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Rethinking Effective Remedies to the Climate Crisis: a Vulnerability Theory Approach

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Abstract

Although the harmful effects of climate change on human rights are well-recognized, the legal response to the climate crisis has been inadequate. This is particularly problematic as the crisis disproportionately affects vulnerable groups, which is exacerbated by a lack of effective remedies in contesting the adverse effects of climate change. The article argues that vulnerability theory offers a persuasive framing for rethinking what kind of remedies can be considered effective in the context of the climate crisis. A vulnerability theory approach shows how vulnerability increased by the climate crisis is universal but differentially distributed. Effective remedies are an essential part of responding to this vulnerability. The article suggests that characteristics of an effective remedy include the ability to contest breaches of positive obligations, speediness, the ability to contest future harms, the ability to contest breaches of extraterritorial obligations, bindingness, and equality of standing.

Keywords Climate crisis · Climate change · Vulnerability theory · Effective remedies · Access to justice · Positive obligations

Introduction

The harmful effects of climate change on several human rights are well-recognized in a vast body of literature on climate change and in previous research on human rights and climate change (see, e.g., Carlarne 2021; Wewerinke-Singh 2018, Humphreys 2010). Potential human rights violations include violations of the right to life and right to health and violations of the rights of people belonging to a certain group, such as age-based discrimination when deciding about climate policies.

Despite the existence of several relevant human rights related to climate change and the codification of new rights such as the right to a healthy environment (UN

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General Assembly 2022), there is an "inexplicable gap between the threat that climate change poses and the legal responses offered" (Carlarne 2021). Indeed, legislation has not responded to the climate crisis adequately, which has spurred strategic litigation in national and international courts (see, e.g., Yoshida and Setzer 2020; Savaresi and Setzer 2022). One of the strategies in such litigation is arguing a connection between climate change and human rights violations (Meguro 2020). Rights require effective remedies to be realized in practice. However, complaining about the state's insufficient climate actions is often difficult: domestic remedies can be lacking, or defective, and human rights conventions were not designed with climate change in mind. As Bellinkx et al. argue, "climate change fundamentally challenges the central tenets of international human rights law" (2022, 70).

Human rights law therefore needs to change. This article argues that vulnerability theory offers a new and persuasive framing for rethinking what an effective remedy means in the context of the climate crisis. Challenging the idea of formal equality, according to which equality amounts to equal opportunities, vulnerability theory developed especially by Fineman proposes that reaching substantive equality presupposes recognizing that all humans are vulnerable and that the state has a central role in responding to vulnerability (e.g., Fineman 2013, 2018). Vulnerability theory enables us to understand how the vulnerability created by the climate crisis is both universal and differentially distributed. An effective realization of rights entails that breaches can be contested, but vulnerability complicates accessing the rights violated by climate change. In light of vulnerability theory, providing effective remedies for violations of rights is an important element in building resilience to respond to vulnerability increased by climate change. It is argued that the characteristics of an effective remedy include the ability to contest breaches of positive obligations, speediness, the ability to contest future harms, the ability to contest breaches of extraterritorial obligations, bindingness, and equality of standing.

Despite its practical importance for the implementation of rights, the question of effective remedies in the context of the climate crisis remains an undertheorized issue (however, see Wewerinke-Singh 2019; Bellinkx et al. 2022; Kelleher 2022a, b). The connection between the vulnerability of individuals and groups to climate change and the lack of an effective enforcement of rights is a widely accepted idea, but it has not been explicitly studied in previous research. In contrast, previous research has extensively addressed human vulnerability to climate change (e.g., Heltberg et al. 2009; for a summary, see IPCC 2022). Vulnerability to climate change has been studied especially at the system level (Brooks et al. 2005), understood as "essentially a state variable." In legal research, Grear has shown how the inadequate response to the climate crisis is deeply intertwined with the law's preference for an imagined, rational subject (Grear 2015). Heri has analyzed vulnerability in the context of climate change at the European Court of Human Rights (ECtHR) (Heri 2022). Moreover, vulnerability theory has been applied to the context of climate change in previous legal research. Mboya has analyzed climate change from the perspective of vulnerability theory, arguing that seeing states as vulnerable to climate change enables structural changes to the current neoliberal regime (Mboya 2018). Harris has argued, relying on vulnerability theory, that the subject of legal and political theory should be understood as interacting with the non-human (Harris 2015), and Kotzé has suggested that vulnerability theory

enables to critically revisit human rights law in the context of environmental protection by replacing the invulnerable subject with the vulnerable subject (Kotzé 2019).

The article does not aim to comprehensively explore vulnerability and the climate crisis but, rather, to provide a starting point for a vulnerability theory approach to effective remedies in the context of the climate crisis. In this article, remedy is used to refer to the procedural meaning of the term, which is the process by which claims about human rights violations are heard and decided by courts, administrative agencies, or other competent bodies. This notion is closely related to access to justice (Shelton 2015:16). The second, substantive meaning of remedies, relief afforded the successful claimant—also called redress (Shelton 2015:16)—falls outside the scope of the article (for an analysis, see Wewerinke-Singh 2019; Keller et al. 2022). In past climate cases, courts have, for example, ordered the relevant authorities to formulate action plans to address deforestation in the Colombian case *Amazon's Future Generations,* or to improve monitoring of the implementation of the national climate change policy in the Pakistani case *Ashgar Leghari*. Courts may order mitigation or adaptation measures (Keller et al. 2022). Moreover, assessing whether the measures that courts can order are able to remedy the harm caused by climate change is difficult, and it is clear that remedies ordered by courts cannot solve climate change alone. Implementation of successful climate cases has in some cases been defective (e.g., *Urgenda*; see Eckes 2021). Nevertheless, procedural remedies are an essential part of responding to the climate crisis. As Carlarne formulates it, the judiciary is "the last stand" (Carlarne 2021): not necessarily effective, but closest to what current legal systems have to an effective remedy (similarly, see Eckes 2021).

Another limitation of the study is that the lack of effective remedies is only one factor enhancing vulnerability, as structural causes contribute to the creation of vulnerability. Although the article discusses structural vulnerability in the context of vulnerability theory, a more profound analysis falls beyond the scope of this article. Because of deep inequalities, states have different capacities to adapt to climate change: the most affected states are the least responsible for the crisis (see, e.g., Shue 2014; Parks and Roberts 2006). An effective enforcement of rights is not enough; deeper structural changes are needed to improve the position of vulnerable individuals and groups.

The article is structured so that it first discusses the characteristics of the climate crisis. It then presents the vulnerability theory and discusses the contribution of a vulnerability framing to understanding harm caused by climate change. Following that, it examines the ways in which the climate crisis forces us to rethink effective remedies.

Climate Crisis as an Atypical Crisis

"Crisis" is an indeterminate concept. According to one definition, a crisis can refer to a situation that is not regulated in international law or to a situation that overburdens current regulation but that has to be responded to with legal means (Authers and Charlesworth 2014:20–21). Crisis-centeredness has been argued to make international law poorer, as it directs attention away from structural questions and encourages to focus on individual

events without a broader context (Charlesworth 2002). Crisis narratives of international law have also been criticized for adding nothing to the discussion, as international law centers around crises (D'Aspremont 2021).

Despite the problems of the concept, crises have been considered crucial from the perspective of human rights law. According to Authers and Charlesworth, framing a situation as a crisis gives it exceptional force: crises may catalyze the protection of human rights, but they may also negatively impact the enjoyment of human rights by legitimizing human rights derogations and by strengthening the hierarchy between civil-political and economic, social, and cultural rights. Moreover, using the language of crisis may contribute to blurring the relevant state obligations; framing a certain situation as exceptional shifts the focus on the individual characteristics of the situation (Authers and Charlesworth 2014:28–30), making it more difficult to draw parallels and construct typologies.

Crisis decision-making has been criticized for weakening the controllability of power, transparency, and accountability. From the perspective of separation of powers, crises favor the executive (in the EU context, see Curtin 2014). Moreover, informality is often highlighted in crises. Behind informality lies an assumption that the goal is self-evident and only the implementation counts, which then leads to prioritizing efficiency and rapidity. However, crises are not straightforward situations of problem-solving; crisis decision-making, too, entails choices between values and interests (White 2022:14). Informality, the concentration of power in individuals and other typical characteristics of crisis decision-making are highlighted in crisis circumstances. White argues that they rather are structural problems than temporary deficits of decision-making (White 2022:14).

Climate change is increasingly referred to as a crisis (e.g., Willis et al. 2022) also in legal research (e.g., Eckes 2021). The climate crisis shares with other crises the increased role of the executive, although in the climate crisis, this usually manifests as executive inaction and not as far-reaching executive action justified by a crisis discourse. Nevertheless, the climate crisis arguably differs from other recent crises in some central respects (see also the introduction of this special issue). Firstly, climate crisis differs from other crises because of its slow and long-term nature, which has enabled some political groups to question the existence of climate change altogether. Other recent crises, such as the COVID-19 pandemic and the Ukraine war, have been prioritized as needing an immediate response. Compared to these situations, climate change is a slow crisis, as its effects spread over the years, are not immediately visible and worsen over time. Crises often require making risk assessments, but climate change requires a particularly future-oriented approach. Relatedly, climate change differs from other crises because of its intergenerational nature (on intergenerational equity, see e.g., Donger 2022:272). The effects of the climate crisis spread geographically unevenly, which has not motivated rich countries to prevent these effects. Despite a scientific consensus, there has been a lacking sense of urgency in responding to climate change, also influenced by strong links to industrialism and consumerism that accelerate climate change (Grear 2013:53).

Secondly, climate change fits into the current political and legal structures. Unlike many other crises, it does not automatically disrupt the legal system; on the contrary, a system change would certainly be needed to address it. For reasons such as

its gradual nature and business interests involved, climate change arguably deceives decision-makers into thinking that current structures do not need to be changed. Willis et al.—who also point out that these questions are relevant in decision-making in other contexts, too—have grouped the explanations for the failure of democracies to adequately respond to the climate crisis into (1) the inability to consider medium- and long-term needs, views, and values of future peoples; (2) the way in which technical, scientific, and expert advice is used in decision-making; (3) the influence of interests of high-carbon industries on decisions; and (4) an inadequate consideration of citizens' views and values (Willis et al. 2022). Arguably as a result of the differences between climate change and other crises, the climate crisis is not characterized by executive action based on a state of exception but rather by executive and legislative inaction enabled by the legal system in its normal state.

The Vulnerable Subject

There is an inevitable connection between the climate crisis and vulnerability: the climate crisis deepens vulnerability, and the effect is exacerbated by a lack of remedies. In the current human rights law framework, however, several vulnerabilities are not recognized in the context of climate change.

To analyze how the effects of the climate crisis manifest from the perspective of vulnerability theory, it is first necessary to discuss the vulnerability concept. Vulnerability can be defined as exposure—actual or potential—to physical or emotional harm or suffering (e.g., Nifosi-Sutton 2017). Despite the applicability of the concept to several situations, the traditional approach of human rights law is to regard the subject of human rights law as invulnerable and persons not fitting the ideal legal subject as vulnerable (for a summary, see, e.g., Grear 2013). At the same time, the protection of vulnerable groups has been at the core of international human rights law since its creation, which is demonstrated by a focus on protecting vulnerable groups in international and regional treaties (for a review, see Nifosi-Sutton 2017). Regional human rights courts have refined the understanding of vulnerability. The ECtHR considers vulnerability to derive from distinct sources. It distinguishes between vulnerable groups and individuals and considers that some grounds render a person vulnerable, such as state control (e.g., *Stummer v Austria*) or group-membership (e.g., *Horie v. United Kingdom*). However, some ECtHR cases convey a more context-sensitive understanding of vulnerability, for example, concerning the vulnerability of a mentally disabled person (e.g., *Stanev v Bulgaria*) and the vulnerability of victims of domestic violence (e.g., *Hajduová v Slovakia*) (Timmer 2013; Peroni and Timmer 2013). Similarly, the African Commission of Human and People's Rights uses vulnerability as a primarily group-based concept (Heikkilä and Mustaniemi-Laakso 2020).

Some newer contributions acknowledge that vulnerability as a legal concept can contribute to the protection of disadvantaged individuals and groups by advancing substantive equality (Peroni and Timmer 2013). These include, for example, the inherent vulnerability of children and persons with cognitive disabilities, vulnerability due to state control, and vulnerability in the context of migration. At the same time, the intensifying vulnerabilization of human rights protection, meaning that

human rights protection is increasingly channeled to those considered vulnerable, can contribute to increased protection but also to compartmentalization of protection. Moreover, the concept of vulnerability can be instrumentalized and used for various political purposes (Engström et al. 2022).

Vulnerability theory, in particular, strongly questions the traditional legal understanding of vulnerability. Fineman's vulnerability theory contrasts the contemporary political and legal subject with the "vulnerable subject." The starting point of vulnerability theory is the constructed nature of law's rational subject who is not dependent on others and therefore needs autonomy and not assistance or provision (Grear 2013). According to the traditional understanding, the state's role is to respect the autonomy and space of the liberal subject by not intervening (Fineman 2018:53–58; for a summary and critique of the liberal legal subject, see Grear 2013:43–49). In contrast, vulnerability theory claims that vulnerability is universal; as an attribute arising from physical embodiment, it is an inevitable characteristic of the human condition and shared by all human beings. The idea of embodied vulnerability is prominent in feminist theory (see, e.g., Butler 2016; Matambanadzo 2012). Fineman proposes recognizing vulnerability as an inherent attribute of the human condition, which is always present to some extent but in some situations or stages of human development more than in others: "[t]his reality should have significant implications for the ways in which we reimagine the social contract and how it might define the legal, cultural, and societal role of institutions within the state in the twenty-first century" (Fineman 2018:62). According to Fineman, labelling only certain groups vulnerable is both over- and underinclusive—overinclusive as labelling masks differences among individuals belonging to a certain group, be those differences based on identity or status, and underinclusive as it masks similarities between individuals belonging to these groups and other people. Even more importantly, however, "such a designation suggests that some of us are not vulnerable" (Fineman 2013:16).

Fineman is critical of using vulnerability to pinpoint particular groups, as pinpointing can result in stigmatization (Fineman 2008:8). However, alongside the recognition of vulnerability as an essential attribute of the human condition, her central claim is the recognition of differences among individuals in how embodiment manifests and how the environment affects us. Fineman distinguishes two forms of individual difference, of which the first is physical—consisting of mental, intellectual, and other variations in human embodiment—and the second "social and constructed, resulting from the fact that individuals are situated within overlapping and complex webs of economic and institutional relationships" (Fineman 2013:21). Attention to specific injustices is important; otherwise, vulnerability theory can direct attention from social and political root causes of the harm (Harris 2015).

In vulnerability theory, the state has a central role in responding to vulnerability. According to Fineman, the "invulnerability" of the traditional subject of law can never be reached. Instead, she proposes resilience as a goal. Although the state cannot eradicate vulnerability, it can "mediate, compensate and lessen it and build resilience to prevent misfortune and help take advantage of opportunities" (Fineman 2008, 2013; Heri 2021). In other words, the state needs to correct the uneven distribution of resilience. Vulnerability is therefore not an inherent attribute but something that can be institutionally created and enhanced—but also mediated

and lessened. However, vulnerability theory does not define the specific measures that states need to take to build resilience (see, e.g., Heikkilä et al. 2020). It has been argued that, in the human rights framework, resilience means that "individuals can hold a state to account for its failures to abide by its human rights obligations in front of international and regional treaty body organs, human rights courts and national supervisory mechanisms" (Heikkilä et al. 2020:1186). Positive obligations are arguably a central tool to build resilience and correct the model of formal equality (Ippolito 2017:23–24). In the context of international human rights law, it has been argued that access to justice to seek redress when rights have been violated is one of the elements that should be taken into account when defining vulnerability and vulnerable groups (Nifosi-Sutton 2017:15–16). The lack of effective remedies, discussed later in this article, illustrates how societal structures can exacerbate or lessen vulnerability.

Universal but Differentially Distributed Vulnerability to Climate Change

Climate change contributes to creating complex physical vulnerabilities and social and constructed vulnerabilities. Vulnerability theory offers two central reconceptualizations of the legal understanding of vulnerability in the context of the climate crisis by showing how vulnerability to climate change is both universal and differentially distributed (Kotzé 2019). Firstly, the climate crisis underlines universal vulnerability; secondly, it affects different vulnerable groups in very different ways.

The first aspect, universal vulnerability, means that nobody remains unaffected by the climate crisis and the difficulties to contest breaches of rights concern everyone. Understanding vulnerability in line with vulnerability theory's idea of embodied vulnerability is fitting in the context of climate change, as the effects of climate change violate everyone's rights. This understanding makes more explicit the need for a comprehensive response to the climate crisis that improves resilience in general. It also forces us to reconsider the range of subjects potentially considered vulnerable and demands a future-oriented approach to the question of who is considered vulnerable and how the vulnerable can defend their rights. Several groups affected by climate change—actually the most affected—are not represented in democratic processes. Some of these groups might be given some attention as belonging to the public interest. In Europe, public interest cases rarely have standing in courts. In the Colombian and Pakistani climate cases, however, applicants were allowed to bring collective claims. Determining what kind of solutions will be required today to protect the rights of future generations is understandably difficult. At the same time, the fundamental question of a fair sharing of environmental burdens does not require complex assessments about how society should be organized; fair sharing is rather a precondition for future generations to be able to make such decisions. Claims related to the rights of future generations often feature in climate cases by young people. In *Juliana v United States*, the litigants proposed a novel public trust doctrine and claimed that the federal government has "failed in [its] duty of care to safeguard the interests of Plaintiffs as the present and future beneficiaries of the public trust."

Juliana was not successful, but the reasoning arguably paved the way for other claims concerning the rights of future generations. In *Neubauer*, the German Constitutional Court found that fundamental rights require a fair sharing of greenhouse gas reduction burdens between current and future generations.

Abate uses the term "voiceless" to describe those who are unable to represent themselves in political processes, including future generations, wildlife, and natural resources. In his account, future generations include born children who cannot vote yet (Abate 2020). Although this definition does not fully correspond to the conceptualization of children in human rights law, it helps grasp children's difficulties to participate in political processes. According to Article 12 of the UN Convention on the Rights of the Child (CRC), children have the right to express their views in all matters affecting them. Although the article does specify that the views need to be given due weight, adults have the final say. Lundy has conceptualized Article 12 CRC as consisting of four elements: space, voice, audience, and influence (Lundy 2007). Audience and influence arguably do not compensate for a lack of political participation.

In addition to the rights of future generations, vulnerability theory enables us to grasp the vulnerability of non-humans, although Fineman's vulnerability theory was not designed to address non-human vulnerability (see also Kotzé 2019:69; Harris 2015). Non-human animals and natural resources are even less represented in decision-making than future generations. The subject of human rights is the individual human, and human rights law is struggling to protect even the rights of all human beings (Gearty 2010). Human dignity is commonly regarded as the foundation of human rights, which has been criticized also in human rights research (Łuków 2018). Some accounts criticize the traditional association between rationality, autonomy, and dignity, suggesting instead to base human dignity on the inherent dignity of all human beings (Giselsson 2018). At the same time, it has been argued that human rights represent a form of speciesism, meaning that an individualistic focus on humans that underlies human rights law is difficult to reconcile with collective concerns of environmental law (Gearty 2010; Grear 2011). As Grear has formulated, "the person at the heart of legal anthropocentrism is defined by a rationalism that is independent of embodiment" (Grear 2011; see also Kotzé 2019). In a critique of liberal legal anthropocentrism, Grear argues that recognizing only (rational) humans as legal subjects and seeing humans as detached from and opposed to nature leads to the "suffering of women and other non-dominant humans, but also, importantly, to the suffering of non-human animals and to environmental destruction" (Grear 2011). In fact, according to Grear, because of these hierarchies, "the climate crisis itself is as much a crisis of human hierarchy mediated by the dominant legal order as it is a crisis in the 'natural order' brought about by anthropogenic human activities" (Grear 2015).

In addition to highlighting universal vulnerability, vulnerability theory shows that vulnerability caused by climate change is differentially distributed. The differential distribution can be analyzed from the perspective of the two forms of individual difference—physical vulnerability and social and constructed vulnerability—that Fineman has identified. Previous literature has confirmed that the rights of those already suffering from human rights violations, including women, children, and indigenous people, are likely to be most affected by climate change, too (e.g., Levy and Patz 2015). Vulnerable groups are differently affected due to biological and structural

differences. From the perspective of physical vulnerability, several groups commonly considered vulnerable in human rights law are also biologically vulnerable to climate change. Various social and geographic factors define an individual's vulnerability to environmental hazards (Cutter et al. 2003). Climate change has adverse effects on human health in general (Watts et al. 2018), including mental health; children and adolescents, however, are affected more than adults as they are developing, they are vulnerable to diseases attributable to climate change, and their capacity to adapt is limited (Gibbons 2014; Vergunst and Berry 2022). Persons with disabilities experience multidimensional inequalities and are often excluded from adaptation and mitigation efforts, which reduces their adaptive capacity and exacerbates their vulnerability to climate change (Gaskin et al. 2017). Several climate cases currently pending before the ECtHR rely on the specific vulnerability of the applicants—children (*Duarte Agostinho*), older women (*Klimaseniorinnen v Switzerland*), and persons with disabilities (*Müllner v Austria*)—to climate change (see also Heri 2022).

Secondly, in addition to physical vulnerability, the effects of climate crisis manifest through social and constructed vulnerability. Social and constructed vulnerability is linked to non-discrimination. Social identities, such as age, gender, class, and race, intersect and amplify discrimination (Crenshaw 1989). Lack of representation illustrates how structural factors construct vulnerability, as many vulnerable groups are not properly represented in legislative drafting. For instance, children's opportunities to politically shape laws concerning them are limited, as minors are excluded from majoritarian democratic processes (Nolan 2011:93–133; Donger 2022) and decision-making in courts (concerning the ECtHR, see Fenton-Glynn 2019). UNICEF has introduced the Children's Climate Risk Index, aiming at assessing children's exposure and vulnerability to climate change (UNICEF 2021). The UN Committee on the Rights of the Child has suggested that environmental degradation adversely affects children's rights "in particular for specific groups of children including children with disabilities, indigenous children, and children working in hazardous conditions" (2022, para 8). Moreover, home country is a significant factor contributing to structural vulnerability, as climate change hits states disproportionately. According to the 2022 IPCC report, the vulnerability of ecosystems and people to climate change differs substantially among and within regions because of factors such as intersecting socioeconomic development, unsustainable ocean and land use, inequity, marginalization, and historical and ongoing patterns of inequity, such as colonialism, as well as governance (IPCC 2022). Climate change also poses a challenge to the system of refugee protection because of climate-induced migration. All states contribute to climate change, but causal relations between climate change and the actions of a specific state are difficult to prove. There is a consensus that climate-induced migrants do not fulfil the political refugee definition of the Geneva Convention. It also seems unlikely that states would agree on a new treaty covering climate-induced migration. Moreover, contrasting views have been presented on the usefulness of such a convention (McAdam 2011; cf Williams 2008). The UN Human Rights Committee has recognized on a general level that non-refoulement applies to climate change–induced conditions that violate the right to life (*Teitiota v New Zealand*, Human Rights Committee 2020) although it has not yet found a violation on this ground.

Because of these differences, the climate crisis calls for a nuanced understanding of vulnerability. Addressing vulnerable groups without taking into account their differences would be problematic. According to Grear, reducing vulnerability in terms of resilience enables assessing questions related to "the unequal distribution of power and the differential forms of vulnerability that are economically, politically and juridically produced" (Grear 2011:43–44).

Rethinking Effective Remedies

By highlighting universal but differentiated vulnerability caused by climate change, vulnerability theory shows the importance of responding to vulnerability. This section and the next section discuss effective remedies as one of the necessary tools by which states can build resilience. It is an established idea in human rights law that rights need to be effectively safeguarded. Effectiveness has been developed especially in the context of the European Convention on Human Rights (ECHR), concerning which the ECtHR considers that ECHR rights need to be "practical and effective" (*Marckx v Belgium*). This means that, in addition to prohibiting conduct that breaches the ECHR, states need to actively advance the enjoyment of rights (e.g., Rietiker 2010). Effectiveness is intertwined with protection by the law, which means that "certain guarantees contribute to the effective protection of rights against unjustified infringements – regardless of whether they are caused by actions or inactions" (Lavrysen 2014:82). States therefore have the obligation to have in place a legal framework that prevents infringements of rights.

A closely related concept is the justiciability of rights, which refers to whether a right is judicially enforceable. Justiciability has been debated especially in the context of economic and social rights (see e.g. Langford 2009), but it is also a more general judicial doctrine describing whether an issue can be decided in a particular legal forum (McGoldrick 2010). Although justiciability and effectiveness have the same underlying idea of making rights accessible in practice, they do not fully overlap. Effectiveness does not always require justiciability, although justiciability arguably contributes to an effective realization of a right. Moreover, effectiveness and positive obligations are intertwined, as effectiveness requires active measures from the state (e.g., ECtHR *Airey v Ireland*; Mowbray 2004:3). Indeed, the ECtHR's doctrine of positive obligations has been considered influential in, for example, stretching the protection of the ECHR to children in situations in which enjoying a negative obligation would not protect from a violation (Kilkelly 2010).

Effectiveness is also closely related to access to justice. The starting point in human rights law is that rights are primarily ensured at the domestic level, and international remedies are complementary (Francioni 2007:8). Remedies available to violations of human rights are therefore mainly domestic, but applicants in recent climate cases have questioned whether domestic courts are able to comprehensively address the harm caused by climate change. Access to justice was coined in the USA in the 1960s in radical fundamental rights movements demanding legal action against discrimination. From a historical perspective, the American access to justice movement has been divided into three waves, of which the first focused on "legal services for the poor," the

second on the need to represent diffuse and fragmented interests—such as the interests of women and disabled persons and environmental interests—underrepresented in traditional two-dimensional litigation processes, and the third on alternatives to courts (Cappelletti and Garth 1981:4–5). The same waves can be perceived in the European approach to access to justice, too (Cappelletti and Garth 1981). Access to justice is thus intertwined with the idea of a welfare state (Cappelletti and Garth 1981), which reflects the idea of a responsive state that reacts to harm individuals experience. This implicitly tells that states must not only refrain from violating rights but also actively advance their enjoyment.

Access to justice is also a fundamental right guaranteed in several human rights treaties; for example, Article 2 of the International Covenant on Civil and Political Rights (ICCPR) sets an obligation to "take the necessary steps… to adopt such laws or other measures as may be necessary to give effect" to ICCPR rights. This requirement of providing effective protection is complemented by an explicit obligation to ensure an effective remedy, a guarantee that competent authorities determine whether a right has been breached, and an obligation to enforce the remedy (Article 3). Regional treaties, too, contain provisions on access to justice. In the ECHR, Article 6 guarantees the right to a fair trial, although only for questions already regulated on the domestic level (Xenos 2012:176). Article 13, which safeguards the right to an effective remedy, is relevant for the enforceability of positive obligations at the domestic level. Following Article 13, states have the obligation to create effective remedies for ECHR rights. In this sense, Article 13 is a positive obligation in itself as it creates a duty to make remedies available. The American Convention on Human Rights also guarantees the right to a judicial protection (Article 25), including the obligation of states "to ensure that any person claiming such remedy shall have his rights determined by the competent authority." Access to justice can be considered as one of the central concepts of the modern state along with principles such as legality and separation of powers (Maldonado 2020). From the perspective of human rights law, access to justice is an independent right but also a precondition for an effective enjoyment of other human rights.

In many cases, human rights law recognizes the need of vulnerable persons for specific remedies. According to the Human Rights Committee, "remedies should be appropriately adapted as to take account of the special vulnerability of certain categories of persons, including in particular children" (Human Rights Committee 2004). While the CRC does not explicitly guarantee the right to an effective remedy despite safeguarding procedural rights (Liefaard, 2019), the UN Convention on the Rights of Persons with Disabilities contains a specific provision on access to justice (Article 13).

Rethinking Effective Remedies in Light of Vulnerability Theory

How does vulnerability theory then inform our understanding of what an effective remedy means in the context of climate change? The characteristics of an effective remedy discussed here are legal in nature, and, as mentioned in the introduction, the discussion focuses on remedies in the procedural sense (Shelton 2015:16). A crucial question from the perspective of access to justice is whether the remedy is capable of redressing the harm that was inflicted (Shelton 2015:18). Vulnerability is arguably

exacerbated by ineffective remedies and mitigated by effective remedies, which contribute to building resilience. Vulnerability theory highlights several aspects that are essential in building resilience. In the context of climate change, effectiveness arguably includes the ability to contest breaches of positive obligations, speediness, the ability to contest future harms, the ability to contest breaches of extraterritorial obligations, bindingness, and equality of standing. Effectiveness is arguably not an all-or-nothing question but rather a scale, which means that a remedy does not need to have all of these characteristics to be effective. Nevertheless, a remedy might not be accessible because of various barriers. In the context of children's access to justice, barriers have been divided into situational, including financial barriers and lack of education concerning available remedies, and legal barriers, including the traditional attitude to children as objects and not subjects (Donger 2022:268). Barriers may also be personal, such as diminished self-confidence and the perception that the law is inaccessible (Mitchell et al. 2021:28–29, in the context of older people with mental health conditions) and lack of legal aid (Favalli 2022, in the context of migrants; Rhode 2004).

The first characteristic of an effective remedy is the ability to contest breaches of positive obligations, not only negative obligations. According to a traditional division in human rights law, human rights obligations are divided into negative and positive. The former constitute a ban on intervening whereas the latter require active measures (e.g., Shelton and Gould 2013). The idea that state inaction can constitute harm and amount to violations of human rights is relatively well-established in human rights law, although the scope and limits of the obligation to take active measures remain disputed (see, e.g., Zimmermann 2015:550–551; Shelton and Gould 2013). In other words, failing to protect individuals or failing to advance their rights constitutes under certain circumstances a human rights violation.

The ability to contest breaches of positive obligations is crucial in the context of climate change as many relevant state obligations are positive, such as protecting against harms to life and health (see Heri 2022). If positive obligations are not enforced in practice, they risk remaining a partly unfulfilled promise as challenging alleged breaches of positive obligations is in some cases difficult, if not impossible. The problem manifests mostly on the national level, as fundamental and human rights violations must primarily be solved in domestic instances, but it is not clear whether effective supranational or international remedies are available, either. Many climate cases aim at contesting state inaction, for example, *Müllner v Austria*, one of the pending climate cases before the ECtHR. In *Müllner*, the applicant—an individual with multiple sclerosis—claims to have no effective domestic remedy available, as administrative omission regarding climate measures and the legislator's inaction cannot be challenged. Moreover, positive obligations have a particular relationship to vulnerability, as positive obligations are considered to be particularly accentuated towards vulnerable groups and individuals (Engström et al. 2022:9; Ippolito 2017:23–24). Ippolito has suggested vulnerability-based positive obligations as a way to correct the model of formal equality (Ippolito 2017:23–24). The idea is that states have positive obligations towards all individuals but that the vulnerability of some individuals and groups generates more accentuated positive obligations towards them. In other words, vulnerability can give rise to duties that would not otherwise exist in the case at hand (see Peroni and Timmer 2013:1076–1079; Zimmermann 2015).

Admittedly, some characteristics of positive obligations make complaining about their breaches rather challenging. Compared to negative obligations, it is more difficult to determine whether a positive obligation has been breached. A due diligence standard applies to positive obligations, which means that state responsibility is limited by factors such as whether the state knew or should have known about the violation. Consequently, positive obligations can never be absolute even for absolute rights (for causation and positive obligations, see Stoyanova 2018). It is also difficult to determine the amount of effort required from the state as a state cannot be obliged to do more than it is able to in practice. The conceptualization of positive and negative obligations has been criticized in the context of the ECHR as the scrutiny regarding alleged breaches of positive obligations is lighter than concerning negative obligations. Lavrysen has argued that distinguishing between negative and positive obligations is largely based on the artificial distinction between state action and inaction, built on assumptions of preferring the status quo. Though established, taking a complete lack of state action as the baseline is an imaginary idea rather than a realistic conceptualization of today's government (Lavrysen 2016). Fineman has argued along the same lines that the division between state action and inaction is not clear (Fineman 2018). Although her argument is situated in the context of American political theory, the shortcomings of which she focuses on, the argumentation is relevant also in other contexts. Fineman has pointed to the "inability of contemporary constitutional or political theory to interpret the failure of collective or state action as constituting harm worthy of recognition and compelling remedial action" (Fineman 2018:50).

Secondly, an effective remedy against human rights violations caused by the climate crisis should be speedy: an effective remedy should be effective as soon as possible and not in ten years, after lengthy court proceedings. This question is closely related to the general requirement of exhaustion of domestic remedies before turning to supranational monitoring bodies, and it has been put forward in many recent climate cases. In *Duarte Agostinho*, pending before the ECtHR, the applicants argue that "there is an extremely limited time available" to tackle climate change, which is why the ECtHR needs to exceptionally and urgently absolve the applicants from the exhaustion of domestic remedies (complaint, para 32). In *Sacchi* et al. *v Argentina* et al., children's climate case that the Committee on the Rights of the Child found inadmissible on the ground of non-exhaustion of domestic remedies, the applicants argued that "the unique circumstances of their case would make domestic proceedings unreasonably delayed as they would have to pursue five separate cases, in each respondent State party, each of which would take years" (para 5.7). The Committee did not accept this argument and directed applicants to lengthy domestic procedures. Recognizing state responsibility on a general level but not in individual cases ignores the problematic element of time. Regional human rights systems routinely emphasize the importance of speedy proceedings; the jurisprudence of the Inter-American system, for example, has established timeliness as an essential element of effectiveness, particularly in urgent cases (see *Maya Indigenous Communities of the Toledo District* 2004).

Thirdly, another relevant time-related consideration in the context of climate change is the ability to contest future harms, as many rights violations caused by

the climate crisis are not imminent. Human rights law struggles to respond to rights violations whose effects arise in the future (Richardson 2017:56). However, Heri has argued that the ECHR system could be capable of capturing future risks, too (Heri 2022:935). Relying on age-based discrimination could be a way to contest future harms. Age is a prohibited discrimination ground in many jurisdictions either implicitly or explicitly. In Ecuador, for example, the Constitution prohibits age-based discrimination (see also Kaya 2019). As Donger notes, however, age-based discrimination does not grasp different effects between children (2022:279–280); a vulnerability-informed approach therefore needs to combine age-based discrimination with other claims.

Fourthly, the effectiveness of a remedy is arguably related to extraterritoriality and jurisdiction (see Bellinkx et al. 2022; in general, see Raible 2020, 2022). Although extraterritorial obligations have so far been recognized only in limited circumstances and controversies exist regarding their existence and scope (see, e.g., *Bankovic*), it is clear that jurisdiction can exist beyond territory. Climate change causes transboundary harm, which is difficult to address in domestic proceedings. This was precisely what the applicants argued in *Sacchi* before the Committee on the Rights of the Child. The Committee recognized that states have extraterritorial responsibilities regarding climate change and considered itself to have jurisdiction. At the same time, the Committee ignored the applicants' claims that the climate crisis cannot be fully grasped in domestic proceedings, as foreign applicants would not in all cases be able to pursue their claim before other courts than that of their home state and states' insufficient cooperation in climate change matters would fall outside the mandate of national courts. As applicants presented similar claims in *Duarte Agostinho* (para 32), the ECtHR is yet to rule on this issue (see also Eckes 2021). According to Mayer, human rights treaties have only limited importance for climate change mitigation because they focus on a territorial perspective and largely ignore the interests of future generations and ecological resources (Mayer 2021).

A challenge closely related to extraterritoriality is also jurisdictional: the problems of attributing causation. Previous research has established the difficulties to identify a causal link between a harm and the acts or omissions of a particular state. As Bellinkx et al. argue, embracing extraterritorial jurisdiction would not be enough to respond to climate change because of the requirements of control over territory or a person (2022). They therefore propose revising the rules of attributing causation. In the context of recognizing the right to a healthy environment in its Advisory Opinion on the environment and human rights, the Inter-American Court of Human Rights (IACtHR) acknowledged an additional jurisdictional link based on the causal link between conduct on a state's territory and an extraterritorial human rights violation. Jurisdiction then arises when a state exercises effective control over the activities that caused the damage and consequent human rights violation (2017, para 101). In *Sacchi*, the Committee on the Rights of the Child relied on the Advisory Opinion and found that states can be held responsible for human rights violations occurring outside of their territory (para 10.5). Bellinkx et al. (2022) point to problems even in this model, as it fails to address borderless adverse effects on human rights, such as climate-induced migration that a single state does not directly cause. As a response, they propose developing the concept of international cooperation and responsibility

based on capacity to act rather than harm caused. They see the most promise in the international environmental law principle of common but differentiated responsibilities that takes into account post-colonial inequalities between states. Kelleher suggests that an approach focused on contributing to risk instead of causation—which has already been applied in some climate cases, such as *Urgenda* and *Neubauer*—better captures the responsibility of an individual state (Kelleher 2022a).

Fifthly, effectiveness arguably entails bindingness in the context of climate change. In general, access to justice does not necessarily entail access to a court. According to the UN Committee on Economic, Social and Cultural Rights (CESCR), administrative remedies are adequate in many instances concerning rights contained in the International Covenant on Economic, Social and Cultural Rights (ICESCR), provided that these remedies are "accessible, affordable, timely, and effective." However, "whenever a Covenant right cannot be made fully effective without some role for the judiciary, judicial remedies are necessary" (CESCR 1998, para 13; see also Shelton 2015:100). In some cases, softer mechanisms such as the Ombudsman institution or similar overseers of legality (see, e.g., Thorarensen 2018) can be considered to fulfil the requirements of an effective remedy, also depending on whether the views are taken seriously. In the climate context, however, bindingness appears particularly important; a remedy cannot be considered effective if it does not oblige the state to provide redress. It therefore must be binding, both legally and politically. In the context of climate change, even fully functioning justice systems do not seem to provide effective relief. As discussed earlier, decision-making in crises favors the executive. If the legislative and executive do not act, courts have a particularly crucial role. The difficulty of challenging breaches of positive obligations, for example, concerns legislative inaction: the legislator has not put in place legislation that would allow contesting the situation, which prevents individuals from reaching courts directly or complicates their doing so. Eckes has argued based on recent European domestic climate cases that the cases "illustrate the illegal paralysis of politics" (Eckes 2021:1312).

The understanding of separation of powers determines the answer to the question of whether the legislator is allowed to act as a barrier to the implementation of human rights obligations. As Ackerman has pointed out, it is necessary to think about what the separation of powers protects; separation of powers is not a goal in itself (Ackerman 2000). Eckes has argued in the context of climate change that "in a functional understanding of separation of powers, it is precisely the task of the judiciary to allow citizens to demand justification for policies that interfere with human rights." The decision on which measures must be taken to reach climate objectives belongs to the legislature—and, to an extent, to the executive—but time and inaction reduce political discretion (Eckes 2021:1321–22; similarly, see Carlarne 2021). According to Carlarne, "[t]he inability of the political branches to agree on a pathway for addressing climate change is not a temporary hiccup to the functioning of democracy. It is a massive failure that hurls us to the edge of the cliff and threatens our very survival." (Carlarne 2021). An increased role of courts does not mean that courts would completely determine the measures to be taken, however. In *Urgenda*, for example, the court left the political branches the freedom to determine how the goals will be reached in terms of legislative and executive measures (for an analysis, see Carlarne 2021; Eckes 2021).

Finally, the effectiveness of a remedy requires equality of standing. Vulnerability could play a role in softening admissibility requirements, for example, which is a function that it has had in some ECtHR cases (Heri 2022, 2021). Some legal systems allow judicial review for the protection of collective rights, such as Colombia (*Amazon's Future Generations*; see also Acosta Alvarado and Rivas-Ramírez 2018). The IACtHR has developed a strong tradition of procedural environmental rights, including the right to information, participation in decision-making and access to justice in environmental matters. Procedural environmental rights arguably facilitate channeling individual claims into collective claims without the need to prove direct interest or personal involvement (*Claude Reyes*; Pavoni 2015:72). Moreover, contrary to the ECHR, the Inter-American system does not contain strict victim requirements, which also means that NGOs have a generous standing. In particular, the Inter-American human rights bodies have accepted claims made by numerous victims concerning the rights of indigenous and local communities over their traditional lands (Pavoni 2015:92–97). This public interest–oriented approach represents a step towards equality of standing.

Equality of standing speaks for a strong role for courts as many climate cases are pursued by young people but also as claims related to the rights of future generations feature in climate cases by young people. According to previous research on strategic climate litigation by children, children are well placed to advance claims for future generations as courts are open to perceiving children as members of future generations (Donger 2022). This was the case in *Neubauer* by the German Constitutional Court as well as *Amazon's Future Generations* by the Colombian Supreme Court; both courts held that the claimants had standing to make claims concerning the rights of future generations. Results of climate litigation can substantively advance the rights of nonhumans, too, although recognizing the intrinsic value of other than human interests is not easily reconcilable with the premises of human rights law. However, focusing on the dependence created by embodiment helps circumvent anthropocentric premises, which is why vulnerability discourse has been preferred over equality discourse to advance the interests of animals in the law (Deckha 2015). At the same time, as Donger argues, a vulnerability-informed approach needs to avoid instrumentalizing children's rights to achieve other goals (2022:280). According to Kelleher, standing rules do not need to be reconstructed but, rather, reinterpreted in light of procedural human rights obligations of European states and the EU under the Aarhus Convention (Kelleher 2022b).

Conclusion

The climate crisis is an atypical crisis: it is slow, causes transboundary harm, and has not motivated legislative and executive branches to disrupt current structures. As human rights violations increase vulnerability to climate change (Barnett 2010:258), human rights violations must be remedied to address this vulnerability.

Effective remedies are an essential part of responding to vulnerability caused by the climate crisis. As argued in this article, vulnerability theory developed by Fineman and others offers a persuasive framing for analyzing what kind of remedies can be

considered effective in the context of the climate crisis. Vulnerability theory highlights the uneven impacts of the climate crisis by showing that vulnerability caused by the climate crisis is both universal and differentially distributed. It shows how the climate crisis disproportionately affects the rights of vulnerable groups because of both physical and structural vulnerability. Responding to this vulnerability forces us to rethink effective remedies in human rights law. Arguably, effectiveness requires the ability to contest breaches of positive obligations, speediness, the ability to contest future harms, the ability to contest breaches of extraterritorial obligations, bindingness, and equality of standing.

Remedies provided by human rights law alone cannot effectively address violations caused by climate change. However, the changes suggested in this article would better align the remedies in human rights law with the vulnerabilities caused by the climate crisis. The climate crisis has created new problems, but it has also made visible problems that have existed for a long time and that are related to the very foundations of human rights law.

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