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From Food to Climate Justice: How Motivational Barriers Impact Distributive Justice Strategies for Change

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Climate change is one of the most important and complex problems of the modern age. The sheer scale of the harm produced, coupled with the fact that the changes are human-induced, necessitates a duty to prevent climate-induced impacts. There is a growing literature exploring how costs and benefits should be shared at national, state and generational levels. This chapter adds to this literature by exploring how normatively guided plans could be hindered by barriers beyond distributive justice frameworks and their subsequent applications. Even if we recognise *prima facie* duty to mitigate climate change impacts, there are motivational barriers that could block people from making the requisite changes – motivational barriers that ultimately curtail the effectiveness of climate mitigation strategies. After outlining each of these barriers, this chapter then argues that insights from local food movements could provide novel strategies to potentially address each of the barriers above, as they have leveraged normative arguments to motivate individual and collective action. Lessons from food-focused activism, coupled with normatively guided strategies for sharing costs and benefits, has the potential to help communities work towards effectively addressing climate change.

Introduction

Climate change is one of the most important and complex problems of the modern age. The extraordinary scope of this crisis was recently emphasised in 2018 and 2021 reports by the Intergovernmental Panel on Climate Change (IPCC). These reports urge countries around the globe to make drastic changes to avoid dire environmental and social consequences. In light of these impacts, several scholars have issued a normative call to action, as the scale of the harm to humans and the environment necessitates a duty or responsibility to prevent this harm (Bell 2013; Blau 2017; Quirico 2018). For example, according to Kyllonen (2018, 737), ‘the well acknowledged “no-harm principle” directly necessitates a correlative *pro tanto* duty to refrain from causing the harm and, when that is not possible, to repair or compensate for the harm inflicted’. However, due to the scale and complicated nature of the problem, there is intense debate concerning the distribution of responsibility to address climate change.

Even when recognizing this *pro tanto* duty, ‘individualists’ claim that each person has a responsibility to change their behaviour, such as by reducing their carbon footprint and thus limiting their contribution to climate change (Almassi 2012; Cripps 2013; Fahlquist 2009). In contrast, ‘collectivists’ argue that responsibility should be recognised at the collective level (Hiller 2011; Sinnott-Armstrong 2010; Vance 2017; Vanderheiden 2011), as the problem was largely caused by collective agents. For the latter position, the amount of changes needed to make a difference can only be performed by groups. However, as Kyllonen (2018) argues, a sense of personal responsibility is needed to act as a motivation for individuals to engage in collective action. Thus, it is only through the recognition of personal duty that we can address climate impacts and the clear distinction between individualist and collectivist approaches breaks

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down. This analysis is timely, as it illuminates the key role that personal motivations (be those ethical, social, political or economic) play on the ground, as solutions are actualised.

The philosophical debate on the proper application of the no-harm principle is important and on-going. However, the purpose of this chapter is to explore a lacuna that could negatively impact the effectiveness of individualist and collectivist applications of the no-harm principle: motivational barriers. If individualists are correct that each person has a duty to change their behaviour in such a way as to mitigate their contributions to climate change, then one could argue that barriers to discharging this duty are important factors that need to be considered. In addition, if Kyllonen (2018) is correct that motivations play an important role in collective action, then one could make a similar argument concerning this position. Work on barriers to climate action is not new in the scholarly literature. In addition to extensive research in psychology (Shalev 2015; Baumeister and Bargh, 2014), environmental philosophers have explored the role that participation plays in nurturing the attitudes necessary for recognising a duty to bring about environmental change (Light 2006; Taylor 1981).

This chapter begins from the position that the individualist and collectivist applications of the no-harm principle could provide the normative justification necessary to motivate individuals to act. However, it adds to this work by arguing that normative arguments need to be wedded to interdisciplinary work on other motivational barriers (beyond the lack of a normative argument) – barriers that could limit a person's ability to effectively discharge this duty. Specifically, it argues that even if we recognise a *prima facie* duty to address climate impacts, there are obstacles that could ultimately curtail the effectiveness of such arguments. These include, but are not limited to, goal barriers, ambiguity barriers, threat barriers and structural justice barriers. This chapter then draws from theoretical work in environmental philosophy in general and local food movements (LFMs) in particular to outline potential strategies for addressing each of the barriers above. The aim of this chapter is to provide the foundation necessary for further work on normative duty and motivational barriers. I hope this analysis leads to the development of a robust philosophical framework (combining duty-based arguments with interdisciplinary work) that could help to effectively address what has been called the most wicked problem of the modern age: climate change.

1. Climate Change, Wicked Problems and Motivational Barriers

While factual evidence on climate change impacts is increasing (Tollefson 2021), attempts to encourage people to change their behaviour to address this crisis have had limited success (Shalev 2015; Whitmarsh and O'Neill, 2010; Moser and Ekstrom 2010). According to Moser and Ekstrom (2010, 22026), 'adaptation to climate change has risen sharply as a topic of scientific inquiry, in local to international policy and planning, in the media, and in public awareness... Yet climatic events in Europe, the United States, and Australia in recent years have also led to critical questioning of richer nations' ability to adapt to climate change'. According to Shalev (2015), one of the barriers to climate change adaptation is linked to human motivation, which is understood as the process that moves individual people to act. Human motivation can be roughly divided into two categories: motivations that do not involve conscious awareness and those that require conscious thought, as these help individuals plan for future contingencies (Bargh 1997; Baumeister and Bargh 2014). In the second category, motivational barriers can be roughly broken down into three subsets: goal barriers, threat barriers and ambiguity barriers (Shalev 2015). Concerning the first type, clearly identifying a desired endpoint and using this as a reference to direct behaviour is imperative for pursuing solutions (Kruglanski et al. 2002; Shah et al. 2002). In other words, a clear sense of direction is necessary for providing the personal impetus to realise particular goals (Shalev 2015; Higgins 1989).

However, climate change is a 'wicked problem', or a complex and systemic issue that has no simple solution (Luwig 2001; Whyte and Thompson 2011). Such challenges involve interactions between biological processes and a diverse array of human conduct. Thus, they are not simply complicated but are uniquely challenging, as the way we formulate the problem is nebulous (is climate change an economic, environmental or social problem?) and solutions are varied. As Whyte and Thompson (2011, 441-442) argue:

To describe climate change as an economic problem means that one has already limited oneself to particular economic solutions to addressing it. Because proposed solutions are so closely tied to problem formulations, disagreements among stakeholders who foresee themselves as being impacted differently by the solutions can take

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the form of ontological debates. Unlike problems where there is little disagreement about its basic formulation, wicked problems are characterized by deep ambiguity in the ontological assumptions and metaphysical categories used in their articulation.

As such, wicked problems are exceptionally complex, multifaceted and difficult to address. It follows from this categorisation that there is no one clear solution or goal to guide individual behaviour. Even when we recognise a duty to address climate-induced impacts, there is intense debate concerning how this responsibility should be distributed, and this influences the prioritisation of specific goals (Kyllonen 2018). Due to this complexity, local, national and international discourses often focus on weighing various goals and solutions (Shalev 2015). According to Shalev (2015), there is a plethora of research coming out of social psychology that connects the prolonged evaluation and assessment of goals to inaction and decision-making paralysis (Kruglanski et al. 2010; Shalev and Sulkowski 2009). If this is the case, then climate change decision-making may be hampered by a motivational goal barrier. Additionally, threat barriers also come into play in this context.

Similar to goal barriers, threat also inhibits a person's ability to change their behaviour in new ways and try new experiences. Due to this fact, 'individuals who feel they are under threat, therefore, tend to neglect their long-term, future planning goals in favor of the short-term goal of self-defense' (Shalev 2015, 131). Threat then acts as a motivation to reaffirm typical behaviour rather than changing it (Steele 1988; Cohen and Sherman 2014). As a motivational factor, paradoxically, this can reduce an individual's ability to modify behaviour or judgements when faced with new evidence (Shalev 2015). Likewise, ambiguity also increases resistance to change (Jost et al., 2003), as do situations where a rapid response is required (Kruglanski and Webster 1996; Kruglanski 2004). When taken as a whole, the 'wicked' nature of climate change induces a triad of motivational barriers that actively work against collective action. Goal barriers, threat barriers and ambiguity barriers each play a role in limiting the ability of individuals and the communities they make up to address climate impacts.

What this translates to in a philosophical context is that even if we recognise a *prima facie* duty to address climate impacts, there are also motivational barriers to encouraging people to make the requisite changes – motivational barriers that could ultimately curtail the effectiveness of such arguments. This is especially important if Kyllonen (2018) is correct that collectivist arguments need individualist motivations (specifically, a normative sense of duty) to provide sufficient reason for collective action. If this is the case, then motivational barriers that impact an individual's ability to alter their behaviour in ways necessary to meet the challenge of climate change could have a direct impact on whether they can meet their moral duty. In addition to motivational barriers, 'structural injustice barriers' should be included, as they also impact climate change mitigation strategies. As Harlan et al. (2015, 1) argue, climate change is marked by a myriad of justice concerns. First, the causes of climate change are driven by social inequalities, as marginalised nations and communities typically use vastly less fossil fuels. Second, the poor experience climate impacts more dramatically than the rich at the local, national and global levels. Third, climate change mitigation policies will also 'have starkly unequal impacts within and across societies' (Harlan et al. 2015, 128). Such inequalities could impact an individual's ability to take actions necessary to address a changing climate. These include, but are not limited to, the 'unequal distribution of impacts, unequal responsibility for climate change, and unequal costs for mitigation and adaptation' (Sowers 2007, 140).

Additionally, the history of unequal global development could also negatively impact the ability of individuals to act, depending on their context, as this history often translates into a greater vulnerability to climate impacts and/or the limitation of available options to curtail carbon emissions (Adger et al. 2003). This has led some scholars, such as Parks and Roberts (2010), to argue that micro-discussions of rational choice need to be integrated into larger discussions concerning structural insights and barriers. Barnett and Adger (2007) have also argued that, in certain contexts, climate adaptation strategies should incorporate the wider goals of regenerating ecological, social and human capital needed to address climate impacts. An important take-away from such critiques is that a) wider justice issues need to be brought into climate change discussions and b) burden-sharing should be explored in contexts where development is curtailed by climate change (Parks and Roberts 2010). Thus, these wider structural justice issues could also play a major role in undermining individual action and thus form a fourth barrier: the structural justice barrier.

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2. What Are Local Food Movements and Why Do They Matter?

When taking these barriers into account, one could easily adopt a pessimistic attitude concerning whether individuals and the collective agents they make up can institute the strategies necessary for climate change mitigation. Fortunately, however, philosophical work on LFMs could provide key insights concerning how to address each of the barriers above. This may be surprising to some readers. However, both LMFs and other environmental movements have a long history of bringing about ethically motivated change while grappling with wicked problems. Scholarly work on LFMs often highlights a) how ethically and ontologically centered concerns are actualised to motivate individuals and b) how commitments to address larger justice concerns can guide individual decision-making (Delind 2011; Alkon 2012; Noll and Murdock 2020). The ways that LFMs couple larger systemic issues with local action is evident in the theoretical structure guiding these initiatives. For example, supporters of LFMs typically argue that they provide an alternative to industrialised food systems by reconnecting communities to agricultural processes, including the production, processing and distribution of foodstuffs (Noll and Werkheiser 2017; Levkoe 2011). As industrial food systems produce food on a large scale, they essentially reduce the wide spectrum of food choices that individuals make to 'shallow' choices concerning brands in a supermarket (Delind 2011). In the cultural sphere, these shallow choices translate into the loss of food knowledge and practices (Alkon 2012).

Due to these factors, LFMs are often driven to address larger food system concerns by focusing on local production, reviving heritage breeds and seeds, supporting and rekindling local food customs and helping to increase community control over food systems. As such, LFMs have effectively coupled individual action (buying organic, supporting local farmers, etc.) with addressing complicated food system problems. Depending on the type of LFM, these system-focused problems could be deeply concerned with justice issues (Alkon 2012; Noll and Murdock 2020; Schanbacher 2010). Thus, I argue that the literature on LFMs could provide fruitful lessons for those working to motivate individuals to mitigate climate change. These insights coupled with duty-focused arguments, such as applications of the no-harm principle, could provide the philosophical foundations necessary for making new climate change mitigation strategies a reality.

It is imperative that normative arguments and strategies to negate motivational barriers be integrated if we hope to mitigate climate change. With this goal in mind, the next section of this chapter provides a brief overview of different LFMs before highlighting key strategies they use to address motivational barriers. It should be noted that this analysis is not meant to provide a fully fleshed out solution to this complex dilemma. Rather, it is meant to be the start of a much larger conversation on this topic.

The number of LFMs has been increasing steadily since the middle of the twentieth century. These initiatives primarily aim to realise a wide range of food-related goals, such as connecting local food producers and consumers, developing more resilient food systems, improving local economies and bringing about positive impacts to specific communities (Delind 2011; Alkon 2012; Schanbacher 2010). More generally, they are united by a desire to provide alternatives to industrialised food systems and place environmental and structural injustices at the forefront of discussions concerning food (Levkoe 2011). LFMs have more than 40 years of experience tackling wicked problems in the realm of agriculture (Whyte and Thompson 2011). As Pirog et al. (2014, 1) state, 'the local food movement... has evolved over the past 25 years, including a more recent convergence with movements supporting food access and health, food justice, environment, food sovereignty, and racial equity'. Due to the wide range of goals associated with local food movements, Werkheiser and Noll (2014) place them into three sub-movements, each defined by their unique goals and ontological conceptualisations of 'people' and 'food' that guide group action. In short, LFMs actualise normative commitments, ontological frameworks and justice mandates as they push us to rethink our very relationship with food, society and ourselves.

According to Werkheiser and Noll (2014), there are three types of LFMs, each with their own distinct philosophical commitments. The individual-focused sub-movement is the largest subset of these initiatives. Members of this sub-movement predominantly focus on personal choice or lifestyle politics, conceptualising the food we eat as one choice among many with far-ranging impacts. In contrast, the systems-focused sub-movement conceptualises change as happening at the larger structural or systems level. What separates this sub-movement from the individual-focused sub-movement is that it shifts the conversation from the level of individual choice to push for larger changes that

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could alter food-based subsidies and policies, such as those in the United States (US) Farm Bill. Supporters argue that, by framing the issue beyond individual choice, systems-focused initiatives can change 'many of the environmental, economic, and political problems of the current system' and have on-the-ground impacts, such as increasing food security (Werkheiser and Noll 2014, 203).

Finally, the community-focused sub-movements can be understood as the intersection of the LFM and food sovereignty initiatives. Rather than seeing food as an interchangeable commodity bought and sold on the market, this sub-movement conceptualises 'food' and 'people' as intertwined. Food is not simply a product. It is an important catalyst for creating and reproducing personal identity, community and culture (Desmarais et al. 2010; Schanbacher 2010). As such, food-related issues can and have become important bases for activism around the globe. These movements conceive of people as members of communities with distinct cultures, including local food customs. And 'if communities and food are co-constituted, then the particular culture and the particular food become much more important, as does the symbolic nature of food' (Werkheiser and Noll 2014, 207). For members of this sub-movement, activism is equally co-constituted with communities and shared customs (Desmarais et al. 2010). As such, strategies for bringing about change are often framed as social justice issues. According to Schanbacher (2010, ix), 'The food sovereignty model considers human relationships in terms of mutual dependence, cultural diversity, and respect for the environment... Ultimately, if food sovereignty's demands are not met, the current global food system constitutes a massive violation of human rights'. The community-focused sub-movement places particular importance on actualising justice frameworks when working towards food-related goals.

3. Local Food and Motivational Barriers

The no-harm principle can be understood to necessitate a *pro tanto* duty to refrain from harm and/or repair harm that has been inflicted (Kyllonon 2018). This requires that each person change their behaviour to help address the wicked problem of climate change. The next section outlines how LFMs could provide strategies for mitigating the specific barriers outlined above. For example, the individual-focused sub-movement has been quite successful in addressing the goal motivational barrier. While wicked problems associated with food production are vast and complicated (Whyte and Thompson 2011), these LFMs have distilled myriad possible solutions down into a single message. If you 'buy local', then you help bring about positive change 'one meal, and one family at a time' (Delind 2011, 277). While simplistic, this provides individuals with a clear goal or way to discharge their ethical duties, such as increasing food sustainability, protecting the environment, improving animal welfare, creating a more equitable food system, etc. While a prolonged evaluation and assessment of goals is an important part of adequately addressing wicked problems, such as climate change, providing an easily identifiable action point could help marshal individualist and collectivist responses.

These could include the following: the recognition of a moral obligation to reduce individual emissions, the desire to lessen personal support for carbon-intensive industries by 'voting with your dollar', a commitment to not participate in environmentally harmful group activities, etc. (Vance 2017). Each are individual actions, but they could help mitigate the goal motivational barrier, as citizens committed to making personal changes are more likely to support collective action. For example, Thompson (2015) argues that 'buying local' can act as a heuristic that helps individual consumers better understand the wider impacts of food choice, thus gradually placing them on a path of supporting wider collectivist and justice-focused initiatives. A similar argument could be made concerning climate change mitigation that balances individual responsibility and collective action.

In fact, the literature on LFMs illustrates how active participation in local initiatives has the potential to increase motivation to work towards system-focused change. For example, LFMs are, by their very definition, focused on connecting people to local food-ways and systems. This translates to community-based initiatives that connect citizens to some segment of their local production system. This could take the form of creating farmers markets in food insecure neighbourhoods, community-supported agricultural projects, 'meet your farmer' events, field-to-fork programmes that highlight local products, etc. What LFMs offer, then, in addition to the promise of addressing food-related issues, are opportunities to have meaningful interactions with local components of the food system and the environments where food is grown. Both scientists (Church 2018; Colding and Barthel 2013; Krasny et al. 2014) and environmental philosophers (Light and Higgs 1996; Light 2009) have argued that these types of experiences

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contribute to strengthening moral relationships and building robust connections with the natural world. According to Church (2018, 879), engagement with the environment 'has the potential to contribute to building human connections with nature, to facilitate increased understanding of natural systems, and to influence individual environmental values and behavior'. Similarly, according to Light (2009), public participation helps increase social capital, whereby members of a community are more likely (for multiple reasons) to lay claim to their contexts and engage in collective action projects to maintain these spaces. As climate change threatens ecosystem services (Grimm et al. 2013) and biodiversity (Bellard et al. 2012; Botkin et al. 2007) worldwide, direct contact with what is being lost may help reduce the influence of the ambiguity barrier.

In addition, this analysis illustrates how LFM could provide insight into how to begin to mitigate the threat barrier. In particular, they could also help to provide a blueprint for developing the 'radical hope' that Williston (2012) argues is necessary for bringing about change in increasingly dire times. Williston (2012, 165) defines radical hope as striving 'to retain our ability to flourish as moral agents'. However, the climate crisis creates a context where the ability of humans to flourish is being called into question. Thus, the object of radical hope is the desire to successfully avoid 'total catastrophe', and this desire grounds our motivations for addressing climate impacts. Part of maintaining radical hope is recognising 'the vital interests of members of the moral community' (Williston 2012, 165). As such, one could argue that participating in collective action projects could be one way to cultivate this positive attitude. These types of projects are opportunities to build moral relationships with others and often includes expanding moral communities to encompass the environment and other species (depending on the type of project). They also involve recognising the vital interests of these newly recognized others. As such, these experiences may help to 'find a way for us to flourish in the teeth of the climate crisis' (Williston 2012, 183). Rather than be paralysed by fear, this could nudge individuals to build community ties and retain their ability to flourish in the face of potentially catastrophic climate-related impacts, thus lessening the impact of the threat motivational barrier.

LFMs also have a long history of balancing larger justice-related goals with small-scale projects. Specifically, community-focused LFMs have devoted years both to actively working to achieve food related goals and also addressing larger social justice concerns (Desmarais et al. 2010; Werkheiser and Noll 2014). We need only turn to Declaration of Nyéléni's (2015) definition of food sovereignty (an important type of community-focused LFM) to illustrate the plethora of structural injustices currently on the table:

Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation... It ensures that the rights to use and manage our lands, territories, waters, seeds, livestock and biodiversity are in the hands of those of us who produce food. Food sovereignty implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social classes and generations.

The definition includes goals that are clearly in the agricultural context, such as increasing sustainability, improving agricultural processes and better managing land and water use. These types of projects are typical of most LFM sub-movements (Desmarais et al. 2010; Noll and Werkheiser 2017; Schanbacher 2010). However, one of the unique components of community-focused initiatives is that they often employ an expanded justice framework when working towards change. According to Murdock and Noll (2020, 4), 'food sovereignty focuses... on the larger structures and procedures that problematically create injustice and one of those injustices is food insecurity. In terms of solutions, then, food sovereignty has to be sensitive and aware of the different models of justice and the different ways in which harms can be perpetuated'. This sensitivity and awareness, coupled with community-based action, could provide useful insights for climate change mitigation.

There are myriad inequalities associated with climate change that could impact an individual's ability to act. Structural inequalities include the 'unequal distribution of impacts, unequal responsibility for climate change, and unequal costs for mitigation and adaptation' (Sowers 2007, 140). Additionally, the history of unequal global development negatively impacts the ability of communities to address harms effectively, as this history often translates into a greater vulnerability to climate impacts and/or a limitation of available options to curtail carbon

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emissions (Adger et al. 2003). If Barnett and Neil (2007) are correct that climate adaptation strategies need to recognise wider socially relevant goals, then food sovereignty movements may be able to provide blueprints for how to meaningfully bring about change in such contentious contexts. Indeed, one could argue that the recognition of structural injustices by local movements is a precursor to meaningful deliberation concerning how to address them. At the very least, LFMs provide a model for how wider justice issues can be brought into climate change initiatives, even as communities work towards addressing short-term problems on the ground. As these wider structural justice issues could play a role in potentially curtailing individual action, such a blueprint may be imperative for helping communities across the globe begin to mitigate climate impacts.

Conclusion

One criticism of the above analysis that needs to be discussed is the argument that it moves beyond philosophy, as it draws from empirical work on motivations, environmental movements and local food. If this the case, then motivational barriers and strategies for potentially addressing these barriers should be considered empirical questions and thus outside of the purview of philosophical investigation. One reply to this critique is that environmental philosophers have been discussing the connections between collective action and the desire to protect nature for over 30 years. As such, this paper is not separate from philosophy but is building on this robust theoretical literature. In addition, as climate change is a 'wicked problem', it is complex, multifaceted and difficult to address (Whyte and Thompson 2011). These types of problems require solutions that are interdisciplinary by design. This chapter is also interdisciplinary, illustrating how philosophy can contribute to solutions and how this work could be useful in other disciplines.

This chapter began from the position that the individualist and collectivist applications of the no-harm principle provides the normative justification necessary to motivate individuals to act (Kyllonen 2018). However, these normative arguments need to be wedded to interdisciplinary work on motivational barriers. Even if we recognise a *prima facie* duty to mitigate climate change impacts, certain motivational barriers could block people from making the requisite changes. Drawing from work in psychology, this chapter outlined four key barriers that could negatively impact a person's ability to discharge their duty to mitigate climate change. These include, but are not limited to goal barriers, ambiguity barriers, threat barriers and structural justice barriers. Local food and other environmental movements have a long history of bringing about ethically motivated change while grappling with wicked problems.

Scholarly work on LFMs often highlights a) how ethically and ontologically centered concerns are actualised to motivate individuals and b) how commitments to address larger justice concerns can guide individual decision-making (Delind 2011; Alkon 2012; Noll and Murdock 2020). Concerning goal barriers, LFMs have developed solutions, such as providing clear directives, while attempting to address complex, systemic issues. Concerning the ambiguity barrier, community-based initiatives provide direct contact with what is being lost. In addition, this analysis illustrated how LFMs could provide insight into how to begin to mitigate the threat barrier. In particular, they could help provide a blueprint for developing the 'radical hope' that is needed to remain motivated in dire times. Finally, there are several inequalities associated with climate change that could impact an individual's ability to act. I hope this analysis leads to the development of a robust philosophical framework (combining duty-based arguments with motivational barriers) that could help to address effectively what has been called the most wicked problem of the modern age: climate change.

References

Adger, N., Saleemul H., Brown, K., Conway, D., and Hulme, M. 2003. "Adaptation to Climate Change in the Developing World." *Progress in Development Studies* 3 (3): 179–95.

Alkon, A. H. 2012. *Black, White, and Green: Farmers Markets, Race, and the Green Economy*. University of Georgia Press.

Almassi, B. 2012. "Climate Change, Epistemic Trust, and Expert Trustworthiness." *Ethics and the Environment* 17: 29–49. <https://doi.org/10.2979/ethicsenviro.17.2.29>

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Bargh, J. A. 1997. "The Automaticity of Everyday Life,." In *The Automaticity of Everyday Life: Advances in Social Cognition*, edited by R.S. Wyer, 1–61. Mahway, NJ: Erlbaum.

Barnett, J., and W. Neil Adger. 2007. "Climate Change, Human Security and Violent Conflict." *Political Geography, Climate Change and Conflict*, 26 (6): 639–55. <https://doi.org/10.1016/j.polgeo.2007.03.003>

Baumeister, R. F., and J. A. Bargh. 2014. "Conscious and Unconscious: Toward an Integrative Understanding of Human Mental Life and Action." In *Dual-Process Theories of the Social Mind*, edited by J Sherman, B Gawronski, and Y Trope, 35–49. New York: Guilford Press.

Bell, D. 2013. "Climate Change and Human Rights." *WIREs Climate Change* 4 (3): 159–70. <https://doi.org/10.1002/wcc.218>

Bellard, C, Bertelsmeier, C., Leadley, P., Thuiller, W., and Courchamp, F. 2012. "Impacts of Climate Change on the Future of Biodiversity." *Ecology Letters* 15 (4): 365–77. <https://doi.org/10.1111/j.1461-0248.2011.01736.x>

Blau, J. 2017. *The Paris Agreement: Climate Change, Solidarity, and Human Rights*. London: Palgrave Macmillan UK.

Botkin, D. B., Saxe, H., Araújo, M. B., Richard Betts, R. H., Bradshaw, W., Cedhagen, T., Chesson, P., et al. 2007. "Forecasting the Effects of Global Warming on Biodiversity." *BioScience* 57 (3): 227–36. <https://doi.org/10.1641/B570306>

Church, S. 2018. "From Street Trees to Natural Areas: Retrofitting Cities for Human Connectedness to Nature." *Journal of Environmental Planning and Management* 61 (5–6): 878–903.

Cohen, G. L., and D. K. Sherman. 2014. "The Psychology of Change: Self-Affirmation and Social Psychological Intervention." *Annual Review of Psychology* 65: 333–71. <https://doi.org/10.1146/annurev-psych-010213-115137>

Colding, J., and S. Barthel. 2013. "The Potential of 'Urban Green Commons' in the Resilience Building of Cities." *Ecological Economics, Sustainable Urbanisation: A resilient future*, 86 (February): 156–66. <https://doi.org/10.1016/j.ecolecon.2012.10.016>

Cripps, E. *Climate Change and the Moral Agent: Independent Duties in an Interdependent World*. Oxford University Press.

Dahlberg, K. 1993. "Regenerative Food Systems: Broadening the Scope and Agenda of Sustainability." In *Food for The Future: Conditions and Contradictions of Sustainability*, 75–103. Hoboken: Wiley.

DeLind, L. B. 2011. "Are Local Food and the Local Food Movement Taking Us Where We Want to Go? Or Are We Hitching Our Wagons to the Wrong Stars?" *Agriculture and Human Values* 28 (2): 273–83.

Desmarais, A. A., Wiebe, N., and H. Wittman. 2010. *Food Sovereignty: Reconnecting Food, Nature & Community*. Fernwood.

Fahlquist, Jessica Nihlén. 2009. "Moral Responsibility for Environmental Problems—Individual or Institutional?" *Journal of Agricultural and Environmental Ethics* 22 (2): 109–24. <https://doi.org/10.1007/s10806-008-9134-5>

Grimm, N. B, Chapin, F. S., Bierwagen, B., Gonzalez, P., Groffman, P.M., Luo, Y., and F. Melton. 2013. "The Impacts of Climate Change on Ecosystem Structure and Function." *Frontiers in Ecology and the Environment* 11 (9): 474–82. <https://doi.org/10.1890/120282>

Harlan, S., Pellow, D., Roberts, J.T., Bell, S.E., Holtt, W.G., Nagel, J. 2015. "Climate Justice and Inequality." In

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Climate Change and Society: Sociological Perspectives (eds. Riley E. Dunlap and Robert J. Brulle), 1-55. Oxford: Oxford University Press.

Higgins, E. T. 1989. "Continuities and Discontinuities in Self-Regulatory and Self-Evaluative Processes: A Developmental Theory Relating Self and Affect." *Journal of Personality* 57 (2): 407-44. <https://doi.org/10.1111/j.1467-6494.1989.tb00488.x>

Hiller, V. 2011. "Climate Change and Individual Responsibility." *The Monist* 94(3): 349-368.

Jost, J. T., Glaser, J., Arie., Kruglanski, W. and F. J. Sulloway. 2003. "Political Conservatism as Motivated Social Cognition." *Psychological Bulletin* 129 (3): 339-75. <https://doi.org/10.1037/0033-2909.129.3.339>

Krasny, M. E., Russ, A., Tidball, K. G., and T. Elmqvist. 2014. "Civic Ecology Practices: Participatory Approaches to Generating and Measuring Ecosystem Services in Cities." *Ecosystem Services* 7 (March): 177-86. <https://doi.org/10.1016/j.ecoser.2013.11.002>

Kruglanski, A. W., Orehek, E., Higgins, E. T., Pierro, A. and I. Shalev. 2010. "Modes of Self-Regulation: Assessment and Locomotion as Independent Determinants in Goal-Pursuit." In *Handbook of Personality and Self-Regulation*, edited by R Hoyle, 375-402. London: Blackwell Publishing.

Kruglanski, A. W., Thompson, E. P., Higgins, E. T., Atash, M. N., Pierro, A., Shah, J. Y., and S. Spiegel. 2000. "To 'Do the Right Thing' or to 'Just Do It': Locomotion and Assessment as Distinct Self-Regulatory Imperatives." *Journal of Personality and Social Psychology* 79 (5): 793-815. <https://doi.org/10.1037/0022-3514.79.5.793>

Kruglanski, A. W., and D. M. Webster. 1996. "Motivated Closing of the Mind: 'Seizing' and 'Freezing.'" *Psychological Review* 103 (2): 263-83. <https://doi.org/10.1037/0033-295x.103.2.263>

Kruglanski, A. W. 2004. *The Psychology of Closed Mindedness*. The Psychology of Closed Mindedness. New York, NY: Psychology Press.

Kyllönen, S. 2018. "Climate Change, No-Harm Principle, and Moral Responsibility of Individual Emitters." *Journal of Applied Philosophy* 35 (4): 737-58. <https://doi.org/10.1111/japp.12253>

Levkoe, C. 2011. "Towards a Transformative Food Politics." *Local Environment* 16 (7): 687-705.

Light, A. 2009. "Ecological Restoration and the Culture of Nature." In *Readings in the Philosophy of Technology*, edited by David M. Kaplan, 398-411. New York, NY: Rowman & Littlefield.

Light, A, and E. S. Higgs. 1996. "The Politics of Ecological Restoration." *Environmental Ethics* 18 (3): 227-47.

Ludwig, D. 2001. "The Era of Management Is Over." *Ecosystems* 4 (8): 758-64.

Moser, Susanne, and Julia Ekstrom. 2010. "A Framework to Diagnose Barriers to Climate Change Adaptation." *Proceedings of the National Academy of Sciences of the United States of America* 107: 22026-31. <https://doi.org/10.1073/pnas.1007887107>

Noll, S., and E. Murdock. 2020. "Whose Justice Is It Anyway? Mitigating the Tensions Between Food Security and Food Sovereignty." *Journal of Agricultural and Environmental Ethics* 33: 1-14. <https://doi.org/10.1007/s10806-019-09809-9>

Noll, S., and I. Werkheiser. 2017. "Local Food Movements: Differing Conceptions of Food, People, and Change." In *Oxford Handbook of Food Ethics*. Oxford: Oxford University Press.

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Parks, B., and T. Roberts. 2010. "Climate Change, Social Theory and Justice." *Theory, Culture & Society* 27 (2-3): 134-66.

Pirog, R., Miller, C., Way, L., Hazekamp, C., and E. Kim. 2014. *The Local Food Movement; Setting the Stage for Good Food*. Lansing, Michigan: MSU Center for Regional Food Systems.

Quirico, O. 2018. "Climate Change and State Responsibility for Human Rights Violations: Causation and Imputation." *Netherlands International Law Review* 65 (2): 185-215. <https://doi.org/10.1007/s40802-018-0110-0>

Schanbacher, W. D. 2010. *The Politics of Food: The Global Conflict Between Food Security and Food Sovereignty*. Santa Barbara: ABC-CLIO.

Shah, J. Y., Friedman, R., and A. W. Kruglanski. 2002. "Forgetting All Else: On the Antecedents and Consequences of Goal Shielding." *Journal of Personality and Social Psychology* 83 (6): 1261-80. <https://doi.org/10.1037/0022-3514.83.6.1261>

Shalev, I. 2015a. "The Climate Change Problem: Promoting Motivation for Change When the Map Is Not the Territory." *Frontiers in Psychology* 6: 131. <https://doi.org/10.3389/fpsyg.2015.00131>

Shalev, I. 2015b. "The Climate Change Problem: Promoting Motivation for Change When the Map Is Not the Territory." *Frontiers in Psychology* 6 (February): 131. <https://doi.org/10.3389/fpsyg.2015.00131>

Shalev, I., and M. L. Sulkowski. 2009. "Relations between Distinct Aspects of Self-Regulation to Symptoms of Impulsivity and Compulsivity." *Personality and Individual Differences* 47 (2): 84-88. <https://doi.org/10.1016/j.paid.2009.02.002>

Shukla, P.R., E Skea, Buendia Calvo, H Masson-Delmotte, D.C. Portner, P. Roberts, R. Zhai, et al. 2018. "IPCC, 2019: Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems." Governmental Website. IPCC Climate Report. 2018. <https://www.ipcc.ch/>

Sinnott-Armstrong, W. 2010. "It's Not My Fault; Global Warming and Individual Moral Obligations." In *Climate Ethics: Essential Readings*, edited by Stephen Gardiner, Simon Caney, Dale Jamieson, and Henry Shue, 332-46. New York: Oxford University Press.

Sowers, J. 2007. "The Many Injustices of Climate Change." *Global Environmental Change* 7 (4): 140-46.

Steele, C. M. 1988. "The Psychology of Self-Affirmation: Sustaining the Integrity of the Self." In *Advances in Experimental Social Psychology, Vol. 21: Social Psychological Studies of the Self: Perspectives and Programs*, 261-302. San Diego, CA, US: Academic Press.

Taylor, P. W. 1981. "The Ethics of Respect for Nature." *Environmental Ethics* 3 (3): 197-218. <https://doi.org/10.5840/enviroethics19813321>

Tollefson, J.. 2021. "IPCC Climate Report: Earth Is Warmer than It's Been in 125,000 Years." *Nature* 596 (7871): 171-72. <https://doi.org/10.1038/d41586-021-02179-1>

Thompson, P. 2015. *From Field to Fork: Food Ethics for Everyone*. Oxford: Oxford University Press.

Vance, C. 2017. "Climate Change, Individual Emissions, and Forseeing Harm." *Journal of Moral Philosophy* 14(5): 562-584.

Vanderheiden, S. 2011. "Globalizing Responsibility for Climate Change." *Ethics & International Affairs* 25 (1): 65-84.

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<https://doi.org/10.1017/S089267941000002X>

Whitmarsh, L., and S. O'Neill. 2010. "Green Identity, Green Living? The Role of pro-Environmental Self-Identity in Determining Consistency across Diverse pro-Environmental Behaviours." *Journal of Environmental Psychology, Identity, Place, and Environmental Behaviour*, 30 (3): 305–14. <https://doi.org/10.1016/j.jenvp.2010.01.003>

Whyte, K., and P. Thompson. 2011. "Ideas for How to Take Wicked Problems Seriously." *Journal of Agricultural and Environmental Ethics* 25 (4): 441–45. <https://doi.org/10.1007/s10806-011-9348-9>

Zhai, P., Pirani, A., Connors, S.L., Pean, C., Berger, S., Caud, N., Chen, Y., Goldfarb, L., Gomis, M.I., Huang, M., Leitzell, K., Lonnoy, E., Matthews, J.B.R., Maycock, T.K., Waterfield, T., Yelekci, O., Yu, R., and B Zhou. "IPCC, 2021: Climate Change." Governmental Website. IPCC Climate Report. 2021. <https://www.ipcc.ch/report/ar6/wg1/>

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