

Climate Justice: Principles of Burden-Sharing with an Integrationist Account

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Abstract

Impacts of climate change are ever more present, and so are reports demanding immediate action. However, lack of a joint framework curbs the scope and speed of international action to this pressing issue and thereby shows that more research is due. Drawing on theories of distributive justice, this thesis aims to contribute to determining who owes what in climate justice by bringing together three principles of burden-sharing into a hybrid account. It discusses the polluters pay, the beneficiaries pay, and the ability to pay principles in a sequential order and a sufficientarian threshold to argue that these ostensibly rival principles can point to various liable agents. By suggesting that these principles can coexist within the same theory, this thesis aims to provide a just framework for climate action.

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Introduction

A variety of regions from all around the globe have recently experienced record-high temperatures, icecaps have been melting at unprecedented rates, wildfires are roaring and further deforesting the globe, ever more species are on the brink of extinction, and the World Health Organization (WHO) predicts that climate change related malnutrition, heat stress and diseases will cause at least 250,000 human deaths per year from 2030 onwards. It is indisputable that climate change is a global crisis dramatically affecting the well-being of the world's inhabitants.

It is also indisputable that anthropogenic activities are the cause of climate change. The International Panel on Climate Change (IPCC, 2018) published a special report to warn that human activities have already caused 1.0°C of global warming since the beginning of industrialization. According to the same report, limiting the temperature rise by 1.5°C is essential. This sobering report draws attention to the fact that reactions to decelerate the ecological collapse is of immediate concern now more than ever. For that purpose, IPCC provided an extensive summary of scientific findings pointing the right direction for policymakers: reduce greenhouse gas emissions, restore ecosystems, avoid deforestation, and build sustainable infrastructures.

Although scientific evidence and policy recommendations are now manifest, the progress is still tardy. The harms of climate change are already falling on to the poorer parts of the world, where many who lack the means to adapt to these catastrophic events live (Wainwright and Mann, 2012). But the lion's share of activities giving rise to anthropogenic climate change stem from the citizens of the developed world (Batz, 2013). This asymmetry invokes questions regarding global injustices.

An increasing number of social scientists and philosophers have started addressing this issue. The field of political theory provides a particularly fertile ground with theories of justice in its center. One of the approaches within the field branches off from the theories of distributive justice. Rawls (1999) shaped contemporary discussions of distributive justice by his writings on how a society ought to distribute its resources and responsibilities fairly. A myriad of scholars (Babatunde, 2020; Broome, 2012; Caney, 2005, 2009, 2010, 2014; Meyer and Roser, 2006; Page, 2008, 2011) applied the distributive reasoning to climate change. This appeal to distributive justice focuses on the distribution of inevitable burdens of climate change (Caney, 2005).

In an effort to take into account the unequal contributions to pollutions, lack of access to benefits arising from polluting activities, disproportionate exposure to harmful consequences and different abilities to bear burdens, scholars of climate justice came up with several principles of burden-sharing. This thesis draws heavily on the literature on distribution of burdens (Caney, 2014, 2018; Meyer and Roser, 2006; Page, 2008) and combines principles with different justifications to point to liable agents. In this thesis, the term *liability* is understood as a moral responsibility to compensate the victims of unjust harm (McMahan, 2005). This term is preferred in this context since it is difficult to refer to culpable agents whose actions result in harm. Following McMahan's (2005) moral responsibility account of liability, I hold individuals who are not culpable can still be liable with respect to their role in wrongdoing.

Three principles are pertinent in this context. Firstly, *the polluters pay principle* states that those who pollute and thereby cause harm are liable to share a fair amount of burdens to compensate the damage they have caused (Caney, 2014). This first principle is appealing because of the agent's unmediated role in a wrongdoing. Secondly, *the beneficiary pays principle* suggests that recipients of benefits from activities that harmed third parties should be held liable to compensate victims of the injustice in question (Butt, 2014). Its moral force comes from an

emphasis on the aversion to taking advantage of wrongdoing. And thirdly, *the ability to pay principle* aims to broaden the range of agents by ascribing duty to the advantaged individuals to bear extra burdens (Caney, 2005). Climate change inevitably burdens some innocent agents. The last principle holds that those who have the ability to bear the burden should play a role.

The first two are backward-looking principles appealing to historical backgrounds and corrective considerations to justify distributive claims. In contrast, the third principle is a forward-looking principle overlooking historical contributions and targeting future abilities. This thesis proposes a hybrid account with a sufficientarian threshold, below which agents are exempted from bearing burdens, and a sequential order which prioritizes the polluters pay principle, then the beneficiaries pay principle and finally the ability to pay principle in order to identify the liable agents.

The polluters are the first in line as liable agents and are expected to bear an amount of burden limited by either the amount of their pollution or by the sufficientarian threshold. Following polluters, beneficiaries are second in line to bear burdens and expected to shoulder their fair part, specified with respect to the benefits they have received, or, again the sufficientarian threshold. Lastly, the ability to pay principle pitches in to ascribe duties to those who have the resources.

The outline of the thesis is as follows: The second chapter briefly clarifies some key considerations. I start by explaining what I mean by burdens, harms and liability. Then I clarify what I mean by “agents”. This thesis adopts an individualist methodology to avoid convergence of principles in a single agent. And lastly, I address the question of why a cosmopolitan approach is necessary for a fair distribution of climate burdens. This also calls for discussing isolationist and integrationist views of climate justice. I favor the latter approach and thus suggest that a sufficientarian threshold should be introduced. Having clarified the key

considerations, I then move on to the third chapter to spell out each principle and provide separate justifications for using each of them. I also elaborate on the reasons to prefer a hybrid account and how these three principles should be ordered. The last chapter concludes.

The principles are not novel, but the way they are ordered concurrently and sequentially is. The thesis contributes by combining all three of these principles with a sufficientarian threshold. It is a difficult task to bring together these principles which are by and large deemed rival. But by referring to the work of a wide range of scholars from various fields, the thesis clarifies the issue and provides a new perspective for climate action.

Chapter 1 – Key Considerations

It is necessary to elaborate on some assumptions before explaining the principles of burden-sharing. This chapter clarifies the key terms of the thesis. The very first point that is taken for granted is that anthropogenic emissions of greenhouse gasses are the main cause of climate change. Broome (2012) notes that these emissions are the result of something each and every individual is responsible for. Yet, this thesis problematizes the fact that neither the causes nor the harmful consequences of emissions are distributed equally.

1.1. Harm and Liability

Most of the negative consequences of climate change fall on the poorest parts of the world, harming people from no fault or choice of their own. Their ability to have access to clear water and adequate food, and their rights to cultural integrity are heavily impacted by climate change. According to Broome (2012), even if the harm is unintentional, it is not accidental. The emissions are the result of industrialization of the developed richer countries. It is their citizens who enjoy the benefits of these activities causing climate change. This means that redistributing the benefits and the burdens of the victims is morally required.

Distributive justice enables two different paths of doing justice to the victims. On the one hand, it is possible to concentrate on the agents who are harmed and entitled to compensation (Baatz, 2013; Caney, 2001). However, in this thesis, I bracket out this first puzzle and focus on another question, i.e., how the burdens of mitigating and adapting to climate change should be distributed (Caney, 2001). Mitigation and adaptation policies to tackle climate change inevitably bring serious burdens to bear. The former involves avoiding further human interference to the climate and requires fundamental changes in the ways we live. It aims to stop engaging in harmful activities and switching to cleaner ways in order to cut back emissions. The latter is about adapting to cope better with a world undergoing climate change. Resources

that could otherwise be spent on other aims must be invested to strengthen the response and reduce the vulnerability of various communities.

Nevertheless, distribution of burdens still requires clarifying what is referred to by *harm* and whether there are harmed parties. A line of argument suggests, for example, that industrialization has made everyone better-off than they would have been in its absence. For example, Neumayer notes that “modern medicine or better technologies... have also raised living standards in developing countries and make it easier for later developing countries” (2000, 189). It can be argued, on this basis, that industrialization cannot be regarded as harmful to anyone, since it likely benefited more than it harmed.

However, Shiffrin (1999) criticizes this understanding of harms and benefits as being on a continuous scale like positive and negative numbers. She rejects neglecting the harms even when the overall situation is beneficial for the agent of the event. Instead, she suggests that one can benefit but also be harmed by the same event. She imagines a rescue, which at the same time delivers considerable pain for a short time to the rescued person. According to Shiffrin, a person in such a situation benefits from the overall situation by being rescued, but that still does not mean that the rescued person has not been harmed to prevent greater suffering. Shiffrin defines harm as involving “conditions that generate a significant chasm or conflict between one’s will and one’s experience” (1999, 123) and suggests that there can be harm even when there are significant benefits. This thesis adheres to Shiffrin’s understanding of harms.¹ She suggests that imposing substantial harm on other parties without their consent, even if there were benefits as well, calls for liability for compensation. Following Shiffrin’s account, I will assume that the harms of activities giving rise to climate change are non-negligible, even if they

¹ Specifying those who were harmed precisely and allocating resources to these harmed parties requires much more space and attention. As noted, I concentrate on burden-sharing approach instead of asking who is entitled to compensation. Pointing out that there are some harmed parties is to justify the burdens and call for compensations.

simultaneously entail some benefits.

Clarifying that there were harmed parties brings us to the question of who are the agents liable to bear the burdens of the harm caused by climate change. It is crucial to explain what *liability* refers to. There are various accounts defining the term with respect to culpability, but it is difficult in the context of climate change to talk about culpability, blame or punishment (Meyer and Roser, 2010). This is because individuals who pollute or benefit from pollution are not acting culpably to purposefully cause harm, but harm is a side effect of their actions (Lawford-Smith, 2014). Lawford-Smith notes a related concern that “there might be a worry that without culpability, there’s simply nothing more to say about obligations or duties” (2014, 395).

Following McMahan’s (2005) *moral responsibility account* of liability provides a different perspective against this claim. He suggests that an action which lacks objective justification and unjustly harms other parties against their will ascribes a moral responsibility to the wrongdoer (McMahan, 2005, 394). According to McMahan, a person should be liable if they are morally responsible for wrongdoing, even when they are not culpable, and that the liable agent has the responsibility to compensate the victims of wrongful actions. The focus of this account is on the harm induced to other parties against their will, which, for McMahan, is enough for liability.

Furthermore, McMahan suggests that the moral responsibility account differentiates between degrees of liability, which is in line with the sequential order proposed in this thesis. He writes that the “responsibility for an unjust threat can vary in degree, and liability varies concomitantly” (2005, 395). The unjust threat being climate change, McMahan’s account allows ascribing various degrees of liabilities to polluters and beneficiaries. McMahan’s suggestions are also consistent with the distributive scheme of the thesis. Quong (2012) emphasizes that central to McMahan’s account is an appeal to distributive fairness. To illustrate, Quong gives the following example: “If Albert engages in some action or activity that he knows

or can reasonably foresee might result in harm to innocent others, and if that risk of harm eventuates and there is now harm to be distributed, it is only fair that Albert should be the person who bears that harm” (2012, 56).²

1.2. Individualist Paradigm

This thesis relies on the individualist paradigm and refers to individuals as the primary agents of justice. Caney (2005) finds that discussions of climate justice have oscillated between individualist and collectivist approaches. The former focuses on the harms and benefits of individuals, their polluting activities and their duties. In contrast, the latter suggests that less changeable entities should be the main focus and concentrates on the actions and duties of collective entities like states. Climate change is a very complex issue, and more than one unit of analysis is in play. But it is necessary to proceed with one of them to simplify the discussion. This should not mean, however, that the role of collective entities -i.e., states- is disregarded entirely. For example, Broome (2012) emphasizes that it is an impossible task to identify individuals harmed by one single person and ask the latter to compensate the former in proportion with the harms. Hence, it is likely that the distribution of burdens to individuals will require states’ mediatory role.

In a nutshell, the individualist paradigm takes climate change as a “tragedy of commons” (Scanevius, 2016) which is caused by numerous individuals contributing to the problem through harmful actions. Therefore, the focus of this approach is on individual liabilities, instead of collective ones. The aim of burdening individuals is to identify separate agents who have polluted, benefited, or accumulated enough to achieve the ability to help carry extra burdens.

The appeal to individual responsibilities is particularly appropriate for this thesis which relies

² Substance of the term liability is a controversial topic and there is a rich literature discussing the weaknesses and strengths of various accounts. It is beyond the aim of the thesis to settle this dispute. For further discussion see Ferzan (2011), Tadros (2011, 2014) and Thomson (1991).

on three different principles in the following chapter to provide a hybrid account of burden-sharing. The most important reason for the appeal to the individualist paradigm is the concern that with a collectivist account it is very likely for these different principles to point to the same agents. For example, the polluters pay, and the beneficiaries pay principles suggests that polluters and beneficiaries of pollution should be required to compensate. As Caney (2005) shows, these two principles practically overlap when applied with a collectivist approach. Since polluter states are continuous entities, they are also the beneficiaries of their own pollutions. Furthermore, if the polluting and beneficiary state in question has accumulated wealth through this pollution, the ability to pay principle also ascribes duties to the same agent.

Thus, focusing on only one of these principles would be sufficient to identify the liable agent for the collectivist accounts. This is why the principles are deemed to be rival. However, burdening only one responsible state seems problematic not only because it might be too demanding, but also because of its tendency to neglect intra-national fluctuations of pollutions and benefits. Collectivist accounts, by taking each and every citizen as an equal contributor, may result in unfair distributions. The individualistic perspective, in contrast, can identify various actors and categorize burdens in relation to the agent's characteristics. It not only broadens the range of liable agents, but also distinguishes and ranks the degree of these agents' liabilities with respect to their role.

It must also be noted here that this thesis mostly discusses the duties of agents with "first-order responsibilities", distinguished from the "second-order responsibilities" by Caney (2014). The former refers to certain actions that agents are required to either perform or omit in order to prevent further harm or share the burdens of historical harm. As suggested, mitigation and adaptation policies like reducing emissions or paying for prior harms can be counted among these first-order responsibilities. The principles I outline in the following chapter identify agents for first-order responsibilities. It is not my purpose to argue that these agents are the only

responsible parties. As Caney (2014) suggests, there probably will arise, for example, second-order responsibilities which are to assure that bearers of first-order responsibilities comply with their duties.

1.3. Cosmopolitanism and Integrationism

The question regarding the extent of duties of burden-sharing also requires clarification. Following Rawls (1999), theories of distributive justice have mostly focused on how a society can fairly distribute its resources and responsibilities within its borders. However, climate change is clearly a global issue having enormous impact on people from all around the world. Branching off from the Rawlsian theories, some scholars have hatched out this shell of state borders in order to include individuals from all around the world. These scholars emphasize the need to examine distribution of burdens on a cosmopolitan level (Caney, 2005).

In this view, duties of social and environmental justice are owed by each agent to all others. This school of thought contends that a universal sense of fairness and human rights are at the heart of demands of justice, irrespective of nationality or statehood. The main claim of cosmopolitanism is that persons should not experience a worse life because of morally arbitrary features like place of birth, ethnicity, or religion. Distributive justice should be blind to these and morally irrelevant properties like membership in a nation should not penalize individuals (Caney, 2009).

As already mentioned, climate change exacerbates global inequalities between countries and peoples. It would be an oversimplification to focus on climate action at a local level and disregard the global inequalities involved. Neither causes nor effects of it can be treated without taking millions of others into consideration who suffer from extreme weather, droughts, and hunger. Increasing poverty and North/South inequalities should be included for a more complete picture. Therefore, this thesis also employs a cosmopolitan approach against global

climate change and refers to cosmopolitan duties of burden-sharing, regardless of national membership. However, duties of global justice are likely to be mediated by states. As noted in the section about individualism, the distribution of burdens to individuals from around the world may require states' mediatory role.

Following this consideration regarding cosmopolitanism, there arises another complication, namely, whether climate change can be isolated from other normative considerations such as poverty or global inequality. Walzer (1983) refers to the tendency to separate justice into different spheres, each of which includes only certain social goods and certain arrangements. The isolationist view suggests taking climate change in isolation to identify principles that apply only to climate change related issues and brackets out all other normative considerations (Caney, 2018). It is argued that solving problems is easier when they are considered in isolation (Torpman, 2020).

However, Walzer writes, "what happens in one distributive sphere affects what happens in the others" (1983, 10). A second answer, integrationism, calls for taking other normative issues into consideration as well in order to burden agents with respect to their specific circumstances. Caney (2018) underlines that integrationism is not an overarching theory of everything, which tries to incorporate all normative considerations and presents a general solution. Rather, he writes that the integrationist method stresses the necessity of informing and moderating the dominant principle with relevant considerations. Caney imagines speed limits as an example. Appeal to speed limits is a general principle and those who exceed the limits are punished. However, other concerns can be integrated to this simple rule. Considering related circumstances, Caney (2018) shows that some individuals, such as those who are facing pressing medical issues, can be qualified for exemptions from punishments.

Caney (2018) suggests that climate justice should also be considered as an element in the entire

package of global injustices, since climate change cannot be isolated from other factors like development. Neglecting unequal distribution of historical emissions causing climate change and the consequent asymmetry in abilities to pollute less can result in an unjust burden. For instance, Caney emphasizes the importance of differentiating “someone who has no choice but to emit high levels to survive and someone who could easily use other energy sources but chooses not to” (Brandstedt, 2014, 74).

Following Caney’s line of argumentation, I also appeal to integrationism in this thesis and argue that we ought to burden agents differently in order to take relevant rights and entitlements into account. I hold that spheres of justice are interconnected and principles applying only to climate change are inadequate for the complexity of global injustices. There are many other *prima facie* duties and climate justice is only one part of the story. However, it is not possible to give a full account of justice here. I keep the integrationist concerns simple by referring to a sufficientarian threshold. This threshold draws a line to limit liable agents’ compensation. The thesis employs it because burdening those who are already below the sufficiency level or others who are to fall below this level will lead to more unjust distributions. Thus, agents can be exempted from compensation if they would otherwise fall below the sufficientarian threshold. I will further discuss the application of the threshold in relation to principles. Before moving on to that, let me clarify what is meant by this threshold.

The literature on sufficientarianism is vast. But briefly, sufficientarians hold that there should be a fundamental threshold at the point of sufficiency and every individual should meet that minimum level (Shields, 2019; 2020). This is referred to as the positive thesis. Additionally, a negative thesis is also endorsed, which suggests that inequalities above the threshold are irrelevant (Shields, 2019).

One of the main debates surrounding sufficientarianism is concerned with the threshold itself,

which is regarded as vague and arbitrary by some objectors (Shields, 2020). A similar objection might be directed to the use of a sufficientarian threshold in accounts of climate justice. However, Axelsen and Nielsen (2015) provide a comprehensive account to avoid such objections. Along the lines of Nussbaum and Sen's capabilities approach (Nussbaum, 2003; Sen, 1993), the authors hold that the threshold should be at a level to ensure people's freedom to succeed in central aspects of life and pursue their autonomous plans (Axelsen and Nielsen, 2015).

This thesis uses a similar reasoning. Agents who are below the sufficiency threshold, which concentrates on individual capabilities necessary to ensure an autonomous life, are exempted from bearing burdens. And agents who are above the level can only be burdened on condition that they would not fall below the threshold.

Chapter 2 – Principles of Burden Sharing

In the previous chapter, I have clarified the key terms used in the thesis. I have defined burdens as the costs of mitigation and adaptation policies implemented as part of the climate action, which arise from restrictions on further emissions as well as compensation of harms. I also referred to liable agents, defining liability based on a moral responsibility to compensate harmed parties. Lastly, I suggested that a cosmopolitan and integrationist approach with a sufficientarian threshold is necessary for a fair distribution of the burdens of climate action.

In this chapter, I explain who the liable agents are to bear the burdens. For that purpose, I refer to three different principles, each of which picks up distinct individuals and holds agents liable for differing reasons. These three principles, namely the polluters pay principle, the beneficiaries pay principle and the ability to pay principle, are common in climate justice discussions but mostly regarded as rivals trying to focus on specific agents. Finding them all appealing, it is the contribution of this thesis to the literature to combine all three of them with a hybrid account. I argue that ordering these principles sequentially with a sufficientarian threshold allows them to coexist.

Firstly, the polluters pay principle detects liable actors to hold those responsible who have polluted and contributed to climate change. I maintain this principle is first in line because of the agent's unmediated role in a wrongdoing and argue that the moral responsibility arising with respect to the consequent harm should precede other responsibilities. Broome (2012) suggests that the harm caused by an agent's pollution is the result of an individual action, harming others against their will. This requires compensation. However, agents can only be expected to bear burdens until a sufficientarian threshold, which means that they are exempted from bearing burdens if they fall below the threshold, so that they have enough resources to live on.

The hybrid account I propose then moves on to the second principle in line to ascribe duties to the beneficiary agents. Similar to polluters pay, this second principle also appeals to historical facts and the causal link between the wrongdoing and the agent. Beneficiaries are secondary duty bearers and expected to shoulder their fair part with respect to their benefits and the sufficientarian threshold. I argue that demands on beneficiaries are constrained by an upper limit equal to the amount of benefit they received, as well as the sufficientarian threshold.

Thirdly, the ability to pay principle pitches in to ascribe duties to those who have the resources. This principle does not take historical harms into account but concentrates only on the ability of the agent, based on the necessity of action to protect fundamental interests. Its justification is distinct from the former principles in that it is not concerned with how the wealth arose. The agent with the ability to pay can also be required to bear burdens until the sufficientarian threshold.³

To illustrate the sequential order of principles, imagine a simple scenario in which person A is a polluter, B is a beneficiary, and C has the ability to pay. The hybrid account I suggest burdens A the first and C the last. Agent A bears their burden until either the amount of required compensation for injustices of climate change is met -in which case B and C are free of burdens- or until A is exempted from further compensation in line with their fair burden or the sufficientarian threshold. Subsequently, B is required to bear their share following the same logic, until either full compensation or the relevant limitations obtain. Agent C comes last.

In some cases, it can be a bit more complicated than that. Imagine A is a polluter of small amounts and also a beneficiary. The priority order demands A to be burdened firstly with respect to their pollution. However, if the required amount of compensation to provide

³ I believe it is intuitive to burden the polluters first but apt to ask why those who have the ability should not be burdened before the beneficiaries who are likely to be worse-off compared to those with the ability. Here, I appeal to the link between the beneficiaries and the wrongdoing, thus to corrective justifications. But ordering the beneficiaries pay principle and ability to pay principle is a source of concern.

distributive justice is not met once all the polluters have born their fair shares, A can be burdened again with respect to their duty as a beneficiary. Note that the sufficientarian threshold holds in all scenarios.

With this order in mind, let me now go into details of the principles to explain moral claims and applicable constraints. I respectively elaborate on the polluters pay, the beneficiaries pay and the ability to pay principles in the following sections. In the end of the chapter, I also explain why a hybrid account taking all three of the principles is necessary.

2.1. Polluters Pay Principle

One of the most notable suggestions for a burden-sharing approach is the polluters pay principle (PPP) which has been central to climate justice discussions (Caney, 2010, 2014; Gosseries, 2007; Neumayer, 2000; Shue, 1999). PPP's moral force derives from the causal link between the agent and action. The principle ascribes moral responsibility to agents in proportion to the role they played with their actions. In line with this, the principle is also referred to as the contributors pay principle in some cases (Page, 2011). Burdening the agent for compensation is justified due to the agent's liability for imposing costs.

As one of the first scholars defending it, Shue (1999) associates the charm of this principle with the commonsense appeal of a requirement to "clean up one's own mess". For him, allowing those who contribute to the problem in question to not pay for the mess they made results in an unfair distribution of costs. Besides, it also signals to other agents that they may make "as many messes as they like" without facing consequences (Shue, 1999, 533). It can thus be argued that PPP can help with distributing burdens and also serve as a disincentive for future harms. Based on this intuitive moral claim, I deem PPP as the main principle for climate justice. Those who contribute to climate change should be primary agents of compensation for the harmful actions they took. Contributing to climate change ascribes liability to agents. Polluters should thus bear

their part of the burden to correct the unequal distribution of benefits and harms.

PPP is defined as a backward-looking principle, which takes historical pollution into account as justificatory grounds. Baatz suggests that the principle is especially convincing when it comes to practical considerations since climate affecting pollution is an “outrages injustice”: The lion’s share of anthropogenic climate change stems from the citizens of the developed world, while individuals living in poorer countries, despite much lower contributions, suffer the most from climate change related catastrophes (2013, 94). Similarly, Meyer (2013) also puts forward the fact that industrialized countries and their citizens are responsible for most of the historical emissions, and he argues that this calls for redistributing the burdens. PPP simply aims to do justice by including these past inequalities. However, the principle is not free from complications and objections. I will mention four different objections and complications.

2.1.1. Measuring Pollution

One of these complications arises from the definition of pollution. For example, Broome (2019) suggests that each and every person is a polluter since we all pollute in a way that is morally problematic. Aggregation of our breaths, driving, flying etc. in sum causes a considerable amount of greenhouse gas emissions, according to Broome, and he suggests that we should all be regarded as polluters. In contrast, conceding that it is impossible to live without polluting, Baatz (2013) suggests focusing on emission quotas to identify polluters. He firstly emphasizes that it is not emissions per se that are harmful. The accumulation of vast amounts of greenhouse gasses in the atmosphere in the long run causes the problem. Hence, Baatz proposes that polluters should be defined with respect to a quota, and they should be held responsible to compensate those who are negatively impacted when the quota is exceeded. Duus-Otterström (2014) refers to this as well and labels it the “quota-based PPP”.

Defining polluters with respect to a quota is in line with the individualist paradigm. When an

individual agent acts in a way to contribute to pollution, they are required to compensate the negative impacts of that action. Caney (2005) refers to this interpretation of PPP as the “micro version”, which derives its moral appeal from the “direct link between an agent’s actions and the pollution suffered by others” (Caney, 2005, 753). However, he writes that the micro version can be problematic to apply when the amount an individual owes with respect to their pollution can be challenging to calculate. This is not an uncommon concern for PPP’s application, and it suggests that it is impossible to measure the harm resulting from a specific action or an agent for proportionate distribution of burdens. Some argued that climate change is an extremely complex phenomenon where the harmer and the victim are mostly melded together, and the extent of a certain harm is immeasurable (Gosseries, 2007). Hence, objectors claimed that pointing out polluters and how much they are to pay in proportion with their impact is close to an unrealizable task.

For that reason, some referred to a collectivist approach to solve this practical issue, with which it is rather easier to make measurements. For instance, Page (2008) emphasizes that scientific studies today are getting closer and closer to having precise protocols that can measure the source and quantity of country level pollution. Data indicating the accumulation of emissions in time and space, for example, are available now. It seems to me that these national proxies can be utilized to measure individual level pollutions as well. Dividing the amount of a country’s pollution to its citizens provides an approximation of individual level pollution. It might result in overlooking intra-national inequalities and this is a valid warning when it comes to the principle’s implementation.⁴ Yet, this objection cannot undermine the moral appeal of the principle.

There is a maximum acceptable amount of emission worldwide that can be allowed. Dividing

⁴ The fact that the carbon footprint of someone from the richest %1 could be 175 times more than someone in the poorest %10 (Gore, 2015), or that gendered inequalities and vulnerabilities are worsened by climate change (Kameri-Mbote, 2013) should be a source of concern for the appeal to national proxies.

this amount equally to individuals and deeming those who exceed their quota with respect to the national proxy can provide a way out of this complex issue. Among others, Gosseries (2007) concentrates on this puzzle to suggest, in line with the quota suggestion above, that focusing on emission rights can help with quantifying proportions. Exceeding the above-mentioned quota with respect to state level calculations should make agents liable polluters.

2.1.2. Disappearing Emitters

Another objection raised against PPP points out that most of the polluters are already deceased. Referred to as the “disappearing emitters problem” (Kingston, 2014; Page, 2011), this objection means that a purely backward-looking approach misses some agents. This is especially pertinent for individualist application of the principle because many agents who have polluted heavily in the past are now dead. Critiques state that burdening the living polluters with the entire costs of climate change might result in unfair distributions.

PPP is thus open to two formulations: The lax view suggests that polluters should pay in proportion to their contribution; and the strict view argues the polluters should bear the full burdens, even if they have to pay out of proportion with how much they pollute. As already mentioned, this thesis follows the former interpretation and also a hybrid account with two other principles. Favoring this lax view and holding polluters liable proportionately dodges the concern about disappearing emitters. A limited version of PPP is endorsed which only burdens the living polluters with respect to their own pollution. It is likely that these limitations will not provide the required amount of compensation for climate justice, which is the reason to appeal to other principles in the following sections. However, the fact that some of the polluters have disappeared cannot pardon the duties of the current polluters and their moral responsibility to compensate the unfairly burdened parties.

2.1.3. Excusable Ignorance

This brings us to another common objection to the PPP, namely the excusable ignorance argument (Meyer, 2013; Moellendorf, 2012; Neumayer, 2000). As maintained by this view, polluters could be excusably ignorant of the consequences of their actions, since the detrimental impacts of pollution were mostly unknown up until the 1980s and 1990s. Proponents of this criticism point to the fact that the IPCC published its first report only in 1990 and the United Nations Framework Convention on Climate Change (UNFCCC) was not signed before 1992. Accordingly, Meyer (2013) claims that even though past emissions are harmful, they cannot be regarded as wrongful and thus, it is unfair to make the ignorant polluters pay.

As an example of this objection, Kingston (2014) suggests the following: If a hiker throws an orange pip off the side of a mountain path, which in the end causes a rockslide to a town below, it would be unfair to hold the hiker morally responsible for the harm the rockslide caused. He argues, in line with the excusable ignorance argument, that the agent could not have known that the action would cause harm, nor could they have been expected to know since there was no evidence when the action happened (Kingston, 2014, 284).

This objection is valid for historical pollution. But ever since the 1990s, the dangers of climate change have been widely recognized and been subjected to mainstream debates. It is very unrealistic to take refuge in arguments regarding ignorance and non-voluntariness. As for historical harms, there are a variety of responses to the ignorance objection in the literature. One possible line of argumentation appeals to the conception of strict liability instead of limited liability (Moellendorf, 2012; Page, 2008; Weisbach, 2010). The underlying intuition of strict liability, as opposed to Meyer's and Kingston's stances, is the understanding that "where there is harm, there is fault" (Weisbach, 2010). Quong (2012) refers to this as the *fact-relative account of harm*, distinct from the *evidence-relative* one. The latter, in line with the ignorance objection, holds that "a person can only become liable when she is responsible for a threat of

harm to innocent others as a result of action that is morally impermissible on the basis of the available evidence” (Quong, 2012, 47). However, I favor the former view which deems the evidence and knowledge irrelevant. The fact-relative account focuses on the consequence of actions and whether other parties were harmed.

Hence, fact-based considerations allow proponents of strict liability to hold that regardless of acting knowingly or ignorantly, agents are liable for any harm they caused and compensate damaged parties is fair. Unintentional harm which jeopardizes others’ fundamental rights and interests should have consequences. Climate change is an existential threat for many people and strict liability suggests that there should be no difference when it comes to intentional or unintentional harms. Non-voluntariness is not strong enough a ground to reject liabilities for living polluters.

Let me note once again that PPP with a strict liability still burdens only the living polluters. As Kingston (2014) writes, then, this version of PPP is short of offering a solution for the objection about the disappearing polluters. Many historical polluters cannot be held liable for the harm they caused. As Caney (2005) notes, PPP is an “incomplete” principle by itself. This is the reason for this paper to include beneficiaries pay principle to complement PPP. In the following section, I refer to this principle to include beneficiaries of historical harms. This principle assumes that historical pollution is still subject to strict liability, but since the wrongdoer disappeared, the beneficiary of the wrongdoing is to be burdened. However, there are other criticisms I want to consider before moving on to beneficiaries pay principle.

2.1.4. Crushing Obligations

With respect to implications of strict liability, some warned that applications of PPP might result in even more biased distribution of burdens. Considering that poorer countries are also polluters, Weisbach (2010) writes that applying PPP would burden them with “crushing

obligations”. PPP tends to ignore certain distributive inequalities already in place, presumably resulting from other past injustices. The principle then can further intensify historical injustices and deprivations.

Caney (2010) accommodates this objection by offering an upgrade to PPP. He considers that some individuals from poorer countries might have polluted to provide a decent minimum standard of living. For example, it is much more likely for individuals from richer countries to increase their wealth through cleaner methods and thus acquire their assets without creating much pollution. In contrast, some individuals from less developed countries, say in Africa, who only have enough for a decent livelihood, may have caused harm to the environment through their struggle to survive. According to this objection, PPP can cause unfair distributions by neglecting the relevant background inequalities and injustices. Requiring those with the minimum subsistence level to shoulder their burden according to pollution might possibly end up with them moving below the threshold.⁵ This is a serious objection raised against PPP.

In response to this concern, Caney suggests improving PPP to accommodate this objection. In order to avoid making the already badly-off even worse-off, he argues for a “poverty-sensitive” version of PPP: “Persons 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, 2010, 218). For him, this is a question of “just targeting” for climate policies (Caney, 2018) and he thus incorporates integrationist concerns to reinforce a just theory of climate action. To include present injustices, Caney appeals to a global sufficientarian threshold for burden-sharing principles to consider, with which exemptions can be justified and a fairer approach can be

⁵ A different perspective is proposed by Scanlon (1998). He distinguishes between the liability of agents “who could have done otherwise” with respect to “the possibility of choosing otherwise” (1998, 263). Imagining two different scenarios can better explain this account: An agent A lives in Austria and can sign up for either green energy or carbon energy. Agent B lives in Nigeria and the only way of providing energy is carbon companies. Differentiating the degree of liability between A and B is plausible because of differing abilities. A can be liable to extra costs because she can easily avoid polluting. This is not the case for B. PPP can be sensitive to differing liabilities in such cases.

attained.

In a nutshell, sufficientarianism in climate justice context argues for sensitivity to existing patterns of distribution and considering a minimum level of well-being, below which the agent cannot be expected to compensate their burdens (Page, 2008). This sufficientarian threshold exempts “developing countries from costly action so long as bearing such burdens would prevent their citizens reaching the threshold of sufficiency” (Page, 2008, 565).⁶ Hence, Caney’s remark to improve PPP by accommodating the crushing obligations objection enables the application of this principle to gain normative support by taking other injustices into account. By proposing a sufficiency threshold to solve this puzzle, an integrationist consideration thus avoids undermining basic rights and entitlements.

To sum up, I have suggested defining polluters with respect to a quota. Those who exceed the quota with respect to national proxies can be deemed polluters. I referred to strict liability and a fact-relative account of harm to hold living polluters liable despite the probability of ignorance. I also argued that the fact of disappearing emitters does not pose a problem since the thesis offers a hybrid account, and that the thesis offers a sufficientarian threshold against the crushing obligations objection. This said, poverty-sensitive PPP is still “incomplete” (Caney, 2005). Based on their actions, polluters who exceed their quota are first in line for bearing burdens, unless they are below the sufficientarian threshold. Yet PPP still requires other complementary principles for a fairer account of climate action. It successfully ascribes responsibility to current polluters to hold them liable for the compensation of their past harms and aims to achieve distributive justice. It can also help with deterring future polluters from making further harms. But PPP overlooks living beneficiaries of historical pollution, who have

⁶ As already noted, it is beyond the scope of this thesis to determine the threshold and I am sympathetic to capabilities approach offered by Axelsen and Nielsen (2015). This said, Page (2008) also provides crucial insights regarding the financial aspects of the sufficientarian threshold based on the Adaptation Finance Index and UN Human Development Index.

not directly contributed to climate change but enjoyed the beneficial consequences of polluting activities. This entails that a “monist approach” should be rejected (Caney, 2005) while addressing climate harms and burden-sharing. Caney suggests that PPP should be supplemented with other principles, and makes use of the ability to pay principle, while rejecting the beneficiaries pay principle. Unlike his hybrid account, this thesis includes the beneficiaries pay principle as well and considers it as the second principle in line.

2.2. Beneficiaries Pay Principle

The beneficiaries pay principle (BPP) mainly focuses on those who voluntarily or involuntarily benefited from pollution irrespective of the role they played in causing pollution. In general, proponents of BPP argue that beneficiaries of harmful wrongdoing (or of subsequent effects of harmful wrongdoing) can be morally obligated to compensate victims of the same wrongdoing (Butt, 2014). This principle is rather controversial, so I start with explaining BPP as a general principle first. I then move on to discuss what BPP means in the context of climate justice. In the end, I argue that BPP can be an effective principle for climate action following PPP and broaden the range of responsible agents to accelerate climate action.

2.2.1. What is BPP?

BPP appeals to moral obligations arising from wrongdoing and calls for remedial responsibility towards the victim of the wrongdoing in question. As Duus-Otterström (2017) notes, as a distributive principle focusing on the allocation of goods, BPP states that a just distribution can be achieved by ascribing duties to the beneficiaries to compensate the unequal burdens of wrongdoing.

Acknowledging that it is more appealing to focus on the duties of the wrongdoer, BPP mostly considers scenarios in which the wrongdoer is absent. Proponents of the principle hold that the beneficiaries of a certain wrongdoing are secondary duty-bearers after the wrongdoer (Parr,

2016). In such cases, beneficiaries incur a duty to compensate the victim due to benefits rooted in an injustice. The controversial claim is that BPP is not restricted to cases in which agents voluntarily accept the benefits of a wrongdoing. Obligations towards others can also arise from “merely receiving, rather than soliciting or accepting benefits” (Butt, 2014, 336). Thus, the principle ascribes responsibilities to agents who have neither directly caused nor voluntarily benefited from any harm.

It can be argued here that the agent is basically innocent but still obliged to compensate the victim. As mentioned above, I appeal to McMahan’s (2005) account of moral responsibility, instead of a view based on culpability of agents. McMahan argues that an agent is liable if they bear moral responsibility for wrongdoing, even when they are not culpable. Following his account, I believe that beneficiaries who do not divest themselves of the benefits of past wrongdoing thereby fail to perform an action which harms others. This makes them liable. The moral force of BPP comes from this emphasis on aversion to taking advantage of wrongdoing (Butt, 2014). Although it might be true that the receipt of benefit was initially involuntary, deciding not to divest oneself of the gain at the expense of victims’ harm is voluntary. Referring to the individual’s moral agency, Butt stresses that it is contradictory, on the agent’s part, to condemn wrongdoing but deny compensations to “make the actual world closer to a world where the wrongdoing did not occur” (2014, 340). This failure to give up benefits to reverse the harmful effects of wrongdoing makes the beneficiary agent an accomplice, intentionally taking advantage of an unjust act.

2.2.1.1. Defining Benefits

The definition of benefits and harms is particularly important for BPP. On the one hand, Butt (2014), for instance, argues that benefits should be understood subjectively, not objectively, since it would be an imposition for third parties to define how much involuntary benefit a beneficiary agent has received. Hence, he suggests that agents themselves, as moral beings,

should assess how much they owe in compensation. However, leaving the amount of compensation singlehandedly to beneficiaries poses a fairness problem.

Butt's suggestion based on the practical concern regarding calculating the benefits is plausible but nevertheless imperfect. Firstly, he neglects the victim and their assessment of how much they were harmed. He does not give any reasons why victims cannot decide how much they were harmed, and demand proportionate compensation. However, including the victim's subjective evaluation may result in a contradiction as well, since the beneficiary's subjective evaluation of benefits and the victim's subjective evaluation of harms is unlikely to match. Furthermore, the victim's subjective evaluation can be constrained by their socialization in a discriminatory environment. Imagining someone who is socialized into believing that her husband is entitled to hit whenever he gets angry, many will agree that the victim of domestic harm is entitled to compensation despite her subjective belief.

In contrast, the objective accounts relying on fair calculations also fail to provide a complete account. For example, benefits may refer to resources the beneficiary agent has acquired. However, this calculation is unavoidably based on counterfactuals. The conventional understanding of objective calculations employs a comparative method with the initial status quo before the wrongdoing and argues that an actor A benefits from an act X, if X produces some goods that make A better off than A would otherwise have been (Duus-Otterström, 2017, 1068). X being an injustice, this view claims that responsibilities should be ascribed to the beneficiary of this unjust deed.

As an example, assume that there are three farmers, A, B, and C, each possesses their own land and is self-sufficient with around 100 kilograms of harvest every year. One day, one of the farmers, A, diverts the underground river watering all three fields, hoping that it will boost his crops. A successfully diverts the river but stumbles on a stone on his way back and dies. In his

absence, A's harvest fails. But B's farm is close to A's, and benefits from A's action with 150 kilograms of crops; whereas C is harmed by the diverted river and ends up with 50 kilograms of crops. Based on the counterfactual that if A had not diverted the river, B would not have benefited, and C would not have been harmed, this straightforward example illustrates that objective calculation of harms and benefits can pave the way for resource distribution.

However, this is a simplified example. It must be admitted that measuring individual benefits and harms when it comes to climate justice is much more complicated. Deriving from the difficulty of having clear-cut objective accounts of benefits, and the above-mentioned limitations to the subjective account, I favor a hybrid account. An account of harms and benefits which incorporates both beneficiaries' unjust acquisitions and victims' harms is necessary to achieve a just outcome.

2.2.1.2. Extent of Compensation

Once the definition is clear, there are two possible scenarios for the principle's application when it comes to the extent of compensation. The first scenario assumes that the total cost of harm to the initial status quo exceeds the benefits received. In this case, Butt (2007) argues that there should be an upward threshold equal to the cost of the recipient's benefits to limit the amount of compensation. The beneficiary is only liable to cover the received value of benefits, until the point "where they are no longer beneficiaries of the injustice in question" (Butt, 2007, 142) and not more than that. According to Butt, it is unfair to burden the beneficiaries with further costs of the harm, especially since they have not directly harmed anyone. He holds that the recipient of benefits should help pay some parts of the burden to compensate victims, but the transfer should not exceed the benefit to leave the beneficiaries worse-off than the initial status quo.

The second scenario considers the possibility that benefits exceed the total cost of harms. Parr (2016) refers to exhaustive and non-exhaustive versions of the principle's application in such a

setting. The former version suggests that the recipient is only required to compensate the full costs of the harm and nothing more. The amount to redistribute is exhausted when the harmful effects of wrongdoing are mitigated. Therefore, the exhaustive version implies that the surplus benefits of the wrongdoing can remain with the beneficiary once the victim is adequately compensated. The latter version, by contrast, takes a step further to argue that the beneficiary of an unjust act cannot be entitled to the surplus benefits. The non-exhaustive version concedes that who precisely is entitled to this surplus value is a complicated question, but nevertheless maintains that the beneficiary's duty should not be exhausted by only mitigating the effects of wrongdoing (Parr, 2016, 987).

This is a complex debate, and it is beyond the aim of this thesis. However, the non-exhaustive version can be too demanding. When the injustice in question is compensated, there remains no victims as Butt holds. Despite the objection raised by Parr regarding the moral taintedness of these benefits, redistributing the surplus benefits would muddy the waters. Perhaps, one solution to this puzzle can be through an appeal to Butt's (2014) account on subjective assessment for the surplus benefits. Butt's suggestion to allow beneficiaries to determine the amount of overall compensation is problematic as suggested. However, once the victims and thus the injustice in question is compensated, appealing to moral agency of beneficiaries, and allowing them to determine how much more, if any, they owe might be a solution.⁷

Overall, BPP refers to the duties arising from benefiting from acts of injustice. Proponents of this principle mostly ascribe the primary duty to the wrongdoer but argue that in their absence beneficiaries should be regarded as the secondary duty-bearers. The moral force of this claim arises from the fact that it seems objectionable to refuse to give up the benefits of a wrongdoing.

⁷ Indeed, stopping with the exhaustive version requires further justification, especially when other injustices are considered. They can well be regarded as "manna from heaven" to do justice. However, for simplicity's sake, I prefer to limit myself with climate justice and leave this discussion about the "morally tainted" surplus benefits for the future.

I suggested that benefits should be defined using a hybrid measure which takes objective and subjective elements into account, and that we should limit the extent of compensation either to the amount of benefits or to the cost of the burden in question. With this framework of BPP in mind, I elaborate on its role as a principle of climate justice in the next section.

2.2.2. BPP as a Principle of Climate Justice

BPP proposes that the agents who have benefited from processes contributing to climate change should play a role in sharing the burdens. The principle targets the benefits arising from industrialization and thereby mostly from excessive greenhouse gas emissions, which have had harmful impacts around the world, while also allowing some societies and individuals to enjoy better life prospects and more resources (Das, 2013). BPP claims that some individuals have not directly participated in polluting but benefited from it by coming into existence in an industrialized society. Thus, its moral claim derives from the wrongfulness of not giving up parts of this received benefit voluntarily in order to share a fair amount of burdens of climate change.

Whereas some scholars argue that BPP can be the sole principle to regulate the sharing of the burdens of climate change (Das, 2013; Page, 2012), others take it in combination to PPP (Butt, 2014; Duus-Otterström, 2015). The merit of BPP, according to the former group, is that the principle combines the backward-looking elements of PPP, by preserving the appeal to historical harms with forward-looking elements, by accounting for the ability to pay through targeting benefits (Das, 2013; Page, 2012). According to them, this allows BPP to address distributional issues properly. In contrast, the latter group holds that polluters should still bear responsibility since initiating the act is morally worse than merely benefiting. An account of climate justice which neglects duties of this second group is counter-intuitive. Despite ascribing duties to the beneficiaries, they argue that the responsible agent should bear the burden when possible.

As mentioned already, I prefer a hybrid account and take BPP together with the polluters pay and the ability to pay principles. The principles are ordered sequentially. PPP determines the primary duty-bearers with respect to the harm they caused. However, PPP should be constrained by other considerations. These abovementioned limitations are likely to keep the amount that is owed to victims on grounds of PPP to an inadequate level which requires other principles to chip in in order to burden other liable agents. BPP is a secondary principle, because it burdens beneficiaries who are causally linked to the wrongdoing in question, in addition to burdening polluters through PPP.

Moreover, there also exists a fairness-based reason to avoid restricting the attribution of compensatory duties to polluters. There might be some agents who are polluters but for mere survival. For example, an agent from a poorer country might use cheaper sources of harmful energy, while another agent from a rich country, who has benefited from past harms has now switched to less harmful procedures (Caney, 2005; Das, 2013). This background story reveals that pollution cannot be the only indicator of climate justice. PPP tends to burden the former agent without further inquiry. Including BPP in such cases not only broadens the scope of agents, but also secures justice by avoiding neglecting the duty of this second agent.

2.2.2.1. Measuring Benefits

One complication of applying BPP as a principle of climate justice is about defining and measuring benefits. The applicability of the comparative method mentioned in the previous subsection about BPP as a general principle inevitably results in a considerable appeal to counterfactuals. To assess how much benefit the beneficiaries have received in cases of climate justice, the world prior to benefits and the world with benefits should be compared. However, clarifying this baseline is a nearly impossible task. Although scientific studies successfully measure the amount of contribution to pollution and harmful gas emissions, lack of established protocols make it difficult to come up with precise analyses when it comes to benefits (Page,

2012).

In response to this complication, Page suggests that it is possible to operationalize “national wealth as a proxy for accumulated unjust climatic benefit” (2012, 323). There are some economists, for example, working on this issue to determine the relation between greenhouse gas emissions and welfare, which can help clarify practical concerns.⁸ However, taking this as an objective indicator is not enough. Therefore, as suggested above, taking subjective considerations as well into account might be necessary in some cases.

This said, Huseby maintains that it is not uncommon in ethical discussions to have such uncertainty. He writes that “how exactly duties, responsibilities, blame, and so on are to be distributed is seldom easy to answer with precision” (2015, 214). Admitting there can be practical challenges to its application due to lack of established protocols and precision, Huseby (2015) and Page (2012) suggest that BPP can still be part of climate justice principles.

2.2.2.2. Deceased Beneficiaries

Another objection raised against the BPP presumes that it is possible to allocate burdens and benefits, but brings up the fact that most beneficiaries are dead. This objection is similar to the one directed against PPP. Disappearing beneficiaries, it is argued, can cause other injustices. For example, Huseby refers to a criticism mounted by Caney and writes that “it would be unfair to make those beneficiaries who happen to be alive foot the whole bill” (2015, 213). He notes the two issues that emerge.

Firstly, with the assumption that the living beneficiaries cannot bear the cost of the entire burden, this challenge suggests that the application of the principle can result in an unfair weight. However, similar to BPP proponents’ upper limit mentioned above, Huseby argues that

⁸ For instance, Janssen, den Elzen, and Rotmans’ (1992) article “Allocating Co2-Emissions by Using Equity Rules and Optimization” provides research on this linkage.

compensation can be restricted in such a way as to prevent exceeding the benefits. If the total cost of compensation goes beyond the benefits of living beneficiaries, they are not obliged to foot the whole bill. Furthermore, there should also be a similar sufficientarian threshold for BPP as well, similar to the one mentioned while burdening polluters through PPP. The required compensation should be limited in such a way as to avoid undermining basic rights and entitlements of the beneficiary. This is easier done through a hybrid account, which allows for the distributing of the remaining burden among other agents. But considering that beneficiaries have inherited some or perhaps most of the benefits, Huseby claims that the concern regarding BPP causing injustice to beneficiaries does not permit avoiding their fair share, especially when adequate limitations are in place.

Secondly, Caney's objection also indicates that it is unfair to burden some beneficiaries, while neglecting the duty of others. This is unavoidable since some beneficiaries are dead and cannot be required to bear the burden. BPP adherents might acknowledge that this is in one sense unfair, but still respond that it cannot let living beneficiaries escape distributive duties. To illustrate, if two different agents are indebted to another person and one of the indebted agents fails to pay back, Huseby (2015) argues that the duty of the other agent cannot disappear.

2.2.2.3. The Nonidentity Problem

Lastly, some scholars claim that BPP is vulnerable against a philosophical objection, coined by Derek Parfit (1984), namely the nonidentity problem. The nonidentity problem challenges to the core of BPP, whose application is based on the assumption that agents who are now living in post-industrial societies have benefited from industrialization and consequent harms (Das, 2013). Caney (2005) refers to Parfit's infamous problem to question whether the so-called beneficiaries can be assumed to be beneficiaries in the first place. He notes that the birth of a particular person depends on the exact circumstances of their conception and changing them means a different, non-identical person would come to exist. He also notes that the policies and

other actions of the past have led to the birth of certain individuals who would not have been born if those policies had not been adopted. Broome's (1992) elaboration of the dilemma is particularly apt:

Compare what will happen if we take steps to control our pollution of the atmosphere with what will happen if we do not. The steps we shall have to take will make a significant difference to people's lives. In the rich countries, for instance; people will almost certainly have to travel about less. Consequently, young people will form different groups of friends, meet different people, and marry different people. They will have children at different times, and those will, of course, be different children. After a century or so, nearly all of the people then living will be different individuals from the people who will be living if we continue to pollute in our present profligate way. (33-34)

Thus, it is claimed that living people cannot be made worse or better off due to a past policy, even if the policy has had harmful consequences since any other policy would have produced a different generation of people (Caney, 2005). An account of intergenerational benefits and harms is unintelligible: "it is not possible to compare a state in which a person exists to a counterfactual one in which she never existed at all" (Das, 2013, 750). It is argued that this objection undermines BPP's applicability for burden-sharing in climate justice severely, since the principle is unable to provide the justification for the members of industrialized countries to be regarded as beneficiaries (Caney, 2005).

The nonidentity problem is genuinely complex, and it is beyond this paper's limits to do justice to Parfit's account and its objections. However, there are several attempts to avoid the nonidentity problem for BPP and its application to burden-sharing. One line of argumentation proposed by Page (2012) states that even if it is implausible to talk about beneficiary agents of previous generations' acts in industrialized countries, it is still possible to make intra-generational distributive claims with BPP. He writes that individuals from the developed world enjoy more resources, whereas others face adverse and harmful effects both of which are products of emission-inducing past actions. The fact that there is a "distributive inequity", Page notes, allows the disadvantaged ones to ask for restoration from the beneficiaries, by requiring them to surrender some parts of the benefits (2012, 320). Similarly, Broome suggests that the

nonidentity problem provides reasons to concentrate on the distribution of intra-generational goods and bads, rather than undermine the moral responsibility ascribed by the principle (1992, 34).

Moreover, Page (2012) refers to empirical studies as well to show that BPP is not only relevant for past emissions and past generations. Most of the greenhouse gas emissions have occurred during the lifetime of existing individuals: scientific research suggests that nearly half of the entire greenhouse gasses since the beginning of industrialization was emitted after the 1980's (Page, 2012, 320). Individuals living in the polluting countries have directly benefited from these emissions. BPP is particularly relevant in this case because it points out to agents who benefit from pollution and thereby benefits occurring during their lifetime.

This thesis holds that, despite these difficult objections, BPP is still a serviceable principle for burden-sharing. I have outlined the principle in general and also referred to its application as a principle of climate justice. I then mentioned several objections and rejected or accommodated them to suggest that BPP can play a major role in distributive justice. I suggested that benefits can be measured with respect to a proxy of national wealth, and in some cases, when necessary, subjective considerations can back up these rather objective calculations. Against the concern that living beneficiaries can be burdened unfairly, I replied that compensation is limited to the received benefit or by the sufficientarian threshold. And, lastly, I admitted that the nonidentity problem is challenging but the fact that this thesis focuses on intra-generational distributive inequalities means that it can be circumvented.

BPP can determine beneficiaries of pollution contributing to climate change, and ascribe responsibilities deriving from not giving up the harm voluntarily. This enables expanding the range of individual agents while also avoiding the disappeared polluters problem. BPP is the second principle in line, once the polluters are burdened, due to beneficiaries' role in benefiting

from injustice. I believe a third principle comes next to help prevent climate change and do justice to its victims. I now concentrate on the ability to pay principle to include other relevant actors who might bear some parts of the burden if the amount of compensation received from PPP and BPP is inadequate.

2.3. Ability to Pay Principle

Defined formally, the ability to pay principle (APP) proposes that it is the duty of the wealthy to bear extra burdens to make up for shortfalls in the compensation of victims. The principle states that the burden increases proportionately in line with one's wealth. APP is not historical and does not appeal to past harms, nor to other causal connection between victims and the agents that are required to compensate. It only requires identifying the advantaged individuals who should contribute to compensation, and it assigns responsibilities to them in proportion with their wealth.

To elaborate, Caney (2005) starts with a general premise. He argues that all persons are entitled to the protection of their most fundamental interests, and it is the obligation of others to intervene when these interests are jeopardized. Note that Caney avoids referring to any causal relationships to harms or past actions. He even writes that APP in climate justice “does not necessarily rest on the assumption that climate change is human-induced” (Caney, 2005, 760). He rather insists that the fundamental interests of human beings should be protected. Climate change, to say the least, burdens persons with instability and prevents them from making long-term plans. Therefore, after mentioning other principles and burdening other agents with respect to their role as polluters, Caney suggests that the most advantaged have the duty to compensate the remaining costs to prevent the risk of compromising the victims' fundamental interests.

2.3.1. The Disincentives Argument

From a different perspective, Shue (1999) justifies APP as a principle of climate justice by comparing it to progressive taxation. He explains that those with more resources are required to contribute proportionately to a common endeavor, since all agents are unavoidably bounded to contribute to fix this problem. According to Shue, the “disincentive effects” of burdening the wealthy is one obstacle to this line of reasoning. Many critics have questioned why those who “take more risks, display more imagination, or expend more effort in order to gain more resources” are required to contribute more (Shue, 1999, 538).

This is a common objection raised against APP, asking why the wealthy accumulating in non-harmful ways should pay. By assumption, the advantaged are not necessarily responsible for bringing about climate change. Caney (2010) argues that this objection assumes that it is wrong for some agents to shoulder the burden for a problem that is not of their doing. In response to this objection claiming innocence, Shue draws attention to distributive justifications. For Shue, it is unfair to distribute burdens equally when the wealth is distributed unequally. He suggests that the mentioned criticism against progressive taxation tends to ignore unequal wealth distribution, and requiring the advantaged to pay more in line with their wealth is in fact a fairer procedure. It is thus the strength of progressive taxation to consider respective abilities and take the distribution of wealth into account (1999, 538). APP appeals to a similar reasoning and suggests that it is necessary to demand more from the advantaged for burden-sharing.

2.3.2. Business as Usual?

Caney (2010) notes that climate change requires some parties to bear burdens whether these burdens arise from their fault or not. It is a complex phenomenon with catastrophic outcomes and inevitably burdens some innocent agents. To show why, Caney compares three different possible scenarios. The first scenario includes no attempts to provide justice at all - which Caney terms “business as usual” (2010, 214). This approach, however, unfairly burdens some people

living in hot-spots and creates vulnerabilities for those who live under life-threatening climate conditions. Here, “costs are left to lie where they fall” (Butt, 2014, 337), so Caney rejects the legitimacy of this first scenario since it burdens innocent people, just because they were born in a climate hot spot. Other scenarios involve either the rich or the poor paying for climate action. The latter possibility, which requires the poor to pay for the burdens of climate change seems perverse, because it makes the already worse-off bear the burden. By contrast, there are those advantaged individuals who can pay and still live a decent life. Caney thus believes it is their duty to bear extra burdens. This objection regarding the unfairness of making the innocent wealth pay, then, cannot harm APP. Climate change leaves no possible scenarios within available options where an unguilty party is burdened. He thus suggests it is only plausible for those who have the ability to bear the burden to play a role.

Rejecting APP based on the innocence of the advantaged, according to Caney (2010), reduces the climate justice framework to a simpler version of PPP by limiting responsible agents and disregarding pertinent duties to compensate. It must be noted, as already suggested above, that APP will play a smaller role in the hybrid account I propose. Unlike Caney, I also take BPP as a principle of climate justice and leave less space for APP. However, similar to Caney (2014), I believe that if there is a shortfall for the compensation of burdens, it should be filled by the advantaged.

2.3.3. Historical Records

Another objection against APP calls for accommodating the cleaner patterns of wealth accumulation. The principle is criticized because of its tendency to overlook the historical records of polluting activities. Objectors argue that APP does not differentiate between individuals who have accumulated their wealth with and without pollution. As noted above, APP is ahistorical and only prioritizes giving responsibility to those who can bear the burden. It is counter-intuitive to neglect the origins of climate change and allow historically responsible

actors to get away with their harmful activities. Based on that consideration, for instance, Page (2008) invites us to compare two different groups. On the one hand, he assumes there are wealthy countries who have ignored cleaner methods of progress and caused climate change; and on the other, he imagines a group of wealthy but low emitting countries. According to Page, not differentiating between the duties of the two groups would be extremely unfair.

Caney (2010) acknowledges that this is a serious objection for purely forward-looking approaches and thus suggests accommodating the objection to distinguish between two groups while appealing to APP. He argues that those who are among the wealthy and have accumulated their wealth through harmful actions and contributed to climate change should bear greater responsibility compared to those who enriched themselves by cleaner methods. Caney argues that it is possible to “upgrade” the principle to a “history-sensitive” one by adding a distinction between harmfully and un-harmfully accumulation by wealthy agents (Caney, 2010, 218). According to him, the former should bear greater responsibility to adhere to fairness. However, that still should not mean that the latter group is to avoid shouldering a share entirely. Real-life effects of climate change inescapably burden some parts of humanity in all possible scenarios; therefore, Caney argues that it should be up to the advantaged and the capable to assist in the struggle.

However, note that this objection is primarily directed to accounts of climate justice with APP as the only principle. Including PPP and BPP and burdening other liable agents with respect to historical harms through these principles, the main concern of this challenge is already incorporated in a hybrid account such as the one I propose. APP follows these two other principles and only requires compensation after the historical record is taken into account.

In conclusion, APP demands from agents with greater wealth and capacity to act to shoulder the remaining parts of the burdens of climate justice, after PPP and BPP. By arguing against

business as usual, it relieves the worst off from more burdens and also acts as a disincentive for further pollutions. Being part of a hybrid account, the historical records objection is also evaded. The moral appeal of this principle is based on the presence of a common endeavor which requires a number of agents to contribute, and APP holds that agents with more resources should be burdened to bear more.

2.4. A Hybrid Account

It must be noted here that hybrid accounts of climate justice are not novel. The UNFCCC endorsed the principle of “Common But Differentiated Responsibilities” long ago in 1992. The main aim of the convention’s differentiated responsibilities, which is similar to the aim of the hybrid account I outlined here, was to “acknowledg[e] that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response” (UNFCCC, 1992).

However, the problem with UNFCCC’s suggestion, since it was taking collective entities as agents, was the convergence of liable actors with respect to their responsibilities and capabilities. As Page notes, “developed countries were causally responsible for climate change; they are the main beneficiaries of activities that cause climate change; and they have the ability to tackle the causes and effects of climate change” (2008, 564). Yet, with an individualist approach, as outlined in the previous chapter, it is possible for the hybrid account to pick up different agents and hold them liable. In case of a similar convergence, the thesis holds that the sequential order of principles and the sufficientarian threshold allows a fair distribution of burdens. The hybrid account I argue for complies with the altering rationales suggested by each principle separately and combines them sequentially. It is not that common in the literature of climate justice to uphold a hybrid account of all three principles, but I think an individualist approach ordering the principles sequentially manages successfully.

This said, I lastly want to mention a concern regarding the sequential order and suggest that the order is not absolute. Some readers might take issue with the ordering by some counterintuitive examples. Consider the following scenario. A and B are two different lower class poor individuals who respectively live in Nigeria and Austria. A uses carbon intensive energy, while B can choose to use clean energy, partly because she has benefitted from the previous generations' intentional use of coal. Ordering principles with priority of PPP suggests that A must pay until he reaches the level of the sufficiency threshold. B is expected to pay if the required amount is not met. But imagine that A can fully pay, ending up just above the threshold. B is not required to pay anything, even when she was expectably better off initially. Integrationist concerns allow BPP to overturn PPP in such a case and gives reasonable justifications to avoid referring to an absolute ordering. Nevertheless, ordering principles sequentially with respect to corrective concerns of PPP and BPP first, and then with forward-looking considerations of APP provides a comprehensive account.

Conclusion

The literature on climate justice is intriguing and vast. This thesis contributes by offering a hybrid account for sharing the burdens of climate change, which includes three different principles. Each of these principles identifies different agents and ascribes differing liabilities to these agents with fitting justifications. Employing an integrationist approach, I also take other considerations into account and argue that a sufficientarian threshold should limit the amount of payments. The hybrid account proposed here appeals to a sequential ordering of the polluters pay, the beneficiaries pay and the ability to pay principles. The polluters pay principle takes its moral force from an intuitive appeal to ask for compensation from those who have caused wrongdoing and harmed other agents against their will. Hence, it points to agents who are the first in line for burdens. I hold that polluters can be identified with respect to a quota, exceeding which brings strict liability for compensation. I suggest that polluters should be required to pay until either they compensate their pollution, or until the abovementioned sufficientarian threshold. Subsequently, the beneficiaries pay principle burdens those who are not directly polluters but beneficiaries of others' pollution. This principle is crucial for the account, because of the fact that most of the polluters are absent and their disappearance is likely to result in a shortfall for the compensation of harms. Yet, beneficiaries are still alive and enjoying the positive consequences of activities which simultaneously harmed other parties. I suggested limiting the extent of beneficiaries' compensation by the amount of their benefits or again the sufficientarian threshold. Lastly, the ability to pay principle further broadens the range of agents by holding that those with resources should contribute to compensation of this catastrophic issue. In all possible scenarios, climate change creates situations where innocent individuals are burdened and harmed. It is the duty of the advantaged to bear extra burdens when necessary.

Neither the principles nor offering a hybrid account is novel for the literature on climate justice. Nevertheless, there is a tendency to deem these principles rival and this thesis contributes by

combining all three of them. Utilizing an individualist, cosmopolitan and integrationist approach, the thesis aims to expand the scope of liable agents for climate action. Besides, by referring to terms like burden, harm, benefit, liability and sufficientarianism, this thesis also brings together various philosophical concepts together for a more complete account. Needless to say, there are many more issues to consider, improve and add. But the thesis clarifies an urgent problem and presents a clear argument to address this major concern more effectively.

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