adequate adaptation measures ... to transmit to their children and future generations their culture and traditions and use of land and sea resources discloses a violation of the State party's positive obligation to protect the authors' right to enjoy their minority culture.⁷²

Regional courts, too, are grappling with intergenerational petitions. For the first time in its eventful history, the European Court of Human Rights (ECtHR) is currently faced with a number of related climate lawsuits, spearheaded by *Duarte Agostinho et al.* v. *Portugal et al.*⁷³ The case was filed by a group of six Portuguese young persons against 33 state parties to the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR)⁷⁴ over the respondents' flawed climate policies, alleging that the impacts of climate change already disproportionately affect young people.⁷⁵ Moreover, the complaint argues that these impacts will be felt all the more acutely in the future and will also 'affect any children [that the petitioners] may have'.⁷⁶ While the ultimate merit of this and other intergenerational arguments under the ECHR remains to be assessed by the Court, Helen Keller and Corina Heri conclude that the justiciability of future harm has a long pedigree in the Court's case law.⁷⁷

This line of argumentation has been pushed by Martin Scheinin, who also submitted a third-party intervention to the Committee: Billy, n. 66 above, para. 1.2; see M. Scheinin, 'Climate Change and Human Rights: A Proposed New Line of Argument', paper presented at the Public International Law Discussion Group at the Bonavero Institute of Human Rights, Oxford (UK), 11 Feb. 2021, available at: https://www.law.ox.ac.uk/events/climate-change-and-human-rights-litigation-proposed-new-line-argument.

Billy, n. 66 above, para. 8.3 ('The Committee ... recalls that environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life').

⁷⁰ Ibid., para. 8.8. Various dissenting Committee Members would have found a violation of Art. 6.

⁷¹ Ibid., para. 10.

Tbid., para. 8.14. Note that the Committee only stresses the state's failure to provide adequate adaptation. In his concurring opinion, Committee Member Gentian Zyberi criticized this focus on adaptation and pointed out that 'the Committee should have linked the State obligation to "protect the authors' collective ability to maintain their traditional way of life, to transmit to their children and future generations their culture and traditions and use of land and sea resources" more clearly to mitigation measures'.

⁷³ Communicated Case No. 39371/20, 13 Nov. 2020, available at: https://hudoc.echr.coe.int/eng?i=001-206535.

Rome (Italy), 4 Nov. 1950, in force 3 Sept. 1953, available at: http://www.echr.coe.int/pages/home.aspx? p=basictexts.

A. Daly, P. Leviner & R.T. Stern, 'How Children Are Taking European States to Court over the Climate Crisis – and Changing the Law', *The Conversation*, 8 Apr. 2021, available at: http://theconversation.com/how-children-are-taking-european-states-to-court-over-the-climate-crisis-and-changing-the-law-158546.

Nee Duarte Agostinho et al. v. Portugal et al., Complaint, para. 21, available at: http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200902_3937120_complaint-1.pdf.

⁷⁷ H. Keller & C. Heri, 'The Future Is Now: Climate Cases before the ECtHR' (2022) 40(1) *Nordic Journal of Human Rights*, pp. 153–74, at 163–66.

The bulk of intergenerational climate litigation, however, has occurred within domestic fora. This fact is hardly surprising, given the stagnation and dilution of intergenerational considerations at the international level since the 1990s and their subsequent uptick in national constitutions. Climate lawsuits across myriad countries have witnessed the advent of intergenerational arguments. Pioneering in this regard was the Dutch *Urgenda* case in 2015, famously one of the first successful climate actions. Relying on a wealth of private and public rights, the Hague District Court controversially ruled at first instance that 'the possibility of damages for ... current and future generations of Dutch nationals is so great and concrete that given its duty of care, the State must make an adequate contribution, greater than its current contribution, to prevent hazardous climate change'.⁷⁸

Three years after the *Urgenda* success, the Colombian Supreme Court was faced with a related complaint alleging the violation of a wide array of fundamental rights through the rapid deforestation of the Amazon rainforest (*Lozano Barragán*). The young plaintiffs demanded, among others, an 'intergenerational agreement' to reduce said deforestation and counteract one of the main drivers of global climate change.⁷⁹ In what has been called a highly 'heterodox' landmark decision, which placed intergenerational solidarity at the heart of its argument, the justices sided with the plaintiffs.⁸⁰ Commentators have suggested that the ruling implies as much as an extension of constitutional rights protection for future generations. In another unusual move for the Colombian judiciary, the Court also drew heavily on international environmental law and on the Paris Agreement in what must be interpreted as a progressive deepening of the dynamic relationship between international norms and national judicial practice.⁸¹

A similar conclusion was reached some months later by the Supreme Court of Nepal in *Shrestha* v. *Office of the Prime Minister et al.*,⁸² in which environmental lawyer Padam Bahadur Shrestha successfully petitioned the Court to compel the Nepali government to enact comprehensive climate legislation in line with its international legal

Urgenda v. The State of the Netherlands, Rechtbank Den Haag [The Hague District Court], 24 June 2015, ECLI:NL:RBDHA:2015:7196, para. 4.89, available at: https://deeplink.rechtspraak.nl/uit-spraak?id=ECLI:NL:RBDHA:2015:7196. This ground-breaking decision was unsuccessfully appealed against by the government, and was ultimately confirmed by the Dutch Supreme Court in 2019. For incisive analyses of the first-instance and appeals decisions, respectively, see J. van Zeben, 'Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?' (2015) 4(2) Transnational Environmental Law, pp. 339–57; B. Mayer, 'The State of the Netherlands v. Urgenda Foundation: Ruling of the Court of Appeal of The Hague (9 October 2018)' (2019) 8(1) Transnational Environmental Law, pp. 167–92.

Andrea Lozano Barragán et al. v. Presidencia de la República et al., Corte Suprema de Justicia [Supreme Court of Justice], 5 Apr. 2018, STC4360-2018, Radicación No 11001-22-03-000-2018-00319-01, available at: https://cortesuprema.gov.co/corte/wp-content/uploads/2018/04/STC4360-2018-2018-00319-011.pdf. The case is also known under the name of Generaciones Futuras v. Minambiente.

P.A. Acosta Alvarado & D. Rivas-Ramírez, 'A Milestone in Environmental and Future Generations' Rights Protection: Recent Legal Developments before the Colombian Supreme Court' (2018) 30(3) Journal of Environmental Law, pp. 519–26, at 524.

⁸¹ Ibid

NKP 2075 (2018), 61(3), Decision No. 10210, available at: https://padamshrestha.com/wp-content/uploads/2021/01/PDF-climate-change-Translated-Version-of-the-Judgment_.pdf.

obligations. The Court also followed the petitioner's reasoning that such a law should centre climate justice concerns for current and future generations in accordance with the principle of intergenerational equity. The government swiftly implemented the decision by adopting the Environment Protection Act 2019 and the Forests Act 2019.

Whereas *Shrestha* largely escaped public attention, the New South Wales (Australia) Land and Environment Court's decision in *Gloucester Resources Ltd* v. *Minister for Planning* has attracted extensive commentary. Petitioner Gloucester Resources Ltd challenged the public authorities' denial to grant its application to construct a new coal mine in an ecologically pristine region of New South Wales, a decision ultimately upheld by the Court. In a detailed judgment running to 200 pages, Justice Preston weighed the project's costs and benefits in the light of both domestic laws and international obligations. His analysis also paid attention to the distributive implications of approving the mine, including those for future generations:

The economic and social benefits of the Project will last only for the life of the Project (less than two decades), but the environmental, social and economic burdens of the Project will endure not only for the life of the Project but some will continue for long after. The visual impact of the Project, even after mining rehabilitation, will continue. The natural scenery and landscape will be altered forever, replaced by an artificial topography and landscape. 85

Ever since the much-celebrated *Leghari* decision, ⁸⁶ Pakistan has proven to be one of the most attractive jurisdictions for climate litigation. This reputation was confirmed once again in 2021 by the Pakistani Supreme Court's ruling in *D.G. Khan Cement Company* v. *Government of Punjab*. ⁸⁷ In a striking resemblance to *Gloucester Resources Ltd*, the case arose over a constitutional petition challenging the Punjab government's decision to bar the construction or expansion of cement plants in environmentally fragile areas. The Court took this opportunity not only to quash the complaint; it also expanded *proprio motu* and at length on the overriding importance of safeguarding environmental resources for future generations. The corresponding section in the ruling deserves to be quoted in all its verbosity:

Another important dimension of climate change is intergenerational justice and the need for climate democracy. The tragedy is that tomorrow's generations aren't here to challenge this pillaging of their inheritance. The great silent majority of future generations is rendered powerless and needs a voice. This Court should be mindful that its decisions also adjudicate upon the rights of the future generations of this country. It is important to question

Environmental Protection Act 2019 (2076), 11 Oct. 2019, available at: https://lawcommission.gov.np/en/wp-content/uploads/2021/03/The-Environment-Protection-Act-2019-2076.pdf; Forests Act 2019 (2076), 14 Oct. 2019, available at: https://www.lawcommission.gov.np/en/wp-content/uploads/2021/03/The-Forest-Act-2019-2076.pdf.

⁸⁴ [2019] NSWLEC 7. See, e.g., L. Hughes, 'The Rocky Hill Decision: A Watershed for Climate Change Action?' (2019) 37(3) Journal of Energy & Natural Resources Law, pp. 341–51.

⁸⁵ Gloucester Resources Ltd, ibid., para. 415.

Asghar Leghari v. Federation of Pakistan (2015) WP No. 25501/2015, Order Sheet, 4 Sept. 2015. For a concise analysis, see E. Barritt & B. Sediti, 'The Symbolic Value of Leghari v Federation of Pakistan: Climate Change Adjudication in the Global South' (2019) 30(2) King's Law Journal, pp. 203–10.

^{87 (2019)} CP 1290-L/2019, 15 Apr. 2021, available at: https://www.iucn.org/sites/default/files/content/documents/2021/dg_khan_judgment.pdf.

ourselves; how will the future generations look back on us and what legacy we leave for them? This Court and the Courts around the globe have a role to play in reducing the effects of climate change for our generation and for the generations to come. Through our pen and jurisprudential flat, we need to decolonize our future generations from the wrath of climate change, by upholding climate justice at all times. 88

The United States (US) legal system has a comparatively long record of climate litigation under the auspices of the atmospheric public trust doctrine. 89 The latest case in this category, Juliana v. United States, has attracted considerable attention, not least for having been initiated by a group of children and young persons in conjunction with a nongovernmental organization (NGO) and a designated guardian for future generations, Columbia University climatologist James Hansen. 90 The plaintiffs requested the Court to grant injunctive relief of various types to compel the government to take stringent climate action. While the District Court had ruled in favour of these demands, 91 the US Court of Appeals for the Ninth Circuit later reversed that decision for the case's alleged lack of 'redressability', one of the three elements of the strict standing test in US constitutional litigation. 92 Despite the case's ultimate failure, intergenerational concerns featured in both decisions. The District Court expanded at length on the dangers of climate change for public trust resources and stressed that a long lineage of case law prohibited the government from depriving future generations of environmental commons 'because [such action would] diminish the power of future legislatures to promote the general welfare'. 93 In the majority ruling on appeal, this line of argumentation was neither further pursued nor explicitly rejected. In a scorching dissent, however, Judge Staton interpreted the US Constitution as containing a 'perpetuity principle', from which she deduced a 'constitutional right to be free from irreversible and catastrophic climate change'.94

Finally, the latest and most explicitly intergenerational climate lawsuit to date was decided by the German Constitutional Court on 24 March 2021 (*Neubauer et al.*). The constitutional complaint, brought by a mixed group of minors and adults residing both within and outside Germany, challenged the German Climate Protection Act of

⁸⁸ Ibid., para. 19 (italics omitted).

⁸⁹ Z.L. Berliner, 'What about Uncle Sam: Carving a New Place for the Public Trust Doctrine in Federal Climate Litigation' (2018) 21(4) *University of Pennsylvania Journal of Law and Social Change*, pp. 339–58.

⁹⁰ E. Marris, 'US Supreme Court Allows Historic Kids' Climate Lawsuit to Go Forward' (2018) 563(7730) Nature, pp. 163–4.

⁹¹ Juliana v. United States, 217 F. Supp. 3d 1224 (D. Or. 2016) (Juliana I).

Juliana v. United States, 947 F.3d 1159, 1171 (9th Cir. 2020) (Juliana II). In the Court's view, the requested injunctions would do little to avert the dangers posed by climate change, short of a radical transformation of the US economy. The power to order such a transformation, however, would lie beyond the authority of the Court: W. Montgomery, 'Juliana v. United States: The Ninth Circuit's Opening Salvo for a New Era of Climate Litigation' (2021) 34(2) Tulane Environmental Law Journal, pp. 341–57.

⁹³ *Juliana I*, n. 91 above, p. 1253. Note also the similarities of this idea with Brown Weiss, n. 40 above.

⁹⁴ *Juliana II*, n. 92 above, p. 1182 (Staton J. dissenting).

⁹⁵ Neubauer et al. v. Germany, German Constitutional Court (BverfG), 24 Mar. 2021, 1 BvR 2656/18, 1 BvR 78/20, 1 BvR 96/20, 1 BvR 288/20.

2019⁹⁶ on the basis of its allegedly insufficient 2030 emissions reduction target (55% vis-à-vis 1990 levels), which was argued to infringe the complainants' fundamental rights. In what has been called 'probably the most far-reaching decision ever made by a supreme court worldwide on climate protection', ⁹⁷ the Court relied on the previously rather dormant Article 20a of the German Basic Law⁹⁸ to develop an intertemporal dimension of fundamental rights in relation to climate change:

It follows from the principle of proportionality that one generation must not be allowed to consume large portions of the CO₂ budget while bearing a relatively minor share of the reduction effort, if this would involve leaving subsequent generations with a drastic reduction burden and expose their lives to serious losses of freedom. ⁹⁹

In accordance with this finding, the Court mandated the state to update the law with more concrete targets for the period after 2030 and to revisit the allowable emissions in line with the idea of a fair, that is, a proportional distribution, across generations. The government and the legislature swiftly implemented this decision in June 2021 under the heading of an 'intergenerational contract for the climate', with an updated carbon dioxide (CO₂) emissions target of 65% by 2030 and a new target of 88% by 2040, and the achievement of carbon neutrality by 2045 (compared with 2050). ¹⁰¹

What unites and divides these diverse cases as legal expressions of intergenerational concerns? To approximate an answer to this question, I argue, it is useful to examine three dimensions in more detail: 102 (i) issues concerning representation, (ii) the substantive content of intergenerational rights and duties, and (iii) the riddle of intertemporal remedies.

3.2. Representation

Prima facie, the difficulty of operationalizing intergenerational modalities of legal representation pervades all intergenerational litigation in one way or another. Who can speak for those who have yet to (or potentially never will 103) come into

⁹⁶ Federal Climate Protection Act of 12, Dec. 2019 (BGBl, I S. 2513).

⁹⁷ F. Ekardt, 'Climate Revolution with Weaknesses', Verfassungsblog, 8 May 2021, available at: https://verfassungsblog.de/climate-revolution-with-weaknesses.

The article reads in full: 'Mindful 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', available at: https://www.gesetze-im-internet.de/englisch_gg/englisch_gg.html#p0116 (transl. C. Tomuschat et al.).

Neubauer, n. 95 above, para. 192 (as cited in G. Winter, 'The Intergenerational Effect of Fundamental Rights: A Contribution of the German Federal Constitutional Court to Climate Protection' (2021) 34(1) Journal of Environmental Law, pp. 209–21, at 216).

Winter, ibid

Bundesregierung [Federal Government], 'Climate Change Act: Climate Neutrality by 2045', 25 June 2021, available at: https://www.bundesregierung.de/breg-de/themen/klimaschutz/climate-change-act-2021-1936846.

¹⁰² This structure is adopted from Slobodian, n. 58 above.

¹⁰³ The fact that choices of current generations can influence the very existence of those living in the future is a well-known and much debated dilemma in moral philosophy. It was first described and coined the 'non-identity problem' by Derek Parfit: D. Parfit, Reasons and Persons (Oxford University Press, 1984),

existence? ¹⁰⁴ Of course, this concern weighs less heavily in cases where present generations of youth can stand in for their future iterations, as in *Duarte Agostinho*, *Neubauer*, and *Sacchi*. The issue is more complicated when discussing generations unborn, as the courts' hesitance in *Urgenda* and *Juliana* indicates. In *Urgenda*, the claimants had argued to act on behalf of the current and future generations of both Dutch citizens and of the world population at large. Ultimately, the Hague Court of Appeal engaged only with the first of these four categories, satisfying itself with the fact that:

it is without a doubt plausible that the current generation of Dutch nationals, in particular but not limited to the younger individuals in this group, will have to deal with the adverse effects of climate change in their lifetime if global emissions of greenhouse gases are not adequately reduced. 105

Similarly, in *Juliana*, the alleged harm to (and consequently, standing of) unborn generations were not discussed after it was found that the child plaintiffs had sufficiently pleaded current injury. ¹⁰⁶ A conceptual solution to this problem is at hand, though. As the growing recognition of rights of nature ¹⁰⁷ and the much older fiction of corporate legal personality ¹⁰⁸ show, the law is no stranger to vicarious representation. In intergenerational litigation, for instance, the youngest members of society could act as agents and guardians for the interests of unborn generations, as they are most likely to have overlapping interests with generations to come. ¹⁰⁹

These rather theoretical challenges – similar issues arise over efforts to enfranchise future generations politically ¹¹⁰ – are further exacerbated when paired with the idiosyncratic exigencies of *locus standi* doctrines. In some jurisdictions, such as before the Court of Justice of the European Union, they prevent cases from being brought in the first place. ¹¹¹ In others, standing and admissibility quickly stall the dispute and a

Ch. 16. For a discussion with regard to climate change, see E. Page, 'Intergenerational Justice and Climate Change' (1999) 47(1) *Political Studies*, pp. 53–66.

¹⁰⁴ On this question, see also González-Ricoy & Rey, n. 6 above.

The State of the Netherlands v. Urgenda, Gerechtshof Den Haag [The Hague Court of Appeal], 9 Oct. 2018, ECLI:NL:GHDHA:2018:2591, para. 37, available at: https://deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:GHDHA:2018:2610.

¹⁰⁶ *Juliana I*, n. 91 above, p. 1248 n. 5.

¹⁰⁷ L.J. Kotzé & P. Villavicencio Calzadilla, 'Somewhere between Rhetoric and Reality: Environmental Constitutionalism and the Rights of Nature in Ecuador' (2017) 6(3) Transnational Environmental Law, pp. 401–33.

J. Dewey, 'The Historic Background of Corporate Legal Personality' (1925) 35(6) Yale Law Journal, pp. 655–73.

As one of the reviewers kindly pointed out, there remain significant barriers to the participation of young children in legal proceedings. Many legal systems require minors to appoint an official guardian to interact with the court. Among the cases reviewed in this article, guardians featured prominently in *Sacchi*, *Neubauer*, and *Juliana*. Although it is difficult to gauge their influence on the claims made, guardians arguably introduce the risk of patronization, constraining the latter's ability to express intergenerational interests. For an overview of this practice, see Donger, n. 58 above, pp. 268–70.

¹¹⁰ See, e.g., D.F. Thompson, 'Representing Future Generations: Political Presentism and Democratic Trusteeship' (2010) 13(1) Critical Review of International Social and Political Philosophy, pp. 17–37.

S. Bogojević, 'Human Rights of Minors and Future Generations: Global Trends and EU Environmental Law Particularities' (2020) 29(2) Review of European, Comparative & International Environmental Law, pp. 191–200.

merits ruling in the bud. Take the requirement of individual affectedness, which in many systems is a prerequisite to gain standing. It is often challenging to argue for the individual affectedness of a collective as large as an entire generation. The issue, again, becomes even more difficult when one considers the affectedness of unborn plaintiffs.

One way of navigating around the affectedness requirement is to entrust transgenerational institutions with legal representation. Such institutions may involve cultural communities or Indigenous peoples, as in *Billy et al.*, NGOs, as in *Urgenda*, or even public bodies such as the Welsh Commissioner for Future Generations. ¹¹² At the international level, representation can also be shouldered by states that are willing to take up the onus. For instance, a number of small island states are currently working towards seeking advisory opinions from the ICJ and the International Tribunal on the Law of the Sea. ¹¹³ The privileged legal standing of these actors can go a long way towards resolving procedural dead ends. ¹¹⁴ Finally, courts may consider intergenerational concerns on their own initiative when deciding cases with long-term impacts, as they did in *Gloucester Resources Ltd* and *D.G. Khan Cement Company*. This route avoids the question of representation altogether. Indeed, courts appear to be ideally placed to integrate intergenerational equity into legal decision making in contentious cases by virtue of their widely accepted role as guardians of public rights and interests.

3.3. Intergenerational Rights and Duties

If and once claims proceed to the merits, a head-on confrontation with the opaque scope and content of intergenerational rights and duties becomes inevitable. In this respect the cases surveyed are indicative of three legal strategies. The first two may be grouped under the heading of 'future generations' rights'; they operationalize an equitable distribution of resources between generations through the tools provided by human rights law. By contrast, a third strategy envisages more structural understandings of intergenerational equity.

The first strategy exploits the strong intergenerational undertones of particular classes of rights. These rights can be understood to be inherently intergenerational by virtue of their cross-temporal rationale or conceptualization. The category of inherently intergenerational rights arguably includes cultural rights (*Billy et al.*), environmental rights (*Lozano Barragán et al.*), and children's rights (*Sacchi et al.*) – although the latter category is not clear-cut, for reasons elaborated below. Take the case of cultural rights, the capacity of which to maintain cultural accomplishments across generations is an important feature of their protective scope. As the 1972

¹¹² Davies, n. 6 above.

A. Savaresi, K. Kulovesi & H. van Asselt, 'Beyond COP26: Time for an Advisory Opinion on Climate Change?', EJIL: Talk!, 17 Dec. 2021, available at: https://www.ejiltalk.org/beyond-cop26-time-for-anadvisory-opinion-on-climate-change.

¹¹⁴ In addition to standing, there may be other procedural challenges, including the international legal requirement to exhaust local remedies first (*Sacchi et al.*) and the justiciability of claims (*Juliana*). I do not elaborate these hurdles because they are not specific to intergenerational claims; rather, they plague climate litigation more generally; see Fisher, Scotford & Barritt, n. 52 above, pp. 183–8.

World Heritage Convention recognizes in Article 4, states incur 'the duty of ensuring the identification, protection, conservation, presentation and *transmission to future generations* of the cultural and natural heritage', ^{11.5} an objective mirrored in many cultural rights instruments. ¹¹⁶ *Billy*, once again, strengthened this transgenerational facet by compelling Australia to bolster its adaptation efforts. As the Committee observes, the enjoyment of culture 'is closely associated with territory and the use of its resources, including such traditional activities as fishing or hunting'. ¹¹⁷ This logic renders the language of cultural rights particularly useful for conservation and preservation purposes. Further, the transmission of cultural heritage is not limited to a particular time horizon and could cover impacts that stretch beyond the next decades only. An important caveat to this potential is that the beneficiaries of cultural rights include a relatively small, clearly defined number of individuals and collectives, including those considered as Indigenous (such as the Torres Strait islanders in *Billy*).

Next to cultural rights, environmental rights, too, can be regarded as containing a pronounced intergenerational component, given the environment's function as a cross-generational resource – think of the idea of a planetary trust that dominated intergenerational theories during the 1970s and 1980s. The decision in *Lozano Barragán* offers a glimpse of what such an argument may look like, when the Colombian Supreme Court explained that 'the environmental rights of future generations are grounded in (i) the ethical duty of intra-species solidarity, and (ii) in the intrinsic value of nature'. This potential, however, remains to be carved out in more detail in future decisions.

The rights of the child are similarly forward-looking in character. As Joel Feinberg famously argued, children's rights are 'rights to an open future'; they are geared towards protecting young persons' future choice. The *Billy* claimants availed themselves of this rationale by framing Article 24 ICCPR 121 in the context of the intergenerational equity principle and linking it to cultural rights: 'Yessie Mosby [one of the claimants] fears that his children will have to live on another man's land and will not have anything for themselves or their children, as the Masigalgal culture will be extinct'. 122

In addition to seeing children as inherently worthy of protection, their rights are also justified by children's putative future status as 'full' legal and political citizens. ¹²³ On

¹¹⁵ World Heritage Convention, n. 24 above, Art. 4 (emphasis added).

¹¹⁶ See generally F. Francioni & M. Scheinin (eds), Cultural Human Rights (Brill Nijhoff, 2008); S. Joseph & M. Castan, The International Covenant on Civil and Political Rights: Cases, Materials, and Commentary (Oxford University Press, 2013), Ch. 24.

¹¹⁷ Billy, n. 66 above, para. 8.13.

¹¹⁸ R.P. Hiskes, The Human Right to a Green Future: Environmental Rights and Intergenerational Justice (Cambridge University Press, 2009), p. 9; Brown Weiss, n. 40 above.

¹¹⁹ Lozano Barragán et al., n. 79 above, para. 5.3 (the translation is my own).

J. Feinberg, 'The Child's Right to an Open Future', in W. Aiken & H. LaFollette (eds), Whose Child? Children's Rights, Parental Authority, and State Power (Rowman and Littlefield, 1980), pp. 124–53.

¹²¹ N. 67 above.

¹²² *Billy*, n. 66 above, para. 3.7.

¹²³ J. Bohman, 'Children and the Rights of Citizens: Nondomination and Intergenerational Justice' (2011) 633(1) The Annals of the American Academy of Political and Social Science, pp. 128-40.

these latter terms, children's rights could also plausibly be understood to fall into a second legal strategy, which I call the intergenerational extension of citizenship rights. This strategy involves the transgenerational application of *general* rights such as those to life, health, and civil liberties. To bring future rights within the protective ambit of the Constitution, the German Constitutional Court in *Neubauer* creatively reinterpreted the state's long-standing duty to refrain from undue interferences with constitutional rights. Departing from the calculus of an outstanding carbon budget under the Paris Agreement, the Court forged the new doctrine of an 'advance interference-like effect' that an inequitable distribution of carbon costs and benefits may exercise on fundamental rights. ¹²⁴ A similar logic is found in *Duarte Agostinho*, which alleges that the disproportionate impact of climate change on those living in the future discriminates against generations to come. ¹²⁵

Despite its potential for extending legal time horizons, however, casting children as future citizens is an unsatisfactory strategy from the viewpoint of 'thick' intergenerational equity. Given that many contemporary risks unfold not only over the next decades but over much longer time periods, there is a real danger that even a full realization of children's rights might trample on the interests of generations further down the line. To some extent, this danger is apparent in *Neubauer*, where the Court ultimately declared the German climate law to be unconstitutional for restricting the young persons' exercise of freedom rights in the mid-term future – including the freedom to burn fossil fuels at the expense of later generations. 128

More generally, while the rights frame has several well-known advantages, ¹²⁹ it seems inevitable for conflicts between present and future rights to erupt. What happens if a future generation's right to life requires the partial suspension of a present generation's right to property? What if the right to food of present generations calls for resource depletion to the detriment of posterity? It remains to be seen how such conflicts will be resolved, and whether existing techniques are up to the task. ¹³⁰ What is more, it appears unconvincing that the conferral of rights upon future generations alone can incentivize the type of structural transformation that is needed. ¹³¹ As James Bohman

¹²⁴ P. Minnerop, 'The "Advance Interference-Like Effect" of Climate Targets: Fundamental Rights, Intergenerational Equity and the German Federal Constitutional Court' (2022) 34(1) *Journal of Environmental Law*, pp. 135–62, at 136.

¹²⁵ Duarte Agostinho Complaint, n. 76 above, para. 28.

¹²⁶ Interestingly, as Donger (n. 58 above) argues, the framing of children's rights in intergenerational terms can also crowd out other equally valuable legal strategies and claims.

¹²⁷ P.U. Clark et al., 'Consequences of Twenty-First-Century Policy for Multi-Millennial Climate and Sea-Level Change' (2016) 6(4) Nature Climate Change, pp. 360–9.

¹²⁸ Neubauer, n. 95 above, para. 184. For a similar critique, see Minnerop, n. 124 above.

¹²⁹ Lewis, n. 55 above; J. Peel & H.M. Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7(1) Transnational Environmental Law, pp. 37–67.

¹³⁰ For an examination of this issue and potential solutions, see M.-C. Petersmann, 'When Environmental Protection and Human Rights Collide: Four Heuristics of Conflict Resolution', in C. Voigt, International Judicial Practice on the Environment: Questions of Legitimacy (Cambridge University Press, 2019), pp. 239–61.

¹³¹ A colourful variety of institutional solutions seems to be quickly developing to tackle present bias: Cordonier Segger, Szabó & Harrington, n. 6 above.

perceptively notes: 'However important it is to give voice to the interests of children and future generations in some way, this solution does not fundamentally address the structural causes for the presentist bias of democracy that undermine trusteeship'. 132

In cognizance of this risk, the two rights-based approaches are complemented by a third solution: a more structural understanding of intergenerational equity as guiding state action and influencing decision making more generally, without being directly justiciable. Formulations in this vein lie closer to the traditional function of international legal principles as flexible heuristics that steer the interpretation and design of hard norms. The cases from the US, Nepal, Pakistan, and Australia all espouse such a procedural-hermeneutic operationalization. Although the *Juliana* petitioners had initially alleged the looming infringement of their constitutional rights, the first-instance ruling of the Oregon District Court relied in large parts on the public trust doctrine – a long-standing principle in US federal and state law – to argue that the federal government cannot abdicate its inherently sovereign functions. It found that further inaction on climate change would lead to exactly such a scenario, however: it would deprive future legislatures of the enjoyment of natural resources fundamental to the exercise of public authority. 133 This line of reasoning implies an intriguing shift in the affected interests at stake from citizens' rights to the institutional realization of constitutional mandates. 134 The Nepali Supreme Court in Shrestha ordered the government to '[m]ake legal arrangements to ensure ecological justice and environmental justice to ... future generation[s]. 135 The judges in D.G. Khan Cement cited the overwhelming importance of intergenerational equity as a weighty reason for denying the petitioner's appeal over the cement plant decision. 136 Similarly, Justice Preston relied on the principle to explicitly factor the long-term consequences – visual, social, cultural, environmental – of the proposed infrastructure project into his decision making in Gloucester Resources Ltd. Utilized in this manner, intergenerational equity can expand the temporal scope of impacts that are considered relevant for judicial analysis; in other words, it forces the law to look more closely at the future, and to weigh it more heavily.

It is worth noting that the three strategies identified above need not be mutually exclusive; rather, they are most forceful if pursued jointly. A stellar example here is *Lozano Barragán*, in which the Court stressed the intergenerational component of the right to a healthy environment, extended the reach of general fundamental rights into the future, and considered 'intergenerational solidarity' to guide its analysis of harm and benefits.

¹³² Bohman, n. 123 above, p. 138.

¹³³ *Juliana I*, n. 91 above, p. 1253.

The same shift is visible in Judge Staton's dissent in the *Juliana* appeals ruling when she invokes the 'perpetuity principle' to argue that all branches are under an obligation to preserve the functioning of the constitutional system. Interestingly, she then goes on to contend that the perpetuity principle equipped citizens with an irrevocable, justiciable right to be free from catastrophic climate change: *Juliana II*, n. 92 above, pp. 1180–2.

¹³⁵ Shrestha, n. 82 above, p. 13.

¹³⁶ D.G. Khan Cement Company, n. 87 above, paras 19-20.

3.4. Intertemporal Remedies

In the event that an intergenerational claim succeeds on the merits, courts are faced with a new dilemma: where there is a right, there must be a remedy. ¹³⁷ The pragmatic difficulty of finding equitable remedies permeates environmental and climate law more generally. 138 Puzzles as to the adequacy of traditional remedies and concerns over judicial intrusion into executive and legislative prerogatives are exacerbated in intergenerational litigation. What constitutes an appropriate remedy to protect an intangible class of future beneficiaries who are unable to voice their own preferences? Do courts possess the legitimacy and capacity to grant the remedies sought by claimants? These and other questions are a key challenge facing legal decision makers. Ambitious attempts to address generational imbalances are invariably rooted in the 'tyranny of here and now, 139 - they remain crucially circumscribed by the present context in which a decision must be made and executed. Two types of relief have proven particularly responsive to the demands of intergenerational equity: declaratory actions and injunctions. In practice, these categories are, of course, often pursued in conjunction (as when a declaration of unconstitutionality is accompanied by an injunction to revise the law).

The effects of declaratory pronouncements are widely recognized to strengthen the expressive function of judicial rulings. ¹⁴⁰ In climate litigation, in particular, judicial narratives frequently travel outside the courtroom and feed straight back into advocacy and policymaking. ¹⁴¹ Declarations can serve to denounce unlawful conduct ('name and shame'), establish an authoritative account of the facts, or confirm the unlawfulness of a given type of conduct or omission. Declaratory justice can also contribute to a sense of recognition, of feeling seen and heard. ¹⁴² The yearning for an authoritative recognition of their concerns echoes in many intergenerational legal struggles. The claimants in both *Sacchi* and *Billy* are presumably well aware that the respective powers of

¹³⁷ The legal maxim 'ubi ius, ibi remedium' is foundational for most legal systems today; see, e.g., Marbury v. Madison, 5 U.S. (1 Cranch) 137, 147 (1803).

¹³⁸ See, e.g., R.L. Lorenzetti, 'Complex Judicial Remedies in Environmental Litigation: The Argentine Experience' (2017) 29(1) Journal of Environmental Law, pp. 1–17; K. Roach, 'Judicial Remedies for Climate Change' (2021) 17(1) Journal of Law & Equality, pp. 105–50.

¹³⁹ C. Tilly, 'The Tyranny of Here and Now' (1986) 1(1) Sociological Forum, pp. 179–88.

As Samuel Bray argues, the common conception that declaratory judgments are somehow 'milder' than other types of relief is mistaken: S.L. Bray, 'The Myth of the Mild Declaratory Judgment' (2013) 63(5) Duke Law Journal, pp. 1091–152. Indeed, in international law, the lack of coercive jurisdictional power of many judicial bodies has rendered the declaratory judgment the most common remedy granted: J. Mcintyre, 'The Declaratory Judgment in Recent Jurisprudence of the ICJ: Conflicting Approaches to State Responsibility?' (2016) 29(1) Leiden Journal of International Law, pp. 177–95. I am adopting a broad view of the concept of declaratory relief here to denote any judicial pronouncement, in the abstract or in the concrete, on a legal or factual controversy. Some jurisdictions know a much narrower definition of declaratory relief, but the international and comparative nature of my inquiry demands a more inclusive approach.

P. Paiement, 'Urgent Agenda: How Climate Litigation Builds Transnational Narratives' (2020) 11(1–2) Transnational Legal Theory, pp. 121–43.

¹⁴² One area where declaratory relief as recognition is particularly powerful is transitional justice: F. Haldemann, 'Another King of Justice: Transitional Justice as Recognition' (2008) 41(3) Cornell International Law Journal, pp. 675–738.

the Committee for the Rights of the Child and of the Human Rights Committee are restricted to issuing recommendations, which are violated with blunt frequency. 143 At the national level, plaintiffs seem to focus less on declaratory remedies and more on injunctions, as domestic courts are typically better equipped to issue orders and enforce them than their international counterparts. Indeed, in *Urgenda* the Court remarked that, although the claimants had asked for several declaratory decisions in 'the interest of emotional redress', these claims were thought to be redundant in the light of the successful injunctions. 144 From a strategic perspective, the profile of declaratory determinations of intergenerational equity's content could go a long way in clarifying and developing this growing field of law and kickstarting future lawsuits.

In terms of injunctive relief, there is a wide variety of potential remedies that can contribute to an amelioration of the condition of future generations. Intergenerational injunctions can target different actors and institutions – executive and legislative branches, at both national and local levels. In *Neubauer*, for instance, the judges returned Germany's climate law to the parliament for revision. Most cases, however, are ostensibly aimed at governments, as executive branches tend to be the primary institutional site for the implementation and protection of rights. A curious case is the Colombian court's order in *Lozano Barragán*, which, among other things, obliged municipal authorities in the Colombian Amazon to draft action plans to reduce deforestation in their territories.

Perhaps most interesting, however, is the variety of activities included under the umbrella term 'injunction'. These range from the revision of laws and policies (as in Neubauer) to the establishment of new intergenerational institutions (Lozano Barragán) or laws (Shrestha); from stepping up public funding for protective measures (Billy et al.) to duties to participate in international cooperation (Sacchi et al.); from upholding administrative procedures (Gloucester Resources Ltd) to providing participatory spaces for children and youth (Sacchi et al.). It is also worth noting that these remedies can adopt quite different temporal benchmarks. In Lozano Barragán, for instance, the Court imposed a 48-hour deadline on public agencies to increase intermediary efforts to fight deforestation. At the other end of the spectrum, the Billy Committee ordered the Australian government to invest in long-term adaptation that would protect the inhabitability of the plaintiffs' islands for decades to come.

Paradoxically, litigants who petition for ambitious remedies run the risk of torpedoing intergenerational lawsuits if courts feel that the requested relief pushes the judicial mandate too far. This is the painful lesson of *Juliana*, in which the Court remarked:

Although the plaintiffs' invitation to get the ball rolling by simply ordering the promulgation of a plan is beguiling, it ignores that an Article III court will thereafter be required to determine whether the plan is sufficient to remediate the claimed constitutional violation of the plaintiffs' right to a "climate system capable of sustaining human life." We doubt

¹⁴³ Van Dijk, n. 63 above, p. 7.

¹⁴⁴ *Urgenda*, n. 78 above, paras 4.104–5.

Outside the US, tribunals have frequently ruled on the appropriateness of climate policy and legislation; see, e.g., Neubauer, n. 95 above.

that any such plan can be supervised or enforced by an Article III court. And, in the end, any plan is only as good as the court's power to enforce it. 146

The remedial challenge is thus double-edged; it includes not only the struggle to arrive at actionable solutions for complex intertemporal problems, but also the necessity to consider the limits of the judiciary's remit in this context.

4. THE FUTURE: HERE TOMORROW?

For all the conceptual mist shrouding intergenerational equity to date, litigant parties and judicial bodies appear to be increasingly willing to confront legal complexities head-on. To be sure, the potential of intergenerational claims remains constrained by thorny conceptual obstacles, including much-discussed philosophical problems such as the 'non-identity problem' or the question of whether and how the welfare of future people should be discounted. Yet the cases surveyed illustrate how these larger puzzles can be pragmatically pushed aside or temporarily resolved within the confines of concrete disputes. In my view, the challenges facing the principle in going forward relate less to its 'depth' and more to its 'breadth' or scope. On the one hand, the issue of scope concerns the beneficiaries of intergenerational equity and requires us to think more openly about the categories of 'future persons' that may fall within its protective purview. On the other hand, the principle has been manifestly incapable of colonizing legal fields outside the environmental realm. Both restrictions need to be overcome if intergenerational equity were to redeem its promise and unfold its normative force more fully in the future.

4.1. Equity for Whom?

So far, legal decision makers have largely evaded elaborating the beneficiaries of intergenerational equity. They have either conflated them with young persons currently alive, or simply deferred to abstract obligations to consider future impacts without specifying who exactly will be protected. If intergenerational litigation intensifies and evolves – as it currently seems poised to do – courts will be forced to drive out the class of beneficiaries more clearly to arrive at equitable solutions. At least two issues arise in this regard.

Firstly, intergenerational equity applies to and between legal persons. The category of legal personality is far from static or uniform, however; it hinges upon temporal and cultural contexts. Over the long arch of history, subjecthood has expanded from a select elite of white old men within a narrowly circumscribed territory to more and more individuals, and even to artificial entities like corporations.¹⁴⁹ This expansion is set to

¹⁴⁶ Juliana II, n. 92 above, p. 1173.

¹⁴⁷ See n. 103 above.

¹⁴⁸ S. Caney, 'Climate Change, Intergenerational Equity and the Social Discount Rate' (2014) 13(4) Politics, Philosophy & Economics, pp. 320–42.

¹⁴⁹ In doing so, it has mirrored humanity's 'expanding moral circle': P. Singer, *The Expanding Circle: Ethics*, Evolution, and Moral Progress (Princeton University Press, 2011).

continue across many, if not most jurisdictions. Most importantly, the legal recognition of non-human and more-than-human subjects has accelerated in recent years. 150 To name but one recent example, in January 2022, the Ecuadorian Constitutional Court ruled that wild animals possess a range of rights, including the right to exist, to develop their innate instincts, and to be free from the worst cruelties and distress. 151 Despite such developments, the principle of intergenerational equity has so far been understood as benefiting exclusively human rights holders. This view is misguided – unless the legal rule in question explicitly narrows the application of the principle to humans. Within the growing number of systems that have already extended legal protection to nonhuman animals, intergenerational equity must be considered to include such subjects in its protective scope. If this assessment is correct, we should soon see suits that seek to protect future generations of elephants, forests, or chimpanzees; but what does it mean for legal decision makers to take the intergenerational interests of other species into account? How does anthropocentrism distort our conceptualizations of intergenerational equity? These questions will require confrontation 152 - indeed, such dilemmas are already discernible in judgments like Lozano Barragán, which explicitly connected the rights of nature to intergenerational equity without delving into the far-reaching implications of this link in any detail.

Secondly, concomitant with the domestication of intergenerational equity, the principle has taken on a parochial connotation. In the current international order, intergenerational rights and duties can be raised only vis-à-vis existing political entities – mostly states. Conversely, such obligations merely exist in relation to (future) subjects of a given state's authority. In addition to its own citizens, international legal doctrines on extraterritorial rights protection imply at least some consideration of the interests of foreign citizens, too. ¹⁵³ There are, however, convincing conceptual and normative reasons to understand intergenerational equity as a cosmopolitan obligation, owed by the current global population to future generations of any geographic or political affiliation. ¹⁵⁴ Conceptually, this insight relates to the fact that we simply cannot predict

See, e.g., D.R. Boyd, The Rights of Nature: A Legal Revolution that Could Save the World (ECW Press, 2017); M.-C. Petersmann, 'Sympoietic Thinking and Earth System Law: The Earth, Its Subjects and the Law' (2021) 9 Earth System Governance, article 100114; E. Bernet Kempers, 'Transition Rather than Revolution: The Gradual Road towards Animal Legal Personhood through the Legislature' (2022) 11(3) Transnational Environmental Law, pp. 581–602; Kotzé & Villavicencio Calzadilla, n. 107 above. The synergies and intersections between the rights of nature and those of future generations are explored in more detail in P. Lawrence, 'Justifying Representation of Future Generations and Nature: Contradictory or Mutually Supporting Values?' (2022) 11(3) Transnational Environmental Law, pp. 553–79

¹⁵¹ Corte Constitucional del Ecuador [Constitutional Court of Ecuador], Sentencia No. 253-20-JH/22, 27 Jan. 2022, available at: https://portal.corteconstitucional.gob.ec/FichaRelatoria.aspx?numdocumento= 253-20-JH/22.

¹⁵² H. Lindahl, 'Place-Holding the Future: Legal Ordering and Intergenerational Justice for More-Than-Human Collectives' (2021) 10(2) Rivista di filosofia del diritto, pp. 313–30.

¹⁵³ See generally M. Milanovic, Extraterritorial Application of Human Rights Treaties: Law, Principles, and Policy (Oxford University Press, 2011).

¹⁵⁴ I am grateful to Kalypso Nicolaïdis for raising this issue. The relationship between cosmopolitanism and intergenerational justice has received some attention in the philosophical literature; see, e.g., E. Page, 'Cosmopolitanism, Climate Change, and Greenhouse Emissions Trading' (2011) 3 *International Theory*, pp. 37–69.

the geopolitical set-up of the future. In the case of regular contemporaneous rights, it is arguably reasonable to presume that the authority of the nation-state will persist for the purposes of seizing harmful activities and repairing harm done (or that a legal successor can be identified). This presumption becomes empirically questionable if we consider intergenerational time horizons of multiple decades or centuries. Keeping the historical recency of the Westphalian state as a mode of ordering legal authority, its perseverance is far from obvious. ¹⁵⁵ If the sovereign form of the state perishes or transforms, however, so would a putative class of beneficiaries defined by reference to the state. The state is – at least empirically speaking – a relatively unreliable reference point.

Of course, judges could set these conceptual queries aside and operate within the legal fiction of the immutable state as a heuristic to resolve intergenerational conflicts in the here and now. Even then, however, it appears normatively undesirable to parochialize intergenerational obligations. Such an approach would strongly risk further entrenching existing, intragenerational cleavages between countries, cleavages that are widely considered as unjust and immoral. Think of a rich country like Sweden. If intergenerational equity were to extend to unborn Swedes only, Swedish authorities might reasonably interpret this as a justification for pillaging other states to accumulate resources that improve the wellbeing of future Swedes. In fact, this problem is far from theoretical. Already in *Urgenda*, the plaintiffs claimed to represent future generations of Dutch and non-Dutch nationals alike. Although the Court ultimately declined to engage with the issue after it had established standing for current Dutch generations, the Dutch government fiercely opposed the claimants' arguments. When faced with a similar issue in Neubauer, the German Constitutional Court went much further. For the first time, the Court not only recognized the standing of Bangladeshi and Nepali claimants, 157 it also opined that the German government had a duty to take into account the extraterritorial implications of its policies. ¹⁵⁸ While the judges stopped short of extending protection under the German Basic Law to foreign citizens, 159 some commentators hailed the intervention as a significant step towards 'planetary climate litigation'. 160 Continuing down this path towards marrying inter- and intragenerational equity will arguably require a massive expansion of extraterritorial obligations in relation to future generations. 161

¹⁵⁵ For a provocative criticism of the state as a superficial and historically ambivalent invention, see A. Orford, 'Regional Orders, Geopolitics, and the Future of International Law' (2021) 74(1) Current Legal Problems, pp. 149–94.

¹⁵⁶ *Urgenda*, n. 78 above, para. 4.5; see also Mayer, n. 78 above, p. 176.

¹⁵⁷ Neubauer, n. 95 above, para. 90.

¹⁵⁸ Ibid., paras 173–81, in particular para. 179.

¹⁵⁹ Ibid., para. 173.

¹⁶⁰ L. Kotzé, 'Neubauer et al. versus Germany: Planetary Climate Litigation for the Anthropocene?' (2021) 22(8) German Law Journal, pp. 1423–44.

¹⁶¹ For a similar argument, see J. Colón-Ríos, 'Constituent Power, the Rights of Nature, and Universal Jurisdiction' (2014) 60(1) McGill Law Journal/Revue de droit de McGill, pp. 127–72.

4.2. Vulnerable Futures

As the historical recap in the first part revealed, the development of intergenerational equity has been inextricably intertwined with the environmentalist movement. This trend is observable until today, when the most pressing environmental threat – climate change – has nurtured the conditions for intergenerationality's legal comeback. ¹⁶² Even in legal scholarship, most of the commentators who have written on the subject, including those cited in these pages, come from an environmental law background. Unfortunately, this environmental connotation seems to have prevented the principle from gaining a hold in other fields where intergenerational conflicts loom equally large. As the ICJ's advisory opinion on the legality of the threat or use of nuclear weapons noted in 1996, societies are nowadays confronted with a whole arsenal of unprecedented threats. In his recent book, philosopher Toby Ord highlights and quantifies several such threats, including nuclear war, climate change, resource depletion and biodiversity loss, pandemics, and artificial intelligence. The combined urgency and gravity of these risks lead him to the worrying conclusion that humanity is standing at an existential 'precipice'. ¹⁶³

One need not buy the argument that humanity's very existence is at risk to see how current human activities may leave long-lasting footprints across a variety of fields, though. For instance, experts warn of the mid- to long-term consequences of creating path dependencies such as stranded assets, technological lock-in, or large infrastructure projects. ¹⁶⁴ Century-old socio-political hallmarks are under attack in many places, as the storming of the US Capitol on 6 January 2021 demonstrates. ¹⁶⁵ The long-term consequences of the ongoing COVID-19 pandemic are still unclear. Frontiers such as the rapidly increasing human activities in outer space entail unique generational stakes. ¹⁶⁶ Even issue areas traditionally thought of as intragenerational have oft-ignored temporal ramifications. Poverty, for example, is extremely persistent across time owing to the social risks and vulnerabilities it creates for future generations. ¹⁶⁷ Similarly, high levels of *intra*generational economic inequity have been shown to have significant negative effects on future welfare. ¹⁶⁸ In short, the governance of global risks and challenges requires adaptive legal frameworks that are attentive to the temporal embeddedness

¹⁶² Indeed, even within climate law, intergenerational equity has been mobilized almost exclusively to support more stringent mitigation efforts, but rarely has it informed the design and time horizon of adaptation policies (with the exception of *Billy*) or contributed to the reduction of social vulnerabilities to global warming: K. Bouwer, 'The Unsexy Future of Climate Change Litigation' (2018) 30(3) *Journal of Environmental Law*, pp. 483–506.

¹⁶³ Ord, n. 5 above, pp. 57–99.

N. Frantzeskaki & D. Loorbach, 'Towards Governing Infrasystem Transitions: Reinforcing Lock-in or Facilitating Change?' (2010) 77(8) Technological Forecasting and Social Change, pp. 1292–301.

¹⁶⁵ G. Wood, 'The Dumbest Coup Attempt', The Atlantic, 29 June 2022, available at: https://www.theatlantic.com/ideas/archive/2022/06/hutchinson-testimony-trump-secret-service-jan-6-hearings/661427.

¹⁶⁶ P. Martinez, 'The UN COPUOS Guidelines for the Long-Term Sustainability of Outer Space Activities' (2021) 8(1) Journal of Space Safety Engineering, pp. 98–107.

J. Best, 'Redefining Poverty as Risk and Vulnerability: Shifting Strategies of Liberal Economic Governance' (2013) 34(1) Third World Quarterly, pp. 109–29.

A.T. Schmidt & D. Juijn, 'Economic Inequality and the Long-Term Future' (2021) Global Priorities Institute Working Paper No. 4-2021, available at: https://globalprioritiesinstitute.org/economic-inequality-and-the-long-term-future-andreas-t-schmidt-university-of-groningen-and-daan-juijn-ce-delft.

of human activity.¹⁶⁹ If intergenerational equity were to escape its environmental nest, it could form a promising part of such frameworks, not least through the application of the judicial advances sketched in the previous section.¹⁷⁰

5. CONCLUSION

Picture the year 2025, Greenhouse gas emissions abatement continues to lag behind global ambitions, edging the world closer and closer to dystopian scenarios. Amidst increasing desperation, governments decide to establish a subsidiary body under the Paris Agreement to advocate the rights of future generations of all living creatures. This scenario, conjured in Kim Stanley Robinson's recent cli-fi novel *The Ministry for the Future*,¹⁷¹ does not appear nearly as unlikely today as it may have just a decade ago. Our climatic predicament has undoubtedly catapulted the principle of intergenerational equity back into the legal spotlight, 50 years after its first entry onto the global scene at the Stockholm Conference. Contrary to international law's omnipresent narratives of progress, however, the story of intergenerational equity is characterized by many ups and downs, and by various legal transformations. Yet the imperative of balancing out costs and benefits equitably between generations has survived relatively unscathed.

If anything, the spate of intergenerational climate litigation before national and international bodies attests to earnest attempts to revitalize the legal meaning and implementation of the principle. By scrutinizing these decisions, I hope to have provided an empirical counterweight to the theoretical debates wrestling with these questions. As the analysis shows, intergenerational equity's broad conceptual contours persist, at the initiative of different representatives, through a mix of rights-based and procedural operationalizations, often resulting in highly creative remedial solutions. The key takeaway, then, is that intergenerational equity is here to stay – because intergenerational conflicts will continue to arise. This will pose challenges for legal doctrine, most notably regarding the class of future beneficiaries and the application of the principle across a wider range of areas. To remain relevant and legitimate in the face of abominable risks, international law must find new ways to walk its talk in relation to the future. Ultimately, the law is and continues to be 'an important but neglected site of anticipation'. ¹⁷³ Only by wholeheartedly embracing this anticipatory function can scholarship uncover weaknesses and holes in the international legal fabric, shift perspectives, and regenerate the discourse over the role of law in confronting our precarious existence.

J. Kreienkamp & T. Pegram, 'Governing Complexity: Design Principles for the Governance of Complex Global Catastrophic Risks' (2021) 23(3) International Studies Review, pp. 779–806; V. Heyvaert, 'Governing Intersystemic Systemic Risks: Lessons from Covid and Climate Change' (2022) 85(4) The Modern Law Review, pp. 938–67.

¹⁷⁰ Indeed, there is a nascent literature that explores intergenerational equity from a broader regulatory perspective; see, e.g., T. Cottier, S. Lalani & C. Siziba, *Intergenerational Equity: Environmental and Cultural Concerns* (Brill Nijhoff, 2019); Cordonier Segger, Szabó & Harrington, n. 6 above.

¹⁷¹ Robinson, n. 5 above, pp. 34-6.

¹⁷² T. Altwicker & O. Diggelmann, 'How Is Progress Constructed in International Legal Scholarship?' (2014) 25(2) European Journal of International Law, pp. 425–44.

¹⁷³ E. Stokes, 'Beyond Evidence: Anticipatory Regimes in Law' (2021) 43(1) Law & Policy, pp. 73–91, at 74 (emphasis in original).