

ORIGINAL ARTICLE

“How should we respond to climate change? Virtue ethics and aggregation problems”

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1 | INTRODUCTION

One of the most discussed questions in climate ethics is whether individuals have a moral responsibility to reduce their emissions, or even to become carbon neutral. However, virtue ethics has been largely absent from this debate. This article explores the implications of a neo-Aristotelian account, examining how we respond to climate change as a shared problem, and the characteristic reasons that motivate us to do what we can in response. I contrast this account with consequentialist and deontological approaches, showing that while virtue concepts will often require individuals to reduce their individual emissions, this does not depend on showing that individual emitting actions are harmful. To understand the virtue-ethical notion of *acting well* in response to climate change, we must tell a richer story about our moral contexts and characters. In telling such a story, we will see that merely reducing one's personal emissions while refraining from other actions could reflect vice, while acting well could consist in assisting local adaptation or raising awareness, rather than reducing one's emissions to zero.

Section 1 explores the differences between standard approaches to climate responsibility and virtue ethical approaches, introducing the core theoretical claims of the latter. Section 2 returns to Parfit's discussion of aggregation problems to clarify the basic approach. Section 3 explores the thought that in response to climate change, acting well means doing what we can. This admittedly vague response gives rise to concerns with action-guidance and demandingness. Thus, Section 4 argues that acting well must be understood in light of one's context. This shows that there are many ways to act well in response to climate change, and that the poor and young people who have emitted little can nonetheless respond to climate change as a shared moral problem. Finally, Section 5 explores the importance of exemplary

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climate actions, their difference from otherwise good actions, and argues that such actions can inspire us to do more than we thought ourselves capable.

2 | CLIMATE CHANGE AND INDIVIDUAL RESPONSIBILITY

To understand how virtue ethics approaches our question, consider first how most philosophers have approached it. In the large debate about individual climate responsibility, the desiderata for a successful argument are as follows: first, we attribute *causal* responsibility to an agent for harm resulting from the emission of greenhouse gases. Second, we attribute *moral* responsibility if the agent knew or should have known that harm would result from these actions. Third, we identify a *moral obligation* to cease contributing to harm, and/or to compensate those harmed (Vanderheiden, 2007).

The most significant dispute concerns whether the right kind of causal connection holds between individual actions and the harms of climate change (Nefsky, 2019). This is difficult to establish since each individual is an extremely small part of causal chains comprising billions of actors stretching back to the beginning of the Industrial Revolution. Several have argued that the actions of individuals make no *meaningful* difference to the production of harms from climate change. Baylor Johnson (2003) argues that individual acts do not cause climate-related harms. Ronald Sandler (2010) argues that individual actions are “inconsequential” in producing climate change, responding to a similar argument from Dale Jamieson (2007), while Joakim Sandberg (2011) argues that no consequential harms follow from individual actions. Walter Sinnott-Armstrong (2005) claims there is nothing morally objectionable about joyriding in an inefficient car since this action produces no discernible harm. Galvin and Harris (2014) argue that since individual actions are impotent, neither rights-based arguments nor expected utility arguments produce moral obligations. Kok-Chor Tan (2015) argues against obligations to change one’s lifestyle to become carbon-neutral since the political effects of this remain uncertain. Ben Hale (2011) and Johnson (2003) argue that individual choices not to emit would make no difference due to market forces of demand and supply.¹ Without attributing causal harm, Garrett Cullity (2015) rejects several possible contributions of individuals to collective actions causing climate harm. Instead, Christian Barry and Gerhard Øverland (2015) argue that the same climate harms would occur without the contribution of any particular individual.

Many have objected to these arguments. Steve Vanderheiden (2007) argues that individuals do harm in conjunction with others. Avram Hiller argues that “*going on a Sunday drive is the moral equivalent of ruining someone’s afternoon*” (2011, 57, emphasis original), which implies a significant amount of harm over an entire lifetime (cf. Morgan-Knapp & Goodman, 2014). Simo Kyllönen (2016) argues that individuals violate the no harm principle by knowingly contributing to an aggregate harm. Others are less convinced that standard accounts of harm are applicable, given the temporal lag between emissions and climate harm. Lauren Hartzell-Nicholls (2012) argues that individual contributions to climate change are *de dicto* harmful because they impose threats of harmful conditions upon future people, without being harmful in the standard *de re* sense. Instead, Elizabeth Cripps (2011) argues that the group roughly comprising wealthy individuals cause morally significant and predicable climate harm, thus violating a form of the harm principle applicable to collectives.

A similar picture emerges for the other two desiderata. Those skeptical about the causal claim usually deny that individuals are morally responsible for harms caused by climate change

(e.g., Baatz, 2014; Barry & Øverland, 2015; Cullity, 2015; Galvin & Harris, 2014; Johnson, 2003; Sinnott-Armstrong, 2005; Tan, 2015), while those who defend versions of the causal claim tend to think that moral responsibility can be attributed to individuals, whether directly or in conjunction with others (e.g., Hiller, 2011; Kyllönen, 2016; Morgan-Knapp & Goodman, 2014; Schwenkenbecher, 2014; Vanderheiden, 2007), or to certain collectives (e.g., Banks, 2013; Cripps, 2011; Sandberg, 2011; Tan, 2015; Vance, 2016). So too for the third desideratum, some argue that there is nothing individuals are morally obliged to do, aside from engaging in political action (Cullity, 2015; Galvin & Harris, 2014; Johnson, 2003; Sinnott-Armstrong, 2005; Tan, 2015).² Others believe either that there is some weaker form of moral obligation, for instance an imperfect duty to use only their fair share of emissions (Baatz, 2014), or an obligation to avoid knowingly or foreseeably harming (Hiller, 2011; Kyllönen, 2016; Morgan-Knapp & Goodman, 2014).

My intention here is not to vindicate or reject any of these arguments, but to step back from them in order to ask a different question, namely: what does virtue ethics require in response to climate change? This question has received very little attention. The arguments surveyed above narrow the question to a search for individual obligations, grounded upon a causal account of harm resulting from actions that emit greenhouse gases. The most obvious explanation for this narrowed focus is not any one argument, but a set of theoretical assumptions imported from deontological and consequentialist theories. I do not claim that these accounts are mistaken on their own terms, merely that they presuppose a picture of ethical enquiry that is not shared by all theories. In particular, this picture is contested by virtue ethical approaches. Indeed, for this reason virtue ethicists often find existing ethical debates saddled with uncongenial assumptions. As Rosalind Hursthouse (1991) pointed out in the case of abortion, what had previously been regarded as *the* point of contention, namely the status of the fetus, is simply not decisive for such an approach. We are in a similar situation here. According to virtue-ethical accounts, we do *not* require a causal account of the harmful action that each individual contributes in order to justify moral responses, as has already been argued in two contributions to this literature (Jamieson, 2007; Sandler, 2010). Yet as we will see, the significance of this point remains misunderstood, as do the more general implications of thinking about climate change in terms of virtue concepts. Thus, let us first clarify how virtue-ethical responses differ from those considered above.

To compare the structure of virtue-ethical theories, we must introduce the central concept of virtue. As Christine Swanton (2003, 19–20) puts it, a virtue is “a good quality of character, more specifically a disposition to respond to, or acknowledge, items within its field or fields in an excellent or good enough way.” As we will see below, this distinction between excellent and merely good enough action has many implications for thinking about what virtues require of us. But we can already note a further point here. At least for neo-Aristotelians, the moral quality of action, that is, whether something counts as an excellent or good enough response, is tied to the correct judgment of the virtuous person. As Aristotle puts it, virtuous people develop “an eye for things, and so they see correctly” (1934, 1143b).³ As such, virtues are not merely reliable tendencies to act on moral rules in certain roughly similar circumstances, but complex states of character involving our emotions, our responsiveness to reasons, and the practical judgment to recognize these reasons in context. While the word ‘virtue’ has an old-fashioned ring to it (Williams 2006), virtue terms are widespread in common discourse. The most familiar are justice, honesty, courage, generosity, and so on, while their opposites (which may be multiple) are vices such as injustice, selfishness, dishonesty, cowardice, and so on.⁴

How do virtue terms affect our question concerning individuals and climate change? This is something we will explore throughout, but we can already point to several immediate differences. First, we do not begin ethical enquiry by identifying an action, such as emitting CO₂, and a moral principle, which applies to it. Instead, we begin with the identification of virtue concepts that bear upon the situation (which need not be an action), then explore the characteristic reasons and motivations these imply when judged from a particular context. In this way, we seek to understand the sorts of responses that would count as acting well in response to climate change.

Second, the issue of moral responsibility looks quite different. Because virtues are habituated traits of character, the scope of moral responsibility is potentially broader than for action-based theories. In the context of climate change, the latter seek to establish that individual *actions* are harmful, and thus that we have a moral responsibility to cease doing them. Instead, virtue ethical views attribute moral responsibility for *characteristic* activities, that is, ways of living, because these reflect our moral character. The moral evaluation of action is thus derived from a prior analysis of good or bad moral character. This explains how virtue ethical views can remain uncommitted on the question of whether isolated individual actions produce climate harms. All that virtue ethical views require is that characteristic ways of living can produce climate harms. This is a maximally uncontroversial empirical claim,⁵ and one that even skeptics about the harmfulness of individual actions can readily accept. Instead, because virtue ethics is primarily interested in ways of living that express character traits, all that needs to be claimed is that the emissions produced by individuals acting in character over long periods of time can produce climate harms.

Note that this point already addresses a misunderstanding in the existing debate, where Sinnott-Armstrong asks rhetorically, “How can we tell whether driving a gas guzzler for fun ‘expresses a vice’? On the face of it, it expresses a desire for fun. There is nothing vicious about having fun” (2005, 295). Sinnott-Armstrong’s phrase “on the face of it” is unintentionally apt: barring some obvious cases which are always wrong and cannot even be characterized in ethically neutral terms (e.g., murder),⁶ we are in need of greater detail about the context of action and the person performing it to decide whether someone’s actions are vicious. Consider Sinnott-Armstrong’s example not as a one-off action but as a characteristic lifestyle: a person who has a high-emitting lifestyle, knows about the climate crisis, and refuses to change his lifestyle and continues with his ‘innocent’ fun. This tells us far more about such a person’s faulty moral character than the (potentially one-off) action of driving an inefficient car for fun. Without going into such details here, while a one-off action may not reflect vice, doing the same thing characteristically may well be selfish or uncaring.

The third and potentially most controversial move in this account is the absence of any central notion of moral obligation. Virtue ethics, especially in its neo-Aristotelian forms, has little use for the concept of moral obligation, a point that has been familiar since Anscombe (1958).⁷ This involves rejecting the common presumption in ethical theory that our weightiest moral reasons must be intelligible as obligations. This thought takes many forms, and it is also present in the debate about climate responsibility. For instance, Cullity worries that focusing upon reasons that cannot be considered individual climate obligations might “make it harder to motivate ourselves to address this problem properly” (2015, 164). However, there is simply no theory-neutral reason to think that our strongest or most motivating moral reasons must be intelligible as moral obligations (Williams 2006, 200ff.). Nonetheless, this difference may be overstated since many cases of acting virtuously will *indeed* be intelligible (by other theorists) in terms of moral obligation. As Hursthouse (1999, 123ff.) points out, there are conceptual connections

between obligation-based motives such as acting from a good will, and acting from virtue, since the latter means acting from “a settled state of good character” and for compelling moral reasons (1999, 123). Such reasons can be readily described as acting from duty or on principle.⁸ These connections have also been noted in the debate about climate responsibility. For example, Gunnar Björnsson (2021, 259, n. 7) defends a shared obligation to care appropriately about collective problems, which he claims to be structurally similar to acting according to virtue.

While there are indeed many similarities between acting virtuously and acting on a moral obligation, important differences remain. This is because our choice of moral concepts affects what we consider to be an adequate argument or relevant objection. For instance, Björnsson considers the perspective of climate activists, noting that they often think in terms of doing the best they can, or living up to their moral ideals (2021, 252–3). However, Björnsson simply assumes that these notions can be captured as moral obligations. Yet there is nothing in ordinary notions such as doing the best one can, living up to our moral ideals, or even doing what we believe is required of us that necessitates thinking in terms of moral obligation (at least not in the sense given to this notion in ethical theory). Moreover, as we have already seen, claiming that something is a moral obligation invites challenges concerning the harmfulness of one's individual actions, while also narrowing the moral landscape considerably.⁹ An alternative, which I develop in what follows, is to approach such ordinary notions of moral responsibility using virtue terms.

3 | VIRTUE ETHICS AND AGGREGATION PROBLEMS

To sketch the general approach available to virtue theorists, let us return to Derek Parfit's discussion of what he called “aggregation problems,” of which climate change is a paradigm case.¹⁰ In a prescient passage, Parfit wrote:

“For the sake of small benefits to ourselves, or our families, we may deny others much greater total benefits, or impose on others much greater total harms. We may think this permissible because the effects on each of the others will be either trivial or imperceptible. If this is what we think, what we do will often be much worse for all of us” (1984, 86).

Although aggregation problems are often couched in terms of narrow self-interest, all that is necessary to produce them is acting on a principle of expanded self-interest which holds that “each rather than none does what will be better for himself, *or his family, or those he loves*” (1984, 62). Parfit argued that all standard moral theories give rise to aggregation problems, yet it is unclear that this is the case for virtue ethics. Parfit briefly objected that according to such views, there would still be “cases where acting morally (i.e., on the virtues) would be, on the whole, worse for someone” (1984, 87). While an outcome that is merely worse for someone need not be a counter-example for virtue ethics, it might be sufficient to show that acting in conformity with virtue ethics would produce aggregation problems. I will return to this point shortly.

First, consider Parfit's well-known solution that individuals should become *rational altruists*. This solution consists in outlining two decision rules that rational altruists would follow, which are designed to eliminate the “five mistakes in moral mathematics” which all standard theories seem to make and thus which produce aggregation problems (1984, 67ff.). Thus, Aggregation Rule 1 states that individuals can depart from “common sense morality” (i.e., the expanded self-interest principle already noted) when this produces an aggregation problem (1984, 100). When this is so, individuals should instead do whatever will *actually* best support their expanded self-

interest, thus avoiding the mistakes in moral mathematics. In resource over-appropriation cases, this requires individuals to restrict what they appropriate on the condition that enough other individuals do so as well, where ‘enough’ is the smallest number of contributors necessary to resolve the aggregation problem (1984, 100–1).¹¹ Yet Aggregation Rule 1 can create conflicts with partiality to our loved ones that also produce aggregation problems. In response, Parfit introduces Aggregation Rule 2, which states that whenever Aggregation Rule 1 leads to aggregation problems, we should give *no priority* to our partial aims. Aggregation Rule 2 is conditional, since it only applies when we believe that sufficiently many others will also give no priority to their partial aims (1984, 101).

This solution is framed in terms of decision rules, rather than the requirements of being disposed to reliably act upon them. To be sure, Parfit (1984, 103) acknowledges that there is already a problem with the dispositions associated with common-sense morality, since our partiality to loved ones may undermine acting in ways that avoid aggregation problems. However, Parfit underestimates the dispositional requirements of his solution, which seems to involve a set of new dispositions to respond to aggregation problems, thereby either supplanting or correcting the dispositions associated with common-sense morality. Unfortunately, it is far from clear how anyone could cultivate the dispositions required to become a rational altruist. In the first place, habituating a disposition requires acting successfully upon it sufficiently many times. To do so, aspiring rational altruists would have to be on the lookout for situations in which sufficiently many other people are likely forego their partial aims in order to cooperate. The conditional nature of Aggregation Rule 2 in particular seems unlikely to be fulfilled very often (if ever), leaving few opportunities to develop such a disposition. Second, Parfit acknowledges that there is a tension among our moral motivations to act on common-sense morality, and motivations to act on Aggregation Rule 1. However, he does not explain how we are to overcome or resolve such tensions. This is made worse when Aggregation Rule 2 is introduced, which would involve either a further disposition and a further motivation to act on it, departing from both Aggregation Rule 1 and common-sense morality, or a modification of the newly-introduced motivation to act on Aggregation Rule 1. In either case, tensions among these moral motivations remain unresolved.

From a virtue-ethical perspective, issues of habituation and moral motivation are not secondary concerns to that of finding correct decision rules or moral principles, but are a *primary* focus of ethical theorizing. As such, a solution that rests on dispositions that are impossible to inculcate is no solution at all. Rather than focusing upon decision rules, a virtue-ethical response would attempt to show what kinds of people we would be if we produced aggregation problems, and the characteristic reasons for responding to them. Although virtue ethicists have written little about aggregation problems, the beginning of such a response is available in a remark on Parfit by Philippa Foot. In *Natural Goodness*, Foot claimed the solution to aggregation problems.

“Depends on our human way of thinking. We act within a language that allows us to say ‘I owe it to him’ or ‘I suppose I should play my part’ (as we nowadays think, for instance, of taking a bus rather than a car, to reduce traffic on the road, knowing that we ourselves may need to get somewhere urgently by car some other time)” (2001, 44).

We can begin filling out what this “human way of thinking” means by asking: would a set of virtuous people produce aggregation problems, if each were acting in character? There seems no reason to think not. This possibility depends on empirical variables such as how abundant natural resources are, how many people there are, and what is done with these resources. Thus,

Parfit is likely correct that acting well according to virtue ethics could produce an aggregation problem.

However, *once they realized what they were doing*, virtuous people would not respond by denying that they should do anything. There is a significant ethical (and ordinarily, legal) difference between unwittingly causing a problem, and continuing to cause it once we have become aware of it. Once virtuous people realized what they were doing, they would certainly *not* think that continuing to contribute to an aggregation problem is not grounds for serious complaint. It is hard to imagine them responding as Parfit's self-interested agents, who are *ex hypothesis* motivated only by concern for their own ends and those of their families. Such people might indeed say, "Well, it's true that what we are all doing causes a problem for all of us. But my contribution is so small! Surely *I* don't have to do anything." Or, 'I realize that if we all continue doing this it is worse for everyone. But I don't care. And besides, no one can blame me. I'm not actually harming anyone'. Instead, even *enkratic* (morally continent) people would say things like, 'I suppose I should do my part', even if they do not know the precise effect of their actions. The ongoing Covid-19 pandemic offers many familiar examples: getting vaccinated, wearing a mask in shared spaces, and so on, are individual contributions, which lessen the spread of the virus and consequently save lives. While it will often be impossible to trace the causal effects of such actions from individuals to other individuals, in many societies an ethical norm has already emerged to encourage such actions, and to discourage non-compliance as selfish and irresponsible.

Therefore, even if they unwittingly produced an aggregation problem, it is plausible to think that virtuous people would not continue perpetuating it precisely *because* they are just, benevolent, and compassionate. Indeed, Parfit already provides the basis for such a response, writing that the solution to aggregation problems requires that we "care sufficiently about effects on others" (1984, 86). This is a claim about our dispositions, and specifically the reasons to which we are responsive. If benevolence or compassion is the operative virtue, it has an appropriate scope of considerations (factual and normative), and is responsive (cognitively and emotionally) to salient features of the world as we understand it: for instance, to the fate of others. A callous person, that is, someone deficient in benevolence or compassion, would instead object that they do not care whether what they do harms others, while a selfish person would focus on their own interests (or 'innocent fun') at the exclusion of others.

On the view developed thus far, responding to aggregation problems requires recognizing that there is a shared problem towards which I should respond *somehow*. However, this admittedly vague demand gives rise to further concerns. One issue with vagueness is easy to set aside. First, some might protest that insufficiently clear demands cannot be acted upon. There is little reason for thinking this to be true. As G. A. Cohen pointedly remarked, we seem allergic to vague ethical demands, yet "[w]hen facing our legitimately self-interested choices, we feel no need for a theory that will make everything determinate" (2008, 6). Instead, vagueness might be a more serious concern when we are seeking action-guidance in complex cases. In the above examples, responses appear already well-specified. In the Covid-19 case, government agencies publish recommendations and restrictions, while in the traffic congestion case the set of transport options are determined by available infrastructure and whether one owns a car. However, there are cases in which we may be far less clear about what we should do. Climate change appears to be one such case, given that it is almost impossible to avoid contributing to climate change in *any* way, and given the multitude of potential actions open to differently situated individuals. Now, it is important to recognise that a similar concern with action-guidance affects all theories. As Stephen Gardiner (2011) has argued, climate change may be so

challenging that none of our ethical theories are fully able to address it. Nonetheless, one might worry that an approach grounded in vague virtue terms will offer even less action-guidance than other theories. By exploring what the virtues require in response to climate change, we can address this more serious concern with vagueness.

4 | INDIVIDUALS, VIRTUE, AND CLIMATE CHANGE

One way to fill out what virtue concepts imply is to understand their use, locating them within existing social discourse.¹² While there are many discourses related to climate change, we can begin filling out our response by considering the moral concepts implicit in a recent example, which is both revealing and suitably non-partisan. The United Nations recently produced a booklet entitled *170 daily actions to transform our world*, aimed at supporting transformative societal change to meet the 17 Sustainable Development Goals (SDGs).¹³ Under “SDG 13: Climate Action,” this booklet lists 10 recommendations including limiting food waste, driving less, organizing tree planting with one’s school or company, and spreading awareness about ways to address climate change. This booklet also runs the hopeful slogan across each page: “If you care about the future, be the change. Help to end poverty, to reduce inequalities, and to tackle climate change. Together we can transform the world.” Now, one must take with a grain of salt any hortatory recommendations for individuals to “be the change,” since individual responses have only become more important because policymakers have failed for decades to commit to effective mitigation. It would be dangerous and wrong to imply that collective problems are *primarily* the responsibility of individuals. As shown by British Petroleum’s invention of the carbon footprint, individualizing climate responsibility suits the approximately 90 corporations responsible for two-thirds of all greenhouse gas emissions,¹⁴ who are simultaneously lobbying against climate mitigation while funding climate misinformation (Oreskes & Conway, 2010).

Nonetheless, the appeal to caring about the future is noteworthy, since UN publications are seldom the most radical documents. Yet the phrase running across each page is clearly not meant to be conditional. The point is not that if you happen to care about the future, as you might happen to care about your garden, these are some things you might do; it is that you *should* care about the future, and as such, these are some of the things you should do. While this booklet does not venture into explaining why, the implication is that failing to care about the future is somehow inappropriate. As noted in Section 2, failing to care about the future means failing to care about the fate of others. Thus, the virtue ethicist can respond that failing to do some or all of these actions implies failing to care sufficiently about others (cf. Björnsson, 2021). If so, this would reflect *injustice*, *callousness* or *indifference*, vices which Gardiner (2012) claims are widespread in response to climate change. Since these are vices, their correct attribution implies a judgment of moral blame. The injunction here is that we ought to do what we can to reduce our climate impacts, because we care about others—because we are just, compassionate, and benevolent people. Failing to do what we can, then, is morally blameworthy, because it reflects vices of injustice, callousness, indifference, and so on.

The critic is again unlikely to be satisfied with the vagueness of this response. Surely, there is a large set of possible actions, and doing some of them might preclude doing others. How can we know which actions are required by justice or benevolence? Moreover, we seem to lack a principled basis for determining when I have done *enough*. These protests are unlikely to be lessened by the virtue ethicist’s response that what counts as acting well is determined both by our characters and by features of our context, and therefore may not be the same for everyone.

In other words, the capacity to ϕ , where ϕ is some specific moral action, is not something that all (rational) people are or ought to be capable of, except perhaps in a very limited set of cases. Instead, what counts, as acting well for the enkratic person may not be the same as acting well for the fully virtuous person. The critic might now be convinced that virtue ethics is insufficiently action-guiding, perhaps even obscurantist. This raises two essential features of the virtue-ethical conception of moral agency and acting well, which we will address over the next two sections.

5 | WHAT WE CAN DO ABOUT CLIMATE CHANGE: ACTING WELL WHERE WE ARE

One distinctive feature of virtue ethical approaches is the importance of context in acting well. By context, I mean how the person is morally situated, that is, her social context, and her opportunities for acting, which are not only technological or economic but also shaped by culture. As noted in Section 1, aside from a few cases of intrinsically wrong action, what counts as acting well is difficult to specify independently of context. While context matters to all moral theories, for virtue ethical approaches context is indispensable in the deliberation of the agent looking to act well.

In contrast, in many accounts context enters the picture only *after* we have decided what ought to be done, notably by excusing some from the demands of morality. The approaches outlined in Section 1 seek to identify an action (such as reducing one's individual emissions) and a moral principle that generates obligations (such as the no-harm principle). It is only once this general argument has been made that context enters, for instance by exempting some agents from these obligations on the basis of poverty, lack of agency, and so on. Thus, Christian Baatz (2014, 9–10) points out that it is more difficult to live carbon neutrally in some places than in others due to the carbon intensiveness of existing infrastructure. Baatz concludes that there cannot be a moral obligation for carbon neutrality for such people. When context functions as an excusing factor in this way, climate responsibilities will target a very similar set of people, namely the relatively well-off living in wealthy societies, ignoring those living in less favorable circumstances. There are very good reasons for focusing on the climate responsibilities of the relatively well-off, whose per capita contributions to climate change are far higher than those of people in poorer societies (Chakravarty et al., 2009). Nonetheless, this focus may imply that poorer people need not respond to climate change on the basis of strong ethical reasons. The analogous conclusion would be that the virtues do not require anything below a certain threshold of material circumstance or bad luck. However, virtue ethical theories emphasize that it is possible to act well, that is, in accordance with virtue, in most (if not all) contexts.¹⁵ Climate change can be understood as a shared moral problem by *everyone*, and there are many possibilities for us to act well in response, without losing sight of relevant differences that wealth or influence can have upon our responsibilities.

To illustrate how acting well can require different actions from differently situated people, I will sketch some reasons associated with justice. As we saw in Section 1, virtues are dispositions to respond appropriately to considerations within their 'field' (cf. Swanton, 2003, 19–20). The 'field' of reasons of justice bearing on climate change are likely to be familiar to many readers. Indeed, we have already identified several in Section 2, such as "this is my fair share," "I owe it to others," or "I am doing my part." Nonetheless, we need a richer picture of the person's context to understand what these reasons require.

There is insufficient space to provide anything beyond a sketch of how context influences how we interpret such reasons, although the following discussion shows what a fuller account would involve. First, consider the exceedingly wealthy. Oxfam estimates that between 1990 and 2015, the wealthiest 1% are responsible for emitting twice as much carbon than the poorest 50%.¹⁶ When this is coupled with their often far greater political power, if an exceedingly wealthy person asked himself what his fair share would involve, the answer might not be merely individual carbon neutrality, but a far more demanding set of activities including lobbying governments for ambitious mitigation policy, ensuring their companies and investments are carbon neutral, investing in renewable energy technologies, funding adaptation, funding public education campaigns to raise awareness about climate change, and so on.

Leaving aside the exceedingly wealthy, many people are likely to have both the means and opportunity to reduce their emissions, and to engage in collective action aimed at reducing the threat posed by climate change. Acting well on the reason, “this is my fair share.” “I owe it to others,” or “I am doing my part,” is likely to involve the examples we saw in Section 3: reducing food waste, driving less, becoming involved in community tree planting, raising awareness, switching to renewable energy, reducing meat consumption, flying less often or not at all, riding a bicycle or the train, and so on. However, not everyone will be able to do all of these things, and not always to the same extent. Climate friendly lifestyles can be more expensive, a fact which reflects the improper pricing of environmental goods rather than the moral goodness of the wealthy.

In contexts where such options are either absent or prohibitively expensive, acting well may look considerably different. Indeed, in certain contexts, some reasons of justice might also be less applicable. For many in the Global South, their far smaller contributions to climate change and lower wealth likely means that thinking in terms of “my fair share” becomes less meaningful, unless as a demand that *others* elsewhere start doing their fair share. However, the reason ‘I am doing my part’ appears broader than doing one’s fair share, since the latter implies a role in shared efforts to address a social problem. Even in such contexts, doing one’s part remains an intelligible basis for acting well in response to climate change. As we saw in the example of traffic congestion, whether we are new to the city and have never driven, or whether we are regularly stuck in gridlock, we can recognize the force of doing our part – and the question of what *our* part consists in. Young people who have emitted relatively little carbon can recognize this reason of justice, not merely those who have spent their lives driving around in inefficient cars or flying around the world. Doing one’s part does not exempt people from responding to climate change simply because they are poor or have emitted little. At the same time, what one’s part consists in here could mean something different from reducing one’s emissions. For instance, it could mean becoming involved in local climate adaptation projects, or awareness raising of the plight of those most vulnerable to climate change. In these ways, virtue terms make intelligible the moral action of those often ignored in discussions of climate responsibility.

These responses have revealed another difference between virtue theories and other approaches. In the debate about climate responsibility, it is standard to distinguish between our moral responsibilities as individuals, and those we have as political actors. We saw in Section 1 that many are skeptical about individual responsibilities, but few doubt that climate change imposes on us at least some political responsibilities, perhaps most minimally voting for effective climate policy (Maltais, 2013). However, with the exception of the role responsibilities of politicians, this distinction between individual and political responsibilities does not register when using virtue terms. Because human beings are by nature political animals, as Aristotle said, our ethical life is essentially also political in the sense that it is concerned with how we relate to others and to society. Our characteristic ways of relating (or failing to relate) to others

in society also reflect our ethical character. This is why an individual response such as carbon neutrality could fall short of acting well, and could even express vices such as selfishness and self-righteousness if carbon neutrality were used as a pretext not to engage in any collective climate efforts. If such a person protested that they had already done their fair share, this would reveal an inappropriate grasp of the reasons of justice bearing upon climate change, and an insufficient concern for others.

A critic might worry that this seems overly demanding. Surely there comes a time when have we done *enough* to count as acting well? Some might be prepared to make significant sacrifices (in time and money) to respond to climate change, but does virtue ethics hold that we must all become climate saints or martyrs? Answering this takes us to the second distinctive feature of virtue ethical approaches, namely how moral character affects acting well.

6 | WHAT WE CAN DO: CHARACTER AND CLIMATE CHANGE

As noted in Section 1, for neo-Aristotelians the moral quality of action is tied to the correct judgment of the virtuous person. However, recall the distinction between the characteristically excellent action of the fully virtuous person, and the characteristically good enough action of the merely enkratic person. This is brought out in Aristotle's comparison of the deliberation of the ethical 'novice' compared to that of the virtuous person.¹⁷ The purpose of this distinction is to show that different actions can count as acting well in light of one's attainment of virtue and practical wisdom. Indeed, as Hursthouse (1999, 125) notes, the ordinary phrase "acting well" is apt to make such a distinction since it can be qualified with adverbs such as "fairly" or "very," unlike the seemingly binary description 'acting morally'.

Before considering how this distinction affects acting well in response to climate change, let us set aside a worry with such reliance upon practical wisdom. The difficulty here again concerns action-guidance, since if we lack wisdom we might be unsure about what a virtuous person would do. Such dependence upon moral wisdom is less of a weakness than it might appear. As Hursthouse (1991, 231) observes, most people would sensibly disregard ethical advice offered by somebody who usually made what appeared to be dubious ethical choices, even if they were well-versed in moral theory. If we lack moral wisdom, we would be better off seeking out those we believe to possess it than attempting to get by without it.

Reflection on moral exemplars offers one way to get a better grasp of what virtues require, and can inspire us to better actions than we might have performed otherwise. Linda Zagzebski (2010, 55) has explored the importance of our pre-theoretical grasp of exemplars, defining an exemplar as someone who is "defeasibly imitable even if not perfect." By focusing on exemplars, we can explore some morally excellent responses to climate change, and the strength of reasons we have to perform them.

To orient discussion, I wish to explore what appear to be the morally excellent actions of Swedish teenager Greta Thunberg. However, an important caveat first. I do not mean to imply that Thunberg herself is an exemplar; morally excellent action is *characteristic* of exemplars, but can be performed by others people (although not characteristically).¹⁸ As is well known, Thunberg created international headlines by going on strike from school to protest her country's lack of political action on climate change. For 2 weeks, she handed out leaflets in front of the Swedish parliament, bearing the blunt message: "I am doing this because you adults are shitting on my future."¹⁹ Thunberg's example has since inspired mass protests across the world, and movements such as *Fridays for Future* and *Extinction Rebellion*.

Thunberg's own way of thinking about her actions is noteworthy. When interviewed, Thunberg explained: "I am doing this because nobody else is doing anything. It is my moral responsibility to do what I can... I want the politicians to prioritise the climate question, focus on the climate, and treat it like a crisis." Now, few philosophers would conclude that it is indeed Thunberg's moral responsibility to strike from school. It would be extremely difficult to support any such a claim on the basis of the arguments we considered in Section 1. Perhaps Thunberg is simply wrong about what is morally required of her?

We can readily understand this response in terms of virtue theory. Thunberg believes that it is indeed her responsibility to do what she can, a claim that is already more demanding than arguments based on causal responsibility. She also believes that she *can* do a variety of things that other people around her seem not to think possible or worthwhile. Yet the example shows others that such actions are indeed both possible and worthwhile. Noting the earlier caveat, this kind of response is characteristic of moral exemplars. In relation to climate change, exemplars believe that they both can and ought to do many things that may seem overly demanding to others, including devoting themselves to collective projects aimed at furthering climate action, refusing to fly, becoming vegans, and so on.

It is of course theoretically intelligible to understand these responses as praiseworthy but not morally required. However, on the basis of virtue terms we can instead say that excellent actions are characteristic of virtuous people, and are recognized as genuine requirements by them, just as good enough actions are requirements for enkratic people. A further point here is that exemplars are unlikely to have the same views about what is morally required as other people. As Aristotle noted, the judgment of the virtuous person concerning *what is good* is unlikely to be shared by those lacking in virtue (1934, 1144a). As such, the responses of exemplars will often be inspiring for enkratic people, just as they appear baffling or stupid to vicious or self-interested people.

Moral exemplars may also be motivated to do more by the moral failure of others. This connects to the debate about whether those already acting justly ought to "pick up the slack" and do even more to compensate for the unjust inaction of others, or whether it is sufficient to do what would be fair if everyone else were doing their part (Miller, 2011; Murphy, 2000). Exemplars recognize the failure of others as a reason to do more. However, it seems unlikely that exemplars would be motivated by the thought that in picking up the slack, they were merely doing their fair share, although they may think they are doing their part (see Section 4). They might also be motivated by indignation at the inaction of others, and beyond reasons of justice, by reasons associated with other virtues, such as the benevolent concern with aiding the vulnerable.

One might wonder whether the virtue ethicist has let off the hook those who fail to respond appropriately to climate change. Isn't it overly demanding, even unfair, to require some people to do more? And do not even morally dubious people have moral responsibilities? Yet we have not argued that some people ought to do more than others in response to climate change. We have said that when faced with shared moral problems, some people can be expected to do more because they possess greater practical wisdom and more reliable motivations, both in terms of the reasons they are responsive to, and their affective attitudes. This does not imply that less virtuous people can *justify* doing less, especially by reasoning that because they are less virtuous less can be demanded of them. If someone reasoned in this way, they would not be acting well under *any* description, they would be looking for an excuse for something they were unwilling to do. Those who are selfish, callous, or indifferent to the fate of others are not *justified* in failing to act. The very application of vice terms implies a judgment of moral blame. The point is instead predictive: we *expect* that selfish, callous, and indifferent people are unlikely to be moved by moral reasons to act. Indeed, Aristotle believed that vicious people can

only be expected to respond to the threat of punishment, since they have been badly brought up and are thus insensitive to moral reasons (1934, 1179b5-15). Less harshly, those insensitive to moral reasons may respond to economic incentives such as cost increases or savings. Yet acting on such motives would be insufficient for acting well. Thus, someone who installed solar panels at home simply to save money would not be acting well in response to climate change, although they would not be acting badly either.

A final point about demandingness. As Foot pointed out, we seem to have split intuitions about what makes an action demanding, and hence worthy of praise.²⁰ Although excellent actions, *qua* excellent, seem to call for more praise, they might not be experienced as more demanding by a virtuous person. On the other hand, it might be more subjectively demanding, and hence potentially more praiseworthy, for an enkratic person to act well, even if what he does is more minimal, because he has to overcome his insufficient motivation *a*. As such, assessing the demandingness of responses to climate change requires knowing a good deal more about the character and motivations of people.

7 | CONCLUSION

I have argued that virtue ethical views offer a distinctive way to think about how we should respond to climate change, and that this may often be more demanding than approaches which depend upon a causal account of harm to generate a moral obligation. This is because virtue terms identify reasons to which (nearly) everyone ought to respond. Virtue terms encourage reflection on what we can do, reasoning from our social context. This involves reasons associated with justice, benevolence, and other virtues, and does not distinguish sharply between actions we do as individuals and actions we do with others. Filling out the vague but correct thought that each of us should do our part when faced with the shared problem of climate change, the resulting view requires much from the wealthiest, but a great deal also from many people with both the means and opportunity to reduce their emissions and to engage in collective action aimed at reducing the threat posed by climate change. This approach also shows that the poor and young people who have emitted little can act well by responding to climate change on the basis of moral reasons. Finally, I explored the importance of exemplary climate actions for how we think about acting well. While the resulting view does not hold that the less virtuous are justified when they do less than others, virtuous people can be expected to do more because they possess greater practical wisdom and moral motivation. Yet such actions can inspire others to do more than they would have done otherwise.

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This work has not been previously published in any form, nor is under review elsewhere.

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ENDNOTES

- ¹ This argument assumes that current economic incentives remain in place.
- ² Johnson (2011) later conceded to Hourdequin (2010) that individuals face an imperfect duty to respond.
- ³ See Hursthouse (1999) for discussion. For a non-Aristotelian view of right action, see Swanton (2003).
- ⁴ I leave aside the principal justification question, namely which character traits are *genuine* virtues. Because I cannot address this question here, to avoid controversy I will discuss only familiar virtue terms such as justice, which are unlikely to be disputed. The justification question also raises controversies between neo-Aristotelians, such as Hursthouse and Philippa Foot (2001), who hold that a trait is a virtue if this is partly constitutive of *eudaimonia* (happiness or flourishing), and others such as Swanton (2003) who justify virtues on independent grounds. I assume the neo-Aristotelian position here. For discussion of new, distinctively environmental virtues, see Sandler (2007); Lenzi (2017).
- ⁵ I leave aside the further question of how best to calculate the lifetime emissions of individuals from aggregate country data.
- ⁶ See Aristotle., 1934, 1107a10-11.
- ⁷ Anscombe thought that roles and relationships (i.e. being a parent) did give rise to obligations. Her complaint (echoed by Williams) was against the reduction of all powerful moral reasons to moral obligations.
- ⁸ Both phrases imply a lot about us. As Hursthouse says, “‘because she thought it was right’ (‘from (a sense of) duty’, etc.) is an ascription that goes far beyond the moment of action”, and makes “a claim about what sort of person the agent is – a claim that goes ‘all the way down’” (1999, 123).
- ⁹ This narrowing of ethical discourse was precisely Williams’ (2006) complaint against ethical theory.
- ¹⁰ I understand aggregation problems after Parfit as jointly produced problems in which participants’ individual contributions play little or no causal role, but which can impose serious harm.
- ¹¹ While Parfit acknowledges that socio-political solutions may be sufficient to resolve aggregation problems, he ignores these in order to examine moral principles that would be self-sufficient solutions. In contrast, I do not claim that moral solutions alone will be sufficient to resolve the aggregation problem of climate change (see Section 5). Instead, I follow the widely accepted view that climate change is a ‘wicked’ problem and that a combination of policy responses, democratic participation, behavior change, and moral argument will be required to respond to it effectively. Democratic approaches in particular face problems of short electoral time-frames, voter polarization and proneness to misinformation about climate change (see Lenzi, 2019).
- ¹² Such an approach begins from Wittgenstein’s insights about what is implied by a shared form of life. For two accounts inspired by this approach, see Foot (2001) and Hursthouse (1999).
- ¹³ See <https://www.un.org/sustainabledevelopment/student-resources/>
- ¹⁴ <https://www.sciencemag.org/news/2016/08/just-90-companies-are-blame-most-climate-change-carbon-accountant-says>.
- ¹⁵ Traditional accounts of virtue often insist that moderate (but not extreme) poverty is a prerequisite for living well. See Gambrel and Cafaro’s (2010) discussion of the virtue of simplicity.
- ¹⁶ See <https://www.theguardian.com/environment/2020/sep/21/worlds-richest-1-cause-double-co2-emissions-of-poorest-50-says-oxfam>.
- ¹⁷ See Annas (2011) and Hursthouse (1999).
- ¹⁸ Zagzebski distinguishes between fully exemplary people, and people who are exemplary in certain respects only, giving Aristotle’s *phronimos* and the Christian saint as examples of the former.
- ¹⁹ See <https://www.theguardian.com/science/2018/sep/01/swedish-15-year-old-cutting-class-to-fight-the-climate-crisis>.
- ²⁰ This was noticed by Foot (1978, 10) in relation to Kant’s famous passage describing the person acting purely from the motive of duty. For discussion, see Hursthouse, 1999, 94ff.

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