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# Political institutions

# for Climate-Affected Citizens

A Philosophical inquiry into Climate-Focused institutions



DAVID MATHIAS PAASKE

#### Resumé

Dette speciale handler om krydsfeltet mellem klimaretfærdighedslitteraturen og den demokratiske teori. Mere specifikt handler det om mulige løsningsforslag på hvordan vi bedre kan håndtere klimakrisen ved at repræsentere, inkludere og indskrive forfatningsmæssige love til fordel for klimaramte borgere i de demokratiske beslutninger som påvirker dem på sådan en måde at de overtræder deres fundamentale interesser og basale rettigheder.

Idéen om at repræsentere fremtidige generationer har været diskuteret af flere omgange i den filosofiske- og demokratiteoretiske litteratur. Dog har den eksisterende litteratur overset et vigtigt spørgsmål: hvad med de personer som lige nu bliver ramt af klimaforandringernes skadelige virkninger? Hvorfor skal de mennesker som er hårdest ramt af klimaforandringerne ikke have bedre mulighed for at beskytte deres fundamentale interesser og basale rettigheder? Disse spørgsmål er i hovedsædet og som jeg vil forsøge at besvare i det indeværende speciale.

I andet kapitel af dette speciale giver jeg en grundig redegørelse for den videnskabelige baggrund af klimaforandringerne og en skitsering af den politiske baggrund for klimaforandringerne. Derefter forsøger jeg at vise, at klimaforandringerne som udelukkende et langsigtet problem er en forkert måde at gå til krisen på. Jeg drager på videnskabelige artikler og bøger for at vise, at klimakrisen i dag påvirker og berører flere millioner mennesker på skødesløse måder rundt omkring på kloden.

I tredje kapitel gennemgår jeg spørgsmålet om hvorvidt fremtidige generationer kan anses for at være klimaberørte borgere. Så vidt at de opfylder de kriterier som jeg fremstiller, så kan de godt blive anset for at være klimaberørte. Disse kriterier fordrer, at for at være berettiget som klimaberørt borger skal ens fundamentale interesser eller basale rettigheder være overtrådt eller i fare som følge af de skadelige virkninger som udspringer af i) klimaforandringerne eller ii) som resultat af klimarelaterede politikker.

Jeg går derefter videre til hovedkapitlet, kapitel fire, for at fremsætte fire forslag til hvordan de klimaberørte borgere kan blive beskyttet i den demokratiske proces. Det første forslag viser hvordan et formynderskab, hvis medlemmer vil fungere som 'trustees', kan suspendere vedtagne politikker hvis de går imod de klimaberørte borgeres interesser. Det næste forslag fremsætter et forslag som har i sinde at inkludere og endda give en øget vægtning af stemmer til klimaberørte borgere i demokratiske beslutningstagninger som vedrører klimaforandringerne. Jeg forsøger, efterfølgende, at vise hvordan man kan etablere en model – sub-majority rule –der giver en tredjedel af lovgiverne to proceduremæssige rettigheder til at beskytte de klimarammede borgeres interesser der har beføjelse til at udsætte og suspendere

ikke-bæredygtige politikker som går imod de klimaberørte borgeres basale rettigheder og fundamentale interesser. Slutligt, så er en helt anden måde hvorpå man kan beskytte og sikre de klimaberørte borgeres fundamentale interesser og basale rettigheder (rettigheden til livsfornødenheder og rettigheden til at leve i et sundt miljø) er ved at grundfæste en klimamålrettet Grundlov, der indskriver disse rettigheder i forfatningen.

Jeg vurderer, at alle disse forslag kan vise sig at beskytte de klimaberørte borgeres basale rettigheder og fundamentale interesser. Eftersom klimaretfærdighedslitteraturen på området har primært fokuseret på fremtidige generationer og debatten omkring hvem som bærer klimabyrden, har jeg forsøgt at vise, at det er vigtigt at nytænke de demokratiske processer så de bedre kan håndtere klimakrisen og beskytte de mennesker som er hårdest ramt af klimaforandringerne.

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#### Chapter 1

#### Introduction

This thesis is concerned with questions within political philosophy. One common approach in general in political philosophy is to undertake a normative analysis of all social institutions and generally ask what kind of government, if any, ought we have, and what should be permitted and forbidden to do? Political philosophy is the branch of philosophy that attempts to answer such questions in a rigorous way by determining the proper standards by which we can judge political institutions as good or bad, just or unjust. To decide which institutions are just, we need theories about more fundamental questions about justice. According to Will Kymlicka, a central aim of political philosophy is to "evaluate competing theories of justice to assess the strength and coherence of their arguments for the rightness of their views." (Kymlicka 2002: 6) Justice (i.e., distributive justice) refers to the (morally) right distribution of benefits and burdens within a society, both within and across generations.

Accordingly, this thesis is essentially concerned with two particular subfields within political philosophy and notions within the literature of justice, namely, climate justice and democratic theory. Theoretical literature in the field of climate justice (Caney 2006; 2010a; 2010b; Heyward and Roser 2016; Shue 2016) has in the last decades gained momentum. Climate justice fundamentally

"recognises humanity's responsibility for the impacts of greenhouse gas emissions on the poorest and most vulnerable people in society by critically addressing inequality and promoting transformative approaches to address the root causes of climate change." (Meikle, *et al.* 2016: 497)

Thus, despite the heterogeneity of climate justice viewpoints, the literature on climate justice has (at least) one thing in common: the focus on the aspects of equality and justice essential to both the causes and the effects of climate change. Protecting those who are the most affected by the effects of climate change is a vital part of achieving climate justice, as these people do not have the means or capability to adapt to the effects of climate change. In this way, climate justice highlights the disproportionate impacts of climate changes on the most affected and marginalised humans, as well as the curtailment of political responses to the ill-effects of climate change and the need for political solutions. The field of climate justice raises and seeks to answer moral questions of what one (individual or institutions) ought to do by clarifying

what is just? and what is our duty (if any)? What is at stake in this second range of questions, therefore, is the correct moral response to the problem of climate change: How ought political institutions adapt and be redesigned to the consequences of climate change? This last question is deeply rooted in this thesis.

Secondly, this thesis revolves around literature in normative democratic theory. The fields of climate justice and democratic theory share resemblances because normative democratic theory focuses on the questions of the moral foundations of democratic institutions. The purpose of normative democratic theory is to "determine which, if any, of the forms democracy may take are morally desirable and when and how." (Christiano 2018) As such, normative democratic theory determines whether forms of democracy are morally desirable, whereas the field of climate justice is concerned with individual and institutional responsibility. Moreover, climate justice highlights the disproportionate ill-effects of climate changes on the most vulnerable and marginalized human populations, as well as the restriction of conventional political responses to rising climate instability. These points are relevant for this thesis because it is concerned with how to effectively reform political institutions so it takes the interests of climate-affected citizens effectively into account. As indicated, this research project takes its point of departure from the definition of climate-affected citizens. In a rudimentary sense, everyone will be or is affected by climate change. How this group of climate-affected citizens is characterized will be described in chapter 3.

How can democratic states respond to multiple problems relating to current environmental, climate and sustainability crises? A number of scholars have criticized (Pickering *et al.* 2020; Shearman and Smith 2007) democratic institutions because they lack the capacity to respond to the problems of climate change, with extreme weather, rising temperatures, floods and droughts, the continuous over-use of natural resources like water, land and forests and the depletion of biodiversity (IPCC 2014; 2018; 2019). Accordingly, they argue, democratic systems should be reformed in ways that would help enact more climate-friendly and future-regarding policies.

Those most affected by climate change without political power includes future generations (Thompson 2010), children (Bidadanure 2016) and non-human species (Eckersley 2011). This thesis is devoted to the problems of climate change by seeking political representation and enfranchisement of those most affected by climate change. While I will explicate precisely who counts as climate-affected citizens, examples of individuals significantly affected by climate change are people living in small island states and low-lying river deltas (such as much of Bangladesh), poor people living in the path of cyclones and

hurricanes, Indigenous people displaced by deforestation, sub-Saharan Africans who will experience worse droughts and heat stress with climate change. Those most vulnerable and affected by the consequences of climate change have "moral authority precisely because they are the ones upon whom the burden of risks falls most heavily." (Dryzek and Pickering 2019: 123) To protect these citizens, now that we understand the growing magnitude of climate-induced infringements by consulting the scientific literature on climate change, it would be of interest to discuss how democratic institutions can be reformed that do not undercut the capacity of citizens to enjoy their fundamental interests and not having their basic rights violated.

Accordingly, these inquiries into institutional transformations have recently gained momentum by inspecting institutional means to realize justice for future generations (Beckman 2015; Gardiner 2014; Stevenson and Dryzek 2014). Yet, these proposals and recent theoretical literature on the subject tend to overlook the plethora of issues relating to institutional means to realize climate justice for citizens that are currently affected by the already-occurring illeffects of climate change, that is, those I characterize as climate-affected citizens. Indeed, the already-occurring ill-effects of climate change raise the question of how to give those most affected by climate change better opportunities to defend their fundamental interests and basic rights. This thesis aims to contribute to this critical knowledge gap by understanding how political institutions should be arranged by taking those worst-off as a result of climate change, that is, climate-affected citizens, into consideration.

While it is of interest to explain why current political institutions struggle to deal with the implications of climate change, this thesis aims to specify why and how political institutions should effectively respond to the challenges posed by climate change. It is therefore time to ask a very important question in political philosophy, namely: why should those most affected by climate change, the worst-off people, not be given better opportunities to defend their fundamental interests and basic rights? This question has, surprisingly, attracted scant philosophical attention. As I will venture to argue, the important links between climate change and how affected one is to climate change have been neglected. In this thesis, I attempt to address this lacuna. This stringent normative rationale endorses a prioritarian account that holds that we have a stronger duty to give people benefits the worse off these people are. Accordingly, Matthew Adler labels this approach a "claim-across-outcome approach" (2012: 365). I will expound on this theoretical map of prioritarianism by turning back to the idea in chapter 2.4 'prioritarianism and climate change'.

This thesis proceeds in further four chapters in the following way: before I will attempt to make a compelling case for the proposals, we have to start by considering the nature of the problem of climate change they seek to address. Accordingly, in chapter 2, I shortly describe the scientific (section 2.1) and political background of climate change (section 2.2) to then explain the basic ideas of the field of climate justice (section 2.3). Then I go on to describe the underlying theoretical landscape, that is, prioritarianism (section 2.4). To end the chapter, I explain why political institutions often favors short-term issues over long-term issues (section 2.5). In chapter 3, the purpose is to characterize who counts as climate-affected citizens, what their interests are and whether future generations are entitled as climate-affected citizens. I then set out in chapter 4 to critically scrutinize four ways of addressing how to effectively enfranchise and represent climate-affected citizens in climate-related decision-makings to give them better opportunities to defend their fundamental interests and basic rights. One key consideration is whether the proposals are effective in enfranchising and representing those most affected. I shall start by outlining the first proposal that addresses the problem of not giving sufficient consideration to the fundamental interests of climate-affected citizens by offering a democratic trusteeship as a possible solution to the problem (section 4.1). Then, I will continue to scrutinize whether democratically enfranchising climate-affected citizens in the demos will prove to be an effective tool to better respond to climate change (section 4.2). Next, I address the possibility of establishing the model of a sub-majority rule that will grant one-third of the legislators two procedural rights to protect the interests of climate-affected citizens who have the authority to delay and suspend unsustainable policies (section 4.3). Section 4.4 explores constitutionalization as a means to effectively advance climate justice by ensuring that climate-affected citizens have democratic control over the decisions that significantly affect them. Lastly, I conclude

## Chapter 2

# Why Design Political Institutions More Responsive Towards Climate-Affected Citizens?

A solution to the problems of climate change, Rockström *et al.*, argues "involves normative judgments of how societies choose to deal with risk and uncertainty" (2009: 5). Despite the attempts of some climate ethicists to contribute to political debates, ideas of climate justice have seldom been reflected in the policies and decision-makings of governments (Heyward

and Roser 2016). Rather, political institutions often prioritize short-term policies that significantly attenuates attention and impedes the long-term issue of climate change<sup>1</sup>. In the next subsection, I will attempt to give a short introduction to the scientific background of climate change.

#### 2.1. The Scientific Background of Climate Change

The extensive emissions of greenhouse gases (GHGs) that have been generated since the Industrial Revolution (and from the transformations in the use of land, such as deforestation and the draining of wetlands, produced by the industrialization of agriculture) are disturbing the climate to which humans and non-human species had adapted themselves over the previous 10,000 years of the Holocene. Indeed, according to the majority of scientists (IPCC 2014a; 2014b; 2018; 2019; Lovejoy *et al.* 2019), we are on course for ecological cataclysm. While I continuously draw on the scientific background of climate change, the purpose of this section is to offer a thumbnail sketch of the current and expected ill-effects of climate change. This thesis is specifically interested in the ill-effects of climate change and set aside the discussion of positive impacts of climate change (e.g., economic growth in developed countries by fossil fuel consumption, numerous species flourish in a warmer climate, etc<sup>2</sup>.)

There is an enormous accumulation of technical evidence about climate change. It is widely recognized that the Earth's climate is changing with disastrous ill-effects as a result of human activity. Expanding agricultural production, growing populations and increasing resource use and disposal are amongst the human activities that are having the most profound damaging effects on the Planet. The emissions of greenhouse gases culminate in increased average global temperatures, the rapid rise in global sea levels, substantial shifts in seasonality, heat waves, storm intensity and frequency, and longer-lasting droughts are some of the most disastrous ill-effects of climate change that are currently taking place (Lovejoy et al. 2019: 201). Biodiversity is also challenged with an unprecedented frequency of destruction where the species are disappearing with frightening speed. This will swiftly bring about a sixth extinction, where wild mammal biomass has seen an 85 % decrease since the rise of human civilizations, at least 900 species have gone extinct in the last five centuries and more than 35.000 species have been labelled as threatened with extinction today (Ritchie and Roser 2021). Moreover,

<sup>&</sup>lt;sup>1</sup> This idea is rooted in Paaske, *et al.* (2021) which examines short-term policies adopted in the Danish educational sector that curtail the standard of living of future generations.

<sup>&</sup>lt;sup>2</sup> For the contours of this discussion and a brief sketch of the positive impacts of climate change, see Thomas (2018).

the World Wide Fund for Nature estimates that 60 % of all of the world's mammal, birds, fish, reptiles and amphibians has disappeared between 1470 and 2014 (Grooten and Almond 2018). As of 2018, only a quarter of the Earth's land surface is free of human activity, and projections show that will drop to one-tenth by 2050 (IPBES 2018). These ill-effects are all interrelated because, for example, an increased global temperature results in melted ice - such as Greenland's ice sheet – which then results in increased sea level rise and consequently threatens coastal communities to escape from their homes.

Accordingly, the Earth has entered a new epoch - the Anthropocene<sup>3</sup> - because humans constitute the foremost driver of changes to the Earth System. The Anthropocene is an emerging epoch in which human impacts become pivotal in disturbing the structures of the Earth system. In June 2020, the cumulative atmospheric accumulation of CO<sub>2</sub> reached its highest point in human history of 412.62 ppm (parts per million). The pre-Industrial-Revolution level was around 270 ppm, so we will see a doubling of this figure approaching soon. However, the goal set by the International Panel on Climate Change (IPCC) is to reach a maximum of 450 ppm (think of this as a translation of a 2°C warming). At current trends, we are about 17 years away from hitting 450 ppm. In IPCC's special report on climate change 'Global Warming of 1.5°C', the panel revealed that, since climate change is predominantly driven by the cumulative atmospheric concentration of carbon dioxide (CO<sub>2</sub>), and that this heattrapping gas that reaches the atmosphere is particularly persistent, climate change will not stop becoming more severe until injections of carbon dioxide into the atmosphere completely stop; that is, until human society reaches 'net zero'. If, for example, we see a 2°C rise in temperatures, it is estimated that 99 % of the worlds coral reefs will disappear.

A substantial theoretical understanding of climate change suggests that we are in fact approaching a number of critical 'tipping points' as a result of these cumulative atmospheric accumulations of CO<sub>2</sub>. An example of such tipping points is the ocean surface temperatures that will precipitate the collapse of massive Antarctic ice sheets and Greenland ice sheets, influencing sea levels to rise much higher globally and steadily flooding seacoasts across the world and force populations out of cities with locations like Mumbai, Shanghai, Miami, New York and Bangladesh (Lenton, et al. 2019). Passing such tipping points means triggering irreversible transformations, and frequently these irreversible transformations become long-

<sup>&</sup>lt;sup>3</sup> Other scholars remain sceptical of this term. Andreas Malm (2016) and Jason Moore (2015) refuses the notion of Anthropos (Mankind) and proposes the term Capitalocene, which highlights the destructive and accelerating logics of resource depletion within capitalism as a world system. Another term is suggested by Donna Haraway (2015) who proposes the Chthulucene by highlighting that human beings and non-human species should be tightly interwoven in a symbiotic relationship.

term positive feedbacks, sometimes exacerbating other processes in the climate systems so that they become exponential. According to the IPCC, to limit average global temperature rise to 1.5°C annual global net anthropogenic CO<sub>2</sub> emissions must see a decrease by about 45% from 2010 levels by 2030 and reach net zero around 2050 (IPCC 2018). Overall, the present temperature rise is in the range of 1°C to 1.2°C. It is critical to state, however, that the temperature rises are disproportionately spread out where many regions will face a substantially larger temperature rise. For example, during the winter months, large parts of the Arctic are more than 3°C warmer than pre-industrial times, although global average temperatures have "only" risen 1.2°C. Nonetheless, it is also important to note how the illeffects of climate change imposes negative burdens disproportionately on individuals.

The disproportionate impacts highlighted by climate justice advocates are echoed in two reports put forward by the Intergovernmental Panel on Climate Change (IPCC). For instance, the annual per capita emissions of a person from Denmark are 19 tonnes of CO<sub>2</sub> in 2010. The world average per capita emissions were approximately 7 tonnes of CO<sup>2</sup>, and a resident of Chad emitted less than 0.1 tonnes of CO<sup>2</sup>. The IPCC's Fifth Assessment Report in 2014 offered a detailed review of climate justice concerns among its enumeration of fundamental climate risks identified with high confidence in current scientific assessments. These include, to wit:

- Risk of death, injury, ill-health, or disrupted livelihoods in low-lying coastal areas and small island developing states and other small islands, due to storm surges, coastal flooding, and rapid sea level rise.
- Risk of mortality and morbidity during periods of extreme heat, particularly for vulnerable urban populations and older people.
- Risk of food insecurity and the breakdown of food systems linked to warming, intense
  drought, flooding, and precipitation variability and extremes, particularly for poorer
  populations in urban and rural settings.

As a whole, the ill-effects of climate change affect the developing countries disproportionately, while the emissions that cause the ill-effects of climate change are located disproportionately in the industrialized countries. Many of the key risks listed above constitute particularly challenges for the least developed countries and vulnerable communities, given their lack of ability to cope with the ill-effects of climate change. To back up this claim, those most

vulnerable, IPCC argues with high confidence, "will be more severely affected" (IPCC 2019: 18). Moreover, IPCC further determined that "climate-related hazards constitute an additional burden to people living in poverty, acting as a threat multiplier often with negative outcomes for livelihoods" (IPCC 2014b: 11). Further, "climate-related hazards affect poor people's lives directly through impacts on livelihoods, such as reductions in crop yields or destruction of homes, and indirectly through increased food prices and food insecurity" (ibid.). Accordingly, those people who are socially, economically, culturally and politically marginalized are especially vulnerable to climate change.

However, the problem of climate change is no longer solely a scientific concern, but encompasses economic, political and philosophical issues, to name a few. The detrimental effects of human activities raise a wide range of ethical issues and questions of justice. What the climate justice literature argues (Caney 2006; 2010a; Shue 2016), is that there is a divide between those who are at greatest risk of being affected by the ill-effects of climate change and those benefiting from the activities stemming from climate change. The climate change crisis is thus prone to produce a crisis of social justice in which the most disadvantaged people pay the highest price and are least able to influence policymaking to address climate change (Meikle, *et al.* 2016). Before explaining the ideas embedded in the literature of climate justice, let me sketch out the political background of climate change.

#### 2.2. A Thumbnail Sketch of the Political Background of Climate Change

To date, the political endeavours that have been presented have been insufficient in overcoming the responsibility of political institutions in further destabilizing the Earth System, suggesting comprehensive actions are required when it comes to building capacity for institutional transformation since the issue of climate change challenges the way we arrange our societies. An example that involves sustained attempts to counter and undermine the scientific consensus and public understanding of climate change is described in detail by Naomi Oreskes and Erik Conway (2010). They showed that fossil fuel companies are actively lobbying by spending billions of dollars to prevent and paralyze successful climate action and climate policies to take place to guarantee that their harmful business model can continue to flourish. However, current political trends are looking to overcome these challenges and have put forward promising policies.

Prior to international climate treaties - such as the United Nations Framework Convention on Climate Change (UNFCCC) adopted in 1992 and the 1997 Kyoto Protocol

which lacked collective climate action - one of the most important political instruments to mitigate the consequences of climate change was the enactment of the Paris Agreement. In Paris, at their 21<sup>st</sup> international conference on climate change (COP-21), world leaders implemented the Paris Agreement by widespread consensus. The 2015 Paris Agreement on Climate Change marked an important milestone in overcoming some of the barriers to effective and successful climate policy by aiming to keep temperature rise "well below" 2°C above preindustrial levels and "pursue efforts" to limit warming to 1.5°C before pre-industrial levels. For the first time in history, and unlike earlier climate accords as listed above, the Paris Agreement brings all nations together into a joint effort to tackle the issue of climate change and to adapt to its ill-effects with enhanced support to assist and aid developing countries in adapting to climate change. There was also another positive aspect in the Paris Agreement: Countries obliged their future decision-makers to regularly assess their contributions in the global state of affairs and to heighten their effort relating to climate change politics.

It should be applauded that there finally is an international climate agreement that is global in nature and captures the majority of global climate change emissions, but since the agreement is a non-binding agreement, and there is in this way no clear punishments for the failure of any country not undertaking its promised actions, climate injustices might arise.

#### 2.3. The Idea of Climate Justice

This section aims to shortly provide an overview of the development of the literature in the field of climate justice. The relation between justice and climate change is becoming increasingly prominent in public deliberations on climate policy. Whereas, as we saw in section 2.1, the role of science is to determine how the world *is*, the fundamental question of climate justice belongs to how societies *ought to* respond to climate change.

There are various perspectives on the concept of climate justice, but most ideas are derived from two common points of departure; that the people suffering the most from climate change today are the ones who are the least responsible for the ill-effects originating from climate change, and that climate change in many ways reinforces already existing inequalities on a global scale. An ethical obligation to climate mitigation and adaption to the consequences of climate change can be defended on various and competing ethical theories. Such defences might invoke a duty not to harm or a duty to protect others from harm. Ludvig Beckman and Edward A. Page (2008) suggests that there are three important questions to ask when dealing with issues of climate justice: i) who are the 'recipients' of justice?; ii) what is a just distribution

of climate burdens between the developed and developing countries?; iii) who are the duty bearers of "guaranteeing that distributive entitlements are respected"? (Beckman and Page 2008: 528)

The second question of climate justice is discussed by Simon Caney (2010b). In this piece, Caney seeks to answer the question of who should bear the burden of combating climate change – the industrialized countries or the developing countries (or both) - by discussing the Polluter Pays Principle (PPP). According to this principle, "those who have caused global warming should bear, or a suitable proportion reflecting their emissions of, the burdens of climate change." (Lippert-Rasmussen 2015: 123) Rather than accepting the PPP, Caney suggests that the principle should be complemented with the Ability to Pay Principle. The Ability to Pay principle is a distributive principle according to which the costs associated with addressing a problem should be distributed (among all agents living above the sufficiency threshold) in proportion to each agent's ability to pay for the adaption and mitigation of climate change. As such, people living in extreme poverty should refrain from bearing the burdens of climate change. The view defended, then, is a combination of the two separate principles in such a way that "[p]ersons should bear the burden of climate change that they have caused so long as doing so does not push them beneath a decent standard of living" (Caney 2010b: 218). This notion offered by Caney pertains to the idea of sufficientarianism and relies on a historical principle of distributive justice: the distribution of costs depends on how large a proportion of greenhouse gases one country (or institution) has historically emitted. Hence, PPP links up with a central moral aspect of the Paris Agreement – specifically Article 2.2. - that it will be implemented to reflect equity and the principle of common but differentiated responsibilities taking into consideration different national circumstances.

A separate issue rooted in the literature of climate justice is intergenerational justice in its nature. This field of climate justice primarily concentrates on future generations and which climate responsibilities and duties, if any, the present generations have towards future generations<sup>4</sup>. While climate change affects large populations currently alive, several of the illeffects of climate change, as listed in section 2.1, will be impinged on future generations as a result of the long-lasting atmospheric residence time of greenhouse gases<sup>5</sup>. Accordingly,

<sup>&</sup>lt;sup>4</sup> In another piece (Paaske 2020), I have offered a thumbnail sketch of the literature on climate justice and intergenerational justice.

<sup>&</sup>lt;sup>5</sup> For example, methane has a radiative forcing approximately 120 times more than CO<sub>2</sub> immediately after it is emitted, but its residence time is only 12 years, whereas CO<sub>2</sub> lasts much longer in the atmosphere: 50 % of an emission is "removed from the atmosphere within 37 years, whilst 22% of the emission effectively remains indefinitely." (Balcombe 2018: 1323)

philosophers and political theorists often discuss whether present generations have ethical and juridical obligations to future generations and how to fundamentally transform political systems more sensitive to future generations and move away from the short-term nature of politics. As mentioned earlier, climate change often affects the poorest and most marginalized and it necessary to ensure that their views are recognized, their interests represented and their needs addressed in political deliberations.

With this brief sketch of the theoretical landscape of climate justice behind us, I will proceed to describe the view of prioritarianism to get a better idea of why we ought to enfranchise and include those most affected by climate change in democratic decision-makings.

#### 2.4. Prioritarianism and Climate Change

As was shortly mentioned in the introductory chapter, the fundamental idea of prioritarianism holds that benefits that accrue to individuals that are worse-off than individuals that are well-off have greater moral value. On these grounds, Kasper Lippert-Rasmussen explains, this is what gives prioritarianism a claim to be seen as an egalitarian theory because "smaller benefits to worse-off people might have greater moral value than greater benefits to people who are already better off, broadly speaking." (Lippert-Rasmussen 2014: 165) In this section, I will dive into the fundamental ideas of prioritarianism by explaining the view of prioritarianism and show how this view can be useful when discussing climate change and climate-affected citizens.

According to Richard Arneson, prioritarianism is, roughly speaking, the view that holds that the:

"moral value of achieving a benefit for an individual (or avoiding a loss) is greater, the greater the size of the benefit as measured by a well-being scale, and greater, the lower the person's level of well-being over the course of her life apart from receipt of this benefit." (Arneson 2013)

As such, benefits given to worse-off people have more intrinsic moral value than benefits to better-off people. This is the root idea of prioritarianism. The main reason for which prioritarians adopts this view is that those with the lowest absolute well-being, wealth, vulnerability, and so forth, can be found at the lower end of the respective measure. The worse

this quality of well-being is for an individual, the more a benefit for this individual matters. Hence, we should give priority to the worse-off in the distribution of benefits and we need not ascribe intrinsic value to equality. In this way, the view differs from teleological egalitarianism in that it does not take equality to have intrinsic value. They do share resemblances, nevertheless, in the sense that both theories hold that "if we could do something about life's unfairness, we have some reason to do it." (Temkin 2003: 66) The two views differ on how to achieve equality because prioritarians aim to improve the overall well-being of the worst-off regardless of equality, where egalitarians particularly aim to raise the level of equality irrespective of everyone being worse-off. We give priority to the worse-off and disadvantaged not because of their relative position like egalitarians do, but as a result of their absolute suffering (Temkin 2003: 63).

Let us now turn to the issue of the Levelling Down Objection to fully understand the differences between the two theories. In his seminal lecture *Equality or Priority?* (1995), Derek Parfit stressed that prioritarianism is immune – contrary to egalitarianism - to what Parfit famously coined the Levelling Down Objection (LDO)<sup>6</sup>. The LDO gave birth to the concept of prioritarianism because prioritarians think that "equality per se is not morally valuable" (Arneson 2013) in the same way as deontic egalitarians do. In his influential argument against egalitarianism, political philosopher Nils Holtug (2010) demonstrates that prioritarianism is not vulnerable to the LDO and consequently concludes that prioritarianism is preferable rather than egalitarianism. To understand the limits of egalitarianism and to see the strength of the LDO, let us suppose we can choose between two alternative distributions:

A: Everyone at the same level.

B: Some at the level of A. Others are better off.

Individual	Level of welfare (A)	Level of welfare (B)
X	2	2
Y	2	8

<sup>6</sup> Interestingly, Parfit believes (1995: 7) that only teleological egalitarianism, as opposed to deontological egalitarianism is exposed to the LDO. Kasper Lippert-Rasmussen (2014) also supports this claim: "unlike telic egalitarians, prioritarians avoid the so-called leveling-down objection: according to prioritarians there is nothing bad about going from an unequal state of affairs to an equal one where some are worse off and no one is better off." (2014: 165)

In B, there is inequality, but this inequality is bad for no one since everyone is at least as well off in B as in A. Hence, if one claims, as egalitarians do, that is for the better if it decreases the extent of unjust inequality, then one seems committed to endorsing the view that B is worse than A from the egalitarian point of view. Parfit sketches out the contours of this rationale by writing,

"Suppose that those who are better off suffer some misfortune, so that they become as badly off as everyone else. Since these events would remove the inequality, they must be in one way welcome, on the Telic View, even though they would be worse for some people, and better for no one. This implication seems to many to be quite absurd."

(Parfit 1995: 17)

This is the underlying logic of the LDO. However, according to prioritarianism, because there are none better off in A than in B, levelling down cannot improve an outcome, *ceteris paribus*. In levelling down, there is

"[N]othing of what prioritarians intrinsically value, namely compound of affairs, each consisting of the state that a benefit of a certain size befalls an individual, and the state that this individual is at a particular welfare level." (Holtug 2010: 210)

Prioritarianism always values benefits and does not value equality for its own sake and these features make it immune to the LDO. To see what the LDO will hold in the discussion at hand, let us assume that, *arguendo*, that some people are not vulnerable to sea level rises, and others are affected by sea level rises. According to egalitarianism, it would be better if everyone became affected even though it would be worse for everyone to increase the levels of equality.

To strengthen the prioritarian view in relation to climate-affected citizens, I want to explore a version of prioritarianism that incorporates a concern for those people at *risk* (i.e., potential harm and infringements) and are *actually* harmed associated with the activities of climate change. Let us call this view *climate-affected-accommodating* prioritarianism. This view resonates with Matthew Adler's notion of prioritarianism, which defends the view that prioritarianism can be justified on the basis of a claim-across-outcome approach (Adler 2012: 365). In this sense, we have a stronger duty to give people benefits, or expectable benefits, the worse off these people are, or expectably are.

To give a better understanding of this approach, let us consider the question of the relevant baseline. The relevant baseline can simply say that an instance of climate change is bad when it makes the individual in question worse off than she would have been had she not been subjected to instances of climate change. However, this account implies that when someone is subjected to climate change that perversely makes her better off than she would have been had she not been so subjected, climate change is not bad. Let us instead suppose, for the sake of argument, that an individual in a frozen region such as Siberia seeks to grow his own crops. Because it is practically impossible to plant crops in Siberia today because of the low temperature, a warmer climate would lead to that the individual would be able to grow his own crops. If we want to accommodate this objection, we can try to explain the wrongness of the action through the overall harm that is involved in climate-related activities. If we rather explain the relevant baseline by saying that the *actual* and *potential* (risk-based) harms emanating from climate change is bad because it negatively affects an individual's level of welfare, thus making her worse-off had she not been subjected to the harm of climate change, we accommodate the objection above.

To sum up, prioritarianism argues that it matters more to benefit people, the worse-off the individual in question is. This view is of interest to this thesis to understand why political institutions ought to take the worst-off as a result of climate change, climate-affected citizens, into consideration. Prioritarianism will provide the theoretical and normative framework for why we ought to give climate-affected citizens better opportunities to defend their fundamental interests.

In the next section, I want to critically scrutinize the idea that climate change is specifically a long-termist issue, but I seek to show – by drawing on the scientific literature on climate change – that climate change prompts already-occurring devasting ill-effects.

#### 2.5. Climate Change as Short-Termist

Political institutions are often incapable of addressing the long-term ill-effects of climate change. It is widely recognized (McKenzie 2016; Thompson 2010) that the existing political institutions do not give much thought to future generations. Rather, they typically reward myopic thinking and overlook future-regarding policies. The attempts so far have been insufficient in transforming institutions rooted in destabilizing the Earth system by continuing to build upon the disequilibrium in the Earth system. Of course, the various remedies and climate-regarding policies might take time before we can measure the effect. However, as we

will see in the later chapters, we are far from stabilizing concentrations of greenhouse gases. Indeed, the greenhouse gases continue to rise with increasing speed and have risen 45 percent above the 1990 baseline (Ritchie and Roser 2019).

One concern of long-terminism is that political institutions are challenged with uncertainty considering the long-term effects of climate policies or might lack the institutional capacity to enact such policies. This is generally associated with the short-term orientation of democratic politics or its "appetite for the immediate" (Thompson 2010: 18) by heavily discounting future generations. Short-term issues are those that involve actions with relatively near-term consequences. One example of such an issue is the crisis of COVID-19, which call for rapid political action that has immediate and obvious consequences by societal lockdowns which consequently results in costly actions to rectify the ill-effects of the virus.

However, not all short-term policies are inevitably undesirable. Simon Caney (2016) sketches some criteria by which to ascertain when a failure to safeguard long-term interests is unjustified - which he calls harmful short-terminism - and when it is not. Caney describes cases when people or their representatives act in ways at "t1, whilst they do not result in any cost at t2 (or may even promote a short-term benefit at t2) impose a much greater cost at t3 that thereby results in less overall good for themselves." (Caney 2016: 138) He concludes that instances such as these are problematic because people and/or their representatives choose inefficient policies that are more costly than necessary and thus fails "in their duty to promote the interests of their current citizens." (Ibid.)

Studies in psychology indicate that information about the future seem less important as people tend to disregard temporally distant problems; we tend to "overvalue immediate and spectacular threats while ignoring more impalpable concerns." (Stoknes 2015: 33). This short-termist bias is also evident in political institutions, particularly, in democratic institutions. The view of short-termist bias in democratic states is supported by Kavka and Warren (1983) who claims that

"politicians in democratic states, who are elected for relatively short periods and who are judged by voters largely in terms of the immediate results of their actions, also have

<sup>&</sup>lt;sup>7</sup> Discounting consists in giving less weight to future values than to present values. The so-called discount rate expresses how much less weight is given to a value that accrues in a year when compared to the same value accruing today, for example, a discount rate of 5 percent means that US\$100 in a year counts as the equivalent to \$95 today.

strong incentives to overdiscount the future in the policy-making process." (Kavka and Warren 1983: 432)

Accordingly, many scholars (Shearman and Smith 2007; Pickering *et al.* 2020) have explored the subject of whether or not democratic institutions are capable of effectively addressing long-term issues. These scholars consider the democratic ideal as too slow and cumbersome to deliver the urgent large-scale collective action needed to tackle environmental problems. These institutions, the argument goes, are not capable of effectively addressing long-term issues because of the political dynamics as a result of short electoral cycles, the complexity associated with long-term issues, and the myopic views of voters and political agents with short-term interests<sup>8</sup>.

On the other hand, scholars tend to argue that the question of climate change is a completely different issue because the ill-effects of climate change will significantly affect the lives and livelihood of future generations. However, in this thesis, I will treat the issue of climate change as multiple facets of temporality. I acknowledge the argument in favour of considering climate change as a long-term issue because the most detrimental effects of climate change will take place in the far future as climate change will continue to exacerbate in the next years. What scholars tend to overlook, is that the interest of citizens *currently* living in climate-vulnerable locations are presently under significant threats and exacerbates intra-generational inequality, not only intergenerational inequality.

If we consult the scientific literature on climate change (Lovejoy, et al. 2019), it is evident that the lives of some individuals are presently under enormous threats due to the accelerated frequency of storms, heat waves, sea level rise, forest fires, severe droughts, etc. Furthermore, the livelihoods of present generations are under significant threat as a result of intensifying land use deforestation, destruction of ecosystems and outdoor air pollution. Hannah Ritchie and Max Roser explain that an estimated 3.4 million people died prematurely as a result of outdoor air pollution in 2017 (in this way responsible for 6 % of global deaths) (Ritchie and Roser 2019). To demonstrate how the "safe operating space" for the Earth system is currently under threat, Rockström et al. (2009) developed the nine planetary boundaries. In 2016, it was estimated that four out of nine planetary boundaries have already been exceeded (climate change, biodiversity, deforestation and nitrogen deposition). Accordingly, the

<sup>&</sup>lt;sup>8</sup> Dryzek and Pickering considers this as a form of path dependency, which means that "established institution[s] may pose a barrier to the creation of alternative institutions that would work better." (2019: 29)

magnitude of threats to present generations necessitates that climate change should not be exclusively considered as a long-term issue, but also as a short-term issue. Although future generations are not eligible for inclusion in democratic decision-makings, it is possible to effectively represent their *potential* interests. Responses to the abovementioned tendencies will be turned back to and fleshed out in chapter four.

The arguments that have been made above pertains to the idea that existing democratic institutions should be redesigned to make them more responsive to the interests of future generations. Future-focused institutions, according to Michael K. MacKenzie, are those that:

"aim, in one way or another, to correct short-term biases in political systems and produce policy outcomes that achieve a better balance between the legitimate concerns of the present and the potential interests of the future." (2016: 25)

Some of the proposals introduced in the literature of future-focused institutions involve Beckman and Uggla's (2017) proposal of an ombudsman for future generations in terms of democratic legitimacy. The ombudsmen constitute "condemnations or recommendations that the concerned party may choose to follow or disregards." (2017: 118) In this way, the recommendations offered by the ombudsmen are legally non-binding but are often empowered to initiate a judicial procedure. The purpose of initiating an ombudsman is to ensure that political institutions conform to "dispositions, laws, regulations, and relevant international treaties and to serve as a representative of the citizens' rights and interests vis-à-vis other public institutions." (Beckman and Uggla 2017: 119)

Might such an institutional transformation offer good effects? The challenge of climate change is far greater than redesigning existing democratic institutions more responsive to the interests of future generations: successfully responding to climate change also requires institutional transformations in the way we think about all those individuals that are currently affected by climate change. It requires climate-focused institutions to rethink how to effectively respond to climate change that shapes effective climate policies that likewise cultivate conditions for flourishing for everyone, especially those presently affected and future generations.

As indicated, this thesis takes its point of departure from the definition of climate-affected citizens. Before clarifying how political institutions should be redesigned to be more responsive to the interests of climate-affected citizens, let us now turn to the next chapter which seeks to characterize climate-affected citizens and whether future generations are entitled as climate-affected citizens.

#### Chapter 3

### Who Counts as Climate-Affected Citizens?

I concluded the previous chapter by sketching out the importance of climate-focused institutions since present institutions primarily focus on short-term issues. This chapter aims to define who climate-affected citizens are and distinguish this notion from other groups that are to a lesser extent vulnerable to climate change. To set the stage for an exploration of how to successfully include and enfranchise climate-affected citizens, this chapter takes a critical look at primarily focusing on future generations that are currently prevalent in the literature (Gardiner 2014; González-Ricoy and Gosseries 2016b) and then offers a new definition of those most affected both presently and in the future, that is, climate-affected citizens. Section 1 of this chapter seeks to answer the question of whether or not future generations are entitled as climate-affected citizens. Section 2 of this chapter then goes on to scrutinize which interests and basic rights should be satisfied to be defined as climate-affected citizens.

#### 3.1. Are Future Generations Entitled as Climate-Affected Citizens?

Before sketching out how to possibly represent climate-affected citizens in democratic institutions, let us start by discussing whether future generations are entitled as climate-affected citizens. It is highly likely that our current actions will adversely affect the ability of future generations (those that do not yet exist) to flourish. Also, it is widely recognized that current generations contribute to dangerous circumstances impinged on future generations as a result of CO<sub>2</sub> remaining in the atmosphere for millennia, nuclear waste storage, depletion of wildlife and biodiversity, destruction of ecosystems, are but a few of the problems created by the current generations whose costs may fall disproportionably on future generations. IPCC (2014a; 2014b) suggests that if we do not aggressively limit the concentration of greenhouse gas emissions, we will drastically overshoot the 2°C threshold and might be on a path to a 4°C by the end of this century. This will have destructive consequences for future generations, where the ill-effects as listed in section 2.1. - including severe drought and flooding, rising sea levels, food and water shortages, and increases in human poverty – will be exacerbated and do more harm the higher temperature rise.

Climate-related decisions enacted by political institutions will not only negatively influence current generations but likewise future generations as a result of whether or not to preserve biodiversity, usage of natural resources or how to successfully adapt to the hazardous

multiplicity of climate change impinged on future generations. This problem posed may be called 'the challenge of political presentism' which is generated by a "structural bias in political decision-making towards the interests of the contemporary generation over the needs of future generations." (Beyleveld, Düwell and Spahn 2015: 551) Since individuals of future generations will not have democratic options to currently participate in the decision-makings of political institutions, it is important to consider whether future generations can be counted as climate-affected citizens and, in this way, be eligible for political representation and democratic inclusion. If this is so, "political action [...] seems to be called for that may require a radical change of current legal and political systems." (Beckman 2013: 775)

However, as we saw in section 2.5., the complications of representing future generations arise as current democracies and individuals tend to prioritize short-terminist issues. In this way, the demos, that is, the people entitled to a democratic say, maintain incentives to greatly overdiscount the future in political decision-makings by focusing on short-term issues, thus making it especially difficult to achieve successful climate reforms. If we argue, as widely supported political philosophers, that democratic institutions have a "moral duty to impartially take the interests of all affected parties into account" (Jensen 2015: 546), then just institutional models aimed at enfranchising climate-affected citizens in positive proportion to their climate-affectedness seems crucial to effectively address climate injustices issues.

This line of reasoning coheres with the All Affected Principle (AAP). According to (a generic version of)

The All Affected Principle: an individual should be enfranchised in democratic decision-makings, if, and only if, the outcome of the decision affects the interests of the individual in question.

AAP has gained widespread attraction as the most common solution to dealing with the 'boundary problem', that is, those individuals who have democratic participation rights in a given polity. This means that what generates a claim to inclusion for an affected person, is that she must be given an opportunity to protect her interests by the decision at stake in the demos<sup>9</sup>. I will turn to this issue more thoroughly in chapter 4.1.

<sup>&</sup>lt;sup>9</sup> This, however, is vulnerable to the implication that virtually everyone in the world should be entitled to participate in a given decision-making if they are affected, suggesting a global democracy (Näsström 2011) and entailing inclusion of dead people in decision-makings (Bengtson 2020).

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Despite the intuitive appeal of mitigating the harmful impacts of climate change, the arguments in favour of intergenerational justice have attracted one serious objection. Let us now turn to this issue.

#### The non-identity problem

The counterargument to effectively represent and include future generations in the decision-makings of political institutions questions whether harmful climate policies can harm future individuals, in terms of making them worse off than they would otherwise be (Parfit 1984). This difficult-to-avoid argument is described as the *non-identity problem* and introduced by philosopher Derek Parfit as an intergenerational ethical problem. The argument captures the fact that those people who will exist in the future heavily depends on the choices current generations make<sup>10</sup>. Roughly speaking, it can be formulated as follows: the present actions of individuals of the current generations determine not just the conditions of future people, but also which people will actually exist. Given that policy choices can have a drastic effect on the decisions individuals make, they will affect who meets whom and who has children when and with whom. Therefore, they can affect who will come to exist at a given time.

Consider the following case much discussed in *Reasons and Persons* (1984) by Derek Parfit to show why this is a problem in view of environmental degradation. In his example, a democratic community must choose between two energy policies: Depletion or Conservation of the Earth's natural resources (Parfit 1984: 361). In another piece, Parfit explicates precisely what choosing between Depletion or Conservation amounts to:

"If we choose Depletion, the quality of life over the next two centuries would be slightly higher than it would have been if we had chosen Conservation, but it may later be much lower. Life at this much lower level would, however, still be well worth living." (Parfit 2010: 114)

We are thus confronted with a choice between policies, one which will have undesirable effects on future people, but their lives are still worth living.

If we choose Depletion rather than Conservation, Parfit goes on to say:

<sup>10</sup> For philosophers like John Broome (2012), the non-identity problem should guide us to discard the language of justice in the intergenerational sphere and exchange it with the language of values.

"[T]his will lower the quality of life more than two centuries from now. But the particular people who will then be living would never have existed if instead we had chosen Conservation. So our choice of Depletion is not worse for any of these people." (Parfit 2010: 114-115)

Let us, for the sake of argument, suppose we choose the energy policy Depletion. This entails that over the next two centuries, the quality of life would be much lower than if we had chosen Conservation because the people at this time would struggle to find alternative resources to uphold a standard of living. The immediate intuitive appeal is to choose Conservation rather than Depletion to sustain the living conditions and well-being of future generations. Therefore, it seems that future generations are undesirably affected by choosing the energy policy Depletion and that, considering their interests properly, would call for enacting the policy of Conservation. Parfit, however, questions this line of reasoning on the grounds that Depletion cannot be said to harm, or be worse for, the individuals who come to live as a result of it being chosen (providing their lives are of decent quality).

Let me explicate precisely why Parfit believes that this is not the best solution according to the non-identity problem. Parfit demonstrates in a lengthy passage that if we choose Depletion, we do not actually harm anyone:

"Given the effects of two such policies on the details of our lives, it would increasingly over time be true that, on the different policies, people married different people. And, even in the same marriages, the children would increasingly over time be conceived at different times. [...] Since the choice between our two policies would affect the timing of later conceptions, some of the people who are later born would owe their existence to our choice of one of the two policies. If we had chosen the other policy, these particular people would never have existed. [...] We can plausibly assume that, after one or two centuries, there would be no one living in our community who would have been born whichever policy we chose." (Parfit 1984: 361)

Since nonexistence is the alternative according to Parfit, it seems that future generations are not negatively affected by the choice of Depletion since they will in fact have not been made worse by it. In this sense, they still get lives that are worth living, which seems more desirable than not having existed at all. In this way, future generations have actually benefitted from the current choice of prioritizing Depletion rather than Conservation.

However, climate-focused institutions should aim at promoting more future-oriented reforms of current political institutions by promoting intergenerational justice to take the interests of future generations sufficiently into consideration. Before clarifying how political institutions can effectively enfranchise and include climate-affected citizens in climate-related decision-makings, let us turn to sketch out which interests and basic rights climate-affected citizens hold.

#### 3.2. The Fundamental Interests and Basic Rights of Climate-Affected Citizens

In what follows, I will claim that the ill-effects of climate change in itself or the outcome of climate-related policies<sup>11</sup> threaten and violates some basic rights and fundamental interests of climate-affected citizens. To fill out this assumption, this section sketches out an account of fundamental interests and basic rights by drawing on political philosophers. Then, I turn to the scientific literature on climate change to demonstrate whether climate change in fact violates many individuals of such basic rights and fundamental interests. If this is the case, I will argue that they are entitled to be characterized as climate-affected citizens and thus a claim for enfranchisement and inclusion in climate-related decision-makings.

To back up this claim about, consider the following argument:

- (1) If the fundamental interests and basic rights of an individual, X, are negatively affected by climate change in itself or the outcome of climate-related decisions, then the individual in question is entitled for protection of their fundamental interests and basic rights by way of democratic enfranchisement.
- (2) The fundamental interests and basic rights of climate-affected citizens X are in fact negatively affected by climate change and/or climate-related decision.
- (3) Therefore, climate-affected citizen X ought to be protected from the harmful illeffects of climate change by way of democratic enfranchisement.

<sup>&</sup>lt;sup>11</sup> Here, I distinguish between harm and violation of basic rights and fundamental interests that result from the illeffects of climate change (e.g., increased risks of food insecurity and the breakdown of food systems linked to climate change, intense drought, flooding, air pollution, etc.) and the outcomes resulting from climate-related policies (e.g., adopting projects that exacerbate climate change by way of, say, establishing massive coalmines thus leading to local air pollution). Arguably, it is possible to be harmed by both sets of criteria. However, it is more difficult to determine whether some climate-related policies in fact harms climate-affected citizens, but we will turn back to this issue in section 4.2 and how to overcome the issue that individuals can voluntarily become climate-affected citizens by moving to the coastline to be entitled to democratic enfranchisement.

We will turn back to this argument in chapter four and below in this section by consulting the scientific literature on climate change to determine whether (2) is true. Still, the argument claim that when an individual is negatively affected by climate change in such a way that it violates one's fundamental interests, they ought to be protected by way of democratic enfranchisement. The individuals covering climate-affected citizens as a homogenous agency have in common that they are the ones upon whom the climate burdens and ill-effects fall most heavily as a number of their fundamental interests are negatively affected as a result of the ill-effects of climate change. Several political philosophers have tackled climate change in relation to human rights models deeply rooted in fundamental interests (Caney 2006; 2009; 2010a; Shue 2016). This rationale is based on the idea that we ought to mitigate the effects of climate change on the basis that climate change threatens and violates a number of fundamental interests. Since the ill-effects emerging from climate change produce outcomes in which climate-affected citizens' fundamental interests are unprotected and undermine certain basic rights (the right to subsistence<sup>12</sup> and the right to an adequate environment), let us determine whether they are in fact threatened and violated. First, let us define what fundamental interests and basic rights amounts to.

Fundamental interests should, roughly speaking, be understood in terms of specifying the goods and things a person requires to exercise her agency autonomously. Fabian Schuppert (2014) distinguishes basic needs from fundamental interests. Whereas basic needs are of absolute necessity for securing a human being's survival, fundamental interests

"specify the goods and things a person requires for enjoying conditions under which a person can be a free and autonomous rational agent, as being a free rational agent is an ideal every person has an interest in, independent of their particular conception of the good life." (Schuppert 2014: 35)

As such, fundamental interests are distinguished from interests that are contingent on a person's particular conception of the good (preferences and desires, say, going to the theatre). However, not all individuals have a fundamental interest at stake as a result of climate change. Consider the following.

<sup>&</sup>lt;sup>12</sup> Subsistence is defined as "unpolluted air, unpolluted water, adequate food" (Shue 2020: 185)

Bill, a wealthy Danish person, has no interest in natural conservation whatsoever. Bill will, however, unknowingly be affected in the smallest sense by climate change as rainfall in Denmark will be more frequent. However, this small increase of frequent rainfall is too low a risk to count as a significant threat to his fundamental interests.

Climate-affected citizens will precisely have a fundamental interest in mitigating the ill-effects of climate change, because their well-being, health and subsistence will be under significant threat. For example, the IPCC spells out various consequences of the ill-effects resulting from climate change for the fundamental interests of present and future individuals because of the projected temperature rise. Before we specifically sketch out these ill-effects from climate change, let us turn to describe the basic rights of climate-affected citizens.

Some political philosophers claim that every person has a set of vital interests<sup>13</sup>, which ground a substantive set of social and political basic rights. One such set of vital interests are violated and threatened by climate change, which includes the "human right to life, physical security, subsistence and health" (Bell 2011: 100) that ought to be protected from violation by human (in)action. Simon Caney (2006) has argued most laconically that climate change, in fact, violates these basic rights because the "current consumption of fossil fuels is unjust because it generates outcomes in which people's fundamental interests are unprotected, and, as such, undermines key rights." (Caney 2006: 255) Climate change has not simply turned into a pervasive standard threat to the basic rights of citizens, but also to all "other rights the protection of which depends on fulfilment of basic rights." (Shue 2020: 185) Indeed, this resonates with the United Nations Office of the High Commissioner for Human Rights that has accentuated the ill-effects of climate change have on human rights:

"Global warming could result in hundreds of millions of people suffering from hunger, malnutrition, water shortages, floods, droughts, heat stress, diseases triggered by extreme weather events, loss of livelihood, and permanent displacement. Indeed, climate change poses a direct threat to a wide range of universally recognized fundamental rights, such as the rights to life, food, adequate housing, health and water." (United Nations 2007)

<sup>&</sup>lt;sup>13</sup> Henry Shue argues that these sets of vital interests should be understood as "survival interests" (Shue 2016: 44) because it is unfair to demand that those most harmed should sacrifice their vital interests on behalf of the trivial interests of those not harmed.

In this way, since basic human rights – rights to life, physical integrity, subsistence and health - are violated for large groups by climate change, it provides an incentive to promote effective institutions that reduce the threats of climate change. Let us take a closer look at how climate change threatens these basic human rights by consulting the scientific literature on climate change. The assumption of (2) in the argument above is briefly explained, that is, that climate change will impose harm on climate-affected citizens by depriving them of their fundamental interests and basic rights<sup>14</sup>.

First, climate change threatens the basic right to physical integrity and security as climate change exacerbates the frequency and intensity of forest fires (e.g., the kind of wildfires recently experienced in California and Australia's devasting bushfires as a result of climate-change-induced drought), sea level rise, storm surges, extreme heat and heavy precipitation events such as flooding has increased in frequency and intensity (IPCC 2014a: 8), and thus affects citizens populations living close to coastlines<sup>15</sup> (MacCracken 2019: 21). For example, a consequence of rapid sea level rise is that small islands and low-lying coastal regions will be lost to the sea and leading to migration because its inhabitants will be forced to move away from their homes. For instance, sea level rise will significantly affect people living in small island states (such as the Maldives and Antiqua) and low-lying river deltas (such as much of Bangladesh).

Secondly, the basic right to subsistence is equally threatened by climate change. Subsistence threatens individuals by the fact that major droughts and crop failures will continue to become more frequent and severe and thus undermine food security (Lovejoy, *et al.* 2019: 209). The disruption of agriculture and crop failures by extreme weather became evident in the 2019 flooding in the US Midwest and Mozambique and Zimbabwe after Cyclones Idai and Kenneth caused "bankruptcies for farmers, transport blockages, spikes in food prices, and absolute shortages of food, as well as drownings of people and animals and the destruction of homes." (Shue 2020: 186) Concerning unpolluted air, it was shown in the last chapter that an estimated 3.4 million people died in 2017 from exposure to outdoor air pollution (in this way responsible for 6 % of global deaths) (Ritchie and Roser 2019) as a result of the combustion of fossil fuels. In relation to climate change threatening health, Greenstone and Fan (2018) claim

<sup>&</sup>lt;sup>14</sup> Indeed, Henry Shue, on whose arguments I draw on in this section, defend obligations to establish institutions that protect the vulnerable by safeguarding basic rights connected to a cosmopolitan approach to global justice. (Shue 2020)

<sup>&</sup>lt;sup>15</sup> Simon Caney suggests that climate change jeopardizes a human right to development and that "climate change violates [human rights] because people from coastal settlements and small island states will be forced to leave." (Caney 2010a: 80) Moreover, Caney argues that climate change jeopardizes fundamental interests in health and people's ability to support themselves. (Caney 2008: 538)

that air pollution "is the greatest current threat to human health globally" (2018: 4). Accordingly, Henry Shue forcefully argues that situations in which some individuals are at the mercy of other individuals, but those others have the power to establish political institutions to protect the vulnerable against the climate risks against which they are not capable of protecting themselves "is the paradigmatic situation calling for the recognition and institutionalization of rights." (Shue 2016: 299)

In this sense, Henry Shue (2016) argues that powerful state actors have a responsibility to pay attention to avoid policies that cause certain kinds of harm<sup>16</sup> and proposes one sufficient set of conditions for a prohibited type of harm, including:

- (1) Policies contribute substantially to harm to people living outside "the territory of the state that controls the policies." (Shue 2016: 156)
- (2) An alternative policy is available that would not harm any vital interest of anyone inside or outside the state that controls the choice among policies.

The determined resistance of powerful states worldwide to adopting a limit on emitting greenhouse gases, to wit, China and Russia's climate targets, are far from corresponding to IPCC's recommendations is precisely such destructive policies, according to Shue, that leave other individuals affected by the lack of climate-related policies. Shue furthermore believes that such instances of inaction on climate change will infringe on and violate the basic rights of individuals in the near and distant future. In his highly influential work *Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy* (2020 [1980]), Shue supports the view that the first duty correlative to any right is the negative duty not to deprive anyone of the focus of the right of subsistence (unpolluted air, clean water or adequate food). The continued use of fossil fuels for energy has become a pervasive standard threat to basic human rights. As a result of climate change, many individuals will be left without healthy air, clean water, food and physical safety for themselves. Shue thus concludes that "Every human has a negative moral duty to stop depriving others of the essentials of life, and those of us who are not helpless have the duty to protect those who are". (Shue 2020: 188)

<sup>&</sup>lt;sup>16</sup> Shue subsequently claims that states should take responsibility for *everyone affected* rather than for only those who live on their own political territory" (Shue 2016: 156). I will turn back to the issue of how it is possible to effectively enfranchise those most affected by climate change in climate-related decision-makings in chapter 4.2.

The outcomes resulting from climate-related policies and/or from the ill-effects generated by climate change is negatively affecting climate-affected citizens to such an extent that they ought to be enfranchised and included in climate-related decision-makings if:

- 1) If an individual's fundamental interests and basic rights are violated and threatened by the outcomes resulting from climate-related policies.
- 2) If an individual's fundamental interests and basic rights are violated and threatened by the ill-effects (e.g., increased risks of food insecurity and the breakdown of food systems linked to climate change, intense drought, flooding, air pollution, etc.) generated by climate change (the right to an adequate environment and the right to subsistence).

One of these conditions must be satisfied to be eligible for democratic enfranchisement and inclusion as a climate-affected citizen.

To sum up: I have (1) specified fundamental interests and basic rights of climate-affected citizens, (2) that they are human rights implying and that these are (3) threatened and violated by climate change with the consequence that they ought to have these protected. This set the stage to continue to scrutinize whether it is possible to include these individuals in the next chapter.

Because climate change negatively affects future generations, a number of political theorists have defended the idea that the interests of future generations should be represented in the democratic process (Gardiner 2014; Karnein 2016). However, these proposals and recent theoretical literature on the subject tend to overlook the plethora of issues relating to institutional means to realize climate justice for citizens that are currently affected by the already-occurring ill-effects of climate change. These possible modes of representation and inclusion for climate-affected citizens to effectively respond and establish political institutions for those most affected are the aim of the next section.

## Chapter 4

# Reforming Political Institutions for Climate-Affected Citizens

In 2018, the Intergovernmental Panel on Climate Change (IPCC) released its report on the impacts of global warming of 1.5°C. The report called for "rapid, far-reaching and unprecedented changes in all aspects of society" (IPCC 2018) to reduce the risks of increasing climate change and exacerbating the ill-effects generated. Reforming current political institutions that endorse a climate-affected view to take the interests of climate-affected citizens sufficiently into account seems attractive as a solution to give them better opportunities to defend their fundamental interests and basic rights.

Therefore, let us now consider a number of ways of reforming political institutions by representing and enfranchising climate-affected citizens in democratic decision-makings. Theoretical literature in democratic theory that discusses and propose new modes of political representation and inclusion by safeguarding the interests of future generations by political representation has recently gained momentum (Caney 2016; González-Ricoy and Gosseries 2016b; Karnein 2016). One way to define representation is that it "presupposes the possibility of authorization and/or accountability." (González-Ricoy and Gosseries 2016a: 19) Some of the earlier proposals include ombudsmen for future generations (Beckman and Uggla 2017), initiation of a global constitutional convention focused on the interests of future generations (Gardiner 2014) and democratic Trusteeship in favour of future generations (Thompson 2010).

While I will explain how several of these proposals can effectively enfranchise and protect the interests of future generations, the ultimate purpose of this chapter is to propose and consider alternative models and political instruments for reforming political institutions in favour of climate-affected citizens. To reiterate, this agency encompasses both current citizens and future generations that will have their fundamental interests and basic rights sufficiently affected and violated as a result of the ill-effects generated by climate change. I shall argue, first, alluding to Henry Shue's arguments (2016: 301), that climate-focused institutions must be global in their nature to protect the rights of citizens threatened by climate change; secondly, that they must also be intergenerational as we saw in section 3.1. The ambition of this chapter is in line with what Robyn Eckersley (2004) argue as a need to "reinstate the state as a facilitator for progressive environmental change rather than environmental destruction." (2005: x) How can we achieve this goal?; Why should those most affected by climate change, the worst-off people, not be given better opportunities to defend their fundamental interests and basic rights? This last question has been largely overlooked in the literature on climate justice and democratic theory.

It is crucial to strengthen the ways of representing climate-affected citizens because, if we look at the scientific literature on climate change, we can see that increased capacity and

voice of vulnerable agents benefit the adaptations and mitigations of climate change (IPCC 2014a: 18). Additionally, the ill-effects of climate change are already materializing. We will turn back to consult the scientific literature on climate change, but, to name a few, rapid sea level rise, more frequent and longer-lasting droughts and common heat waves globally are some of the most disastrous ill-effects of climate change that are currently taking place (Lovejoy et al. 2019: 201).

This chapter thus proposes four reforms to political institutions to how policies are made by the legislature, and the ways in which those policies are implemented, that can effectively respond to climate change by taking into account the interests of climate-affected citizens. The central aim is to improve the accountability of the decision-making process in ways that can take into account the interests of climate-affected citizens. More specifically, it argues in favour of (i) creating an independent body of trusteeship whose members would act as trustees charged with the responsibility and possibly grant authorization to suspend policies that undermines the fundamental rights of climate-affected citizens; ii) democratically enfranchising climate-affected citizens in the demos to better respond to climate change; iii) establishing the model of a sub-majority rule that will grant one-third of the legislators two procedural rights to protect the interests of climate-affected citizens which have the authority to delay and suspend unsustainable policies; iv) guaranteeing a fundamental right to subsistence and the right to an adequate environment by way of constitutionalization as a means to effectively advance climate justice by ensuring that they have democratic control over the decisions that significantly affect them. Broadly speaking, then, these four proposals can be divided into three wide-ranging classifications: (1) proxy representation (section 4.3); (2) differential voting schemes (section 4.2); and (3) counter-majoritarian instruments (section 4.1. and 4.4).

With this brief overview in mind, let us first consider the first proposal of an independent body of trusteeship to protect the fundamental interests and basic rights of climate-affected citizens.

#### 4.1. Trusteeship in Favour of Protecting Climate-Affected Citizens

Climate change is, as noted earlier, an issue of intergenerational justice because the greenhouse gas emissions produced today will generate damages to future generations<sup>17</sup>. But since future people do not exist yet and thus impossible to enfranchise, how could we possibly represent

<sup>&</sup>lt;sup>17</sup> See footnote 5 for an explanation of the long-lasting atmospheric residence time of greenhouse gases.

them? According to Anja Karnein, one way to secure the political representation of future generations in democratic decision-makings would be to "eventually mainstream equal consideration of future generations into the general public discussion" (Karnein 2016: 96).

Let us now turn to the idea of installing a body of representation for climate-affected citizens and how to overcome the implications of the inability to prevent undesirable legislations that exacerbate the ill-effects of climate change. A simple way to safeguard the fundamental interests of future generations is to include them in the decision-making process. Some have defended the idea that some seats in legislative assemblies should be reserved for representatives of future generations (Ekeli 2005), an idea which we will turn back to in section 4.3. Others believe what is needed is a new set of administrative bodies – a democratic trusteeship (Thompson 2010) - empowered to revoke laws and policies conflicting with the interests of future generations. This proposal functions as a counter-majoritarian instrument in that it claims that electoral democracy is by its nature ill-equipped to successfully respond to climate change (Pickering *et al.* 2020; Shearman and Smith 2007). Therefore, it is essential, the argument goes, to introduce institutional improvements that impede the will of the majority (therefore the term 'counter-majoritarian).

To back up the claim of including climate-affected citizens included in climate-related decision-makings, consider the following argument:

- (1) If the fundamental interests or basic rights of a climate-affected individual, X, are negatively affected by climate-related political decision, Y, or from climate change in itself, then X ought to be included in Y.
- (2) The fundamental interests or basic rights of climate-affected citizens are in fact negatively affected by climate-related political decisions or from climate change in itself.
- (3) Therefore, climate-affected citizens ought to be included in climate-related political decisions.
- (4) If climate-affected citizens ought to be included in climate-related political decisions, then there is a *pro tanto* reason to implement a trusteeship.
- (5) Therefore, there is a *pro tanto* reason to implement a trusteeship in favour of safeguarding the fundamental interests and basic rights of climate-affected citizens.

Since future people, the argument goes (Thompson 2010), are the kind of individuals that can have, although not make moral claims, we should try to ensure that future people have

democratic control over the decisions and policies that affect them. This should be done by protecting them in the demos because present generations contribute to harmful climatic events that are then impinged on future generations. In what follows, because future generations cannot be present in the undertakings of democratic decision-makings, this section critically examines a suggestion that proposes an establishment of an independent body; a trusteeship in favour of representing and protecting climate-affected citizens in the democratic process<sup>18</sup>. Although theoretical literature in political philosophy and democratic theory propose political representation by means of establishing a democratic Trusteeship in favour of safeguarding the interests of future generations, I will rather attempt to sketch out how to successfully represent climate-affected citizens that are also *currently* affected by a number of ill-effects generated by climate change. Establishing an independent body of trusteeship could be to choose a commission or a citizens' assembly, or even a combination of both<sup>19</sup>.

For Dennis F. Thompson (2010), the proposal of democratic trusteeship is specifically intended for protecting the interests of future generations by institutionalizing a principle where present generations should act as 'trustee' on behalf of protecting the interests of future generations. Thompson argues that the principle

"[A]ssumes only that future citizens should have a voice in the making of the laws by which they are bound, and should be able to hold accountable officials who carry out those laws. To have an effective voice and to exercise effective accountability, they will need a democratic process that preserves their competence to control their government." (Thompson 2010: 27)

Thompson's proposal is designed with the inspiration of the Tribune of the Plebs in the Ancient Roman Republic. The Tribune of the Plebs did not cast its votes in political decision-makings, but was created to defend the rights and interests of the plebs when these interests and rights were violated or at stake. The Tribune of the Plebs did have some certain political power as a

<sup>&</sup>lt;sup>18</sup> This solution is an adaption of Thompson's (2010) proposal of a democratic Trusteeship for future people. Whereas Thompson's proposal focuses on sustaining the democratic value of making collective decisions – a democratic Trusteeship – this proposal aims to secure that the trusteeship does have a vote in the demos. In this way, this proposal will have the power to strike down and intervene in legislations that conflicts with the interests of climate-affected citizens.

<sup>&</sup>lt;sup>19</sup> One example of an entrenched trusteeship as a constitutional objective was established in South Africa in 1996 in the constitutional environmental right. This body of trusteeship is installed to have the environment, for the benefit of "present and future generations' through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development" (Statutes of the Republic of South Africa Constitutional Law 1997: 1253).

way of intervening in legal proceedings, veto laws and by forcing to reconsider the legislated proposals.

The view of democratic trusteeship proposed by Thompson is supported to i) guarantee the perennity of the democratic process that gives future generations at least as much capacity for collective decision-making as a particular democratic polity have; ii) by having their votes casts by the trustee to protect their fundamental interests by having the right to intervene in policies that undermines their interests. Thompson claims that we should establish an independent body whose members would act as trustees charged with the responsibility to protect the interests of future generations.

While the trusteeship view has several attractions alluded to above, one may object to it on the grounds of lack of accountability. Accountability is required to ensure that those who are granted independence do not abuse their power. Thompson himself responds to this line of criticism by arguing that the proposal of trusteeship does not ignore accountability:

"The relative lack of accountability is also partly offset by setting limits to the powers of the trustee institutions. [...] It might be necessary to empower a constitutional court to review some actions by the trustees. But with regard to future citizens, the constraints on trustees' authority should be relatively modest to avoid impairing their ability to fulfil their distinctive duties, with which ex hypothesi no other political authority is concerned." (Thompson 2016: 194)

One of the more attractive features of a trusteeship is offered as a response to this line of criticism called *suspensive interventions*. This suggestion is put forward as a way for the trustees to have authority to stop "temporarily actions by the legislature or executive that could be shown seriously impair the capacities of the democratic process in the future." (Thompson 2010: 32) The trusteeship can prove to be a necessary instrument to protect and identify the values that are likely to be neglected and "prescribe priorities that should be adopted in creating and reforming institutions." (Thompson 2010: 28) As such, the institution of the democratic trusteeship can be authorised – both on national and international levels – to postpone or suspend the enactment of a law that could harm and infringe upon climate-affected citizens in ways that violate and undermine the fundamental rights and basic rights (to reiterate, the "human right to life, physical security, subsistence and health" (Bell 2011: 100)) of these citizens.

Appealing to such underlying rationales in the present context seem appropriate in the case of safeguarding the interests of climate-affected citizens. To bracket this proposal, let us suppose that, for the sake of argument, a national polity decides to vote in favour of putting a new coal-fired power plant into operation that doubles a country's greenhouse gas emissions. What then happens by the institutionalization of the trustees is that advocates intervene to counteract the proposal of putting the coal mine into operation on behalf of the interests of climate-affected citizens. The independent body of trustees will have the power to make use of the suspensive veto to delay laws that risk damage and exacerbate the risks of violating the basic rights and fundamental interests of climate-affected citizens. Certainly, the trusteeship will attempt to hold accountable the legislators who accomplish the law by arguing that the proposal is clearly in conflict with the interests of climate-affected citizens.

Moreover, Kristian Ekeli claims that it is likely that this sort of representation "will increase the debate, awareness, and knowledge among both citizens and legislators about issues affecting future generations" (Ekeli 2005: 441) amounting to an "educative process" (Ekeli 2005: 448). However, this might be achieved through other means, by, for example, promoting the sustainable agenda without genuine representation of future generations. Nevertheless, a genuine representation of climate-affected citizens by use of a democratic trusteeship may have stronger symbolic power:

"In a number of cases, future generations are among the parties who are significantly affected by present democratic decisions. This seems to imply that at least democratic decisions that significantly bear upon the lives of posterity cannot be regarded as legitimate unless future people have been given a voice in the decision making process. From this line of reasoning, it seems to follow that future generations ought to be represented in legislative assemblies in cases that significantly affect them, provided that such representation is possible". (Ekeli 2005: 443)

Ekeli argues that democracy implies that (representatives of) all affected parties should participate in decision-makings. Because future generations are affected by a number of democratic decisions, most notably climate-related decision-makings, then future generations should be represented in democratic deliberations. The principle that implies that all affected parties should participate in decision-makings is called the All Affected Principle (AAP).

This completes this section's argument. In a nutshell, it goes along these lines: because the fundamental interests of a climate-affected citizen, X, is affected by climate change in itself

or/and from the outcomes of climate-related decision-makings, Y, then there is a *pro tanto* reason to implement a trusteeship in favour of safeguarding the fundamental interests and basic rights of climate-affected citizens. The trusteeship can serve as an effective tool to protect the interests and rights of climate-affected citizens since the trusteeship can postpone or suspend the enactment of a policy that could harm the rights and interests of climate-affected citizens.

In the next section, let us turn to the issue of whether it is possible to enfranchise climate-affected citizens in the demos.

#### 4.2. Democratic Enfranchisement of Climate-Affected Citizens

We have now seen that the proposal of establishing a trusteeship can serve as a political tool to protect the interests and rights of climate-affected citizens by way of postponing or suspending legislating unstainable policies that could harm and infringe upon climate-affected citizens in ways that violate and undermine their fundamental rights (the human right to life, physical security, subsistence and health). Let us now examine a different proposal by way of differential voting schemes.

While those most affected by the ill-effects of climate change may have priority because of their vulnerability to risks and ability to counteract them, they often lack the capacity to give voice to their concerns (Dryzek and Pickering 2019). In what follows, I will argue that it is necessary to ensure an impartial deliberation that takes the interests of all affected parties within climate policies sufficiently into account. Accordingly, the question that arises is: why should those most affected by climate change, climate-affected citizens, not be granted better opportunities to defend their fundamental interests and basic rights by democratic enfranchisement? This question has, notably, attracted scant philosophical attention. Consider choices that evidently affect citizens that are affected by climate change, such as choices regarding renewable energy. These choices affect citizens all over the world for many centuries as well, in that way affecting future generations. This proposal is, however, specifically intended for citizens that are currently affected by climate change since if we grant future people votes by following the democratic rule of one person, one vote, it will outweigh all the votes of the present generations. Accordingly, representing future generations by protecting their interests by means of new forms of political representation such as granting representatives of future people a veto right (as put forward in the last section and in the next section) seems more intuitively appealing to overcome this crucial problematic of granting future generations votes. This also goes against the democratic egalitarian ideal of 'one person,

one vote', but it does not exclude citizens within the border of, say, Denmark. It specifically aims to enfranchise those citizens that are affected by climate change in itself or from the outcomes resulting from climate-related decision-makings in such a way that it violates and undermines the fundamental interests and basic rights of climate-affected citizens.

To back up the claim of enfranchising climate-affected citizens in climate-related decision-makings, consider the following argument:

- (1) If the fundamental interests or basic rights of climate-affected citizen X are negatively affected by political decision Y or from climate change in itself, then X ought to have a say in Y.
- (2) The fundamental interests or basic rights of climate affected citizens are in fact negatively affected by climate-related political decision Y or from climate change in itself.
- (3) Therefore, climate affected citizens ought to have a say in climate-related political decision Y.
- (4) If climate affected citizens ought to have a say in climate-related political decisions, then there is a *pro tanto* reason to democratically enfranchise them in climate-related decision-makings.
- (5) Therefore, there is a *pro tanto* reason to democratically enfranchise climate-affected citizens.

The reason for inclusion on this rationale would be that it is unfair to X, *ceteris paribus*, that Y can affect X through democratic decision-makings, when X is both left without political power in decision-makings and is likewise negatively affected by climate change. One remark before we move on: being included in a political institution means having the right to vote on a given decision in the demos. The idea of premise (1) is called the All Affected Principle (AAP), which we will return to below.

As mentioned earlier, the question of who should be included in the process of democratic decision-makings has been known as the boundary problem in democratic theory. This question is of interest to this project in the sense that how the demos is constituted affect which decisions will be enacted. A number of empirical studies will support this line of reasoning to demonstrate that those vulnerable to climate change will be associated negatively with climate scepticism.

First, it might be the case, that if children and future people were included in deciding on a specific climate policy, say, whether or not to implement renewable energy rather than coal, the outcome would be in favour of implementing renewable energy. A recent poll in Britain indicates that for nearly half of all voters aged 18 to 24, climate change represents the most pressing issue today, where the age group over 65 counts for less than 20 percent. In the United States, only 10 percent of eligible voters aged 18 to 29 describe climate change as a "not very serious problem," compared with 40 percent of those over 65 (Runciman 2019).

Moreover, empirical studies suggest that vulnerability to the risks related to climate change correlate with lower levels of climate scepticism and is considerably correlated with a commitment to proactive climate policies. For instance, people living in countries that are affected by the ill-effects of climate change – such as air pollution - are significantly more likely to strongly favor regulatory measures on coal-based energy specifically out of concern for climate change (Whitmarsh 2008). Further studies spell out that there is a clear connection between being more vulnerable and affected by the effects of climate change reflects the stronger concern of climate change. Three in ten or fewer in the U.S., Europe (median of 27%) and the Middle East (median of 27%) express serious concern about the personal effects of climate change. However, many sub-Saharan African countries are especially affected by the effects of climate change. Around 88 % in Uganda, 77 % in Burkina Faso and 73 % in Ghana are very concerned about the threats posed by climate change (Stokes et al. 2015). As in sub-Saharan African countries, countries in the Asia-Pacific region that are particularly vulnerable to the effects of climate change are among the most concerned about its personal impact. For instance, the Philippines, ranked second-most at risk from climate change in a recent United Nations report, reports the greatest concern about the personal toll of climate change among the Asian nations surveyed (Ibid.).

Hence, if it is solely the younger age group that was included in deciding on implementing renewable energy and those most affected by climate change, they would, presumably, vote in favour of the implementation. Thus, the boundary problem is of both practical and theoretical interest.

If we argue, as widely supported political philosophers, that democratic institutions have a "moral duty to impartially take the interests of all affected parties into account" (Jensen 2015: 546), it would be interesting to discuss whether those significantly affected by climate change should be enfranchised in positive proportion to their climate-affectedness in the demos, and to what extent. A commonly, if not the most, proposed solution to the boundary problem, that is, the problem of constituting the demos, that coheres with enfranchising those

affected by a particular decision is the All Affected Principle (henceforth: AAP) which has recently gained momentum in democratic theory. According to (a generic version of):

The All Affected Principle (AAP): an individual should be included in the democratic deliberations, if, and only if, the individual in question is affected by the decision at stake<sup>20</sup>.

The underlying normative logic behind the AAP is that people should have decision-making power over that which affects them, or that which makes them better or worse off. This version of AAP delineates the demos by including those affected on the basis of i) it gives one an opportunity to protect their interests (Goodin 2007); ii) it gives one the capacity to be selfgoverning; and iii) the utilitarian rationale that maximizes welfare (Bengtson and Lippert-Rasmussen forthcoming). This version of the AAP is called the *causally affected* version by modifying the political boundaries<sup>21</sup>. This version, roughly speaking, states that because policies have causal effects on citizens' interests, those citizens are granted entitlement to participate in that specific decision-making in the demos that affects them. In this way, AAP challenges existing mechanisms in democratic institutions by making democratic inclusion a question of who is affected by decision-making apparatuses and political institutions. The AAP is favored as a democratic tool because it will enfranchise those most affected by the decision, Y, promoting what climate justice demands. As we saw in section 2.3., the literature in climate justice defends the idea that people that are affected and living in extreme poverty should not only refrain from bearing the burdens of climate change but also protected (e.g., Caney 2006). Granting climate-affected citizens a higher weight of votes in democratic decision-makings, makes the democratic system more responsive to those affected by climate change by increasing the prospect of sufficiently taking their interests into account.

According to a specific version of AAP (Goodin 2007), how much of a say you ought to have over an issue depends on how much your interests are at stake resulting from that issue. Gustaf Arrhenius (2007: 13) suggests that judgements of affect can be based upon a prior theory

<sup>&</sup>lt;sup>20</sup> Other political theorists that subscribe to some version of AAP consists of Robert E. Goodin (2007), Harry Brighouse and Marc Fleurbaey (2010) and Gustaf Arrhenius (2007)

<sup>&</sup>lt;sup>21</sup> This line of reasoning is compatible with the view of democratic instrumentalists. The crux of democratic instrumentalists appeals to the likely outcome of the procedure matter, and that the procedure that generates the greatest outcome should be selected. On the other hand, a proceduralist endorses the democratic procedure irrespective of its outcome.

of interests, and an examination of the consequences of decisions reflecting those specific interests. Drawing on some of these insights, let us suppose, for the sake of argument, that:

#### Scenario I

There are two sets of people, A and B. A is a citizen of Bangladesh and B is a citizen of Denmark. AAP is in place, where inclusion and exclusion depend on possible consequences of possible decisions. The Danish polity has to decide whether or not to reduce its contribution of economic foreign aid to Bangladesh, call this Y. Because the political decision governing Y affects A – even to a larger extent than B, A ought to be included in the Danish decision-making on the matter.

AAP would thus require the inclusion of A in democratic decision-makings qua being affected by the decision in Denmark, which A will in this example if Denmark withdraws from their foreign aid programme. As such, affectedness cuts across state boundaries and, according to the generic version of AAP, the receiving country or the individuals located in the receiving country, should be given a say in whether or not Denmark should reduce its contribution of economic foreign aid.

Accordingly, the AAP has been widely criticized and contested, primarily because the generic version of AAP implies radically over-inclusionary implications. There are several over-inclusionary implications with this generic version of AAP Since everyone is *possibly* affected by every possible decision enacted by political decision-makings, concerns about the practicality (or the absence of) have emerged (Goodin 2007: 64). As other critics have pointed out, supporting a generic version suggests that AAP entails the participation of dead people (Bengtson 2020) or future generations in the demos (Tännsjö 2007). This suggests that the generic version of AAP takes no account of the obvious point that a decision may impact people's interests to different degrees. If, for example, we turn to the following scheme:

Individual	Affectedness (on a level of 10)	Votes on the matter
X	1	1
Y	10	1

Here, let us say that the level of affectedness is '1' if an individual is affected to the lowest extent possible by the outcome of a decision and '10' is the greatest extent one can be affected.

AAP would argue that although X is affected to a lesser degree than Y, they are both affected by the policy in question and should equally be granted the same weighting of votes.

As a solution to this problem, another modified version of the AAP argues that decision-making power should be allocated in proportion to one's stakes in the decision:

Independent Proportionality: "[A person's stake in a decision] requires that we enfranchise all and only those people whose interests are affected by a decision and that we assign voting weights in positive proportion to people's degree of affectedness, measured for each decision separately." (Angell and Huseby 2020: 12)

The justifications of this modified principle of AAP pertains to the idea that AAP allows for a proportional view - in positive proportion - of affectedness (cf. Brighouse and Fleurbaey 2010) according to which those whose interests are more affected by a decision should have more influence than those whose interests are less affected, measured for each specific decision.

However, let us consider one scenario that particularly harmonizes with the Independent Proportionality principle to see the weakness of the proposal:

#### Scenario II

Let us assume that the Swedish citizens have to democratically decide on whether or not to phase out the oil by replacing it with, say, renewable energy. National statistics indicate that 97 % of the citizens of Sweden decides to vote in favour of phasing out oil, although their fundamental interests or basic rights won't be harmed. However, the Swedish polity decides to implement AAP to effectively achieve the desired outcome of phasing out oil. Moreover, let us suppose that, following the decision of phasing out oil, all other countries subsequently decide to phase out the oil. Consequently, all oil companies are shut down and the owners and workers of the oil refineries in, say, Saudi Arabia, will be without a job and have to shut down their life's work.

In this second hypothetical scenario, the decision to phase out the oil is clearly a good decision for mitigating the ill-effects of climate change. However, since the owners and workers of the oil company are deeply affected by the outcome of the decision as they have to abandon their life's work and important income, their interests at stake and the degree of affectedness are

certainly greater than the citizens of Sweden. Consequently, according to the Independent Proportionality version of AAP offered by Kim Angell and Robert Huseby (2020), it makes sense to democratically enfranchise the owners of the oil refineries and should be assigned a higher weight of votes than the Swedish citizens on the matter in question. In this way, the owners of the oil company can decide to democratically cast their votes to effectively vote against the Swedish proposal to phase out oil. This democratic voting scheme could look like this:

Individual	Affectedness (on a level of 10)	Votes on the matter in a	
		Swedish polity	
X (Swedish citizen)	1	1	
Y (A citizen of Bangladesh)	7	2	
Z (A citizen of Saudi Arabia)	3	0	

This proposal, however, has several important implications. First, if those polluting more than one's fair share should have a fairly larger say than, to continue in the same jargon, the citizens of Sweden, then it might prove to be difficult to accomplish an enactment of policies that contributes to sustainable policies (implementing renewable energy rather than fossil fuels). Secondly, rather than disenfranchising polluters in climate-related decisionmakings, AAP demands that they should be enfranchised by granting them a higher weight of votes than the Swede. One might object to this on the basis of social justice. This line of reasoning moves away from the ideal of social justice because AAP counterintuitively prioritizes to enfranchise those well-off (the owners of the oil refineries) rather than "define stakes in a way that gives priority to the worst-off to any desired degree" (Brighouse and Fleurbaey 2010: 155). Hence, let us try to resuscitate AAP so that it doesn't imply that the owners of the oil companies should be included in climate-related decision-makings. One way to resuscitate the AAP so the principle avoids enfranchising the owners of the oil companies in climate-related decision-makings, entails an alternative version which claims the sufficient reason for inclusion and enfranchisement in climate-related policies is that one should be sufficiently affected by climate change in itself or by the outcome of climate-related policies. What sufficiently entails in this case, is that the fundamental interests and basic rights (cf. section 3.2) are violated and harmed. In this way, the resuscitated principle requires that we enfranchise all those people in the current scheme of democracy that are sufficiently affected

by the ill-effects from climate change and the outcomes of climate-related policies and that we assign voting weights in positive proportion to one's degree of affectedness. Let this idea become clear by way of the following voting scheme illustration:

Individual	Affected by climate change or from the	Votes	on	the
	outcome the policies (on a level of 10)	matter		
X	3	1		
Y	10	2		

Here, let us, for the sake of argument, say that if one's degree of affectedness is over '8', then one's fundamental interests and basic rights are violated and harmed as a result of either i) climate change in itself or ii) from the outcome of climate-related policies. On the basis of social justice, this idea seems promising because owners of the oil refinery company will not be entitled to enfranchisement. After all, their fundamental interests and basic rights are not harmed (the right to an adequate environment, the right to subsistence).

Let us, therefore, then imagine one last scenario which satisfies the underlying rationale of the revised principle (i.e., that one has to be affected by climate change *in itself* or from the outcome of climate-related policies).

#### Scenario III

Suppose that the Swedish polity sets out deliberately to decide whether or not to phase out its oil refineries and, in the process, accepts the revised principle of AAP which states that one has to be affected by climate change *in itself* irrespective of the outcome of climate-related policies. The owners of the oil companies decide to move their factories to the coastline, therefore meeting the fundamental conditions for inclusion and enfranchisement, that is, affected by climate change in itself. Since the owners of the oil companies are vulnerable and possibly affected by flooding and sea surges – which counts as climate-affected - they are entitled to a large say and, consequently, decides to vote against the policy that phases out oil.

Indeed, in this hypothetical scenario, it would seem very clear to enfranchise the owners of the oil company because they will be negatively affected by climate change in itself since they relocated all their oil refineries to the coast. With this in mind, I argue that we need to retain

the all-affected principle and its normative claims but refine it further to ensure that the principle would afford a better claim to legitimacy to those most affected that do not contribute significantly to climate change by current decision-making apparatuses.

If we, instead, define stakes in AAP referring to Brighouse and Fleuerbaey's (2010) idea of given priority to the worst-off in a way that promotes social justice, owners of oil companies should not be granted enfranchisement in climate-related decision-makings. Even if the owners of the oil companies are expected to be affected due to financial loss, the interests of the worst-off should be prioritized rather than the owners to bolster the fundamental interests of this group on the basis of social justice. By adopting this alternative version of AAP, those who are accountable for making the problem of climate change significantly worse by emitting more than one's fair share of greenhouse gases should not be entitled to inclusion in the decision-makings. Yet, proponents of AAP cannot be certain that those affected by climate change in itself or from the outcomes of climate-related decision-makings will use their increased voting weights to promote rather than undermine social justice. However, as the empirical studies indicate, there is good reason to believe that those vulnerable and affected by climate change will promote climate-friendly initiatives by regulatory measures.

To sum up, it has been argued that those individuals that are having their fundamental interests and basic rights violated by political decision Y or from climate change in itself, ought to have a say in that decision Y. To achieve this, it has been argued that one way of giving these climate-affected citizens a say in a specific decision-making, is to enfranchise them in climate-related decision-makings.

With these points in mind, let us turn to which objections might be targeted against this proposal. In the next subsection, it is the aim to discuss a potential objection to the AAP, which has been largely overlooked. As critics have already pointed out, the generic version of AAP has radically inclusionary implications in terms of constituting the *demos* by either suggesting that AAP entails a global democracy (Näsström 2011), including future generations in decision-makings (Tännsjö 2007), participation of dead people in a particular democratic polity (Bengtson 2020) or by violating the democratic ideal of political equality. Consequently, I will not expatiate more on these objections. However, I want to discuss another possible objection to the AAP, namely, why is it the case that the necessary and sufficient condition for a claim of inclusion is based on affectedness and not in knowledge in a specific area of expertise? Let us now turn to discuss this issue.

#### The Epistocratic Objection

As explained in this section, I have argued decision-making power should be allocated in positive proportion to one's stake, that is, how affected one is in terms of having their fundamental interests and basic rights sufficiently affected in a negative way which includes, to reiterate, the "human right to life, physical security, subsistence and health" (Bell 2011: 100). This subsection explores a possible objection to the proposal of a proportional weighting of votes in positive proportion to one's affectedness, namely: if our best hope of effectively responding to the crisis of climate change rests on deferring to organisations with specialized knowledge, the question arises whether we should reject the idea of allocating the weighing of votes on the basis of affectedness, but rather constitute it on the basis of knowledge. As Angell and Huseby rightly claims, a proponent of the principle of Independent Proportionality cannot be certain that "the worst-off will use their increased voting weights to promote rather than undermine social justice." (2020: 10) Hence, the proposal of democratic enfranchisement to those most affected, allocated in positive proportion, cannot be certain that those affected by climate in itself will use their increased voting weights to promote rather than undermine social justice (although drawing on empirical studies suggests it is the case as emphasized at the beginning of this section). In this subsection, I will explore one challenge to the proposal in 4.2. which argues that epistocracy is preferable to democratic institutions because the desired outcome of effective climate policies will be delivered.

Recently, many political institutions have attempted to address numerous urgent, multidimensional problems, such as COVID-19 and climate change, by specifically consulting climate scientists and health scientists to respond to these crises. International organisations such as the World Health Organization (WHO) can provide better solutions to the COVID-19 pandemic than the IPCC (Intergovernmental Panel on Climate Change), which instead can arguably provide better solutions to mitigating the ill-effects of climate change than WHO because of their specific field of expertise. When such issues of climate change arise, Anne Jeffrey claims, "our best hope of resolving them effectively lies in deferring to institutions with specialized knowledge." (Jeffrey 2017: 1) Accordingly, Jeffrey defends a form of government that is best equipped to resolve problems such as climate change and COVID-19, namely: limited epistocracy.

Etymologically, *episto* is derived from the Greek word of epistēmē which means understanding or knowledge, and *cracy* meaning a form of government. As such, the combined meaning of the words is the rule of those who know and was prominently developed by David

Estlund (Estlund 2008). Epistocracy is thus a qualified rule by expert institutions, where these institutions get their political authority by way of their specialized knowledge and their ability to generate optimal solutions in their specific area of expertise. Epistocracy distinguishes itself from democratic ideals by way of the absence of political equality in the selection of the leaders.

The form of epistocracy Jeffrey defends, limited epistocracy, is ruled by a certain kind of organized body of experts, which she calls *specialized institutions* with the political authority to make decisions and issue commands in the area of their specific expertise. The discussion over whether epistocracy is preferable to democracy or other forms of government for that matter is a relatively new debate in the field of democratic theory (Brennan 2016). The specific form of epistocracy I will touch upon is the limited epistocracy defended by Jeffrey (2017) because this form of epistocracy *can* go hand in hand with democratic values. There are various limited epistocracies but the kind of epistocracy Jeffrey defends is on the grounds of rule by the specialized institution, with the "political power to make decision and issue commands in the area of their expertise." (Jeffrey 2017: 2) In this way, the body of experts' rule is limited in the sense that it is within the narrow area of expertise the body can submit instructions that can effectively – with the knowledge they hold - respond to the issue at hand. Let's consider the arguments in favour of this type of limited epistocracy.

Intergovernmental bodies such as the IPCC or an independent body of experts such as The Danish Council on Climate Change (*Klimarådet*) - which issue suggestions for effective climate policy solutions to the Danish Parliament – maintains that it is of utmost importance to limit global warming to 1.5°C rise in temperature rather than 2.0°C rise in temperature (which is most likely to happen). This is so since climate-related risks for natural and human systems are "higher for global warming of 1.5°C than at present, but lower than at 2°C" (IPCC 2018: 5), including projected higher risks from temperature extremes (Ibid.: 7), drought (Ibid.: 8), risks associated with sea level rise (Ibid.: 8), impacts on biodiversity and ecosystems (Ibid.: 8), ocean acidification (Ibid.: 9), risks to "health, livelihoods, food security, water supply, human security, and economic growth" (Ibid.: 9), to name a few, are projected to increase and are project to occur more frequently at 2.0°C rise in temperature compared to a 1.5°C rise in temperature. This view of an independent body of experts has immediate intuitive appeal because the extensive knowledge in subjects such as climate science or virology cannot be expected to be mastered by the average citizen nor elected politicians.

However, in 2020, President Xi Jinping announced that China will aim to hit peak emissions before 2030 and for carbon neutrality by 2060. Moreover, the Paris Agreement on

Climate Change aimed to keep temperature rise "well below" 2°C above preindustrial levels without any form of accountability. This stands in contrast to the scientific literature on climate change, for example, the *Special Report: Global Warming of 1.5 °C*, which importantly states that the world is now completely off track, heading instead towards a 3°C rise in temperature. As such, Jeffrey concludes that intergovernmental- and independent bodies, such as the examples of IPCC and The Danish Council on Climate Change put forward above, are not specialized institutions in the sense that they merely put forward recommendations, and not more than that (Jeffrey 2017: 4-5). The intergovernmental- and independent bodies of IPCC and The Danish Council on Climate Change lack the power to issue policies that will be enacted.

The arguments in favour of limited epistocracy belong to the idea that the bodies of IPCC and The Danish Council on Climate Change are better equipped to decide and act quickly in emergencies and effectively mitigate consequences of climate change before a 2°C rise in temperature occurs than the voting population based on their expertise in climate science. Accordingly, Jeffrey argues that

"along with the evidence that the voting population is largely misinformed or underinformed about hard and social scientific facts that bear on what policies would actually best promote citizens' welfare, limited epistocracy looks much more attractive than democracy. The effectiveness of the state in securing wellbeing would be dramatically increased by farming out decisions and implementation of policy to specialized institutions". (Jeffrey 2017: 7)

The thrust of this rationale is, accordingly, that since a large majority of citizens aren't capable of getting acquainted with specialised subject matters, such as climate science or epidemiology, then it seems more attractive to hand over the rule to those acquainted with the literature on climate change or epidemiology in the expectation that they will issue policies that better respond to complex problems.

To achieve robust political inclusion from marginalised groups (e.g., religious and cultural groups), Jeffrey continues to form a Conditional Form Thesis\*, where citizens can "fairly experiment with different responses to the same information and even help to generate suggestions to the specialized institution for further options." (2017: 19) This thought becomes clear by way of example. Let us suppose that the Danish Council on Climate Change were authorized by the Danish Parliament to set limits on citizens' annual carbon emissions and

issue policies that reduce the amount of yearly greenhouse gas emissions to a greater extent than the Danish Parliament is capable of. In deliberating on such options, citizens, Jeffrey argues, "might come up with new, creative ways to offset and reduce their emissions." (2017: 19) In this way, groups with conflicting interests – say, the need for nuclear power – will not feel marginalized and deprived of inclusion in democratic deliberations. But what appeals to advocates of limited epistocracy is that this form of rule offers citizens benefits that democracy is unable to offer, since politicians don't have the relevant competence in complex areas such as climate science or epidemiology in times of crises.

Let us now turn to another rationale often adduced in support of epistocratic principles, namely, an establishment of an *epistocratic veto* concerning how to effectively respond to the crisis of climate change by putting knowledge at the centre.

#### Epistocratic Veto

In his highly influential work, *Against Democracy* (2016), Jason Brennan proposes a suggestion in which a state grants universal suffrage with epistocratic veto. This epistocratic veto has the power to strike down a law, rather than creating a law, and is open to all members of society. Brennan suggest that

"Citizens may join the epistocratic council only by passing rigorous competency exams, in which they demonstrate strong background knowledge in the social sciences and political philosophy." (Brennan 2016: 215-216)

In this way, citizens are not excluded from political inclusion but are included and selected on meritocratic basis by way of competency exams in a specific area if they turn out to demonstrate necessary knowledge. If a citizen succeeds in passing the exam, she is obtained for joining the epistocratic council. As mentioned earlier, the epistocratic council has the power to exert the epistemic veto. This epistemic veto can veto "any (or almost any) political decisions made by the general electorate or its representatives, on the grounds that the decisions were malicious [or] incompetent" (Brennan 2016: 216). This seems appealing on the basis that if we want to effectively respond to the crisis of climate change, it is necessary to take scientific means from various areas of expertise into consideration. If it is not the case that a government is unable to issue policies that curb the atmospheric concentrations of greenhouse gases and instead issue

policies that continue to contribute to the ill-effects of climate change, the epistocratic veto has the power to strike down a democratic decision.

Drawing on this idea, let us suppose that the Danish Parliament decides to spare the agriculture sector which emits more than one-third of the overall emissions in Denmark (Danmarks Naturfredningsforening 2021) from limiting their annual emissions. Since this clearly stands in contrast to proposals rooted in the scientific literature on climate change (IPCC 2018; 2019; Lovejoy, *et al.* 2019), it seems extremely plausible in relation to the scientific literature that the epistemic council will exert the veto to overturn the decision to spare the agriculture sector. However, one complication with this proposal is that it cannot "guarantee that competently made laws will come into existence" (Brennan 2016: 217) after overturning the suggestion to spare the agriculture sector from limiting their greenhouse gas emissions.

This proposal has one critical implication. Since the epistocratic council is not capable to legitimately propose new policies (*pace* Brennan 2016), constitutionally embedded norms that restrict the ability of politicians to pursue non-sustainable policies seem more attractive in curbing global greenhouse gas emissions. I will turn to this idea in chapter 4.4.

Before doing so, let us turn to another proposal of representing climate-affected citizens in climate-related decision-makings, that is, by sub-majority rule.

## 4.3. Climate-Affected Citizens and the Sub-Majority Rule

As we saw in the previous section, it is difficult to determine which citizens should be enfranchised in democratic decision-makings. Two justifications for political representation and enfranchisement of climate-affected citizens have been offered: i) representing climate-affected citizens by way of a trusteeship is favored as a means to advance climate- and intergenerational justice; ii) enfranchising climate-affected citizens in climate-related decision-makings to better respond to climate change and protect the interests and rights of these individuals. The next proposal is intended to represent and protect, both future and present, climate-affected citizens in the democratic process and is, like the two previous proposals, favored as an instrument to counteract intergenerational- and climate injustices stemming from climate change by protecting their fundamental interests and basic rights. Accordingly, in this section, I explore the constitutional device of the proxy representation of a sub-majority rule and how it differs from the previous proposals.

The idea of a sub-majority rule and proxy representation is that, since the policies that a specific democratic polity enact might have an enormous influence on individuals, a number

of seats in the current legislative assembly ought to be reserved for representatives of future generations (Ekeli 2005). Adrian Vermeule (2005) defines a sub-majority rule as one that "authorizes (i) a predefined numerical minority within a designated voting group (ii) to change the status quo (not merely to prevent change) (iii) regardless of the distribution of other votes." (Vermeule 2005: 76) In what follows, let us determine whether it is possible to apply this proxy to the question of protecting the interests of climate-affected citizens.

To back up this claim about climate-affected citizens, I will defend the following argument:

- (1) If the fundamental interests and basic rights of climate-affected citizen X are negatively affected by political decision Y, then X ought to have a say by way of representation in Y.
- (2) The interests of climate-affected citizens are in fact negatively affected by climate-related political decisions.
- (3) Therefore, climate-affected citizens ought to have a say by way of representation in climate-related political decisions.
- (4) If climate-affected citizens ought to have a say by way of representation in climate-related political decisions, then there is a *pro tanto* reason to establish a submajority rule.
- (5) Therefore, there is a *pro tanto* reason to establish a sub-majority rule.

First, the idea is to give a specific selected minority the legal opportunity to delay enacted policies that are considered to conflict with the welfare of climate-affected citizens (2). One such suggestion would be to grant one-third of the legislators two procedural rights to protect the interests of climate-affected citizens to delay unsustainable policies that (potentially) harm the interests of climate-affected citizens. The basic idea of this form of proxy representation pertains to the idea of granting the opportunity to delay a law proposal if some legislators believe it conflicts with, specifically in this section, the interests of climate-affected citizens. The minority of no less than one-third of all political representatives can be empowered to demand that its unsustainable enactment of a particular policy can be delayed for closer scrutiny. The minority is thus empowered by at least one-third of the legislators to call for a delay if the minority believe that the specific policy conflicts with the interests of climate-affected citizens by exacerbating the ill-effects of climate change. For example, if a country, say, Poland, decides to spend twenty billion dollars on hard coal, so they all of their

energy from coal. The minority of a sub-majority rule can then delay this unsustainable policy because it will harm climate-affected citizens by making the local environment worse, so a huge majority of the Polish population will have their right to an adequate environment and subsistence violated.

Secondly, the aim of a sub-majority rule is to trigger referenda on particular policies that might be in conflict with the fundamental interests and basic rights of climate-affected citizens. If, for example, the existing government proposes unsustainable policies thus exacerbating climate change rather than mitigating by, say, producing coal-fired power stations as mentioned above, the sub-majority rule can consequently demand a referendum on the basis that the policy risks imposing serious harm upon both future generations and those affected by the current ill-effects of climate change. Hence, it ensures that the minority of the lawmakers can require a referendum on the enacted policy if it can have serious impacts on the right to an adequate environment or the right to subsistence.

These two ideas of the sub-majority rule can serve as a means to encourage more climate-oriented decision-makings. However, the minority of lawmakers should only be allowed to delay or call for a referendum if they demonstrate that the policy in question actually harms climate-affected citizens in such a way that the right to an adequate environment or the right to subsistence is harmed. Kristian Ekeli (2005) claims that this sort of proxy representation should only be secured within the structure of current existing democracies by authorizing specific selected representatives to represent the voices of future generations. To make this work efficiently, it is *sine qua non* that the proxy will hold the power to carry out delays of specific policies that conflict with the interests of future generations. In this way, the purpose of the sub-majority rule is to make it difficult to enact policies that will have detrimental effects on climate-affected citizens and possible destructive long-term consequences.

In its simple form, a sub-majority rule authorizes a minority to cancel a decision irrespective of how other votes are cast. Kristian Ekeli (2005) has conceived of his proposal for sub-majority rules in primarily protective language: the sub-majority rules will help protect future generations from having their living conditions seriously and adversely affected by present actions. Ekeli argues that the representatives of future generations should have *locus standi* by proposing that one-third of the legislators will be authorised to make specific demands if they believe a particular policy will be harmful to the interests of future generations.

Ekeli believes delaying votes on bills could promote more public awareness and deliberation<sup>22</sup> on issues related to future generations and climate change.

To sum up: This section has shortly explored whether it is possible to represent climate-affected citizens in democratic decision-makings if they prove to conflict with their fundamental interests and basic rights. If they actually prove to conflict, a sub-majority rule can serve as an effective tool to delay policies that motivate unsustainable options or by demanding a referendum on the matter. Accordingly, there is a *pro tanto* reason to establish a sub-majority rule in favour of protecting climate-affected citizens.

Let us now turn to one last proposal, that seeks to inscribe the right to an adequate environment and the right to subsistence in constitutions.

#### 4.4. Climate-Focused Constitutional Clauses

As we saw in section 4.2., democratic decision-makings may not only affect present generations but also future generations. This is clear when it comes to democratic decision-makings regarding the use of various natural resources, depletion of biodiversity and ecosystems. Notwithstanding the fact that voters and their elected legislators have the power to enact unsustainable policies that adds to the ill-effects of climate change, the majority of those most affected, climate-affected citizens, do not have the opportunity to effectively influence present political decision-making processes<sup>23</sup>.

Against this background, a number of scholars (Pickering *et al.* 2020; Shearman and Smith 2007) have argued that democratic systems should be reformed in ways that would help enact more climate-friendly and future-regarding policies. Since, the argument goes, that democracy undermines – or at least threatens to undermine – our collective capacities to act, then they must be reformed. Accordingly, in recent decades numerous countries have enacted a legal instrument to counter the ill-effects of climate change, namely, by constitutionalization of environmental rights. For instance, the Constitution of Norway have amended their

<sup>&</sup>lt;sup>22</sup> Michael K. Mackenzie and Didier Caluwaerts (2021) found that deliberation can be used to encourage people to support environmental policies. They asked 330 participants to consider two policies designed to mitigate climate change. The results show that those who deliberated became more supportive of policies that aimed at climate mitigation and even became more willing to pay to mitigate climate change (2021: 13).

<sup>&</sup>lt;sup>23</sup> As we saw in our discussion of AAP (section 4.2), the generic version of AAP purports to claim that an individual should be included in the democratic deliberations, if the individual in question is sufficiently affected by the decision at stake. As such, some (Näsström 2011) criticize AAP on the grounds that AAP entails a global democracy. This clarification implies that in the present case, the majority of those most affected do not have the opportunity to influence present political decision-making processes because we assume that the resuscitated version of AAP is not recognized in the present section. Thus, an individual in Bangladesh that are significantly affected by climate change because of heat waves and rapid sea level rise will not have the opportunity to influence present climate-related decision-makings in, say, Denmark.

constitution so it declares that it is a substantive right to "an environment that is conducive to health" and calls for environmental rights and natural resources to be "safeguarded for future generations as well." The Norwegian Constitution serves as a tool to take the decisive authority on environmental concerns away from elected officials as constitutional restraints will prevent the majority from enacting a particular policy that conflicts with these specific environmental rights. However, on closer scrutiny, it is difficult to determine whether the Norwegian Constitution that claims that "an environment that is conducive to health" can be seen as legitimate reason for decreasing their greenhouse gas emissions. For example, it might be the case that not lowering their greenhouse gas emissions can safeguard an environment that is conducive to health. Therefore, the aim of this section is to examine whether constitutional entrenchment of either "a right to an adequate environment" (Hayward 2005: 25-62) or the right to subsistence could serve as a successful tool to counter and successfully mitigate the illeffects of climate change by protecting the fundamental interests and basic rights of climate-affected citizens.

The aim of this section is to discuss one proposal that reforms current democratic systems in some ways by fundamentally protecting the interests of climate-affected citizens by claiming that every constitutional democracy ought to guarantee a fundamental right to subsistence (defined as unpolluted air, unpolluted water, adequate food) and a right to an adequate environment in its constitution. Since the right to subsistence and the right to an adequate environment are clearly violated for climate-affected citizens as a result of climate change, as discussed earlier in this section, it should necessarily be enshrined as fundamental rights in a state's constitution. To achieve this, we ought to grant them constitutional standing as a means to effectively advance climate justice by ensuring that climate-affected citizens have democratic control over the decisions that significantly affects them (Lawrence and Kohler 2018). Constitutional entrenchment can accomplish some undertakings in this regard.

The simple idea of introducing constitutional entrenchment is, roughly speaking, similar to the sub-majority rule sketched out in the last section. This proposal encompasses both those citizens that are currently by a significant degree and future generations. Here, the idea is also to make it possible to (1) delay policies that are considered as being in conflict with the welfare (that is, basic rights and fundamental interests) of climate-affected citizens. Moreover, constitutional entrenchment of the right to an adequate environment or the right to subsistence is to (2) trigger referenda on specific policies that conflict with the fundamental interests and basic rights of climate-affected citizens by moving pressure from the legislators to the constitutional law court. However, there is more to the idea of constitutional

entrenchment. Whereas the sub-majority rule merely had the power to delay policies and trigger referenda if certain policies are deemed to be inimical to the fundamental interests and basic rights of climate-affected citizens, the proposal of constitutional entrenchment will make it unachievable to enact unsustainable policies (authorizing coal-fired power plants).

This idea becomes clear by way of example. If, for example, a suggested policy is in danger of jeopardizing and seriously harming the interests and rights of climate-affected citizens by enacting policies that continues to increase the concentration of greenhouse gas emissions or that are degrading the environment, then the constitutional entrenchment of the right to an adequate environment or the right to subsistence can effectively constrain the policy in question. It is favored as an instrument to counter climate injustices by constraining the ability of legislators to pursue non-sustainable policies.

Before describing the proposal in further detail, let us consider the following argument:

- (1) If the fundamental interests or basic rights of individual X are negatively affected by political decision Y, then X ought to be safeguarded by revoking policy Y.
- (2) The fundamental interests or basic rights of climate-affected citizen X are in fact negatively affected by climate-related political decisions.
- (3) Therefore, climate-affected citizens ought to be safeguarded by revoking policy Y.
- (4) If climate-affected citizens ought to be safeguarded in climate-related political decisions, then there is a *pro tanto* reason to constitutional entrench the fundamental interests or basic rights of climate-affected citizens.
- (5) Therefore, there is a *pro tanto* reason to constitutional entrenchment.

This argument does not intend to argue that one subgroup of individuals, say Nepalese, has these interests or that it is specifically their interests. I will argue, however, that all persons irrespective of nationality and location, enjoys these fundamental interests and basic rights to an adequate environment and the right to subsistence. If these fundamental interests and basic rights of a person are violated, they are characterized as climate-affected citizens as we saw in section 3.2.

Before explicating precisely how climate-focused constitutional clauses should be established, we have to scrutinize the following normative claim: climate change harms a number of individuals' fundamental interests and basic rights, specifically, the right to subsistence and the right to an adequate environment. To support (1) in the argument above, we need to consider the predicted ill-effects of climate change and how these ill-effects violate

the basic right to subsistence and the right to an adequate environment. As we saw in section 3.2., climate change violates a number of fundamental interests and basic rights of individuals but let us once again consider the following ill-effects resulting from climate change. First, rapid sea level rise is one of the main mechanisms of climate change. A consequence of this is that small islands and low-lying coastal regions will be lost to the sea and leading to migration because its habitants will be forced to move away from their homes. For instance, sea level rise will significantly affect people living in small island states (such as the Maldives and Antiqua) and low-lying river deltas (such as much of Bangladesh).

A second ill-effect of climate change is severe, more frequent and longer-lasting droughts on a global basis (Lovejoy et al. 2019: 201). These severe droughts are, besides increasing the occurrence of forest fires in vast swaths of primary and degraded forests in especially Amazon forests, leading to biodiversity depletion and decreased productivity. Today, the human population alongside the livestock produced for food constitute 96 % of the mass of all mammals on the planet, where only 4 % is left as wildlife animals. According to the 600-page landmark review, The Economics of Biodiversity, led by Professor Sir Partha Dasgupta published in February 2021, "The stresses humanity has inflicted on the biosphere to the point where our mode of conduct is not sustainable are due to institutional failure writ large." (Dasgupta 2021: 130) This leads Dasgupta and his team to conclude that the deeprooted institutional failures must accept that the economics are "embedded within Nature, not external to it" (Dasgupta 2021: 27) by demanding a transformation of our institutions by enacting policies that discourage unsustainable damaging forms of consumption and increase the global supply of natural assets. This resonates with the rationale expressed by Dryzek and Pickering (2019) who argues that the "ecological dimension means that any view of sustainability that clashes with the ecological conditions for human and non-human flourishing must be ruled out." (2019: 89) The institutional transformations required is to cultivate policies that increases natural assets, not decreasing the amount of these assets. With climate change in rapid development, we are seeing desiccation, deoxygenation, and violent extremes of drought that will fundamentally increase "forest flammability through land-use changes and climate volatility, and will thus provide new ignition sources." (Lovejoy et al. 2019: 150) These illeffects arising from the severe and longer-lasting droughts will unequivocally harm the right to subsistence and the right to an adequate environment since increasing desiccation and deoxygenation will drastically alter the air they breathe to the worse and increasing chance of forest fires (thus violating the right to an adequate environment).

Let us turn to a third predicted ill-effect of climate change, which are frequent instances of global heat waves that jeopardizes the right to an adequate environment and the right to subsistence. Although climate change has moral relevance because of its impact on future generations, this does not exhaust its moral relevance. As we saw in section 2.1. the ill-effects are being felt by current generations. For example, the Lancet's *The 2020 report of The Lancet Countdown on health and climate change* demonstrated that extreme heat waves affected vulnerable populations the most, with "some 296.000 deaths occurring as a result of high temperatures in 2018." (The Lancet 2021: 164) In addition, Hannah Ritchie and Max Roser has showed that an estimated 3.4 million people died prematurely as a result of outdoor air pollution in 2017 (Ritchie and Roser 2019).

These panoplies of ill-effects resulting from increasing climatic changes leads Simon Caney to argue that climate change "threatens the fundamental interests that all persons have in *avoiding involuntary threats to their health*" (Caney 2006: 261-262) and the interests being harmed are "fundamental interests which persons of different conceptions of the good would all prize." (Ibid.: 262) For all these reasons, premise (2) is a plausible premise since climate change in fact threatens a number of fundamental interests at stake – interests in access to food, unpolluted air, subsistence, not being forced to migrate, etc. – which is normally required for a decent standard of living and an adequate environment.

With these considerations in mind, let us turn back to the proposal in this section. The proposal to initiate a constitutionalization that protects the right to subsistence and the right to an adequate environment has two attractive features. First, constitutional entrenchment of the right to an adequate environment and the right to subsistence can help prevent corporations and political institutions from pursuing non-sustainable outcomes by creating legally enforceable goals that prioritizes the need for sustainability.

Secondly, given the continuous uncertainties about the urgency of climate change, constitutionalizing can "reduce uncertainty about whether long-term policy outcomes will be delivered, thus increasing citizens' willingness to endorse far-sighted policies" (González-Ricoy 2016: 169) and "credibly signal the importance of intergenerational matters, thus coordinating citizens around new focal points as well as shaping their values and beliefs" (Ibid.: 169). Robyn Eckersley supports this claim and argues that one of the aims of what she coins environmental constitutional design is to

"facilitate a robust "green public sphere" by providing fulsome environmental information and the mechanisms for contestation, participation, and access to

environmental justice—especially from those groups that have hitherto been excluded from, or under-represented in, policy-making and legislative processes." (Eckersley 2004: 140)

Constitutional entrenchment of the right to an adequate environment and the right to subsistence can therefore prove to result in synergy effects because i) it will revoke unsustainable policy suggestions that conflict with the basic rights embedded in the constitution and ii) facilitate a robust "green public sphere" so information about the necessity of mitigating the ill-effects of climate change will communicated more effectively.

By granting the right to an adequate environment and the right to subsistence a greater legal status corresponding to other basic- and human rights, it calls attention to the risks associated with climate change and environmental degradation and the importance of policies addressing these issues. Fundamentally, a constitution serves as the fundamental building block of a nation's legal and political system and consists of "a set of norms (rules, principles or values) creating, structuring, and possibly defining the limits of government power or authority." (Waluchow 2018). It defines the powers and responsibilities of the various political and judicial institutions, and the relationship between citizens and the state.

Some defend the idea of constitutionally embedded norms that restrict the ability of legislators to pursue non-sustainable policies to grant constitutional standing towards future generations (Ekeli 2007; 2009; Gosseries 2008; May and Daly 2015). I believe, however, that it is crucial to consider whether climate-affected citizens should have their fundamental interests and basic rights protected by means of constitutional laws that curtail the power of political institutions by encouraging them to pursue sustainable policies that effectively mitigates the ill-effects of climate change.

This view of democratic inclusion and constitutionalization for climate-affected citizens is favoured as a juridical instrument to counteract the tendency of climate injustices and can help to advance fairness to the constitution-making process by constraining the ability of legislators to pursue non-sustainable policies. Climate-focused constitutional clauses by reducing the authority of legislative majorities are a means whereby this can be achieved. A typical concern to this line of reasoning is that constitutional rights are not "directly actionable to promote when they include future generations among their addressees, since future individuals do not yet exist." (González-Ricoy 2016: 171) However, as I have argued above, it is possible to represent future individuals by way of installing a body of democratic trusteeship

(section 4.1) or by sub-majority rule (section 4.3) where they can postpone or suspend the enactment of a law that could possibly harm climate-affected citizens (and thereby future generations) in ways that violates their fundamental interests and basic rights.

The climate-focused constitutional clauses represent a means to encourage political institutions to produce climate-oriented decisions that motivates moral outcomes in favour of climate-affected citizens and future generations by mitigating their greenhouse gas emissions. Kristian Ekeli (2007) proposes that constitutional courts should be granted the right to "require that state authorities undertake environmental and technological impact assessments before decisions affecting critical resources are made" (2007: 379). This solution is offered to create more public awareness and improve the process of democratic deliberations about affecting near and future generations. According to May and Daly (2015), environmental constitutionalism proposes:

"a new way of thinking about the relationship among individuals, sovereign governments, and the environment with the overall goal of prompting governments to more aggressively protect environmental resources for the benefit both of humans, present and future, and of the environment itself. Constitutional law provides a holistic approach to the challenge of environmental protection because it encompasses almost every tool of which law can avail itself." (May and Daly 2015: 49)

Summing up this section, constitutional entrenchment of the right to an adequate environment and the right to subsistence prompts that policies that conflict with the interests and rights of climate-affected citizens ought to be revoked. Accordingly, if the right to an adequate environment and the right to subsistence are violated (premise 1), then there is a *pro tanto* reason to constitutionally entrench these rights to safeguard climate-affected citizens (5)

# Chapter 5

# Conclusion

We have almost come to the end of this thesis. In this short, final chapter, I recapitulate the thesis so far. Let me start with the summary. The core aim of this thesis was to scrutinize the issue of why those most affected by climate change, climate-affected citizens, should not be given better political opportunities to defend their fundamental interests and basic rights. This

issue has, surprisingly, attracted scant philosophical attention. In answering this question, I have proposed and analysed four proposals which have not previously been discussed in relation to how climate-affected citizens can effectively be enfranchisement and included in climate-related decision-makings. To that end, I have examined a number of proposals advanced in the literature for how democracy can be redesigned so as to mediate this conflict and thereby better secure the demands of intergenerational- and climate justice.

In section 3.1., I demonstrated that if future generations are indeed affected by climate change in itself or from the outcome resulting from climate-related policies they are entitled as climate-affected citizens. I then went on to section 3.2. to show which criteria that must be satisfied to be enfranchised in climate-related decision-makings. These include:

- 1) If an individual's fundamental interests and basic rights are violated and threatened by the outcomes resulting from climate-related policies.
- 2) If an individual's fundamental interests and basic rights are violated and threatened by the ill-effects (e.g., increased risks of food insecurity and the breakdown of food systems linked to climate change, intense drought, flooding, air pollution, etc.) generated by climate change (the right to an adequate environment and the right to subsistence).

I then went on to chapter 4 to examine a number of proposals that can effectively safeguard the basic rights (right to an adequate environment and the right to subsistence) and the fundamental interests of climate-affected citizens. These include (i) (i) creating an independent body of trusteeship whose members would act as trustees charged with responsibility and possibly grant authorization to suspend policies that undermines the fundamental rights of climate-affected citizens; ii) democratically enfranchising climate-affected citizens in the demos to better respond to climate change; iii) establishing the model of a sub-majority rule that will grant one-third of the legislators two procedural rights to protect the interests of climate-affected citizens which have the authority to delay and suspend unsustainable policies; iv) guaranteeing a fundamental right to subsistence and the right to an adequate environment by way of constitutionalization as a means to effectively advance climate justice by ensuring that they have democratic control over the decisions that significantly affects them. I have argued that these four rationales can serve as tools to protect climate-affected citizens and their fundamental interests and basic rights by answering the main question in this thesis: why should those most affected by climate change, the worst-off people, not be given better

opportunities to defend their fundamental interests and basic rights? If we introduce one (or even several of the proposals) in democratic decision-makings, it can serve as a tool to i) enfranchise and grant climate-affected citizens participation - by differential voting schemes - in those decision-makings that affects them to a certain extent (section 4.2); ii) by way of proxy representation that can serve as an effective tool to delay or demand a referendum on unsustainable policies that results in violating the interests and rights of climate-affected citizens (section 4.3) and lastly, iii) counter-majoritarian instruments which have the authority to suspend enacts of a policy that could harm the rights and interests of climate-affected citizens (section 4.1. and 4.4).

# References

- Adler, M. (2012). Well-Being and Fair Distribution: Beyond Cost-Benefit Analysis. Oxford: Oxford University Press.
- Angell, K. & Huseby, R. (2020). The All Affected Principle, and the weighting of votes. Politics, Philosophy & Economics.
- Arneson, R. (1999), Egalitarianism and Responsibility, Journal of Ethics 3.3, pp. 225–247
  ——, (2013). Egalitarianism. In: The Stanford encyclopedia of philosophy,

  Summer Edition, ed. E. N. Zalta.

  http://plato.stanford.edu/archives/sum2013/entries/egalitarianism/
- Arrhenius, G. (2007). The boundary problem in democratic theory. Stockholm: Stockholm University.
- Balcombe, P., Speirs, J. F., Brandon, N. P., & Hawkes, A. D. (2018). Methane emissions: Choosing the right climate metric and time horizon. Environmental Science: Processes, Impacts, 20(10), pp. 1323-1339.
- Beckman, L. (2013). Democracy and future generations. should the unborn have a voice? In: Spheres of Global Justice, pp. 775-788.
- Beckman, L. & Page, E. (2008) Perspectives on justice, democracy and global climate change, Environmental Politics, 17:4, pp. 527-535.
- Bell, D. (2011). Does anthropogenic climate change violate human rights?, Critical Review of International Social and Political Philosophy, 14:2, pp. 99-124.
- Bengtson, A. (2020). Dead People and the All-Affected Principle. Journal of Applied Philosophy, 37(1), pp. 89-102.
- Bengtson, A. and Lippert-Rasmussen, K. (Forthcoming). Why the all-affected principle is groundless. Journal of Moral Philosophy.
- Beyleveld, D., Düwell, M. and Spahn, A. (2015). Why and How Should We Represent Future Generations in Policymaking?, Jurisprudence, 6:3, pp. 549-566
- Bidadanure, J. (2016). Youth Quotas, Diversity, and Long-Termism? In: Institutions For Future Generations, pp. 266-281. Oxford: Oxford University Press.
- Brennan, J. (2016). Against Democracy. Princeton University Press.
- Brighouse, H. and Fleurbaey, M. (2010). Democracy and Proportionality, The Journal of Political Philosophy 18, 2, pp. 137-155
- Broome, John. 2012. Climate Matters: Ethics in a Warming World. New York: Norton.
- Caney, S. (2006). Cosmopolitan Justice, Rights and Global Climate Change. Can J Law

- Jurisprud 2006, 19, pp. 255–278.
- —, (2009). Human rights, responsibilities, and climate change. In: C. Beitz and R.E. Goodin, eds. Global basic rights. Oxford: Oxford University Press, pp. 227–247.
- —, (2010a). Climate change, human rights and moral thresholds. In: S. Humphreys, ed. Human rights and climate change. Cambridge: Cambridge University Press, pp. 69–90.
- —, (2010b). Climate change and the duties of the advantaged, Critical Review of International Social and Political Philosophy, 13:1, pp. 203-228
- —, (2016). Political Institutions for the Future: A Fivefold Package. In: Institutions For Future Generations. Oxford: Oxford University Press.
- Christiano, T. (2018). Democracy., The Stanford Encyclopedia of Philosophy (Fall 2018 Edition), Edward N. Zalta (ed.).
- Danmarks Naturfredningsforening. (2021). Klimaplan for Landbruget Frem mod 2030.

  Retrieved May 05, 2021, from <a href="https://www.dn.dk/media/76468/dn-s-klimaplan-for-landbruget.pdf">https://www.dn.dk/media/76468/dn-s-klimaplan-for-landbruget.pdf</a>
- Dasgupta, P. (2021). The Economics of Biodiversity: The Dasgupta Review. London: HM Treasury.
- Dryzek, J. and Pickering, J. (2019). The Politics of the Anthropocene. Oxford: Oxford University Press.
- Eckersley, R. (2004). The green state: Rethinking democracy and sovereignty. Cambridge, MA: MIT Press.
  - —, (2011). Representing nature. In: S. Alonso, J. Kean, & W. Merkel (Eds.), The future of representative democracy (pp.236–257). Cambridge, UK: Cambridge University Press.
- Ekeli, K. S. (2005). Giving a voice to posterity deliberative democracy and representation of future people. Journal of Agricultural and Environmental Ethics, 18(5), pp. 429-450.
  - —, (2007). Green constitutionalism: The constitutional protection of future generations. Ratio Juris, 20(3), pp. 378-401.
  - —, (2009). Constitutional Experiments: Representing Future Generations Through Submajority Rules. Journal of Political Philosophy, 17(4), 440–461
- Estlund, D. (2008). Democratic Authority: A Philosophical Framework. Princeton University Press.
- Gardiner, S. M. (2014). A call for a global constitutional convention focused on future generations. Ethics & International Affairs, 28(3), pp. 299-315.

- González-Ricoy, I. (2016). Constitutionalizing intergenerational Provisions. In: Institutions For Future Generations, pp. 169-183.
- González-Ricoy, I., and Gosseries, A. (2016a). Designing Institutions for Future Generations.
  In: Institutions For Future Generations, pp. 3-23. Oxford: Oxford University Press.
  —, (2016b). González-Ricoy, I., and Gosseries, A. Institutions For Future Generations. Oxford: Oxford University Press.
- Goodin, R. E. (2007). Enfranchising all Affected Interests, and its Alternatives, Philosophy & Public Affairs 35, 1, pp. 40-68
- Gosseries, A. (2008). Constitutions and future generations. Good Society 17(2): pp. 32–37.
- Greenstone, M. and Qing Fan, C. F. (2018). Introducing the Air Quality Life Index, Chicago:

  Energy Policy Institute at the University of Chicago [EPIC]. Retrieved from:

  <a href="https://aqli.epic.uchicago.edu/wp-content/uploads/2018/11/AQLI-Report.111918-2.pdf">https://aqli.epic.uchicago.edu/wp-content/uploads/2018/11/AQLI-Report.111918-2.pdf</a>
- Grooten, M. and Almond, R.E.A. (2018). Living Planet Report 2018: Aiming Higher. WWF. Hayward, T. (2005). Constitutional environmental rights. Oxford University Press.
- Heyward, C. and Roser, D. (2016). Introduction. In: Climate Justice in a Non-Ideal World,ed. Clare Heyward and Dominic Roser. Oxford: Oxford University Press, pp. 1-17.Holtug, N. (2010). Prioritarianism. Persons, Interests, and Justice, pp. 202-243.
- IPCC. (2014a). Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.
  - —, (2014b). Climate Change 2014: Impacts, Adaptation and Vulnerability. Technical Summary. Geneva: Inter-governmental Panel on Climate Change.
  - —, (2018). Summary for Policymakers. In: 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 [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R.

Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E.

- Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press (2019): Summary for Policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.- O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2018). Summary for policymakers of the IPBES assessment report on land degradation and restoration. IPBES.
- Jeffrey, A. (2017). Limited epistocracy and political inclusion. Episteme, 15(4), pp. 412-432.
- Jensen, K. K. (2015). Future generations in democracy: Representation or consideration? Jurisprudence, 6(3), pp. 535-548.
- Karnein, A. (2016). Can we Represent Future Generations? In: Institutions For Future Generations. Oxford: Oxford University Press.
- Kavka, G. and Warren, V. (1983). Political representation for future generations. In: R. Elliot and A. Gare (Eds.), Environmental Philosophy: A Collection of Readings. University Park: The Pennsylvania State University Press.
- Kymlicka, W. (2002). Contemporary political philosophy: An introduction. Oxford: Oxford University Press.
- Lenton, T. M., Rockström, J., Gaffney, O. *et al.*, (2019). Climate Tipping Points—Too Risky to Bet Against, Nature, 575, pp. 592-595.
- Lippert-Rasmussen, K. (2014). Born free and equal?: A philosophical inquiry into the nature of discrimination. New York: Oxford University Press.
  - —, (2015). A just distribution of climate burdens and benefits: A luck egalitarian view. In: Climate Change and Justice, pp. 107-128.
- Lovejoy, T. E., Hannah, L. J. and Wilson, E. O. (2019). Biodiversity and climate change: Transforming the biosphere. New Haven: Yale University Press.
- MacCracken, M. C. (2019). What is climate change? In: Biodiversity and Climate Change, pp. 12-22.
- MacKenzie, M. (2016). Institutional Design and Sources of Short-Termism. In: Institutions For Future Generations. Oxford: Oxford University Press.
- MacKenzie, M. K. and Caluwaerts, D. (2021). Paying for the future: Deliberation and support

- for climate action policies. Journal of Environmental Policy & Environmental Policy & Planning, 23(3), pp. 317-331.
- Malm, A. (2016). Fossil capital: the rise of steam power and the roots of global warming. Verso.
- May, J. R. and Daly, E. (2015). Global environmental constitutionalism. New York, NY: Cambridge University Press.
- Meikle M, Wilson J, Jafry T. 2016. Climate justice: Between mammon and mother earth.

  International Journal of Climate Change Strategies and Management 8(4), pp. 488–504.
- Moore, J. W. (2015). Capitalism in the web of life: ecology and the accumulation of capital. Verso.
- Näsström, S. (2011). The Challenge of the All-Affected Principle. Political Studies, 59(1), pp. 116-134.
- Oreskes, N. and Conway, E. (2010). Merchants of Doubt: How a Handful of Scientists

  Obscured the Truth on Issues from Tobacco Smoke to Global Warming. New York:

  Bloomsbury.
- Paaske D.M. (2020). Impact of Climate Change, Intergenerational Justice, and Human Rights on SDGs. In: Leal Filho W., Azul A.M., Brandli L., Lange Salvia A., Özuyar P.G., Wall T. (eds) Reduced Inequalities. Encyclopedia of the UN Sustainable Development Goals. Springer Nature.
- Paaske, D.M., Segura-Bonilla, O. and Hernandez-Milian, J. (2021). ESD for managers in the Danish lower secondary educational curriculum. Journal of Work-Applied Management, Vol. ahead-of-print No. ahead-of-print.
- Parfit, D. (1984). Reasons and persons. Oxford, England: Oxford University Press.
  - —, (1995). Equality or priority?, The Lindley lecture. The University of Kansas.
  - —, (2010). Energy policy and the further future: The identity problem. In: Climate Ethics: essential readings, pp. 112-121.
- Ritchie, H. and Roser, M. (2019). Outdoor Air Pollution. Published online at OurWorldInData.org.
  - Retrieved from: https://ourworldindata.org/outdoor-air-pollution
  - —, (2021). Biodiversity. Published online at OurWorldInData.org. Retrieved from: <a href="https://ourworldindata.org/biodiversity">https://ourworldindata.org/biodiversity</a>.
- Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin, III, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C. A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P.K. Snyder, R. Costanza, U. Svedin, M. Falkenmark,

- L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B.Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley. 2009. Planetary boundaries: exploring the safe operating space for humanity. Ecology and Society 14(2): 32.
- Runciman, D. (2019). Democracy is the planet's biggest enemy. Retrieved April

  15, 2021, from <a href="https://foreignpolicy.com/2019/07/20/democracy-is-the-planets-biggest-enemy-climate-change/">https://foreignpolicy.com/2019/07/20/democracy-is-the-planets-biggest-enemy-climate-change/</a>
- Scavenius, T. (2018). The institutional capacity of democracy. In: Scavenius, T. B. (Ed.),
  Rayner, S. (Ed.). Institutional Capacity for Climate Change Response. London:
  Routledge.
- Schuppert, F. (2013). Distinguishing basic needs and fundamental interests, Critical Review of International Social and Political Philosophy, 16:1, pp. 24-44
- Shearman, D. and Smith, J.W. (2007). The climate change challenge and the failure of democracy. Westport, Conn.: Praeger; Oxford: Harcourt Education.
- Shue, H. (2016). Climate justice vulnerability and protection. Oxford: Oxford University Press.

  —, (2020). Basic rights: Subsistence, affluence, and U.S. foreign policy: 40th anniversary edition. Princeton, NJ: Princeton University Press.
- Statutes of the Republic of South Africa Constitutional Law. (1997). The Constitution of the Republic of South Africa, 1993, ACT 108 of 1996, pp. 1241-1331.
- Stevenson, H. and Dryzek, J. S. (2014). Democratizing Global Climate Governance. Cambridge, England: Cambridge University Press.
- Stokes, B., Wike, R., & Carle, J. (2015). Global concern about climate change, broad support for limiting emissions. Pew Research Center, 5(11).
- Stoknes, P. E. (2015). What We Think about When We Try Not to Think about Global Warming: Toward a new psychology of climate action. White River Junction, VT: Chelsea Green Publishing.
- Tännsjö, T. (2007). Future people, the all affected principle, and the limits of the aggregation model of democracy. In T. Rønnow-Rasmussen, B. Petersson, J. Josefsson and D. Egonsson (eds) á Wlodek. Philosophical Papers Dedicated to Wlodek Rabinowicz (Lund: Lund University, 2007).
- Temkin, L. S. (2003). Equality, Priority or what? In: Economics and Philosophy 19 (1), pp. 61–87.
- The Lancet. (2021). Review of the Lancet Countdown on health and climate change: responding to converging crises. Accessed from:

  https://www.sciencedirect.com/science/article/abs/pii/S014067362032290X

- Thomas, C. D. (2018). Inheritors of the earth: how nature is thriving in an age of extinction. Penguin Books.
- Thompson, Dennis F. 2010. Representing Future Generations: Political Presentism and Democratic Trusteeship. Critical Review of International Social and Political Philosophy 13, pp. 17–37.
  - —, (2016). Democratic trusteeship. In: Institutions For Future Generations, 184-196.
- United Nations, 2007. The human rights impact of climate change. In: United Nations joint press kit for Bali climate change conference, 3–14 December 2007.
- Vermeule, A. (2005). Submajority Rules: Forcing Accountability Upon Majorities. The journal of political philosophy 13.1: pp. 74–98.
- Waluchow, W. (2018). Constitutionalism. The Stanford Encyclopedia of Philosophy (Spring 2018 Edition), Edward N. Zalta (ed.), URL: https://plato.stanford.edu/archives/spr2018/entries/constitutionalism/.
- Whitmarsh, L. (2008). Are flood victims more concerned about climate change than other people? The role of direct experience in risk perception and behavioural response. Journal of Risk Research, 11(3), 351–374.