Contents lists available at ScienceDirect







journal homepage: www.sciencedirect.com/journal/earth-system-governance

From exacerbating the Anthropocene's problems to intergenerational justice: An analysis of the communication procedure of the human rights treaty system

Nicky van Dijk

Law Faculty, University of Tasmania, Private Bag 89, Hobart, TAS, 7001, Australia

ARTICLE INFO	A B S T R A C T
Keywords:	As our existing legal system is not equipped to adequately respond to climate change, earth system law scholars

Reywords: Institutions for future generations Earth system law Human rights Intergenerational justice Convention on the rights of the child Climate change As our existing legal system is not equipped to adequately respond to climate change, earth system law scholars call for repurposing or transforming it. This paper analyses one shortcoming of current law—its inability to protect a safe climate for young people and future generations—by focusing on improving one legal framework, the communication procedure of the international human rights treaty system. Using the 2019 communication of sixteen children to the United Nations Committee on the Rights of the Child as a case study, it highlights the opportunities and shortcomings of the communication procedure in advancing intergenerational justice, specifically related to democratic legitimacy, recognition and representation, accessibility, and impact. The analysis shows hope: even within a system that is inherently anthropocentric and grants massive powers to States, there is a drive in recent years that acknowledges the inherent interconnectedness of human behaviour and Earth's systems; and the past, present and future.

1. Introduction

There is a big asymmetry between human behaviour and nature's natural rhythm. While globalisation, economic growth and technological advancements are quickly impacting the planet's systems, nature's slower pace to restore and regenerate cannot keep up (Richardson, 2017a). As a result of this human behaviour, we are now faced with a climate emergency, mass species extinction, ocean acidification and other interconnected and global problems. Staying within planetary boundaries is essential for many reasons, one of which is that failing to do so will have an immense impact on the well-being of both current and future generations. A part of a solution to ensure that we stay within our planetary boundaries could be for us to use the law as a 'purposeful vehicle for shaping behaviour to achieve desired ends' (Hadfield and Weingast, 2012, p. 473). Historically law has focused on protecting individual freedoms or wealth distribution as desired ends, but our judicial institutions can also help steering 'human development in a way that secures a "safe" co-evolution with natural processes' (Biermann, 2007, p. 328).

Unfortunately, mainstream (international) environmental law is often not equipped to respond to the intergenerational challenges of the Anthropocene. Taking climate change as an example, law struggles to grapple with climate change's slow onset changes without a distinguishable perpetrator, the uncertainty of future impacts, the expected harms to people who are not yet born, the harms to non-human nature, and the truly planetary scale of the problem. As a result, earth system law scholars have theorised on the different theoretical and practical hurdles law needs to overcome to respond to the Anthropocene (Brown Weiss, 2020; Brunnée, 2019; Kotzé, 2019; Lim, 2019; Vidas et al., 2015). As suggested by Kotzé and Kim (2021), earth system law's contribution can be three-pronged: it can (1) analyse the short-comings of the current legal system, and reimagine opportunities for change; (2) make normative claims on how our priorities should change; and (3) make concrete proposals to reform for existing legal frameworks,¹ or initiate new frameworks, in line with the demands of the Anthropocene.

This paper focuses on one shortcoming of our current legal system: law's short-term horizon and inability to secure the basic needs of future people (see Abate, 2019). When I use the term 'future people' I refer to

https://doi.org/10.1016/j.esg.2021.100123

Received 30 July 2021; Received in revised form 2 November 2021; Accepted 11 November 2021 Available online 2 December 2021 2589-8116/© 2021 The Author. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0).

Abbreviations: ACHPR, African Charter on Human and Peoples' Rights; HRC, Human Rights Committee; IACHR, Inter-American Court of Human Rights; NGO, non-governmental organisation; IPCC, Intergovernmental Panel on Climate Change; UN, United Nations; UNCRC, United Nations Convention on the Rights of the Child; UNFCCC, United Nations Framework Convention on Climate Change; UNHRC, United Nations Human Rights Council.

E-mail address: nicky.vandijk@utas.edu.au.

¹ For an analysis of how one can harness the transformative power of earth system law, see the paper by Mai and Boulot (2021) in this issue.

both young people of the current generation and people who are not yet born (future generations), as together these groups are massively impacted by climate change but currently do not (or only very minimally) have a say in the policies that shape their future. And I will analyse this shortcoming in one specific legal institution—the communication procedure of the United Nations (UN) human rights treaty system—and suggest proposals for reform.²

As a case study I will use a communication by sixteen children to the UN Committee for the Rights of the Child (Sacchi et al., 2019). This communication argues that Argentina, Brazil, Germany, France and Turkey violate the children's rights to life, health and culture by insufficiently cutting greenhouse gas emissions themselves, or encouraging other high emitting countries to do so. This communication is an example of an emerging trend in human rights law that acknowledges the threat of an unstable and unsafe environment on human rights of people around the world, but especially on young people and future generations. This paper will examine the communication procedure-analytically, normatively and critically-from an intergenerational (procedural and substantive) justice perspective (Earth System Governance Project, 2018). As the impact on substantive justice is inherently uncertain, I will focus my analysis mostly on the improvement of procedural justice, understood as the enhancement of the recognition, representation or participation of future people's voices or interests, without unjustifiable democratic costs for the current generation. This thorough focus on procedural justice is important, as many (short-term oriented) procedures could be the cause of short-termism in climate lawand policy-making more broadly, and therefore be partly responsible for the limited substantive injustice. When I refer to substantive justice, I mean the amelioration of (future) rights violation of future people,³ without in the process sacrificing the rights of the current generation.

Taking a closer look at repurposing and reforming the human rights system to improve intergenerational climate justice is worthwhile, first of all, because improving or repurposing an existing legal framework through incremental changes may be more feasible and efficient than initiating new frameworks (Duit et al., 2010)—or at least be essential in building momentum to create a common understanding for the need of new institutions that fully embrace earth system law. However, the human rights framework is inherently anthropocentric, and therefore still far away from the holistic and planetary approach of earth system law. It is a prime example of a legal framework that upholds the false dichotomy between human and non-human nature and grants massive power to States, creating understandable pessimism with earth system law enthusiasts. It therefore makes sense that to date most earth system law scholars have focused on transforming international environmental law, rather than human rights law (Kotzé, 2014, 2020).

However, pro-active and innovative lawyers, activists and scholars are testing the opportunities to evolve human rights law. First, human rights scholars increasingly acknowledge the inherent interdependence of social-human and ecological systems. Some countries start to extend rights language to non-human nature (Gellers, 2021 in this issue), and several court cases stress the threat of seemingly 'mere' environmental problems to human rights violations (see Peel and Osofsky, 2018). Many countries include the right to a safe climate, environment or future in their constitution, legislation or treaty (González-Ricoy, 2016; UN Special Rapporteur on human rights and the environment, 2019), and the right to a healthy environment is now also recognised by the Human Rights Council (2021a). Human rights language puts 'direct public and political attention to the detrimental human consequences of climate change'—it puts a 'human face' on the climate disaster (Peel and Osofsky, 2018, p. 40).

Second, the global character of human rights institutions is promising. On a national scale, young people have already used human rights law successfully to protect their future, such as in the famous Dutch Supreme Court decision on the *Urgenda* case (The Netherlands v Stichting Urgenda, 2019). However, seeking justice on a national level is very costly and time consuming to repeat in many different territories. Via the communications procedure, the children seek justice for a global problem on a global scale, with the possibility to set influential global precedents.

And most importantly, third, the slightly more flexible and soft nature of human rights law allows for stretching the time horizon in which it ordinarily operates. The communications procedure is one of the few international legal systems where children can seek justice directly, offering a powerful voice to people who usually do not even have a seat at the table. It creates public awareness that children—not abstract entities—are harmed by climate change today.

In the remainder of this paper I will, first, elaborate on the communication procedure generally and the children's communication specifically (section 2). I will then analyse in which ways this procedure has opportunities to protect future people—focused on young people, but also touching on the protection of future generations—and suggest additional reforms that could improve this. Specifically, I will analyse the procedure's democratic legitimacy; options to offer representation and recognition to future people; accessibility, including the potential to overcome common legal issues such as causation and jurisdiction; and potential impact on decision-makers and the wider public (section 3). In doing so, this paper will highlight some shortcomings and opportunities of the communication procedure to correct human behaviour and align it with nature's natural rhythm.

2. Communication

On December 19, 2011, the UN General Assembly adopted the Third Optional Protocol (UN General Assembly, 2011) to the UN Convention on the Rights of the Child ('UNCRC', UN General Assembly, 1989). This Protocol (art. 5) allows children to write a case, a 'communication', to the UN Committee of the Rights of the Child ('the Committee') when they believe their rights as outlined in the Convention have been violated by the actions or omissions of a State. After a communication is lodged, both the country or countries (art. 8), other stakeholders, and in turn the petitioners can elaborate on their side of the story by filing additional documents with the Committee, and on request of the Committee via oral hearings. Once all information is in, the next steps for the Committee is to decide on whether the communication is admissible, and if so, to formulate recommendations to the countries about whether the Committee believes rights were violated and/or the countries should change their policies or behaviour. The countries are under no obligation to implement the recommendations, but are obligated to submit a written response justifying the extent to which they implemented the recommendations (art. 11(1)).

While the Committee merely has advisory powers, and the influence of the procedure on substantive justice are uncertain and limited, this procedure could nevertheless help built the momentum of climate litigation. For example, next to advising States, decisions of the Committee can help overcome legal hurdles related to for example causation,

² Though compensating for past harms (Richardson, 2017a, 2017b), including the protection of non-human nature (Gellers, 2021; Kotzé, 2019; Chapron et al., 2019; Keulartz and Bovenkerk, 2016; Follette and Maser, 2017; Tanasescu, 2014; Boyd, 2005), diminishing the focus on the nation State and increasing the focus on global law-making and including non-State actors (Kotzé, 2019), catering to the interdependence of Earth's systems (Kotzé, 2019), and making space for adaptive forms of governance that embrace unpredictability and unforeseen complexities of social and environmental problems (Armstrong and Kamieniecki, 2017; Kotzé, 2019; Brunner and Lynch, 2013), are all valuable research topics, they will not be the focus of this paper due to spatial limits.

³ The communication of the children and other authors often only focuses on a few rights—focusing on life, subsistence, health and culture (Bell, 2011; Caney, 2009; Shue, 2011). I consider the rights of future people to be broader, such as defended in the UNCRC and others (Cordes-Holland, 2008; Peel and Osofsky, 2018; van Dijk, 2021).

jurisdiction or standing that are now often faced by young climate litigants. This breath of possible outcomes can help build other legal cases *globally* (Gubbay and Wenzler, 2021). More broadly, the procedure gives children a genuine voice—as victims of climate change, and as activists and litigants holding States accountable (Rogers, 2019, 2020). It offers a pathway for groups of young petitioners from around the world to file communications collectively. The perspectives of children in the communication may influence States' laws and policies, but can also influence societal narratives more broadly.

2.1. Children claim their future

On September 23, 2019 sixteen children of twelve different countries filed a communication with the Committee for the Rights of the Child (Sacchi et al., 2019). The children allege that five countries—Argentina, Brazil, France, Germany and Tukey—violated their rights to life (art. 6), health (art. 24) and culture (art. 30) and the requirement to act in the children's best interest (art. 3) of the UNCRC. The plaintiffs were able to file a petition under the communication procedure of the *Third Optional Protocol* of the UNCRC. While all UN members are party to the UNCRC except for the USA, making it the most rapidly and widely endorsed treaty to date, only 46 countries have ratified its *Third Optional Protocol*. So only these 46 countries are subject to the compliance mechanism of the UNCRC. The plaintiffs chose to bring their case against these five countries because of their disproportionate emissions. They argued that these five countries violated their rights by insufficiently cutting greenhouse gas emissions themselves, or encouraging other high emitting countries to do so.

The sixteen children are from twelve diverse countries. Their communication explained in clear and emotive language how all children have already been impacted by climate change related events (Sacchi et al., 2019 paras. 96-167). For example, twelve-year-old Nigerian Debby Adegbile has been hospitalised repeatedly over the past years for her asthma, as hotter temperatures in her city worsen air quality. And Marshallese David Ackley III contracted chikungunya, a new mosquito-borne disease that was not present on his island until global warming. Argentinian Chiara Sacchi's neighbourhood was destroyed during an unprecedented windstorm, and Tunisian Raslen Jbeili survived a wildfire approaching his home-his neighbours did not. These cases show the impact of climate change on the children's physical health and safe living conditions, but the petition also described the impact on children's mental health. For example, Swedish well-known climate activist Greta Thunberg was so disturbed by climate change she fell into a depression and stopped eating. It is noteworthy that most of the sixteen plaintiffs do not live in one of the five countries, but all children claimed to have been impacted by the high emissions of these five countries.

Next to addressing the impacts of climate change on the children's right to health and life, the communication also described the impact of rising temperatures, extreme weather events and rising sea levels on Indigenous cultures. Seventeen-year-old Palauan Carlos Manuel witnessed waves breaching sea walls, crashing into homes, on his low-lying island in the Pacific. And in Northern Sweden the reindeer food supply is being destroyed by climate change, preventing Sami Ellen-Anna from learning the subsistence way of life of her Indigenous community—reindeer herding. When climate change substantially alters the living conditions of Indigenous communities—sometimes even making them uninhabitable, as in the case of communities living on low lying islands in the Pacific—this threatens these communities' ability to live with their culture, and to pass on their culture to future generations.

Needless to say, this petition did not start by sixteen children who happen to run into each other. It was initiated by a proactive community of public interest lawyers who looked for suitable plaintiffs for their case. This way, children who would otherwise have lacked the resources or knowledge to seek legal representation are now empowered to share their story and seek political change. Also, by preselecting the most suitable plaintiffs, the lawyers increased their chances to set global precedents and further add to the momentum of climate change litigation that has exploded over the last years (Setzer and Byrnes, 2019). As the human rights framework was not designed to respond to climate change, it took impressive work of these creative lawyers to place this global problem into pre-existing legal boxes.

To minimise future rights violations, the petitioners asked the Committee to *find* that climate change impacts children's rights, that the states knowingly perpetuate the climate crisis, and therefore that the states violate the children's rights. Also, the children asked that the Committee *recommends* to the five countries that they accelerate mitigation and adaptation efforts, initiate cooperative international climate action, and ensure children's political participation in climate policy-making (Sacchi et al., 2019, pp. 96–7). On May 1, 2020 David R Boyed and John H Knox (2020), the current and former UN Special Rapporteurs on the issue of human rights and a healthy environment, submitted an *amicus curiae* brief to the Committee. They argued in favour of the children's case, highlighting the threat of climate change to the human rights of the children, and arguing for the admissibility of the communication.

However, on January 20, 2020 Germany, France and Brazil replied to the communication, arguing the petition is not admissible, because (a) the Committee lacks jurisdiction, (b) the petition is ill-founded and unsubstantiated, and (c) the petitioners have not exhausted domestic remedies.⁴ I will discuss the admissibility of the petition in section 3.3 below. They reiterated these points during the oral hearings in May 2021, where the Committee requested to hear more from the legal representatives of the States and petitioners, as well as from the petitioners themselves (UNCRC, 2021a). The replies from the States clearly showed that the countries are not willing to take responsibility for the climate crisis under the communication procedure, and highlight obstacles to climate litigation.

In October 2021 the Committee published their decision on the communication of the children (UNCRC, 2021a; 2021b; 2021c; 2021d, 2021e). They found the communication inadmissible under article 7(e) of the Optional Protocol, stating that the children have failed to exhaust domestic remedies. While this was not the result the petitioners had hoped for, the remainder of this paper will highlight the value and shortcomings the communication procedure generally, and of the decision the Committee did make, particularly related to statements around causality and jurisdiction.

3. Analysis

In this section I will highlight some opportunities and shortcomings of the communication procedure in relation to intergenerational justice, using the children's case as an example. First, in section 3.1, I will elaborate on democratic legitimacy, explaining to what extent the communication procedure is justified to exercise authority over the current generation. After all, when we use or reform an institution to better protect the rights of future people, we need to prevent unjustifiably high democratic costs for the current generation. In section 3.2, I focus on how fair the communication procedure is for future people, focusing on the recognition and representation of the voices and interests of future people. Third, in section 3.3, I discuss the likeliness of the Committee to meet a request similar to that from the children. The analysis of this accessibility is threefold: (1) How accessible is it to submit a communication in the first place? And how achievable is it to write a communication on human rights violations related to climate

⁴ As the countries' reply is not publicly available at the moment, I have reconstructed the countries' arguments based on the *amicus curiae* brief by the current and former UN Special Rapporteur on Human Rights and the Environment (Boyd and Knox, 2020), the reply by the children (Sacchi, 2020), the final decision of the Committee (UNCRC, 2021a), and media statements (ChildrenVsClimateCrisis, 2020).

inaction, (2) that is found admissible by the Committee, and (3) where the Committee will conclude the recognition of rights violations? Fourth, in section 3.4 I analyse the obstacles and opportunities for this communication procedure to impact policy-making, law-making or the wider public.

3.1. Democratic legitimacy

Is a person, process or institution justified to exercise power over the current generation? This is an important question for intergenerational justice, as while often the interest of future people may align with the interests of all people currently alive, sometimes they may not. An example of an—intuitively—normatively illegitimate legal reform is a constitutional provision forbidding people over 50 to run in elections, or a decision to use all funding for healthcare for the elderly instead for primary school education. While these decisions may be beneficial for future people, they deprive the current generation of opportunities they have reason to value. Normative illegitimacy poses injustice towards the current generation, but when an institution is also *perceived* as illegitimate by the wider public, it may also jeopardise the institution's impact and (long-term) sustainability.

I follow the insight of Bodansky (2007) that an institution can be more or less legitimate for many different reasons. First, so-called source-based legitimacy shows that a source can 'grant' legitimacy to a person, process or institution. Historically the believed support of a Deity granted legitimacy, but nowadays this often happens through consent of the demos. Consent can be direct and explicit, for example when citizens vote in a national referendum, or more implicit or indirect, for example when elected representatives sign an international treaty. And this more indirect and implicit consent is clearly present in the communication procedure. For example, the five countries voluntarily became party to the UNCRC and its Optional Protocol. This means that elected representatives of all countries have explicitly consented to recognise the powers of the Committee, pledged to protect the rights outlined in the Convention, and promised to allow citizens to write communications to the Committee. All countries have the option to denounce the UNCRC and its Optional Protocol at any time, and have to date chosen not to do so. Also, historically, the Committee is a well-respected and independent expert committee, and the UNCRC is the most rapidly and widely ratified human rights treaty in history, showing wide support. But most importantly, as the Committees have merely non-binding powers, they cannot override democratically made decisions at the national level. This means that the source-based legitimacy of any policies-including potential policy changes inspired by the recommendations of the Committees-still lies at a national governmental level of each country.

Second, fair procedures can ground legitimacy (Bodansky, 2007). Here, procedures that are for example more inclusive, transparent, impartial, participatory, evidence-based and non-discriminatory are more legitimate. And many of these characteristics are present in the communication procedure. For example, it allows individuals from marginalised communities and children to file petitions, which gives a wide variety of individuals a formal voice in influencing policy-making who otherwise may not have had one, for example because they are below the voting age or undocumented. Next to this, there are some characteristics inherent to the procedure that make it fairer for individuals seeking to use it. For example, the Committee consist of a wide variety of independent members from different nationalities, genders, and backgrounds, showing impartiality of the decision-making process. The Committee does not merely consider the petition itself but also replies by the countries and a second reply by the petitioners, as well as allowing for amicus curiae briefs from other stakeholders, allowing many affected groups (and those speaking on their behalf) to influence the final decision.

However, there are also many ways in which the communication procedure could be improved to be more procedurally legitimate, and these shortcomings influence both the current generation and future people alike. For example, there is a page limit to all written documents,

which does not allow for plaintiffs to do justice to their case on paper, and also the final recommendations of the Committee are often brief. This brevity is a limitation for activists, legal scholars, lawyers, policymakers and others who wish to use the evidence, arguments or analysis in these official documents for future cases. Second, most written documents are not public until the Committee has made its recommendations, limiting those willing to engage with the case to create awareness or learn from it. Third, we can question how independent and expertise-driven the Committee members are. There is no robust selection procedure or even minimum requirement for members of the Committee, which makes it likely that at least some members are not experts in for example international or human rights law. And as the Committee covers such a wide variety of cases, we cannot expect that these members are experts on all (or even some) topics-they may for example not understand climate science, or how climate change drastically impacts future people. Unsurprisingly, the Committee often does not have the expert or situated knowledge to make clear and precise recommendations that have practical value. Linked to this, fourth, the human rights committees have been criticised for years for not having adequate resources to handle such a high case load (Limon, 2018; O'Flaherty, 2010; UN Secretariat, 2006). There is a major backlog of petitions-active cases almost doubled between 2011 and 2016-which delays justice for the petitioners (Limon, 2018). Because of this, it can take a very long time to receive a response from the Committee. On average it takes three and a half years for committees to reach their final views, but in case of complicated communications it has taken up to seven years (Limon, 2018).

Last, there are more overarching shortcomings of the human rights treaty body system that also negatively impact the fairness of the communication procedure. For example, as I will elaborate in the sections below, States often do not engage with the human rights treaty system, or only do so in a superficial way, either due to lack of capacity or political will. Also, the wider public (outside of specialist circles) is often unaware of the communication procedure, and if they are aware, they perceive it as an ineffective and inaccessible procedure (Limon, 2018). This low level of engagement and belief in the treaty body system as a whole, as well as the communication procedure specifically, both by individuals and States, inherently makes it a less accessible and inclusive pathway for change. In other words, reforming the communication procedure to ameliorate these shortcomings, e.g. by increasing transparency or recourses, will not only impact the effectiveness of the procedure, but also the fairness towards the current generation.

A third way to improve the legitimacy of a person, process or institution is through its outcomes: whether an institution is seen as doing a good job such as producing economic growth or promoting social justice (Bodansky, 2007). For example, the European Union is criticised for having a democratic deficit partly due to its high reliance on expert committees and minimal transparency. However, the basis of the EU's legitimacy lies in its success in promoting peace and prosperity in Europe—not in the level of its transparent and inclusive procedures, but the outcomes. I will discuss outcome-based legitimacy, and specifically how the communication procedure can promote substantive intergenerational justice, further in section 3.4.

3.2. Recognition and representation of future people

In the previous section I focused on how fair the procedure is to the *current* generation. In this section I will switch my focus to *future* people—both young people growing up and future generations. I will focus on the outcomes of the communication procedure in section 3.4, discussing substantive intergenerational justice, and here merely focus on two other forms of procedural justice that are closely linked to this: recognition and representation (Fraser, 1997, 2001; Young, 1990). Recognising future people calls for refraining from devaluing or oppressing their perspective and opportunities, and representation for allowing future people to participate in the decision-making that affects

their lives—either through direct participation, or via proxy representation. In this section I will touch on how the communication procedure impacts the recognition of future people, but mostly zoom in on the extent to which future people are represented—that is, are their voices and interest included in the decision-making procedure, and if so, are they included in a non-discriminatory way? In other words, does it include the voices or interests of *all* future people, or unjustifiably prioritise some people or interests over others?

A first noteworthy feature of the communication procedure is that children can initiate filing a petition, thereby giving them a voice. This is very special, as in the fast majority of decision-making or consultative processes children either do not have a voice—they cannot vote, they cannot become politicians—or their input is not very impactful. However, in recent years the youth climate movement has created narratives where children are not only the primary victims of climate change, but also a group of actors holding polluters responsible (Rogers, 2020, 2019, p. 61ff). While the FridaysForFuture school strike movement started on the streets, the stories of children are increasingly amplified in the legal sphere, and the communication procedure offers an (international) pathway to do so.

The communication also gives a voice to Indigenous children. These children do not only speak to how climate change impacts them at the moment, but also about how climate change threatens their cultural practices, traditions, and connection with their Country going into the future. Most Indigenous Peoples do not have a (Western) linear conception of time, where the past is in the past, the future is still to come, and the present is where we are now. Instead, they conceptualise time as a loop, circle or spiral where the past and future are integral to the present (Winter, 2017, p. 35). This means that, conceptually, protecting Indigenous practices and culture for people who are not yet alive is just as important as protecting it for the current generation—the future is no less than the present or past. In other words, these Indigenous children could be considered proxy-representatives for yet unborn Indigenous people.

On top of this, blurring conceptual binaries-between current and future generations, but also between human and non-human nature, or between one and another jurisdiction-may be essential to fully understand the amorphous complexity of climate change (Earth System Governance Project, 2018; Kotzé, 2019). 'Law's taxonomical and linear tendencies, if anything, tend to exacerbate law's inadequate systemic grasp of the challenges' (Grear, 2014, p. 105). An example of how human rights can contribute to the blurring of such binaries is succinctly phrased by the UN High Commissioner for Human Rights Michelle Bachelet. When announcing the recognition of the right to a clean, healthy and sustainable environment, she states: 'We must build on this momentum to move beyond the false separation of environmental action and protection of human rights. It is all too clear that neither goal can be achieved without the other' (OHCHR, 2021). Therefore, offering a platform for stories that counter these dichotomies and creating legal precedents that acknowledge for example the validity of a non-linear conception of time is extremely valuable.

Next to the plaintiffs speaking for themselves—and, as could be argued, also as proxy-representatives for future generations who are similar to them—they are aided by their legal team to voice their stories and present their evidence in the strongest way possible. And on top of this, other people can write *amicus curiae* briefs to strengthen the petitioner's points. For example, the current and previous UN Special Rapporteurs for Human Rights and the Environment, David Boyd and John Knox (2020), filed an expert statement for the communication in which they confirm why they believe the Committee should find the communication admissible. This raises an interesting question about what capacities or characteristics are needed to be a proxy-representative of future generations (Campos, 2020; Rose, 2018).

As lawyers and other representatives are often from well-off countries in the global North, and from the dominant culture in their country, while most petitioners are not, we can expect the representatives to have a bias that may hinder them from adequately representing the actual needs of future people.⁵ And as earth system law scholars and others point out, the representation of non-human nature is potentially even more tricky (Burgers, 2020a; Tanasescu, 2014). And while children can hold their proxy accountable, future generations and non-human nature cannot, which makes the question of representation even more complex (Jensen, 2015; Rehfeld, 2011; Saward, 2009). While this mismatch in power between the plaintiffs and their proxy-representatives should be treated with caution, it also offers opportunities. Since the needs of children and future generations are phrased in a general way, and refer to very fundamental and clear rights in this communication—take action to ensure that the rights to life, health and culture of children is protected from the impacts of climate change—representatives can use their position of power in favour of the children's cause.

Next to allowing future people to have a voice-themselves or through someone else representing their interests-and having procedures in place that are designed to take their interests into account, it is also essential for the fairness of a procedure that it be nondiscriminatory. At a first glance, it may seem like the communication procedure is inherently non-discriminatory because of the treaties' explicit commitment to grant all human beings equal rights. The children's communication also emphasises that if countries do not take urgent and serious climate action, 'the devastating effects of climate change will nullify the ability of the Convention to protect the rights of any child, everywhere' (Sacchi et al., 2019, p. 6). However, unfortunately many future people are categorically excluded from harnessing the communication procedure. For example, people who are not yet born cannot file a complaint, and one cannot file a complaint on behalf of them, so the temporal discrimination of the representation of future generations is still present in the procedure. A reform proposal that aims would include to ameliorate this giving standing to proxy-representatives of yet unborn people to voice expected or unavoidable rights violations of future generations. However, extending rights to future generations comes with many both practical and theoretical problems, so further research is needed whether this would truly be a beneficial reform proposal for the communication procedure (Claassen, 2016; FitzPatrick, 2007; Lewis, 2018; Unruh, 2016).

Also, no claim can be brought against countries who are not State party to the Convention or its *Optional Protocol*, which excludes many young people from harnessing the communication procedure, and perpetuates an asymmetric power imbalances that strongly favours the sovereignty of the State. Additionally, no claim can be made by people outside of the jurisdiction of State parties. However, legal precedents that acknowledge a global jurisdiction in cases of harms related to excessive emissions of a State could overcome these hurdles, to which I will speak in section 3.3.2.

3.3. Accessibility

Following the definition of Gilabert and Lawford-Smith (2012), and tailoring it to the context of the communication procedure, I wonder how feasible and accessible it is for children to file a communication with the Committee when seeking intergenerational justice in the contect of climate change. This makes the question three-fold: (1) how easy is it to lodge the communication in the first place; (2) what were the obstacles to writing a communication that the Committee will likely find admissible; and, if the Committee had found the communication admissible, (3) what are the obstacles and opportunities for the Committee to make recommendations that would promote intergenerational justice? I will answer these questions related to the procedures of the communication procedure in this section, and discuss the potential impact of 'positive' recommendations by the Committee in the next section.

⁵ I want to thank one of the anonymous reviewers for pointing out this shortcoming in the earlier draft of this paper.

3.3.1. Making a claim in the first place: how accessible is this?

As the communication procedure is not well-known, people seeking justice will likely not know that this pathway exists, and therefore not use it (Limon, 2018, p. 24ff). In the case of the petitions by the children, it took a group of proactive lawyers to bring together a group of plaintiffs, gather information through research and contacting experts, find evidence of the harms that were done, write a promising communication, and manage other correspondence with the Committee. While not categorically excluded from using the procedure, for many people the procedure is inaccessible because of e.g. the costs, time commitment, knowledge requirement, or legal skills involved, and this disproportionally affects historically oppressed populations and young people.

While still costly, this procedure does have a major benefit compared to traditional legal pathways. In tort law plaintiffs often run the risk of having to pay for all the legal costs of the other party, such as for example in *Australian Conservation Foundation* v *Minister* (2017). Under the communication procedure the Committee cannot order this, making this pathway slightly less risky in terms of costs associated.

3.3.2. Admissibility

Once a communication is filed successfully, we need to ask: what are the obstacles to write a communication that the Committee will likely find admissible? As 21 per cent of all communications are found inadmissible, it is important that those writing a communication receive help from lawyers or NGOs (Limon, 2018, p. 25).

Article 7 of the *Optional Protocol* lays out when communications are admissible. Most of the conditions are clearly met by the children's communication: the communication is not anonymous (art. 7(a)), the communication is in writing (art. 7(b)), all countries have ratified the UNCRC and its *Optional Protocol* (art. 1(3) and 7(c)), the same matter has not already been examined by the Committee in the past (art. 7(d)), the communication is timely (art. 7(g)), the communication is in the children's best interest (art. 3(2)), and the children have consented to lodge the communication (art. 5(2)). In their reply to the children's communication, Germany, France and Brazil argued that the Committee should find the communication inadmissible for three reasons.

First, the State parties argued the petition was unsubstantiated and unfounded. As the children argued against this convincingly, and the Committee's response also refuted the States' argumentation, I will not focus on this here. Second, according to France and Germany, the Committee lacks jurisdiction. While some of the sixteen children live in one of the five countries, the majority does not—they live in countries with lower emissions, and/or countries that have not ratified the UNCRC or its *Optional Protocol*. However, article 2(1) of the UNCRC and article 5 (1) of the *Optional Protocol* do not mention the word 'territory' but refer to 'jurisdiction'.⁶ And as mentioned by the Committee (UNCRC, 2013 para. 39), the UNCRC 'does not limit a State's jurisdiction to 'territory''.' States have obligations when their domestic acts are causally responsible for an extraterritorial harm that could 'in a direct and foreseeable manner' impact people's rights, and this responsibility remains intact also in the case of a shared contribution to a harm.⁷

To substantiate their claim, the plaintiffs had to show the causal link between the behaviour of the countries, climate change impacts, and the harms done to the plaintiffs (Gubbay and Wenzler, 2021, p. 360ff). While showing causation between State's behaviour and plaintiff's harms is generally uncomplicated in human rights cases, with climate change cases it is not. There are three causal relationships that the plaintiffs had to address (Cordes-Holland, 2008). First, anthropogenic greenhouse emissions must be responsible for climate change. This has been shown extensively by climate science (IPCC et al., 2018), so should not be an obstacle. Second, the causes of the rights violations of the children, such as extreme weather events or temperature change, must be a result of anthropogenic climate change, and not a mere natural occurrence. While attribution science-the science linking specific changes in the earth's climate to emissions—is evolving rapidly, it is not conclusive. For the Committee to find this causal link sufficiently substantiated, it needs to accept minor scientific uncertainty with regard to some of the causes of the children's (future) rights violations, for example based on the precautionary principle (UNFCCC, 1992 art. 3(3)). However, the causes of the children's alleged rights violations are likely linked to climate change, and without drastic mitigation further emissions will unavoidably-directly and foreseeably-impact future people's rights (IPCC et al., 2018). Third, the harms to the children must be the result of the behaviour or omissions of the States. As all five countries are high emitters, their emissions are causally responsible for the climate change impacts that harmed the children-albeit it be a small proportion of the cause. In short, while arguing for jurisdiction is an obstacle of the children, there was ample room for the Committee to adopt an understanding of jurisdiction that aligns with climate change's global and uncertain nature. And in their decision the Committee indeed did so (UNCRC, 2021a, 2021b, 2021c, 2021d, 2021e). It acknowledged the climate science and states that harms originating from climate change were reasonably foreseeably for State parties. It considered State parties to have effective control over their emissions, and found that 'the collective nature of the causation of climate change does not absolve the State party of its individual responsibility that may derive from the harm that the emissions originating within its territory may cause to children, whatever their location'. In short, the decision set a global precedent acknowledging the global character of climate change, and correspondingly the need to understand jurisdiction in a more global way as well.

Third, the responding countries argue that the petitioners have not exhausted all domestic remedies. And this is true—they have not. However, article 7(3) of the *Optional Protocol* mentions this does not impact the admissibility of the communication if 'the application of the [domestic] remedies is unreasonably prologued or unlikely to bring effective relief'. The children argue that filing separate domestic lawsuits would be futile, as indeed, it would be very costly and would cause unreasonable delay (Sacchi et al., 2019, p. 91ff). Also, independent domestic lawsuits would not provide the type of far-reaching international relief that is needed to combat climate change. However, since the petitioners did not clarify well enough why they believe the available remedies would not lead to effective relief or would lead to an unreasonably long timeframe, the Committee concluded that the communication is inadmissible as authors have failed to exhaust domestic remedies.

3.3.3. A 'positive' response from the Committee

Even though the Committee did not find the communication admissible, and therefore will not analyse the communication based on its merits, it is still valuable to theorise on what the limitations and opportunities are for a Committee to formulate a response that is everything—or at least party—what the children 'had hoped for'. As this paper aims at intergenerational justice, the outcome that I consider desirable includes that the Committee (1) acknowledges that all or some of the children's rights are violated; (2) recommends on how States should remedy the rights violation, e.g. through climate mitigation,

⁶ Article 2(1) of the Convention states that 'States Parties shall respect and ensure the rights set forth in the present Convention to each child within their jurisdiction without discrimination'.

⁷ Different human rights committees have defined extraterritorial obligations differently. The Human Rights Committee (2019, para. 63) states that the activities of a State must impact people's rights in 'a direct and reasonably fore-seeable manner'. The Inter-American Court of Human Rights (2017, para. 101) states that 'a person is under the jurisdiction of the State of origin if there is a causal relationship between the event that occurred in its territory and the violation of the human rights of persons outside its territory'. The African Commission on Human and People's Rights (2015, para. 14) states that States' actions must 'reasonably be foreseen to result in an unlawful deprivation of life'. And the European Court of Human Rights (2009, para. 25) talks about a 'direct and immediate cause'.

adaptation or compensation, and increased international cooperation; and (3) recommends increasing options for children or proxyrepresentation of future generations to participate in climate lawmaking.

In September 2019 five human rights committees, including the Committee for the Rights of the Child, issued a joint statement on human rights and climate change (OHCHR, 2019). In this statement they argue that 'climate change poses significant risks to the enjoyment of the human rights ... among others, the right to life, ... the right to health ... and cultural rights'. Children are especially 'at heightened risk of harm to their health, due to the immaturity of their body systems.' They also acknowledge that human rights mechanisms are important to prevent climate inaction, that States should 'dedicate the maximum available resources' to mitigation measures, and that States 'must guarantee [children and other persons the] human right to participate in climate policy-making.' Also, States must prevent discrimination in their mitigation and adaptation efforts. The committees assure that, in their future work, they will keep a close watch on the influence of climate change on human rights, and 'provide guidance to States on how they can meet their obligations'. In other words, the Committee has already generally acknowledged that climate change impacts human rights of people, and that they are willing to offer recommendations on how States should prevent further rights violations and give young people a voice in climate law-making. In October 2021 this was further strengthened by the Human Rights Council's (2021a) recognition of the right to a safe, clean, healthy and sustainable environment, and the establishment of a Special Rapporteur on the promotion and protection of human rights in the context of climate change (UNHRC, 2021b).

These recent developments give hope for that the Committee's decisions to communications like those of the children—if found admissible—could have included at least a partial finding of a human rights violation, and a (non-specific) recommendation on how to remedy this. However, generally stating 'that States should take climate action' is far less politically controversial than publicly acknowledging that a specific State violated the rights of its citizens, and publicly recommending to specific countries how they should change their behaviour. In recent years, many Court decisions recommending States to accelerate climate action have been criticised for blurring the lines between the political and judicial power.⁸ How much governmental regulation is appropriate to protect citizens from climate change impacts is a political question, not a legal one, it is argued. However, when fundamental rights are at stake, human rights law is designed to speak up (Burgers, 2020b).

Concluding, the accessibility of the communication procedure has some serious practical and legal limitations. And the final outcome of the procedure is subject to some serious theoretical obstacles, including those related to jurisdiction, causality, separation of powers, and proportionate harm. However, as the Committee has already expressed that it takes the impact of climate change on children's rights very seriously, it is imaginable that their recommendations could have include an acknowledgement of rights violations and corresponding advice to change policy.

3.4. Impact

In this last part of my analysis, I will focus on the potential impact of the communication procedure—I will switch my focus from analysing procedural justice to substantive justice. I will start with analysing the potential impact of strong words from the Committee—in their decision on the admissibility of the children's communication, but also in a potential future communication where a rights violation is found—and then broaden my scope to analysing the influence of the process as a whole on climate politics, future litigation and the wider public.

First, if the Committee would have made final recommendations about this petition, they would have merely been advisory. States do not have an obligation to implement them, and though they do have an obligation to respond to the recommendations and justify why they choose to (not) implement them, there is no compliance mechanism enforcing this. Overall, States' implementation of recommendations of the Committees appears very poor. In their latest report, the Human Rights Committee states that only 22% of the responses it received from States showed evidence that the States were implementing their recommendations to a 'satisfactory' level, and 32% 'partly satisfactory' (Limon, 2018).⁹ One might wonder: if a high emitting country has not changed its behaviour after the joint statement of committees, the commitments it made under the Paris Agreement, numerous IPCC reports and massive bottom-up activism addressing their inadequate climate policies-can we really expect another non-binding recommendation to have an impact?

On top of the poor implementation rate, States often do not justify why they choose to not remedy the rights violations. While there is a high response rate of States to the recommendations of the committees-86% according to the analysis of Limon (2018)-the quality of the responses by States to the committees varies considerably. In an analysis of 100 communications, researchers showed that in nearly half of the cases States either rejected the allegations without offering any substantive justification, or failed to address the allegation at all (Limon, 2018). This lack in even justifying why a State does not change its policies after being called out on a human rights violation shows that the communication procedure leaves the current power imbalance intact. The power to initiate climate action for example remains with national level governments-who are influenced by many causes of harmful short-termism (MacKenzie, 2016)-and a Committee calling out a human rights violation will not be the silver bullet to change this. However, a positive recommendation from the Committee could contribute to a tipping point. It may not drive the change, but will help with building momentum in climate litigation cases that hold State governments accountable.

What is also promising about the communication procedure is that it directly helps lawyers, activists, legal scholars and others *globally* with their own future climate litigation. The procedure creates official documents with evidence and arguments supporting climate change related rights violations, which is available for *all* future communication procedures and other litigation. Especially in States with national human rights frameworks, a decision by a Committee about causality and jurisdiction—such as in this communication—can be used by litigants in national and international tribunals globally.

Next to the legal and political influence the communication procedure might have, the media coverage of these communications where children from all over the world are portrayed as victims of climate change as well as litigants and activists keeping adults accountable (Rogers, 2020)—can change the hearts and minds of the wider public. Also, a strong statement by the Committees can be used as an advocacy tool to lobby for the protection of young people worldwide.

Last, it is essential to acknowledge that even without ambitious recommendations of the Committees—or even if the petitions are not found admissible in the first place—the communication already has an influence on policy-makers and the wider public, simply by being lodged in the first place. Communications are often accompanied by media campaigns, and every step of the communication—lodging it, States replying, plaintiffs replying, Committees recommending, States

⁸ See for example the many articles by politicians, academics and the general public as a response to the *Urgenda* case in the Netherlands (Bergkamp, 2015; Boer, 2016; de Graaf and Jans, 2015), or the appeal by the Minister for the Environment (2021) in the *Sharma* case in Australia.

⁹ This analysis is based on the Human Rights Committee's analysis of State's reports, and not an independent assessment of the actual implementation itself, and therefore an imprecise analysis. Also, implementation may take time, and therefore could still be done in the future.

responding—can serve as a hook for pro-active NGOs, activists, scholars and others to spread the message. Also, governments are forced to let at least some of their employees spend time on understanding and responding to the communication. Though Germany, France and Turkey have each argued that the communication against them should be inadmissible, the governmental employees working on this may have created change within the government itself. For example, a few months before the children lodged their communication, eight Torres Strait Islanders-Indigenous Australians living on low lying islands-lodged a similar communication with the Human Rights Committee against Australia (Murphy, 2019). Next to emission reductions, another demand of them was that Australia would spend at least \$20 million on adaptation measures on the Torres Strait Islands to protect the inhabitants. A few months after the case was lodged, the Australian government committed to paying \$25 million to resilience and adaptation measures on the Islands. We cannot know whether this was a response to the communication or not, but either way one of the demands of the Torres Strait Islanders' communication was met before the Committee has spoken a word.

4. Conclusion

Throughout the paper I have mentioned limitations and opportunities of the communication procedure more generally, and specifically in relation to the children's communication. In this conclusion I will highlight some overarching trends related to the procedural and substantive intergenerational justice of the procedure.

The communication procedure offers a pathway for children's interest to be recognised and represented, and for children's voices to participate. This procedure is one of the few pathways accessible to children to take international legal action related to climate change. However, future generations cannot participate (as they are not yet born) and cannot be represented by proxies. And while there is room to explicitly consider the interests of future generations-for example in the Committee's decision, or in the proposed mandate of the newly established Special Rapporteur on the promotion and protection of human rights in the context of climate change-they are currently left out. On the one hand, one might argue that explicitly including the needs of future generations is not needed, as their needs overlap largely with those of children currently alive, and children are already suffering serious impacts from climate change now, making children the preferred plaintiffs. On the other hand, finding a way to grapple with human rights violations in the (long-term) future, especially where the needs of children might be different from those of future generations, might be needed for future cases.

When focusing on the potential substantive justice impact of the procedure, the analysis is grimmer. Even if the communication of the children was found admissible, and even if the decision of the Committee would have advised States to change their behaviour, the decision would likely not have had a large impact on States' behaviour directly. This paper showed the state-centrism of the procedure in two ways. First, there is an assymmetric power imbalance between (adults in) State governments and young people and future generations that is hard to overcome in international human rights law. For example, States are free to decide whether they ratify the Convention and its Optional Protocol, and can format the procedure in a way that allows them to e.g. offer less transparency or be subject to minimal compliance mechanisms to hold them accountable. Also, the strong upholding of the admissibility requirement of exhausting domestic remedies disproportionately favours States. However, the Committee's decision speaking to the jurisdiction of the States acknowledged the truly global scale of climate change, and is a small step towards minimising state-centrism in future climate change cases worldwide.

Second, the procedure cannot be used to bring grievances to nonstate actors directly, such as fossil fuels companies, which also perpetuates the State-centric bias of the international law system. However, the Committee's decision found that States have effective control over the emissions within their territory (including that of non-state actors). So while the state-centrism is a weaknesses of the procedure from an intergenerational substantive justice perspective, and confirms the views of earth system law scholars about the shortcomings of the international legal system in general, we can still see small steps in the direction of fruitfully using human rights law for climate action.

Last, collaboration between different subspecialties of law—such as environmental law, human rights law and Indigenous law—can help lawyers keep an oversight on the interconnected planetary socioecological problems, and prevent problem shifting where the amelioration of one environmental problem could exacerbate another socioecological problem (Galaz et al., 2017; Kotzé et al., 2021). In short, human rights law has the potential to better deal with the uncertain, global and intergenerational character of climate change, and precedents doing so will build momentum for future climate litigation.

Funding

This research was supported by a Tasmanian Graduate Research Scholarship.

Credit author statement

Nicky van Dijk: term, conceptualisation, writing-original draft, writing-review and editing, funding acquisition.

Declaration of competing interest

The author declares that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We wish to thank Anja Hilkemeijer, Peter Lawrence, Ben Richardson, Alice Bleby, the two anonymous reviewers, and the editors of this special issue for their valuable thoughts and guidance on the early drafts of this paper.

References

- Abate, R.S., 2019. Climate change and future generations. In: Climate Change and the Voiceless: Protecting Future Generations, Wildlife, and Natural Resources. Cambridge University Press. https://doi.org/10.1017/9781108647076.
- Andreou v. Turkey, 2009. European Court of Human Rights. 45653/99 (27 October 2009).
- ACHPR, 2015. General Comment No. 3 on the African Charter on Human and Peoples' Rights: the Right to Life (article 4).
- Armstrong, J.H., Kamieniecki, S., 2017. Strategic adaptive governance and climate change: policymaking during extreme political upheaval. Sustainability 9, 1244. https://doi.org/10.3390/su9071244.
- Australian Conservation Foundation Incorporated v Minister for the Environment and Energy, 2017. Federal court of Australia. FCAFC 134 (2).
- Bell, D., 2011. Does anthropogenic climate change violate human rights? Crit. Rev. Int. Soc. Polit. Philos. 14, 99–124. https://doi.org/10.1080/13698230.2011.529703.
- Bergkamp, L., 2015. Het Haagse Klimaatvonnis: Rechterlijke Onbevoegdheid En de Negatie van Het Causaliteitsvereiste. Nederl. Juristenbl. 1676, 2278–2288.
- Biermann, F., 2007. 'Earth system governance' as a crosscutting theme of global change research. Global Environ. Change 17, 326–337. https://doi.org/10.1016/j. gloenvcha.2006.11.010.
- Bodansky, D., 2007. Legitimacy. In: The Oxford Handbook of International Environmental Law, Oxford University Press, Oxford, pp. 704–726.
- Boer, N. de, 2016. Trias Politica Niet Opofferen voor Ambitieuze Klimaatpolitiek. Social. Democracy 73, 40–48.
- Boyd, D.R., 2005. The Rights of Nature: A Legal Revolution that Could Save the World. ECW Press.
- Boyd, D.R., Knox, J.H., 2020. Amici Curiae Brief on Special Rapporteurs on Human Rights and the Environment in Support of Admissibility. United Nations Special Rapporteur on Human Rights and the Environment.
- Brown Weiss, E., 2020. Establishing Norms in a Kaleidoscopic World. Brill Nijhoff. Brunnée, J., 2019. The rule of international (environmental) law and complex problems. In: Krieger, H., Nolte, G., Zimmermann, A. (Eds.), The International Rule of Law:

N. van Dijk

Rise or Decline? Oxford University Press, pp. 211–231. https://doi.org/10.1093/ oso/9780198843603.003.0014.

Brunner, R., Lynch, A., 2013. Adaptive Governance and Climate Change. Springer.

- Burgers, L., 2020a. Justitia, the People's Power and Mother Earth. Ipskamp printing.
- Burgers, L., 2020b. Should judges make climate change law? Transnatl. Environ. Law 9, 55–75. https://doi.org/10.1017/S2047102519000360.
- Campos, A.S., 2020. The British academy Brian Barry prize essay: representing the future: the interests of future persons in representative democracy. Br. J. Polit. Sci. 1–15. https://doi.org/10.1017/S000712341900067X.
- Caney, S., 2009. Climate change, human rights and moral thresholds. In: Humphreys, S. (Ed.), Human Rights and Climate Change. Cambridge University Press, Cambridge, pp. 69–90. https://doi.org/10.1017/CBO9780511770722.004.

Chapron, G., Epstein, Y., López-Bao, J.V., 2019. A rights revolution for nature. Science 363, 1392–1393. https://doi.org/10.1126/science.aav5601.

- ChildrenVsClimateCrisis, 2020. Latest News. https://childrenvsclimatecrisis.org/latest -news/. (Accessed 21 January 2021).
- Claassen, R., 2016. Ecological rights of future generations: a capability approach. In: Human Rights and Sustainability. Routledge, Abindon/New York.
- Cordes-Holland, O., 2008. The sinking of the strait: the implications of climate change for Torres Strait Islanders' human rights protected by the ICCPR. Melb. J. Int. Law 9. https://doi.org/10.2139/ssrn.1129087.
- de Graaf, K.J., Jans, J.H., 2015. The Urgenda decision: Netherlands liable for role in causing dangerous global climate change. J. Environ. Law 27, 517–527.

Duit, A., Galaz, V., Eckerberg, K., Ebbesson, J., 2010. Governance, complexity, and resilience. Global Environ. Change 20, 363–368.

Earth System Governance Project, 2018. Earth System Governance. Science and Implementation Plan of the Earth System Governance Project. Utrecht, the Netherlands.

FitzPatrick, W.J., 2007. Climate change and the rights of future generations: social justice beyond mutual advantage. Environ. Ethics 29, 369–388. https://doi.org/ 10.5840/enviroethics200729440.

- Follette, C.L., Maser, C., 2017. Sustainability and the Rights of Nature: an Introduction. CRC Press. https://doi.org/10.1201/9781315155999.
- Fraser, N., 2001. Recognition without ethics? Theor. Cult. Soc. 18, 21–42.
- Fraser, N., 1997. Justice Interruptus: Critical Reflections on the 'Postsocialist' Condition. Routledge.
- Galaz, V., Tallberg, J., Boin, A., Ituarte-Lima, C., Hey, E., Olsson, P., Westley, F., 2017. Global governance dimensions of globally networked risks: the state of the art in social science research: global governance dimensions of globally networked risks. Risk Hazards Crisis Publ. Pol. 8, 4–27. https://doi.org/10.1002/rhc3.12108.
- Gellers, J.C., 2021. Earth system law and the legal status of non-humans in the Anthropocene. Earth Syst. Gov. 7, 100083 https://doi.org/10.1016/j. esg.2020.100083.
- Gilabert, P., Lawford-Smith, H., 2012. Political feasibility: a conceptual exploration. Polit. Stud. 60, 809–825. https://doi.org/10.1111/j.1467-9248.2011.00936.x.
 González-Ricoy, I., 2016. Constitutionalizing intergenerational provisions. In: González-
- González-Ricoy, I., 2016. Constitutionalizing intergenerational provisions. In: González-Ricoy, I., Gosseries, A. (Eds.), Institutions For Future Generations. Oxford University Press, pp. 170–183. https://doi.org/10.1093/acprof.oso/ 9780198746959.003.0010.

Grear, A., 2014. Towards 'climate justice'? A critical reflection on legal subjectivity and climate injustice: warning signals, patterned hierarchies, directions for future law and policy. J. Hum. Rights Environ. 5, 103–133. https://doi.org/10.4337/ ihre.2014.02.08.

- Gubbay, I., Wenzler, C., 2021. Intergenerational climate change litigation: the first climate communication to the UN committee on the rights of the child. In: Alogna, I., Bakker, C., Gauci, J.-P. (Eds.), Climate Change Litigation: Global Perspectives. Brill.
- Hadfield, G.K., Weingast, B.R., 2012. What is law? A coordination model of the characteristics of legal order. J. Leg. Anal. 4, 471–514. https://doi.org/10.1093/jla/ las008.

HRC, 2019. General Comment no 36. Article 6: right to life (No. UN Doc CCPR/C/GC/ 36).

- IACHR, 2017. The environment and human rights (No. Advis. Opin. OC 23/16).
 IPCC, 2018. Summary for policy makers. In: Masson-Delmotte, V., Skea, J., Zhai, P., Portner, H.-O., Roberts, D., Shukla, P.R., Pirani, A., Moufouma-Okia, W., Pean, C., Pidcock, R., Connors, S., Matthews, J.B.R., Chen, Y., Zhou, X., Gomis, M.I., Lonnoy, E., Maycock, T., Tignor, M., Waterfield, T. (Eds.), Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty. World Meteological Organisation, Geneva, Switzerland.
- Jensen, K.K., 2015. Future generations in democracy: representation or consideration? Jurisprudence 6, 535–548. https://doi.org/10.1080/20403313.2015.1065649.
- Keulartz, J., Bovenkerk, B., 2016. Changing relationships with non-human animals in the anthropocene—an introduction. In: Bovenkerk, B., Keulartz, J. (Eds.), Animal Ethics in the Age of Humans. Springer International Publishing, Cham, pp. 1–22. https:// doi.org/10.1007/978-3-319-44206-8_1.
- Kotzé, 2019. Earth system law for the Anthropocene. Sustainability 11, 6796. https:// doi.org/10.3390/su11236796.
- Kotzé, L.J., 2020. Earth system law for the Anthropocene: rethinking environmental law alongside the Earth system metaphor. Transnatl. Leg. Theor. 11, 75–104. https:// doi.org/10.1080/20414005.2020.1776556.
- Kotzé, L.J., 2014. Rethinking global environmental law and governance in the Anthropocene. J. Energy Nat. Resour. Law 32, 121–156. https://doi.org/10.1080/ 02646811.2014.11435355.

- Kotzé, L.J., Kim, R.E., 2021. Exploring the analytical, normative and transformative dimensions of earth system law. Environ. Pol. Law 50, 457–470. https://doi.org/ 10.3233/EPL-201055.
- Kotzé, L.J., Kim, R.E., Blanchard, C., Gellers, J.C., Holley, C., Petersmann, M., Asselt, H. van, Biermann, F., Hurlbert, M., 2021. Earth System Law: Exploring New Frontiers in Legal Science. Earth Syst. Gov.
- Lewis, B., 2018. The rights of future generations within the post-Paris climate regime. Transnatl. Environ. Law 7, 69–87.

Lim, M. (Ed.), 2019. Charting Environmental Law Futures in the Anthropocene. Springer. Limon, M., 2018. Reform of the UN Human Rights Petitions System. Universal Rights Group.

- MacKenzie, M.K., 2016. Institutional design and sources of short-termism. In: González-Ricoy, Iñigo, Gosseries, A. (Eds.), Institutions for Future Generations. Oxford University Press, Oxford.
- Mai, L., Boulot, E., 2021. Harnessing the transformative potential of Earth System Law: from theory to practice. Earth Syst. Gov. 7, 100103 https://doi.org/10.1016/j. esg.2021.100103.
- Minister for the Environment (Commonwealth) v Anjali Sharma & ors, 13 September 2021. Federal Court of Australia. VID389/2021.
- Murphy, K., 2019. Torres Strait Islanders Take Climate Change Complaint to the United Nations. The Guardian. https://www.theguardian.com/australia-news/2019/may /13/torres-strait-islanders-take-climate-change-complaint-to-the-united-nations. (Accessed 2 March 2020), 13 May 2019.

O'Flaherty, M., 2010. Reform of the UN human rights treaty body system: locating the Dublin statement. Hum. Right Law Rev. 10, 319–335. https://doi.org/10.1093/hrlr/ ngq009.

OHCIR, 2021. Bachelet Hails Landmark Recognition that Having a Healthy Environment Is a Human Right. https://www.ohchr.org/EN/NewsEvents/Pages/Di splayNews.aspx?NewsID=27635&LangID=E&mc_cid=8b82509648&mc_eid=9 4b6e9b3ae. (Accessed 25 October 2021), 8 October 2021.

- OHCHR, 2019. Five UN Human Rights Treaty Bodies Issue a Joint Statement on Human Rights and Climate Change. https://www.ohchr.org/en/NewsEvents/Pages/Display News.aspx?NewsID=24998&LangID=E. (Accessed 11 January 2021), 16 September 2019.
- Peel, J., Osofsky, H.M., 2018. A rights turn in climate change litigation? Transnatl. Environ. Law 7, 37–67. https://doi.org/10.1017/S2047102517000292.
- Rehfeld, A., 2011. The concepts of representation. Am. Polit. Sci. Rev. 105, 631–641. https://doi.org/10.1017/S0003055411000190.
- Richardson, B.J., 2017a. Time and Environmental Law: Telling Nature's Time. Cambridge University Press. Cambridge.
- Richardson, B.J., 2017b. Doing time—the temporalities of environmental law. In: Kotze, L.J. (Ed.), Environmental Law and Governance for the Anthropocene. Hart Publishing, p. 55074. https://doi.org/10.5040/9781509906574.
- Rogers, N., 2020. Victim, litigant, activist, messiah: the child in a time of climate change. In: From Student Strikes to the Extinction Rebellion. Edward Elgar, pp. 103–121. Rogers, N., 2019. Law, Fiction and Activism in a Time of Climate Change. Routledge.
- Rose, M., 2018. Zukünftige Generationen in der heutigen Demokratie: Theorie und Praxis der Proxy-Repräsentation. Springer Fachmedien Wiesbaden, Wiesbaden. https://doi. org/10.1007/978-3-658-18846-7.
- Sacchi, C., 2020. Petitioners' Reply to Admissibility Objections of Brazil, France, and Germany, 4 May 2020.

Sacchi, C., Lorenzo, C., Ivanova, R., Ackley, D., Anjain, R., Kabua, L., Islands, M., Adegbile, D., Manuel, C., Melithafa, A., Thunberg, G., Smith, C., Villaseñor, A., 2019. Comminication to the Committee on the Rights of the Child, 23 September 2019.

Saward, M., 2009. Authorisation and authenticity: representation and the unelected. J. Polit. Philos. 17, 1–22. https://doi.org/10.1111/j.1467-9760.2008.00309.x.

Setzer, J., Byrnes, R., 2019. Global Trends in Climate Change Litigation: 2019 Snapshot. Grantham Research Institute on Climate Change and the Environment, Centre for Climate Change Economics and Policy, London.

Shue, H., 2011. Face reality? After You!—a call for leadership on climate change. Ethics Int. Aff. 25, 17–26. https://doi.org/10.1017/S0892679410000055.

- Tanasescu, M., 2014. Rethinking representation: the challenge of non-humans. Aust. J. Polit. Sci. 49, 40–53. https://doi.org/10.1080/10361146.2013.874404.
- The Netherlands Ministry of Economic Affairs and Climate Policy v Stichting Urgenda, 2019. Supreme Court of the Netherlands. ECLI:NL:HR:2019:2007, 20 December 2019.
- UN General Assembly, 1989. Convention on the rights of the child. Treat. Ser. 1577, 3. Opened for signature 20 November 1989, entered into force 2 September 1990.
- UN General Assembly, 2011. Optional Protocol to the Convention on the Rights of the Child on a communications procedure. A/RES/66/138.
- UN Secretariat, 2006. The Concept Paper on the High Commissioner's Proposal for a Unified Standing Treaty Body. HRI/MC/2006/2.
- UN Special Rapporteur on human rights and the environment, 2019. Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment (Annual Report to the UN General Assembly No. A/74/161. UN General Assembly.
- UNCRC, 2021a. 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 in Respect of Communication No. 107/2019 (No. UN Doc CRC/C/88/D/ 107/2019).
- UNCRC, 2021b. 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 in Respect of Communication No. 108/2019 (No. UN Doc CRC/C/88/D/ 108/2019).
- UNCRC, 2021c. 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

N. van Dijk

Procedure in Respect of Communication No. 106/2019 (No. UN Doc CRC/C/88/D/ 106/2019).

- UNCRC, 2021d. 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 in Respect of Communication No. 104/2019 (No. UN Doc CRC/C/88/D/ 104/2019).
- UNCRC, 2021e. 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 in Respect of Communication No. 105/2019 (No. UN Doc CRC/C/88/D/ 105/2019).
- UNCRC, 2013. General Comment No. 16 (2013) on State Obligations Regarding the Impact of the Business Sector on Children's Rights.
- UNHRC, 2021a. The Human Right to a Safe, Clean, Healthy and Sustainable Environment (UN Doc A/HRC/48/L.23/Rev.1).

- UNHRC, 2021b. Mandate of the Special Rapporteur on the Promotion and Protection of Human Rights in the Context of Climate Change (UN Doc A/HRC/48/L.27).
- United Nations, 1992. Framework convention on climate change. 1771 UNTS 107. Opened for Signature 4 June 1992, Entered into Force 21 March 1994.
- Unruh, C., 2016. Present rights for future generations. Kriter. J. Philos. 30, 77–92. van Dijk, N., 2021. The capability approach as a road map for re-thinking
- intergenerational justice. In: Giving Future Generations a Voice: Normative Frameworks, Institutions and Practice. Edward Elgar, pp. 42–61.
- Vidas, D., Fauchald, O.K., Jensen, Ø., Tvedt, M.W., 2015. International law for the Anthropocene? Shifting perspectives in regulation of the oceans, environment and genetic resources. Anthropocene 9, 1–13. https://doi.org/10.1016/j. ancene.2015.06.003.

Winter, C.J., 2017. The Paralysis of Intergenerational Justice.

Young, I.M., 1990. Justice and the Politics of Difference. Princeton University Press.