



Universiteit
Leiden
The Netherlands

Do individuals bear political and moral responsibility towards climate mitigation?

Calvi, Cristina

Citation

Calvi, C. (2025). *Do individuals bear political and moral responsibility towards climate mitigation?*.

Version: Not Applicable (or Unknown)

License: [License to inclusion and publication of a Bachelor or Master Thesis, 2023](#)

Downloaded from: <https://hdl.handle.net/1887/4177451>

Note: To cite this publication please use the final published version (if applicable).



**Universiteit
Leiden**
The Netherlands

Do individuals bear political and moral responsibility towards climate mitigation?

**BSc thesis - International Relations and Organisations (IRO)
Foundations of Climate Justice (workgroup 102)**

Cristina Calvi (s3557219)

Supervisor: Dr. Jelena Belic

Second reader: Dr. Marco Verschoor

Submission date: 20.12.2024

Embargo statement: public

Word count: 8778 words

ABSTRACT

This paper examines the role of individuals in climate mitigation through a novel account of responsibility, which addresses the ‘Collective action problem’ structure of climate change. Although governments and corporations are usually viewed as the primary duty-bearers for climate mitigation, this thesis illustrates how individuals can meaningfully contribute to mitigation efforts. Therefore, this research is motivated by the question: *do individuals bear political and moral responsibility for climate mitigation?* In this paper, I argue that individuals, motivated by political and moral individual responsibility and complemented by institutional reform, can prompt societal and, ultimately, structural reforms through the aggregation of their efforts. In the context of climate mitigation, my research challenges how game theoretical perspectives, such as the ‘Collective action problem’ and the ‘Tragedy of the commons’, perceive individual agency as isolated and therefore impotent. Accordingly, by considering individuals as interconnected members of the global collective, I argue that their mitigation efforts can drive systemic change by strengthening institutional solutions, which amplify societal impacts. In this paper, I employ an integrationist methodology that provides a comprehensive and holistic analysis considering various disciplines, from game theory to philosophy and social psychology. Finally, by highlighting how individual efforts intersect with systemic change, I address objections from public and scholarly debates and bridge parts of significant literature gaps. In the very final part of the paper, I also illustrate which areas are susceptible to future research.

TABLE OF CONTENTS

INTRODUCTION

CHAPTER 1 - Literature Review

- 1.1 Climate mitigation
- 1.2 The Collective Action Problem
- 1.3 The link between climate mitigation and game theory
- 1.4 Political or moral individual responsibility?
 - 1.4.1 The relevance of discussing individual responsibility
 - 1.4.2 Political conceptions of individual responsibility
 - 1.4.3 Moral conceptions of individual responsibility
 - 1.4.4 Addressing the literature gap

CHAPTER 2 - Argumentation

- 2.1 An account of political and moral responsibility
- 2.2 Collective responsibility concerning climate change
- 2.3 Social identity perspectives on climate mitigation
 - 2.3.1 The Social Identity Theory
 - 2.3.2 The ASPIRe model
 - 2.3.3 Extending the role of global identity in climate action
- 2.4 Addressing the climate collective action problem

CHAPTER 3 - Objections

- 3.1 Individual Causal Inefficacy and the “no-harm” view
- 3.2 The “no-effect” view
- 3.3 The “overly demanding” view

CONCLUSION

BIBLIOGRAPHY

INTRODUCTION

The climate crisis constitutes a severe Collective Action Problem (CAP) threatening the Earth. To prevent irreparable changes inflicted on our planet's natural systems, mitigation strategies are necessary (Batalha & Reynolds, 2012, p. 743), and as climate change is human caused, it seems logical to approach the phenomenon in terms of responsibility (Banks, 2013, p. 42). Usually, moral duties concerning climate mitigation have been allocated to states (Schwenkenbecher, 2012, pp. 168-169). However, there is broad disagreement on who bears responsibility and what this responsibility practically entails (Sardo, 2023, p. 27). Recently, there have been discussions on individuals bearing moral responsibility to reduce their emissions, but there is neither a consensus on this nor on whether individuals bear mitigation responsibilities at all. For instance, some scholars believe that individual actions are impotent within climate mitigation (Hiller, 2011, pp. 350-354), therefore arguing that it is inadequate to demand individuals change their behaviour to be more sustainable (DeSombre, 2018, p. 5). Other scholars believe individual climate action should only be motivated by political and not moral responsibility (Sardo, 2023, p. 41). Accordingly, this research is motivated by the following question: do individuals bear political and moral responsibility towards climate mitigation?

While larger entities (e.g. states or corporations) are extremely critical in driving systemic change, this paper moves beyond the myopic focus on governmental responsibility (Schwenkenbecher, 2012, pp. 168-169), aiming to reframe public understanding and engagement. Besides institutional agents' efforts, the widely neglected value of individual mitigation efforts should also be explored, as their aggregation can potentially have enormous effects (DeSombre, 2018, p. 5; Loy et al., 2022, p. 563). Collectively, individuals can foster social change by acting as role models, encouraging sustainable lifestyles and prioritising inspirational actions (Schwenkenbecher, 2012, pp. 176-179). I argue that a discussion of personal political and moral responsibility and its intersection with systemic change is essential when questioning dominant game theoretical framings of climate change. These perspectives perceive individual agency as impotent (Ortmann and Veit, 2023, p. 85; Hourdequin, 2010, p. 455). Therefore, this thesis adopts a moral and political philosophical method that emphasises how individual agency represents an indispensable and valuable contribution to mitigating climate change. My proposed account of responsibility constructively addresses the mainstream framings of climate change and identifies how to escape the climate CAP. To

approach individual responsibility in this way, I employ an integrationist methodology, holistically exploring how global warming interconnects with various issues, such as social norms or notions of individual and collective identity (Loy et al., 2022, p. 576). By emphasising how individual actions' aggregation can attain systemic change, an integrationist lens supports my proposed account, illustrating how personal efforts can mobilise the collective to tackle the crisis (Ortmann & Veit, 2023, p. 85). Furthermore, integrationism allows to revise the game theoretical models, positioning individuals as capable agents of influencing collective norms and prompting meaningful climate action through shared responsibility (Hourdequin, 2010, pp. 457-458; Schwenkenbecher, 2012). Hence, this thesis' normative statement is the following: individuals bear political and moral responsibility towards climate mitigation as their aggregative sustainable efforts can positively reshape dominant narratives and ultimately foster collective action that climate change requires.

I deem this research topic as both socially and theoretically relevant since current accounts of individual responsibility do not adequately address the CAP that characterises climate change. I propose a new account emphasising how, besides a political dimension, the moral dimension of individual responsibility is also crucial to consider. Mainly, individual responsibility deriving from moral duties communicates and symbolises one's commitment to the collective's well-being and one's contribution to shaping societal norms, which can inspire collective action (Hourdequin, 2010, pp. 444, 451; Raterman, 2012, p. 428). Furthermore, behavioural changes can prompt outside pressure to influence society and institutions at large, thus complementing the potential of personal political efforts in driving systemic change (Hiller, 2011, p. 365).

The first chapter of this paper contains a review of the literature. I discuss climate mitigation and climate change through the CAP framework. Then, before delving into the main debate regarding the nature of individual responsibility, I illustrate how relevant individual agency is within climate mitigation. In the second chapter, I present my argumentation proposing a dual account of individual responsibility, both political and moral. Then, I draw on Banks' (2013) theory of collectivism and social psychological empirical evidence to further reinforce my novel account of responsibility. I discuss the Social Identity Theory (SIT), the ASPIRe framework, and the role of global identity within climate mitigation. Next, I illustrate how my account of responsibility can be a pathway to escape the climate CAP. In the third chapter, I explore three objections to my main arguments: the Individual Causal Inefficacy (ICI) objection alongside the "no-harm" view, and then the "no-effect" and the "overly demanding"

views. Lastly, I summarise my main findings, discuss research limitations and strengths, and make recommendations for future research.

CHAPTER 1 – Literature Review

This chapter delves into climate change and climate mitigation. I illustrate how mitigation generates a CAP, and then I explore this game theoretical perspective further. Next, I discuss various conceptions of individual responsibility for climate mitigation.

1.1. Climate mitigation

Our planet's climate is changing, and human activity is the cause (Batalha and Reynolds, 2012, p. 743; Banks, 2013, p. 42). Anthropogenic greenhouse gases (GHGs) are at their peak, having steadily increased since the pre-industrial era, largely due to economic and population growth (Pachauri et al., 2014, p. 4). In recent decades, climate change has gravely impacted natural and human systems around the globe: ocean acidification, glaciers shrinking, Arctic sea ice loss, extreme rise in sea levels, a decrease in cold temperature extremes, an increase in warm temperature extremes, and the quicker extinction of species (Pachauri et al., 2014, pp. 2-16). In the next centuries, many aspects of climate change will continue even if GHGs are stopped (Pachauri et al., 2014, p. 16). Therefore, this existential and pressing challenge calls for collective efforts to prevent irreversibility and abrupt changes. Therefore, individuals should reduce their carbon footprints, as their joint efforts are effective (Loy et al. 2022, p. 563).

The Intergovernmental Panel on Climate Change (IPCC) has identified GHGs, primarily carbon dioxide (CO₂), as the driving forces of climate change. The largest source of CO₂ derives from burned fossil fuels; other major sources of GHGs are industry, transportation, landfills, and some food production (Banks, 2013, p. 43). The year 1992 marks the initiation of international agreements about climate mitigation, with the establishment of the United Nations Framework Convention on Climate Change (UNFCCC) in Rio de Janeiro. This treaty aims to stabilise GHG concentrations in the atmosphere through principles of equity and *common but differentiated responsibilities*, which are based on the national capabilities of ratifying UN members (Batalha & Reynolds, 2012, p. 744). Another agreement, which resulted from this treaty, stipulated that the most developed countries would lead in mitigation efforts to fully consider developing countries' vulnerable contexts. In 2007, the Conference of the

Parties in Bali, the UNFCCC's supreme body, launched *mitigation, adaptation, technology and capacity building* as key elements for an international plan of action (p. 745).

Pachauri et al.'s (2014) synthesis report summarises findings from the IPCC's Fifth Assessment Report (AR5), adopting an integrative perspective on climate change. Mitigation, often discussed alongside adaptation, refers to strategies aimed at reducing emissions and sinking GHGs, and it considers a near-term timescale (pp. 17-76). Mitigation's effectiveness depends on policies and "cooperation at all scales" (Pachauri et al., 2014, p. 26), as well as on institutions, governance, technologies, infrastructure, sustainable livelihoods and behavioural as well as lifestyle choices. Some risks, such as economic costs and technological availability, are unavoidable even with mitigation strategies in place (pp. 18-77). Since mitigation aims to limit climate change to two degrees Celsius (p. 20), all countries should immediately begin with mitigation efforts through a unified carbon price and widespread access to key technologies (p. 24). However, countries differ in their capacities (p. 76), raising issues of equity, justice and fairness. Marginalised communities – socially, economically, politically and culturally - are especially vulnerable to both the crisis and to some mitigation responses (p. 54). As Pachauri et al. (2014, p. 13) emphasise, climate harm is unevenly distributed, and it is generally greater for those who are disadvantaged at all development levels. Importantly, delaying mitigation shifts burdens to future generations, compromising adaptation and the basis of sustainable development (pp. 18-76). Therefore, substantially reducing emissions makes long-term mitigation costs sink, paving climate-resilient pathways for sustainable development practices.

1.2 The Collective Action Problem (CAP)

The Collective Action Problem (CAP), famously introduced by Mancur Olson in 1965, derives from the rational choice neoclassical economics' *homo economicus* approach (Svendsen, 2022, p. 3). It describes a situation in which two or more rational individuals only act in a group's interest if selective incentives are applied (pp. 1-3). These reward those who cooperate (positive selective incentives) and punish those who do not (negative selective incentives). Historically, David Hume's *A Treatise of Human Nature* is the first work to treat this concept academically. Hume compared the cooperation between two farmers versus a thousand (p. 1), arguing that larger-scale cooperation is comparatively more complicated, even when benefits exceed

cooperation costs. Therefore, “the smaller the individual net gain becomes, the more likely it is that group action will fail” (Svendsen, 2022, p. 2).

Ostrom (1990), who belonged to the post-*homo economicus* generation, expanded the economic rationality assumption to include social control and norms (pp. 3-4). By considering social incentives, including human relations and social control, finding ways to overcome the CAP (p. 5). With the social capital theory, political science and sociology have also examined social incentives within legal and economic structures, largely overlooked aspects by Ostrom (1990). Despite these differences, individuals remain self-interested and rational, often prioritising personal rather than public interests.

The free-rider problem, central within the collective action framework, refers to scenarios in which two or more individuals pursue “the same goal: a collective good” (Svendsen, 2022, p. 3). As Svendsen (2022) illustrates, these scenarios lead to suboptimal outcomes in which cooperation fails due to uncertainty regarding group organisation. Although the advantages of group organisation would exceed cooperation costs, “individual rationality *does not* lead to collective rationality” (Svendsen, 2022, p. 5). Furthermore, the larger the group, the higher the incentive to free ride: Nash equilibria predict that individuals will defect cooperation, further impeding achieving collective goals (p. 3).

The climate crisis is often also modelled through the ‘Tragedy of the commons’, exemplifying the CAP. Hourdequin (2010, p. 446) explores its three main assumptions. First, players are incentivised to maximise their benefits by using shared commons. Second, communication between players is limited to their use of commons. Third, only the costs of overusing the commons are shared. Hourdequin (2010) critiques this model for oversimplifying human nature, reducing it to narrow economic rationality and overlooking the moral and social ways in which individuals can influence others’ decisions (Hourdequin, 2010, p. 452). Furthermore, applying these game theoretical models to climate change reinforces narrow conceptions of human decision-making, encouraging one to act following personal self-interest (Hourdequin, 2010, p. 455). Evidence illustrates that many people do not understand themselves and their own decisions exclusively or even primarily through this lens. Accordingly, Hourdequin (2010, p. 456) claims that the CAP framework is useful for understanding certain dynamics, but it does not adequately justify why individual GHG reductions are meaningless without a collective agreement.

1.3 The link between climate mitigation and game theory

Climate mitigation generates a CAP, underpinning Olson's argument: the larger the group, the lower the individual gain from cooperation, therefore, the likelier coordination fails (Svendsen, 2022, p. 2). However, the benefits from effective mitigation apply to the whole planet, requiring coordinated action from various agents, such as states, corporations, and individuals. In this case, as Hume observed, cooperation is not ensured even when the benefits outweigh the costs (Svendsen, 2022, p. 1). Generally, global cooperation is hindered by the free-rider problem: some entities choose to defect cooperation while being able to benefit from the mitigation efforts of participant entities. For instance, high-emission countries might resist mitigation efforts due to competitive disadvantages. Alternatively, developing nations demand support from wealthier ones, calling for equity and justice. Marginalised and vulnerable communities lack the capabilities to mitigate, although they are those most impacted by climate change (p. 13): "The social acceptability and/or effectiveness of climate policies are influenced by the extent to which they incentivise or depend on regionally appropriate changes in lifestyles or behaviours" (Pachauri et al., 2014, p. 94). These disparities affect the opportunities for cooperating and create tensions in international climate negotiations (Batalha & Reynolds, 2012, p. 744).

Accordingly, the 'Tragedy of the commons' also applies to the climate crisis, as the global population exploits a shared resource, the atmosphere while ignoring the shared long-term consequences of its depletion. Therefore, Pachauri et al. (2014) reinforce the imperativeness of unified and immediate action across nations for effective mitigation (p. 24) since GHGs ultimately affect everybody on the planet.

Finally, mitigation efforts suffer from a temporal aspect, which complicates and exacerbates the matter further. Indeed, immediate mitigation efforts' results will take decades to manifest (p. 76). Consequently, mitigation is perpetually delayed by the prioritisation of short-term benefits, and so burdens and future mitigation costs are passed on, and inequalities are further exacerbated. Therefore, despite the many international treaties and mitigation strategies in place, national priorities and capacities often lead to insufficient action.

1.4 Political or moral accounts of individual responsibility?

This section discusses the value of individual agency within climate mitigation and explores the academic debate concerning individuals' mitigation efforts, delving into political and moral conceptions of individual responsibility for climate mitigation.

1.4.1 The relevance of discussing individual responsibility

While governments' and corporations' mitigation efforts are extremely critical in driving systemic change, individual efforts are also indispensable. Isolated individual impacts appear minor, but their accumulation can drive significant global change (DeSombre, 2018, p. 5). Given that current state-led measures are insufficient and inadequate in addressing the crisis, individual contributions should not be overlooked. Furthermore, as climate change is fundamentally human caused, it is logical to assess it through individual accountability (Banks, 2013, p. 42). For instance, individuals bear moral responsibility because they contribute to harmful collective practices through personal consumption and lifestyles, exacerbating the climate crisis (Schwenkenbecher, 2012, p. 168).

Institutional solutions, widely considered to be the most effective in fostering systemic change, depend on individual behaviour to be implemented, making it a critical factor to consider, as "an institutional solution is only as good as the individual behaviour it influences" (DeSombre, 2018, p. 6). Furthermore, individual agency can complement institutional efforts by creating social pressure on governments to take stronger action and create efficient climate regimes (Schwenkenbecher, 2012, pp. 170-183). For instance, Hiller (2011) highlights how the most effective campaigns which can attain great policy changes are those fostering political will by putting a face on climate harm and putting climate change on a human scale. Hiller (2011, p. 365) also emphasises that behavioural shifts, ultimately bringing substantial collective action, can be inspired by personal awareness regarding one's environmental impacts. Similarly, Schwenkenbecher (2012, pp. 168-170) and Sardo (2023) highlight how morally imperative it is to reduce 'luxury emissions': futile contributions to one's carbon footprint.

Furthermore, Hourdequin (2010, p. 448-454) argues that integrity, the reflection of deeply held moral values in one's broader identity, and relational commitments enhance the moral and practical value of personal actions. This suggests that individual responsibility also has a social and moral element, besides a personal one, since individual actions can influence others,

ultimately inspiring behavioural societal shifts. Therefore, through a relational perspective, individual agency has broader and more meaningful societal significance.

1.4.2 Political conceptions of individual responsibility

Political theorists have conventionally perceived individual responsibility as inadequate in addressing structural injustices stemming from climate change. Sardo (2023) argues that individualistic theories of responsibility create scapegoating and victim blaming due to their inability to conceptualise structural injustice. Therefore, the author advocates for a strong notion of political responsibility (p. 36), which is based on relational criteria rather than individualistic ones, considering climate change's various injustices (pp. 26-27). Sardo (2023) allocates responsibility to agents' profitable participation in global political and economic carbon-intensive systems (p. 27) rather than on causal contributions or capacities. This account is inspired by Iris Young's Social Connection Model (SCM), situating individual responsibility within "the social, economic, and political relationships within which individuals and communities participate" (Sardo, 2023, p. 36). SCM links responsibility by recognising "one's contribution to and capacity to affect a structural injustice stem from one's concrete connections in social structural processes" (Sardo, 2023, p. 37). In this way, SCM avoids backwards-looking blame attributions by focusing on forward-looking solutions for collective action and necessary structural reforms.

Crucially, SCM integrates the Beneficiary Pays Principle (BPP), emphasising that agents benefitting from GHG emissions by third parties are responsible for the compensation of climate change victims. SCM maintains UNFCCC's 'common differentiated responsibility', but it departs from the narrow focus of states as primary duty-bearers. SCM situates agents as embedded in unjust structures without solely considering 'respective capabilities'. By emphasising relational complicity, the framework mobilises collective pressures, avoiding moralisations which spur resentment, defensiveness and bad faith (p. 39). Ultimately, Sardo's (2023) political account of individual responsibility offers an ethical approach to climate justice, which seeks to dismantle the unjust power structures which drive the global economy. This framework emphasises collective, relational action for systemic change. It avoids problems of blame allocation, helping agents to recognise their responsibility for climate justice and encouraging active participation to transform unjust systems (pp. 42-46).

Other examples of individual political action include “lobbying for a larger, more affordable, and electric public transportation system (...) changes to residential zoning ordinances that could decrease the need for privately owned electric vehicles” (Sardo, 2023, p. 45). Additionally, other ways for individuals to politically contribute to climate mitigation are “engaging in political activism, establishing or joining local initiatives to promote sustainable energy use, joining established political parties” (Hourdequin, 2011, p. 170). Furthermore, another suggestion would be to organise pressure on wealthy Western states since they are the main drivers of global demand, and they hold the most power to implement environmental and labour standards on the import of green technology and materials.

Similarly, Johnson (2003, p. 286) believes political efforts are meaningful to counter climate change as these can change aggregate behaviour. And, together with Sinnot-Armstrong (2005), he emphasises how individuals should work towards achieving governmental policies regulating GHG reductions (Hourdequin, 2010, p. 444). According to Sinnot-Armstrong (2005), individuals should fulfil their political responsibilities by voting for candidates who can enact policies aimed at reducing GHGs (Hourdequin, 2010, p. 447). Similarly, Johnson (2003) believes that individuals are morally obliged to work towards collective agreements that can meaningfully mitigate a ‘Tragedy of the commons’ (Hourdequin, 2010, p. 448).

Both Johnson’s (2003) and Sinnot-Armstrong’s (2005) analyses heavily rely on game theory to model climate change (Hourdequin, 2011, p. 158). Therefore, they believe individuals bear no responsibility for climate mitigation unless there is a regulatory collective agreement, arguing that individual efforts are otherwise useless (Hourdequin, 2010, p. 444). However, Hiller (2011, p. 365) and Raterman (2012, p. 427) point out that this last argument is ironic and self-defeating, as this ‘seeming insignificance’ objection can be applied to political efforts. If unilateral sustainable actions are useless, then this also applies to one vote in an election, given that there are so many other votes. Furthermore, Raterman (2012, p. 422) highlights the ambiguity in Johnson’s (2003) claims, as they do not explore how ‘collective agreements’ can be created.

From a differing perspective, Hourdequin (2010, p. 450) states that coherent personal commitments require serious mitigation contributions through personal and political efforts, as these commitments are taken more seriously when mitigation efforts are also expressed personally. Personal commitments are valuable as they “spur greater awareness and more

careful consideration of the kinds of political changes that may be most effective” (Hourdequin, 2010, p. 456). Since Hourdequin (2010, p. 456) believes individuals are not atomistic, self-interested, economic actors isolated in their decisions and values, she proposes a fortified version of Johnson’s (2003) and Sinnott-Armstrong’s (2005) framework.

Sardo (2023) also extends Johnson’s (2003) and Sinnott-Armstrong’s (2005) accounts of political responsibility, criticising the minimal obligation of “voting green” (p. 45). The scholar suggests that one should leverage one’s position within existing networks and empower those most vulnerable. Sardo (2023, p. 40) illustrates how voting for candidates supportive of sustainable policies, protesting, publicly advocating, communicating and deliberating can shift public opinion and, consequently, public action. Generally, collective political efforts can have a snowballing effect across supply chains, transforming the dominant, exploitative and disempowering carbon-intensive systems. The upcoming section explores the other side of the broader debate: moral notions of individual responsibility.

1.4.3 Moral conceptions of individual responsibility

Sinnott-Armstrong (2005) and Johnson (2003) argue that individuals have limited moral obligations to reduce their GHGs, modelling climate change through game theoretical frameworks (Hourdequin, 2010, p. 444). The scholars consider unilateral actions impotent in addressing the crisis scale (Hourdequin, 2011, p. 157). Hourdequin (2010, p. 444) criticises this narrow scope of Johnson’s (2003) and Sinnott-Armstrong’s (2005) conceptions of individual responsibility. She proposes that a mitigative commitment should also entail thoughtfulness about personal emissions by reducing these (Hourdequin, 2010, p. 451). Furthermore, drawing on Confucianism, the scholar suggests that individuals should be conceptualised relationally as interconnected members of moral communities. In this way, individuals’ GHG reductions are meaningful because of their direct impact and their communicative, symbolic function of inspiring collective action (pp. 444-451). For instance, driving an SUV communicates one’s lack of concern about the commons (p. 455), encouraging and normalising such behaviour.

Raterman (2012) adds to this relational discussion by highlighting how fundamental unilateral sustainable actions’ symbolic and expressive function is (p. 428). These actions express one’s commitment to collective well-being and one’s contribution to shaping societal norms in morally relevant ways. Moreover, the author points to ample psychological research, which

demonstrates that environmentally taxing consumerist lifestyles do not significantly enhance happiness (p. 433). This argument further reinforces the moral and personal value of sustainable living.

In a later piece of work, Hourdequin (2011) responds to many of the criticisms by Johnson (2003), and she reaffirms the importance of unilateral reductions, as their communicative value can address CAPs and make them more solvable. Fostering cooperation, reciprocal trust, and the development of moral norms through actions restraining commons' exploitation is necessary to make the climate CAP more tractable (p. 158). Rather than abiding by game theoretical tenets, moral norms are essential within climate mitigation as they restrain exploitative, harmful behaviour (p. 161).

Furthermore, Banks (2013) also advocates for individual moral responsibility, taking a distinct approach to this conception. Banks (2013, p. 49) grounds individual responsibility in the full knowledge agents have of their harmful actions. Therefore, arguing that agents which contribute to harmful practices are morally required to participate in mitigation.

Finally, Hiller (2011, p. 365) also advocates for moral responsibility, emphasising how personal awareness regarding one's environmental impacts can drive behavioural shifts. Ultimately, these behavioural changes address the CAP, as they can prompt outside pressure to influence society and institutions at large (p. 365). Ultimately, moral accounts can foster societal shifts and potentially support policy changes, bridging the gap between the necessary ideal institutions and the political will required to implement them.

1.4.4 Addressing the literature gap

Generally, game theory complicates understandings of individual responsibility, discouraging individual mitigation efforts due to the perceived higher personal costs rather than benefits, especially considering free riding. Therefore, I believe the existing scholarship neglects the value of individual agency for climate mitigation. Furthermore, current accounts of responsibility do not adequately address the CAP of climate change. Consequently, individual agency is neglected since the CAP posits individual efforts as useless and inadequate in prompting systemic change and addressing the scale of climate change.

Through an integrationist methodology, my thesis positions individuals as possible drivers of systemic change since the complexity of the climate crisis does not absolve individuals from contributing to mitigation. I acknowledge that to prompt effective systemic change; individual agency has to be supported by increased global cooperation and large-scale institutional reform. In this way, I challenge the game theoretical tenets, which perceive individuals as impotent within collective contexts, illustrating pathways of collective action through individual agency. Therefore, I advocate for a reconceptualization of climate responsibility: I argue that individuals bear political and moral responsibility for climate mitigation, highlighting the value of this dual account of responsibility. Nevertheless, I acknowledge that formulating a precise account specifying individuals' climate responsibility is impossible (Raterman, 2012, p. 417).

CHAPTER 2 – Argumentation

In this chapter, I propose a novel account of individual responsibility, emphasising its potential to organise climate action. I believe individual responsibility should be understood as a dual duty: the reduction of personal emissions and the contribution as a collective member to influence social norms and practices. I draw on psychological theories to demonstrate how social identities can prompt pro-environmental behaviour: I focus on Banks' (2013) collectivist theory, then the Social identity theory (Ellemers & Haslam, 2012) and the ASPIRe model, and empirical studies on global identity. Lastly, I discuss how my proposed account can serve as a pathway to address the CAP, illustrating how individuals can prompt meaningful climate action for climate mitigation.

2.1 An account of political and moral responsibility

To address climate change, individuals bear political and moral responsibility for climate mitigation: moral responsibility to reduce their own harmful emissions and political responsibility to drive systemic change through advocacy and social pressure on governments or incentive structures (Hourdequin, 2010, p. 444). This account exceeds the limiting game theoretical assumptions on purely economic rationality, as these undermine individuals' agency.

Sinnot-Armstrong (2005) argues that individuals should fulfil their political responsibility by voting for electoral candidates who can reduce GHGs through climate mitigation policies (Hourdequin, 2010, p. 447). I agree that voting is a valuable and important personal duty, but

is “voting green” sufficient and exhaustive to address the climate crisis? How could this be a credible and proportional commitment to the crisis at hand?

I believe moral integrity is crucial: individual and collective action needs to be consistent. It is not sufficient to engage in collective efforts concerning climate mitigation, such as “voting green”, when one lacks personal, individual commitment. Therefore, I believe it is illogical and hypocritical to not coordinate political efforts with personal, moral ones. Further individual efforts can prompt policy shifts through engagement in political activism, participating in initiatives supporting green energy, and working towards solutions which politically pertain to mitigation (Schwenkenbecher, 2012, p. 170). For instance, social pressure can attain stronger, more adequate governmental action concerning climate change. Without personal and moral engagement, individual political efforts for climate mitigation cannot be enhanced.

Ultimately, accounts of individual responsibility must consider how climate change constitutes a CAP: a limited focus is inadequate. I argue that my novel account can address this character of climate change with its powerful dual nature. Through Sardo’s (2023) framework, political individual responsibility is situated within the relational and structural dimensions of climate injustices. Leveraging one’s position within existing networks to drive systemic change is an action focused on overcoming the crisis by dismantling carbon-intensive systems (Sardo, 2023, p. 45). Therefore, a political conception of individual responsibility, through numerous pathways of action, can pave the way for systemic transformation (Hourdequin, 2010, p. 444; Sardo, 2023, pp. 42-45).

Crucially, I deem that morality can richly complement individual political efforts through the symbolic and communicative value in unilateral environmentally friendly actions (Hourdequin, 2010, pp. 444-451; Raterman, 2012, p. 428). These actions foster cooperation and social trust (Hourdequin, 2010, p. 444), two elements that pertain to the CAP structure of climate change. Furthermore, as Gardiner (2006) argues, climate change is subject to morally relevant multiplier effects (p. 405). Without adequate climate action, current generations pass the problem to future ones, exacerbating it and adding to mitigation costs. Therefore, besides a political conception of individual responsibility, encouraging moral notions is also essential.

Moral responsibility could create the collective agreements that Johnson (2003) and Sinnott-Armstrong (2005) strongly reinforce, coordinating collective action (Hourdequin, 2010, p.

453). As the post-*homo economicus* generation has demonstrated, social control and norms can overcome the CAP (Ostrom, 1990, p. 5). Additionally, unilateral actions, such as reducing GHGs, can catalyse systemic change by inspiring and encouraging others to contribute to collective well-being (Schwenkenbecher, 2012, pp. 176-179). Furthermore, as DeSombre (2018, p. 6) argues, the long-term efficacy of moral duties is strongly enhanced by institutional support, which is driven by collective political engagement.

Lastly, I consider how this account of responsibility might seem demanding, as I argue that individuals should reduce their emissions and actively engage in politics. However, I believe my account leaves room for flexibility since my argument centres on moral integrity, demanding alignment between personal and collective efforts. Furthermore, I never claim one should fulfil political responsibility through all the pathways I have mentioned throughout this paper. I believe this aspect supports individuals' differing contexts and capacities, allowing for different manifestations of individual political and moral responsibility for climate mitigation. Additionally, as I will demonstrate in the next section, I also distinguish individuals based on their political power, this also allows for several ways to contribute to climate mitigation. Furthermore, I have also emphasised how vital institutions are in driving systemic change, individuals are not burdened with a responsibility greater than what it can achieve. Through the combination of climate action, motivated by my proposed nature of responsibility and institutional support, humanity addresses the CAP characterising climate change.

In sum, the dual account I propose holds extreme value in the combination of political and moral dimensions of individual responsibility, it connects collective political efforts, insufficient in isolation, with moral commitments. In this way, a stronger sense of community can be fostered to collectively and comprehensively address the climate crisis (Hourdequin, 2010, p. 454; Banks, 2013, p. 48). Individual actions can inspire structural change through the strengthening of institutional solutions, amplifying societal impacts.

2.2 Collective responsibility concerning climate change

Theories of collective responsibility are useful to consider within the context of climate change, as it is a truly collective phenomenon (Banks, 2013, p. 49). The theory Banks (2013) proposes highly applies to the climate crisis, and unlike other theories, it relies on unstructured collectives, which are often understudied due to the difficulty in addressing them (p. 47). This

aspect is especially crucial since the relevant collective in the climate crisis is the global population, which lacks the capability of making structured decisions.

Banks' (2013) theory is tailored to understand the role of individuals without assuming that the collective to whom they belong acts analogously to them (p. 50). In this theory, agents' responsibility has to do with their "power to affect others" (Banks, 2013, p. 59) and the extent to which others are affected. This aspect of political power greatly aligns with my account's political dimension, as I argue individuals should influence collective norms and practices. Furthermore, I also believe this theory supports the moral dimension of my proposed account because it focuses on how individuals can affect others, highly relating to the strong communicative and symbolic function of individual mitigation efforts.

Accordingly, I now present and discuss Banks' (2013) theory. Firstly, Banks (2013) identifies which members of the collective can be held responsible for exacerbating climate change. Banks (2013) deems agents as responsible if they participate in a problematic practice and causally contribute to the collective outcome, such as producing carbon emissions (p. 51). Therefore, nearly all of the global population can be considered responsible. However, the scholar proposes that some agents are excused if, through actions or languages, they have publicly distanced themselves and somehow denounced the created harm. Then, they are not viewed as members of the collective, although emission-free lifestyles are not equally possible for everyone, and acting in opposition to collective action is challenging (p. 52). Secondly, Banks (2013) determines who bears moral responsibility for the collective's harm. Some members are exempted if coerced or excusably ignorant. For instance, until the first report by the IPCC in 1990, individual agents could only have limited knowledge of climate change. However, Banks (2013) also proposes discussions on "ignorant agents" who *should* have known better (p. 54).

The author identifies three types of roles agents have in a collective (from most to least responsible): order givers, order followers, and supporters (p. 57). In the 'Order Givers' section, individuals are differentiated based on power asymmetry, which determines their degree of complicity within the collective. For instance, the political class bears the most responsibility for harm resulting from climate change because the choices presidents make in their tenure directly impact how the collective acts. Additionally, presidents have structured the political class impacting national emissions (p. 58). The 'Order Followers' category refers

to CEOs or small business owners who have power and perspective within smaller collectives. Essentially, they have the same power as ‘Order Givers’, although their power is restricted because they exert it in smaller groups and because they had no role in setting up their working environment (p. 59).

Hourdequin (2010) complements this discussion by emphasising how agents’ decisions and actions communicate how much they are polluting the atmosphere and the extent of their concern about the commons (p. 60). Both Banks (2013) and Hourdequin (2010) emphasise individual action’s importance, illustrating why Banks’ (2013) third category, ‘Supporters’, is also powerful within the climate change context (p. 61). Supporters are responsible insofar as they choose to remain in the collective and adhere to the social norms that characterise their culture. Therefore, they *should* know that by acting unilaterally, they contribute to harm (p. 62). The only aspect limiting their responsibility is their lack of leadership within the collective. Ultimately, the extent to which agents are required to distance themselves from collectives depends on their role: citizens can be required to limit their emissions, whereas CEOs can be required to invest in green technologies (p. 63).

Banks’ (2013) theory provides very convincing arguments which can address the CAP structure of climate change, reinforcing my argumentation. Through this theory, Banks (2013) supports the view that individuals bear political and moral responsibility in the absence of collective regulatory schemes since the collective in question is unstructured, not regulated. Generally, Banks (2013) highlights the transformative potential of individual agency within the unstructured collective of the global population. Through the categorisation of individual agents based on their political power and complicity in the matter, Banks’ (2013) insights complement my account by adding another layer to conceptions of individual responsibility: not all bear the same degree of responsibility, although the nature of responsibility remains the same. Furthermore, alongside Hourdequin (2010), Banks (2013) emphasises the importance and value of individual mitigation efforts, as they can reshape norms and identify shared responsibility (Hourdequin, 2010, pp. 457-458; Schwenkenbecher, 2012).

2.3 Social identity perspectives on climate mitigation

In this section, I complement my argumentation by drawing on social psychology to demonstrate how, besides individual responsibility, individuals’ social identities can prompt

behaviour, influence sustainable practices and comply with the nature of their responsibility. These insights are extremely relevant to my research, as they suggest group membership and social identity can prompt concerted collective action to drive systemic change (Ellemers & Haslam, 2012, p. 383). The combination of the Social Identity Theory, the ASPIRe model, and global identity perspectives offers a comprehensive strategy that mobilises individuals and collectives to address the climate crisis.

2.3.1 The Social Identity Theory

The Social Identity Theory (SIT) was developed by Tajfel in the 1970s, and it pertains to social psychology. Ellemers and Haslam (2012) discuss this theory of ‘intergroup conflict’ (p. 350), presenting how social contexts are considered the key determinants of individuals’ self-definition and behaviour (p. 379). Therefore, people’s responses are understood through subjective beliefs about the groups they belong to and their relation to others rather than through material interdependencies or instrumental concerns (p. 379). SIT challenges the scientific understanding of Realistic Conflict Theory (RCT) by describing the “mere categorisation effect”: a different behaviour towards ingroup and outgroup members (p. 380).

After SIT further developed, the concept of social identity emerged, explaining how sometimes people behave as group members rather than as individuals. Accordingly, SIT aims to understand and explain how people’s behaviour reflects their social, rather than personal, identities (p. 381). Social categorisation is complemented by social identification, namely the realisation that one is included in some but not all social categories (p. 382). This identification also considers the personal emotional significance of a group membership, which motivates people to emphasise group identity upholding, protection or value enhancement (p. 382). Furthermore, over time, SIT’s core ideas have been tested and redefined to address criticisms of ambiguity and further extend theoretical applicability (p. 385). For instance, SIT has been applied to determinants of collective action (p. 393).

By framing the climate crisis through SIT’s progressive and optimistic lens, this thesis aims to reshape the dominant game-theoretical narratives which view individual agency as meaningless. This paper demonstrates that collective identity and action can redefine the existing and inadequate paradigms on climate action. Additionally, SIT helps in identifying how individuals can comply with the account of responsibility I suggest, as it has the potential to organise collective action. Ultimately, the CAP framework is about failing action,

coordination and cooperation. By drawing on SIT, I demonstrate how cultivating a shared global identity can be crucial in mobilising collective action to address climate change. For instance, social identity can be valuable within climate mitigation as “individuals with a devalued social identity are less likely to pursue strategies of social change” (Ellemers & Haslam, 2012, p. 384). Overall, SIT provides a nuanced understanding of how subjective belief structures (e.g. perceptions of laws and cultural norms) influence group behaviour and potential for social change (p. 383).

2.3.2 The ASPIRe model

Batalha and Reynolds (2012) highlight how global climate mitigation commitments have been failing for decades (p. 744) and that psychological aspects of social and behavioural change have been widely neglected (p. 743). Therefore, the scholars call for a more serious engagement with social and behavioural sciences (p. 744), as these could explain the lack of coordinated climate action.

Batalha and Reynolds (2012) attribute citizens’ and leaders’ inability to develop a higher-order superordinate identity encompassing broader collective interests as one of the central reasons for COP15’s failure (p. 748). The ASPIRe framework they present is fundamental to fostering this type of identification, proving that a sustainable superordinate identity can provide meaning and coordination for its members, mitigating subgroup conflicts and enhancing coordinated climate action. ASPIRe outlines how a sustainable superordinate identity can be developed: perceiving oneself at a higher-order identification and as a member of a nation takes a broader perspective that includes all individuals on the planet. Therefore, everyone is a member of the same ingroup and, as research suggests, inter-group bias is best reduced when people identify themselves both at a subgroup- and superordinate-group level (p. 748). In this way, cooperation is fostered between subgroups, and these are aligned towards shared goals. Therefore, ASPIRe can offer promising avenues for climate mitigation (p. 756).

Empirical research shows that higher-order identification leads to “greater concern for relationships and achieving social stability and the greater good for everybody (...) goals that benefit not only the individual but the collective as well” (Batalha & Reynolds, 2012, p. 749). Through ASPIRe, individual nations’ narrow self-interests can be converted into global interests, which would be expressed through compromise and, most importantly, inclusion.

This framework can “unlock entrenched divides and provide a basis for collective action” (Batalha & Reynolds, 2012, p. 754), enhancing collective empowerment.

The ASPIRe framework presents some useful, practical implications: acknowledging the differences and similarities in how states are affected by the climate crisis (p. 753) and applying this model to new climate negotiations could prompt more effective climate mitigation efforts. Nations must initially define what aspects and goals they perceive as most relevant to preserve their national identity, considering climate change (p. 752). Then, they should integrate these within a superordinate identity. The authors also highlight how building a shared identity requires a connection between political leaders and citizens to deliver effective climate legislation (p. 753). Therefore, national goals and identity among citizens have to be redefined: ultimately, shared problems demand shared solutions. The psychological reality of a social identity, the sense of “us”, can achieve this.

2.3.3 Extending the role of global identity in climate action

Loy et al. (2022) discuss two studies which explore how a global identity is related to self-reported climate-protective behaviour (p. 563). The authors illustrate how seeing oneself as a part of the world community is crucial to reducing carbon emissions. The authors extend previous studies’ operationalisation of a global identity related to climate change. They associate global identity with climate protective behaviour (p. 565), examining how “people who defined themselves as part of a global community (...) considered global climate change as more relevant and engaged more in climate protection” (Loy et al., 2022, p. 578). Perceptions of humanity within the climate crisis are associated with more climate-protective behaviour, which contributes to effective and urgent climate action.

Collective sustainable efforts are necessary to tackle the climate crisis, but they are only effective if undertaken by many. Scholars argue that a social identity perspective on understanding climate-protective behaviour considers these aspects (p. 563). A global identity can constitute a useful strategy within the context of climate mitigation (p. 564). Loy et al. (2022) draw on the empirical evidence provided by the Social Identity Model of Pro-Environmental Action (SIMPEA) and measure global identity with the German version of the Identification with All Humanity (IWAH) scale. Their findings indicate that “the more people felt part of all humanity (global self-definition) and were concerned about the well-being of all

humans (global self-investment), the more relevant they perceived climate change, and the more they reported actions and intentions to mitigate climate change” (Loy et al., 2022, p. 575).

Furthermore, Loy et al. (2022) complement the insights by Batalha and Reynolds (2012) by focusing on the practical implications of a superordinate identity, such as GHG reductions and increased support for environmental policies (p. 566). Therefore, this study suggests that a global identity should be fostered, for example, through simulation games in which people are confronted with different realities, demonstrating similarities and connections between people (p. 576). Loy et al.’s (2022) findings add to this paper’s narrative, which emphasises how individual agency within collective contexts is indispensable within climate mitigation efforts. The building of a global identity extends SIT further by illustrating how people worldwide can be unified by shared commitments for a sustainable future.

2.4 Addressing the climate collective action problem

The CAP characterising the climate crisis demands an understanding of individual responsibility within collectives to adequately inform mitigation efforts. Accordingly, Banks (2013) situates individuals’ actions as integral to harmful collective practices, suggesting that distancing oneself from these practices minimally weakens the collective (pp. 52, 64-65). Hourdequin (2010, 2011) complements this discussion by proposing a relational conception of individuals, which emphasises the importance of moral change, besides the necessary policy shifts to drive systemic change (p. 444). Individual moral responsibility prompts personal emission reductions and support for broader social change; these actions are mutually reinforcing and foster norms encouraging cooperation rather than pursuits of self-interest (Hourdequin, 2011, pp. 158-161).

Schwenkenbecher (2012) and Hourdequin (2010) emphasise individual actions’ communicative function of inspiring collective efforts and raising awareness of the broader phenomenon (p. 179). Similarly, Sardo (2023) examines how Fossil Fuel Divestment movements are an embodiment of a political conception of responsibility where public advocacy has successfully fostered systemic change and collective action in the United States (pp. 42-43). Within their work, Raymond et al. (2023) have illustrated how norm-based strategies can tackle severe and distinct CAPs such as Anthropogenic climate change. The scholars propose the following four strategies: reframing norms by highlighting new

perspectives on a matter, combining descriptive messages with injunctions, encouraging others to endorse and support new norms, and encouraging trustworthy messengers to inform on climate science and foster cooperative behaviour (pp. 520-526).

Collectively, these perspectives demonstrate the potential of individual agencies, informed by norm-based strategies, to address the systemic challenges posed by climate change. I consider these approaches to be aligned with the general character of my research, which emphasises how the aggregation of individual efforts, motivated by political and moral conceptions of responsibility, can positively reshape climate action narratives.

CHAPTER 3 – Objections

This chapter explores some objections from public and scholarly debates regarding individuals' responsibility for climate mitigation (Schwenkenbecher, 2012, p. 170). First, it addresses the Individual Causal Inefficacy (ICI) objection and the “no-harm” view. Then, the “no-effect” view, and lastly, the “overly demanding” view.

3.1 Individual Causal Inefficacy and the “no-harm” view

I combine the ICI objection and the “no-harm” view, as they argue for the same thing. The ICI objection introduced by Hiller (2011) argues that individual actions have an insignificant effect on climate change (pp. 349-350). The “no-harm” view argues that GHGs make “no direct and detectable contribution to global warming” (Schwenkenbecher, 2012, p. 172). DeSombre (2018) complements this argument, claiming that individual actions make an “unimaginably small contribution to any given environmental problem” (p. 5). Therefore, advocates of this view believe that nothing is morally wrong with individuals' emissions, suggesting that no one has to refrain from emitting them.

Sinnot-Armstrong (2005) and Johnson (2003) advocate for this view since they believe unilateral individual actions are completely insignificant; therefore, they deny individuals bear responsibility for sustainable efforts. Hourdequin (2010, 2011) critiques Johnson's (2003) isolationist perspective, reinforcing that unilateral mitigation efforts are not as bleak as he claims them to be. Through a relational perspective, ‘unilateral action in isolation’ does not exist (p. 158) since “acts themselves can be communicative” (Hourdequin, 2011, p. 159) and

they influence others. Furthermore, it is very relevant to how others act since “knowingly contributing to aggregate harm means to accept that if a sufficient number of other persons act in the same way, this will cause the respective harm” (Schwenkenbecher, 2012, p. 173). As Schwenkenbecher (2012, p. 174) points out, most individual emitters are full moral agents: they know about harmful practices, they know many others are engaging in these, and, often, they know they could act otherwise.

Crucially, if GHGs are not a direct and detectable contribution, then what is largely causing climate change? Let us not forget that the IPCC has identified GHGs, primarily CO₂, as the driving forces of climate change. Therefore, I reject both of these views mainly because the aggregation of GHGs is harmful (Rateman, 2012, p. 424). This argument “delivers very strong reasons in favour of individual emission reductions” (Schwenkenbecher, 2012, p. 176).

3.2 The “no-effect” view

The “no-effect” view claims that individual mitigation efforts lack moral significance based on consequentialist, forward-looking notions: “independently from whether or not our individual GHG emissions are harmful – nothing any person could do will stop global warming now” (Schwenkenbecher, 2012, p. 176). Sinnott-Armstrong (2005) is a proponent of this view, as he argues that individual agency cannot achieve anything substantial but that individuals should vote to fulfil their political duties (Schwenkenbecher, 2012, p. 176; Hourdequin, 2010, p. 444).

I believe that urging individuals to “vote green” and claiming that unilateral actions achieve nothing substantial is contradictory and self-defeating (Rateman, 2012, p. 427; Hiller, 2011, p. 365). This causal inefficacy argument can be applied to a singular vote, as within a great number of votes, this vote alone cannot achieve anything like an isolated sustainable action. However, as I have extensively emphasised, it is the aggregation that matters, taking an isolationist perspective will undermine most arguments. By conceiving individuals relationally rather than atomistically, individual ‘unilateral’ actions can “catalyse and support emerging collective agreements” (Hourdequin, 2010, p. 453). Therefore, as largely demonstrated throughout this paper, emission reductions are morally significant in aggregation, as they influence others and foster systemic change (Hourdequin, 2010, p. 445; Moser & Dilling, 2007, p. 481). Furthermore, individual acts stabilise collective norms and agreements (Hourdequin,

2011, p. 162), countering “unrealistically optimistic assumptions about human motivations” (Hourdequin, 2011, p. 161) from the pessimistic paradigms of game theory.

3.3 The “overly demanding” view

This view claims that lifestyle changes are excessively demanding and disproportional to individual moral duties since what one would need to sacrifice is not of comparable moral importance to complying with such duties (Schwenkenbecher, 2012, p. 180). Contrary to this objection, individual emission reductions are not overly demanding, especially because most GHGs are luxury emissions (Schwenkenbecher, 2012, p. 180). Emissions are usually differentiated by their purpose: if they are necessary to survive or if they simply serve a luxury. Although there is no consensus on what exactly classifies as a luxury emission, margins of disagreement are typical in ethical debates, and some examples can illustrate that some emissions can be easily avoided. For instance, flying in a private jet is unnecessarily taxing on the environment. Likewise, over-consumption (e.g. owning a great amount of clothes) does not concern personal survival, and it serves no morally significant purpose.

Additionally, claiming that incorporating sustainability is overly demanding is a dramatic claim. As Raterman (2012) argues, the discomfort which comes with adopting more sustainable lifestyles diminishes once previously harmful habits are changed (p. 433). Furthermore, as Schwenkenbecher (2012, p. 180) emphasises, most environmentally friendly actions (such as recycling) are low- or even no-cost actions and usually one-time investments that pay off in the long run (Raterman, 2012, p. 433). Ultimately, these scholars highlight how accessible and practically feasible environmentally friendly efforts are, besides being extremely morally significant towards broader systemic change.

CONCLUSION

This research explored individual responsibility towards climate mitigation through an integrationist lens, situating individual agency within political and moral contexts. Drawing on interdisciplinary insights from philosophy, game theory and social psychology, this study attempts a holistic analysis of individual responsibility, critiquing dominant approaches. The game theoretical ‘Collective action problem’ and ‘Tragedy of the commons’ perceive individual efforts as inconsequential and, therefore, insignificant to meaningfully contribute to climate mitigation. These models largely fail to consider the potential of individuals to shape

societal norms and behaviours, which, when complemented by civic engagement and institutional reform, are critical to effective climate mitigation.

This research advocates for the dual account of individual responsibility within mitigation, both political and moral, demonstrating these dimensions' critical complementarity. Notions of moral responsibility expressed through sustainable practices are catalyst efforts to systemic change by inspiring others to express and encourage sound commitments to collective well-being (Schwenkenbecher, 2012, pp. 176-179). Individual efforts foster normative societal shifts, which ultimately can prompt collective action. By highlighting how individual efforts intersect with systemic change, I have addressed and bridged parts of significant literature gaps by exploring the value of individual agency within climate mitigation and proposing a novel account of individual responsibility which addresses the CAP structure of climate change.

Furthermore, adopting an interdisciplinary approach allowed for a comprehensive and holistic analysis that contributed to normative theory and practical fields, informing the broader scholarship and various policy fields. The novel account of individual responsibility I propose challenges dominant game theory paradigms by reframing individual agency as pivotal in transformative processes. Therefore, I have advanced broader discussions on personal responsibilities in achieving broader systemic change, which climate mitigation requires.

However, I do acknowledge this paper's limitations. For instance, through practical constraints and limited scope, this research cannot delve deeper into relevant cultural and contextual factors (e.g. socio-economic disparities), which can compromise the extent to which individuals are capable of influencing societal norms and living sustainably. For example, individual-driven change can be hindered and resisted by structural barriers such as political and economic structures. Additionally, while the insights from the provided social psychological empirical evidence are valuable to this research, their hypotheses often rely on static assumptions. These assumptions are not always applicable since context dynamics and identities change over time and across social contexts (Ellemers & Haslam, 2012, pp. 390-391). Therefore, further research must account for these limitations to fortify these insights' applicability to complex real-world scenarios.

Lastly, future research may focus on longitudinal studies to explore how behavioural shifts combined with consistent political efforts, can influence policy and societal attitudes over

extended periods. Additionally, comparatively analysing various case studies could provide more nuance to understanding how individual responsibility is manifested in contrasting cultural and socio-economic contexts. Moreover, further research may investigate the causal effect of cultivating and promoting social identities on a larger scale (Loy et al., 2022, pp. 563-576). These suggestions could enhance the validity and robustness of my research to inform scholarship and policy and offer more nuanced and comprehensive insights on how individual agency within collective systems is valuable in tackling the climate crisis.

Bibliography

- Banks, M. (2013). Individual responsibility for climate change. *The Southern Journal of Philosophy*, 51(1), 42-66.
- Batalha, L., & Reynolds, K. J. (2012). ASPIRIng to mitigate climate change: Superordinate identity in global climate negotiations. *Political Psychology*, 33(5), 743-760.
- DeSombre, E. R. (2018). Understanding Environmental Behavior. In *Why Good People Do Bad Environmental Things*. Oxford University Press, 1-15.
- Ellemers, N., & Haslam, S. A. (2012). Social identity theory. *Handbook of theories of social psychology*, 2, 379-398.
- Gardiner, S. M. (2006). A perfect moral storm: Climate change, intergenerational ethics and the problem of moral corruption. *Environmental values*, 15(3), 397-413.
- Hiller, A. (2011). Climate change and individual responsibility. *The Monist*, 94(3), 349-368.
- Hourdequin, M. (2010). Climate, collective action and individual ethical obligations. *Environmental Values*, 19(4), 443-464.
- Hourdequin, M. (2011). Climate change and individual responsibility: a reply to Johnson. *Environmental Values*, 20(2), 157-162.
- Johnson, B. L. (2003). Ethical Obligations in a Tragedy of the Commons. *Environmental Values*, 12(3), 271-287.
- Loy, L. S., Reese, G., & Spence, A. (2022). Facing a common human fate: relating global identity and climate change mitigation. *Political Psychology*, 43(3), 563-581.
- Moser, S. C., & Dilling, L. (Eds.). (2007). *Creating a climate for change: Communicating climate change and facilitating social change*. Cambridge University Press.

- Ortmann, J., & Veit, W. (2023). Theory roulette: Choosing that climate change is not a tragedy of the commons. *Environmental Values*, 32(1), 65-89.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge university press.
- Pachauri, R. K., Allen, M. R., Barros, V. R., Broome, J., Cramer, W., Christ, R., ... & van Ypersele, J. P. (2014). *Climate change 2014: synthesis report. Contribution of Working Groups I, II and III to the fifth assessment report of the Intergovernmental Panel on Climate Change* (p. 151). Ipcc.
- Raterman, T. (2012). Bearing the weight of the world: On the extent of an individual's environmental responsibility. *Environmental Values*, 21(4), 417-436.
- Raymond, L., Kelly, D., & Hennes, E. P. (2023). Norm-based governance for severe collective action problems: Lessons from climate change and COVID 19. *Perspectives on Politics*, 21(2), 519-532.
- Sardo, M. C. (2023). Responsibility for climate justice: Political not moral. *European Journal of Political Theory*, 22(1), 26-50.
- Schwenkenbecher, A. (2012). Is There an Obligation to Reduce One's Individual Carbon Footprint?. *Critical Review of International Social and Political Philosophy*, 17(2), 168-188.
- Sinnott-Armstrong, W. (2005). It's Not My. In *Perspectives on climate change: Science, economics, politics, ethics* (pp. 285-307). Emerald Group Publishing Limited.
- Svendsen, G. T. (2022). Collective action problem. In *The Palgrave encyclopedia of interest groups, lobbying and public affairs* (pp. 147-153). Cham: Springer International Publishing.