Inconsequential Contributions to Global Environmental Problems: A Virtue Ethics Account

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Abstract

This paper proposes an answer to what Sandler calls ‘the problem of inconsequentialism’; the problem of providing justification for the claim that individuals should engage in unilateral reductions of their personal consumption, even though doing so will make an inconsequential contribution to mitigating the harmful impacts of the global environmental problems that the aggregate of such consumption causes. I provide an answer to this problem by developing a virtue ethics-based argument that a limited but significant class of consumption actions performed by typical consumers in rich, industrialised economies in the global North are moral wrongdoings, and the corresponding unilateral reductions in personal consumption are morally obligatory. I make this argument by drawing an analogy between a typical Northern consumer and a member of a golf club who has discovered that his club causes harm—by dumping used golf balls into a nature reserve—to which he inconsequentially contributes. I advance a moral evaluation of *remaining a member of a harming group*, based on the attitudes to the harm expressed by so remaining, and on Sandler’s virtue-grounded agent-relative target principle of right action. I examine a number of objections to this argument. I use Elizabeth Cripps’s notion of a ‘harming putative group’ to respond to the objection that the set of individuals whose aggregated consumption causes environmental problems is merely an arbitrary abstract set, membership of which is not justifiable grounds for moral evaluation. I then present two responses to the objection that withdrawal from this harming putative group—by refraining to perform those consumption actions which constitute membership—is unduly demanding.

Keywords Inconsequentialism · Virtue ethics · Harm · Complicity

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Introduction

This paper proposes an answer to what Sandler (2010) calls ‘the problem of inconsequentialism’. This is the problem of providing justification for the claim that individuals should engage in unilateral reductions of their personal consumption, even though doing so will make an inconsequential contribution to mitigating the harmful impacts of the global environmental problems that, in aggregate, such consumption causes. It has been argued that individuals are not under an obligation to engage in individual actions or refrainings to tackle such problems (e.g., Sinnott-Armstrong 2005; Johnson 2003). The answer to the problem of inconsequentialism that I will provide is that a limited but significant class of consumption actions performed by typical consumers in rich, industrialised economies in the global North are moral wrongdoings, and the corresponding unilateral reductions in personal consumption are morally obligatory. The central argument of this paper provides an answer grounded in a virtue ethics account of the moral wrongdoing of remaining a member of a harming group.

In this paper, *unilateral reductions* are reductions insofar as they involve a reduction on the part of the individual in the direct use of, or stimulation of demand for, natural resources and other environmental goods, including the absorptive capacity of the atmosphere for greenhouse gases. For a reduction to count as unilateral it must be either (1) independent of what is required to comply with relevant just institutions or (2) go beyond what is required for such compliance. Typical unilateral reductions encouraged by governments and environmental NGOs are intended to be achievable alternatives to particular widespread consumption actions or practices. By achievable we may clarify that unilateral reductions target the ‘inessential or even frivolous’ sources of emissions and other uses of natural resources that Shue (1993: 55) labels *luxury emissions*, and, further, the *dispensable* emissions ‘without which we would have been less well off, but whose absence would not have brought us any such harm as long-term physical or psychological damage or debilitation’ (Traxler 2002: 108). Unilateral reductions, then, target the *low hanging fruit* (Vandenbergh et al. 2008) such as reducing personal motor vehicle engine idling as the achievable alternative to the widespread consumption practice of leaving the engine idling when at a standstill; turning appliances off at the plug as the alternative to the widespread consumption practice of leaving appliances on standby mode; as well as more ambitious actions such as eating less meat and dairy, and driving and flying less, as the alternatives to the widespread adoption of a diet high in meat and dairy, and frequent driving and flying respectively. I will call the actions to which unilateral reductions are intended to be the achievable alternative *consumption actions*.

The Virtue Ethics Account of the Wrongdoing of Remaining a Member of a Harming Group

The argument of this paper develops a virtue ethics-based argument that certain consumption actions are moral wrongdoings and their corresponding unilateral reductions are therefore morally obligatory.¹ The argument is as follows:

- A. To remain a member of a harming group is a moral wrongdoing;
- B. The performance of consumption actions constitutes remaining a member of a harming group;
- C. Therefore, the performance of consumption actions is a moral wrongdoing.

I will firstly present an analogy to the case of environmental problems of an individual remaining a member of a harming group, followed by a first set of defences against a claim of wrongdoing in this context. Next, I will present an account of the nature of the wrongdoing in this context grounded in a virtue ethics formulation of wrong action. Finally, I will transfer the claim to the case of the harming group responsible for environmental problems, and consider some additional defences to the wrongdoing claim that its members might advance.

I begin with the case of Nigel, who is a member of a golf club. Nigel uses the club's driving range, at the end of which is a steep embankment. The driving range is a little too short, such that occasionally, if Nigel strikes a golf ball particularly fiercely, the ball disappears down the embankment. Otherwise, the balls are swept up by the golf ball picker. After a while of using the driving range, Nigel discovers that not only do his more fiercely-struck golf balls end up down the embankment, but so do all the other balls he strikes, along with all those of his fellow members who use the range, for that is where the golf ball picker, he discovers, dumps its collections. He investigates what is down the embankment and finds a community nature reserve. The pond and woodland in the reserve is now choked with thousands of golf balls and is devoid of wildlife, and members of the local community who helped to create and once enjoyed the reserve no longer visit it. Nigel is appalled by his discovery, petitions the management to desist and makes his fellow members aware of the practice in the hope that they will do likewise, but neither respond to his protests. The practice continues. What should Nigel do? He has found himself a member of a group—in this case, a golf club—that harms. It harms the wildlife in

¹ For reasons of space, I cannot here present negative arguments against possible consequentialist and deontological responses to the problem of inconsequentialism. In Knights (2012), I argue that Parfit's (1984) and Glover's (1975) attempts to develop consequentialist arguments that actions that are members of sets of actions that together cause harm constitute a moral wrongdoing apply to the particular case of consumption actions and the moral status of their contribution to environmental harm. Sandler (2010) provides a convincing case for why Kantian ethics also cannot adequately address longitudinal collective action environmental problems. I restrict myself to advancing a positive case that virtue ethics *can* provide a substantial response to the problem of inconsequentialism. For further discussion of the problem of inconsequentialism, in particular its implications for promotional duties, see Baatz and Voget-Kleschin (2019).

the pond, and the local community by unjustly depriving them of a green space that they once enjoyed. He knows that some of the golf balls in the pond and woodland are his—both from those he has struck down there directly and those that the picker has dumped—but that this amount is negligible compared to the many thousands down there. Resigning his membership of the club will make no difference, either in terms of the number of golf balls that end up in the reserve, or its effects on other members or the actions of the club. In the end, he decides not to resign. Despite still seeing the balls—including his—being dumped down the embankment, he continues going to the club and using the driving range.

What defence could Nigel give if his friend Olivia criticised his failure to resign his membership of the golf club? He might point to his ignorance of the harmful practice when he joined; defend the club's practice as not being intentionally harmful but one in which the harm was an unintentional by-product of a good business decision (the manager tells him the golf balls are cheap but good for only one strike); defend his own actions as not intentionally harmful but ones in which the harm to which he contributes is unintentional; or defend his contribution to the harm caused by the club's practice as inconsequential. He might also say that he now tries never to directly hit any balls down the embankment. These defences, whatever their independent strengths, do not answer the charge that his failure to resign his membership now he knows that the group of which he is a member causes harm constitutes a moral wrongdoing. I now develop this charge below.

To remain a member of a harming group is to continue one's membership (i.e., fail to resign one's membership and withdraw from the group) after one comes to know (or after the point where one could reasonably be expected to know) that the group causes harm. This definition of what it is to remain a member of a harming group is independent of whether or not the harm resulting from the group's actions is an intentional consequence of the group's deliberately adopted policies. What is wrong with remaining a member is not Nigel's continuing contribution to the harm, since this is inconsequential, but his attitude to the overall level of harm that the club is causing to the wildlife and the local community. Firstly, in remaining a member of the club Nigel is *acquiescing* in the harm that it is causing. He may not be explicitly assenting to the harm continuing, but he is tacitly doing so by his actions (or, rather, his lack of action in resigning). Secondly, in remaining a member of the club Nigel is *complicit* in the harm it is causing and the wrongdoing that the harm constitutes. He may not be the manager who instigated the practice, or the treasurer of the club who signs the cheques for the cheap golf balls, or on the committee who approved the practice, or the driver of the cart who pulls the lever and dumps the golf balls, but he is nonetheless a member of the club and as such—even without a specific role in the harm—is complicit in the harm it causes. This complicity is grounded by his membership fees partly contributing towards the practice and his continuing membership lending credibility to the club.

Thirdly, and further grounding his complicity in the harm, in remaining a member Nigel is tacitly *approving* of or *endorsing* the practice of dumping golf balls in the reserve. He may protest that he does not approve of it; he rather professes his disapproval to his fellow members and to the manager, as well as to his non-member friends like Olivia. Moreover, if he were the manager, he would stop the practice.

But his actions tell a different story. If he were to meet a local resident who once enjoyed the nature reserve and who asked him if he had resigned his membership, and replied that he had not because he did not think his membership made any significant difference, the local resident might agree with him that it did not make a difference in terms of the number of golf balls that were dumped in the reserve, but she would nonetheless be justified in being disgusted that Nigel had remained a member on the grounds that doing so showed that he approved of the practice. Nigel could protest that he did not approve of the practice or the harm that it caused, but the local resident could say that if he really disapproved then he would resign his membership, because not resigning is a form of approval and endorsement of the practice continuing. As O'Neill et al. (2008: 84) observe, 'actions are not just instrumental means to an end, but a way of expressing attitudes to people and things.' An action is expressive if it manifests a state of mind, such as a belief, mood, emotion, attitude, desire, intention, or personality trait (Anderson and Pildes 2000: 1506). To determine the expressive content of an action we need to weigh the agent's intention in performing the action against the social meaning of their action. As Anderson and Pildes (ibid.: 1513) argue, '[e]xpressive theories of action hold people accountable for the public meanings of their actions.' If I raise my hand at an auction, I have made a bid, even if I claim that my intention was only to stretch. Nigel, in being aware of the club's practices and the harm they cause, and being free to resign his membership of the club but failing to do so, is accountable for the attitude towards the practice and its consequences it expresses, namely, approval and endorsement.²

I will now introduce a virtue-oriented account of moral wrongdoing to further my argument. It is widely assumed that for an ethical theory to be adequate it must offer an account of the rightness and wrongness of actions. Therefore, while evaluation of agents and their character traits is foundational in virtue ethics, attempts have been made to provide an account of right action from within the virtue framework (e.g., Hursthouse 1999; Slote 2001, but see Das 2003 for scepticism.). One such account of *right* action has been advanced by Sandler (2007), itself a modified and expanded version of Swanton's (2003) account. Before I introduce this account, it is worth distinguishing two helpful notions in Sandler's (2007: 40–41) account of what distinguishes the virtues from one another: their *bases* of responsiveness, that is, 'the types of objects, events, and properties to which they are responsive', and their *forms* of responsiveness, that is, 'the types of reactions and activities that they involve'. For example, 'the basis of responsiveness for compassion is the suffering of others, and the forms of responsiveness are concern for others, desiring to assist others, and acting to diminish the suffering of others. The basis of responsiveness for gratitude is being benefited by another, and the forms of responsiveness are recognition of the

² Our actions are also evaluable in terms of whether they are expressively rational, that is, whether they authentically express our identity (see, for example, Hargreaves Heap 1989). This standard of rationality, which is often portrayed as standing in contrast to instrumental rationality, is used by some to explain why people vote when there is little chance that their vote will influence the outcome of an election (see, for example, Brennan and Hamlin 1998; Engelen 2006). While this debate is strongly related to the issue of individual environmental behaviour, I will not develop my arguments in terms of an assessment of rationality, since my primary concern is the ethical status of our actions.

benefit, a desire to acknowledge it, and actions that acknowledge it' (ibid.: 41). We are now in a position to better understand Sandler's (ibid.: 94) *agent-relative target principle* of right action:

An action is right to the extent that it better hits the targets of the operative virtues taken together (i.e., it is more virtuous) than the other courses of action available to a particular agent under the circumstances; and an action is wrong to the extent that it misses the targets of the operative virtues taken together (i.e., it is less virtuous) than the other courses of action available to a particular agent under the circumstances.

Consider the simple case where 'the aim of a virtue is simply to promote the good of individuals and hitting the target is successfully promoting that good' (Swanton 2003: 39). In Sandler's (2007: 92) terms, it is 'a matter of whether the considerations in the world to which the operative virtue is responsive are adequately addressed by the agent's action. With respect to compassion, it is a matter of whether the suffering is relieved....With respect to tolerance, it is whether one is able to refrain from interfering with what one finds objectionable.'³ Right action in virtue ethics, then, is a matter of hitting the target of the virtue, that is, of one's *forms* of responsiveness being appropriate to and adequately addressing the *bases* of responsiveness.

An account of wrong action—which is not explicitly offered by either Swanton or Sandler—can be derived from this account of right action. Firstly, actions which merely fail to hit the target of the virtues that are operative in a context count as wrong action. But also, missing the target of a virtue will often, although not always, involve hitting the target of a vice.⁴ Just as certain virtues will be operative in particular contexts, so will certain vices. For example, in a situation that calls on people to desire the alleviation of the suffering of others and act to bring about that end, missing those targets of the virtue of compassion may hit the target of the vices of insensitivity, apathy or arrogance.

To say that the target of a vice or virtue has been hit is to make an evaluation of the action itself, not the agent's intentions and motivations. On this latter point the notion of 'hitting the target' of vices and virtues is neutral; whether an act is *from* virtue or vice depends on the motives of the agent and the state from which she acts, whereas whether an act *itself* is virtuous is typically independent of these features of the agent (Sandler 2007: 92). Admittedly, the idea of hitting the target does imply some agency and intention, and we may therefore be more comfortable with this notion in relation to virtues (the targets of which we condone aiming for) than vices, but for our purposes, it is purely an evaluation of the action, not the agent's motives.

³ Sandler does not provide an account of what it is for a virtue to be 'operative' in a context. However, I take it that, for example, a context in which one person benefits another will be one in which the virtue of gratitude (and the vice of ingratitude) will be operative, and if in that context there is no danger or risk for either the giver to give or the receiver to receive, the virtue of courage (and the vice of cowardice) will not be operative.

⁴ An alternative characterisation which Sandler uses is that actions which do more than merely miss the target of a virtue are 'contrary' to or 'violate' a virtue. I am providing a more positive characterisation of wrong action in terms of the vices.

This is not to say that agents' inner states are never relevant to an evaluation of their actions; the target of vices and virtues involve not just valuable outcomes but also the acting agent's desires and emotions.

Using this account, we can now claim that in acquiescing in, being complicit in, and approving of or endorsing the practices of the club and their associated harm, Nigel's action of remaining a member of the golf club hits the target of certain vices and fails to hit the target of certain virtues.⁵ Firstly, insofar as he is unprepared to withdraw from the group and disassociate himself from its actions and is thereby tacitly acquiescing in and approving of or endorsing the harm it causes, Nigel's action hits the target of the vices of *indifference* and *disrespectfulness* towards the victims of the harm. Even if his membership has caused and is causing little harm in relation to the level of harm caused by the group, the fact that the group of which he is a member is causing considerable harm should be a matter of concern to him that moves him to acknowledge the harm in some way, even if he is incapable of stopping or even mitigating it. In failing to acknowledge it in the ways open to him—which include ceasing to perform the actions which aggregate to cause the harm, but more importantly for our purposes, to resign his membership of the club—he is being indifferent to and disrespectful of its victims by remaining a member.⁶ Secondly, insofar as he appreciates both the harm that the group of which he is a member causes and that his membership associates him with this harm in a morally problematic way, but is nonetheless unmoved to withdraw from the group, remaining a member hits the target of the vice of *apathy*. Thirdly, insofar as the benefits he accrues from membership of the group lead him to ignore or downplay the harm caused by its practices Nigel's action hits the target of the vice of *selfishness* or *self-centredness*, and insofar as he unjustifiably weighs the benefits he accrues from membership above the harm suffered by the victims of his group's actions the targets of the vices of *arrogance* and *egoism* would be hit. Fourthly, insofar as he professes disapproval of the practice which causes the harm yet continues by choice to reap the benefits his membership and his contribution to the harm affords, remaining a member hits the target of the vice of *hypocrisy*. Fifthly, insofar as fear of the costs—either material, psychological or social—resulting from withdrawal from the group leads him to remain a member despite recognition of the harm with which he is associated Nigel's action hits the target of the vice of *cowardice*.

In addition to, and mirroring, the vices the target of which are hit by remaining a member of the harming group, there are certain operative virtues in this context. Firstly, if Nigel refused to acquiesce in and approve of or endorse the practices of the group and the harm it causes by resigning his membership, his action would hit the target of the virtues of *compassion*, *concern*, *care*, *empathy*, *sympathy* and *respect*. Secondly, if he overcame barriers to his withdrawal from the group,

⁵ Nigel's 'action' here may be better understood as an omission—a the failure to resign his membership—but I am characterising it positively here in terms of remaining a member.

⁶ To appreciate how remaining a member of the harming group hits the target of these, and many of the other vices (and how it fails to hit the target of many of the operative virtues), I reiterate once again that the target of many vices and virtues involve not just valuable outcomes but also the acting agent's desires and emotions (Sandler 2007: 93).

including material, psychological or social costs, resigning his membership would hit the target of the virtue of *determination*. Thirdly, if he properly weighed the benefits that accrue to him from his membership against the harm that the victims of the group's practices suffer, the targets of the virtues of *honesty* and *humility* would be hit. Fourthly, if he withdrew from the group and thereby made his actions consistent with his professed disapproval of the practice which causes harm, resigning would hit the target of the virtue of *integrity*. Fifthly, if he withdrew from the group despite harbouring fears of the material, psychological or social costs that it may result in, the target of the virtue of *courage* would be hit. In failing to hit the target of these virtues, Nigel commits a moral wrongdoing in remaining a member of the harming group. The claim that remaining a member is a moral wrongdoing is thus justified from two directions; from hitting the target of operative vices and failing to hit the target of operative virtues.

To set up the analogy with consumption and environmental harm, let's imagine that the above charge is put to Nigel by his friend Olivia, who is not a member of the golf club. She, appalled by his failure to resign his membership, accuses him of disrespectfulness, apathy, arrogance and so on. Nigel reflects on her arguments, and (perhaps in order to deflect the conversation from his own situation) retorts that Olivia is no different; she too is a member of a group that harms. Olivia, puzzled, asks which group. He says she is a member of the group of individuals who act in such a way that, in aggregate, the consequences of their actions are global climate change, biodiversity loss, marine pollution and all the other global environmental problems that cause so much harm through drought, disease, starvation, and so on. That is, she drives her car, heats her house, flies on holiday, buys and throws away material goods, eats meat and does all the other things that directly use fossil fuels and other non-renewable resources, and stimulates demand for such resources. These are analogous to Nigel striking golf balls at the driving range. Global climate change and other environmental problems—and the harm they cause to the current global poor, future generations of humans, and current and future nonhumans—have been caused by individuals like Olivia doing all these things. Olivia may protest that, just as Nigel petitioned the management to change their policies, she too engages in political action to promote the establishment of just institutional measures to mitigate environmental problems. And just as Nigel attempts to unilaterally reduce his direct contribution to the problem by avoiding hitting golf balls directly into the reserve, she too unilaterally reduces her contribution to environmental problems in the recommended ways, but like Nigel is restricted in how far she can mitigate her contribution because of institutional constraints. But Nigel dismisses these defences, and presses the analogy with his club membership and reasons to withdraw. If Olivia now remains a member of this harming group, then just as in Nigel's case, it will not be Olivia's continuing contribution to the harm that will ground a negative moral evaluation, since her contribution is inconsequential. Rather, what will ground the negative moral evaluation will be the way in which her remaining a member (which is itself constituted by her continuing to inconsequentially contribute to the harm) will be expressive of acquiescence, complicity and tacit approval of the harm, and will therefore hit the target of the operative vices and fail to hit the target of the operative virtues.

The Wrong Kind of Group Defence

I will present two arguments to which Olivia might appeal to undermine the analogy. Firstly, Olivia might claim that there is a relevant disanalogy between the kinds of groups of which she and Nigel are members. The group on which Nigel is basing his moral evaluation of Olivia is not at all like the group of which Nigel is a member. His is a formal group: a club, with rules for who counts as a member. Olivia's 'group' is not like this. It is not even an informal group, like a university reading group or a criminal gang or a pub quiz team, where membership is governed not by payment of a fee or the signing of a contract as with formal groups, but by social conventions. The group Nigel alleges she is a member of is merely an abstract set of individuals; she is a member of this set along with accountants in the United States, lawyers in Finland, pharmacists in Australia and engineers in the UK, and all the millions of other kinds of individuals who perform actions with consequences that, in aggregate, cause environmental problems. This is not a group at all, but just an abstract set, so she is not a member of anything on a par with Nigel's golf club regarding which she can be morally evaluated in the same way he can. To take Olivia's defence further, consider Sinnott-Armstrong's (2005: 298) claim that 'membership in a set is too arbitrary to create moral responsibility. I am also in a set of all terrorists plus me, but my membership in that abstract set does not make me responsible for the harms that terrorists cause.'

With regard to abstract sets, Olivia is clearly a member of indefinitely many abstract sets, such as the set of individuals born on (let us say) a Tuesday, or the set of individuals who can read. Olivia is also a member of the set of individuals who are causally responsible for global environmental problems and their harmful impacts. But we might object that this set is arbitrary. If Olivia is going to be morally evaluated on the basis of her membership of a set then it seems justifiable for her to demand that this set is not gerrymandered (like Sinnott-Armstrong's terrorist set which contains one non-terrorist) so as to secure a certain moral evaluation of its members. Since, therefore, Olivia is a member of an indefinite number of such sets, a criterion is required to distinguish the sets of which Olivia is a member that are arbitrary and those which are non-arbitrary.

Let us say that non-arbitrary sets are those which reflect considerations in the world, such as common physical, biological, social, cultural, psychological, historical or causal properties or relations, and arbitrary sets are those which fail to reflect such features. The set of all terrorists plus Olivia is clearly a gerrymandered set according to which a moral evaluation of Olivia on the grounds of her membership of this set is unjustified, since, for example, she does not share the relevant psychological properties of desiring to commit acts of violence to further a political cause. The set of individuals causally responsible for global environmental problems is not a gerrymandered set since the members of this set share a certain causal relation to a particular set of phenomena. Since the actions which any given member of the set perform are inconsequential to the level of harm caused by the aggregated consequences of all its members' actions, two

objections follow. Firstly, if any given member's actions are inconsequential in such a way that there are no causal relations between their actions and any harm, then in what sense does this allegedly non-arbitrary set reflect considerations in the world? But it is at the level of the *set* that this reflection must obtain, not at the level of individual members. There are undeniable causal relations between the aggregated consequences of its members' actions and the harm in question, and it is this that makes the set non-arbitrary. The second objection reintroduces the problem of inconsequentialism insofar as it concerns the criteria of membership of the harming group: how can any given (alleged) member's membership of the group be justified if there is no causal relation between their inconsequential actions and any harm? The answer is that membership is justified not by the causal relation between any given member's actions and any harm (since there is none), but the performance of the *class of actions* that aggregate to cause harm. The actions which aggregate to cause the harm have been identified, which in turn determines the identity of the individuals who belong to the set that reflects this causal relation. The problem of inconsequentialism as applied to the criteria for harming group membership is thus circumvented.⁷

Even if Olivia accepts that this set that Nigel claims she is a member of is not arbitrary, she may still not be satisfied that her membership of it justifies a moral evaluation with the same structure as the evaluation of Nigel's remaining a member of the golf club. She may object that moral judgements cannot be grounded in membership of a *set* of any kind, even one which reflects considerations in the world which make it non-arbitrary. For example, it would be peculiar to morally condemn a particular terrorist not on the grounds of the acts of violence he commits or desires to commit, but on the grounds of his membership of the set of terrorists. In a case like Nigel's, where he has neither bad motives nor has performed actions with harmful consequences, a moral evaluation is nonetheless possible because of his membership of a real *group*, not an abstract entity like a set. Membership of the (non-arbitrary) set of individuals who are causally responsible for global environmental problems and their harmful impacts is therefore insufficient to ground a moral evaluation of Olivia or any of its other members. The question for Nigel if he wishes to continue with his transfer of Olivia's arguments to her contribution to environmental problems is whether the non-arbitrary set of individuals who are causally responsible for environmental problems can be shown to be anything more than merely a set.

I will use Cripps's (2011) notion of a harming *putative group* to suggest that the set of individuals causally responsible for environmental problems can be shown to be a group according to which it is appropriate to morally evaluate its members on the same grounds as the account provided for Nigel's continuing membership of the golf club. A harming putative group is 'a set of individuals who do not yet constitute a group in the strong sense, but are nonetheless 'grouped' by the predictable harmful impact of their combined actions and could plausibly form a group to tackle the

⁷ For an alternative account of what it means to contribute towards harmful consequences, see Baatz and Voget-Kleschin (2019).

harm' (Cripps 2011: 176). Such groups are weakly collective responsible for the harm they cause if the following three-part sufficient condition is satisfied (*ibid.*):

- the individuals acted in ways which, in aggregate, caused harm, and which they were aware (or could reasonably be expected to have foreseen) would, in aggregate, cause harm (although each only intentionally performed his own act);
- they were all aware (or could reasonably be expected to have foreseen) that there were enough others similarly placed (and so similarly motivated to act) for the combined actions to bring about the harm; and
- the harm was collectively avoidable: by acting otherwise (which they could reasonably have done), the individuals making up the putative group could between them have avoided the harm.

Such a group is not a formal group (which is what I take Cripps to mean by a group 'in the strong sense') like a political party or a golf club, but it is plausibly more than merely an abstract set. Firstly, as we have already seen, it is a non-arbitrary grouping since it reflects a consideration in the world, namely, the causal relation between the aggregated consequences of the actions of its members and the harm in question. Secondly, its members bear not only a causal relation to the harm, but also an epistemic one: they were both aware (or could reasonably be expected to have foreseen) that actions such as the ones they were performing would, in aggregate, cause harm, and that this harm would indeed be caused since there were enough others similarly placed for an aggregation sufficient to bring about the harm. Thirdly, unlike the members of arbitrary sets, it could plausibly constitute a formal group to tackle the harm it causes. Indeed, many subsets of its members have already formed groups to tackle the harm, and a global treaty such as the Paris Agreement is evidence of the plausibility that a stronger formal group could be constituted. It is a set that is, as it were, a formal group in waiting. These three features—the causal and epistemic relations between the (members of) the group and the harm, and the realistic potential to constitute a formal group to tackle it—justify elevating collectives of the kind at issue above the status of a set to that of a (putative) group. However, even if one is not prepared to grant this point, either with regard to such collectives in general or the collective at issue in particular, it should be borne in mind that the important point remains not whether we are prepared to anoint this particular set as a (putative) group, but whether remaining a member of this collective (once one comes to know that one is a member) is relevant to moral evaluation. I consider Cripps's account of why such a (potential) collective of individuals should be considered a (putative) group as sufficient to elevate it above being labelled a set, and that the notion of a harming putative group is a useful one, but even if one is not prepared to grant it this status, the arguments still serve to justify the same structure of moral evaluation as applies to Nigel.

Olivia may press again that the group of which Nigel alleges she is a member is not adequate to ground a moral evaluation of her. It may well be the case that this supposed group could formalise itself in such a way that it could tackle the harm, but until it does and the conditions for membership are themselves formalised, she should not be judged for her membership, because until the formalisation

of these conditions it remains a mere set. But Nigel may appeal to the epistemic conditions to urge that, again, this is more than a set. Set membership may obtain in the absence of such epistemic relations—we are members of indefinitely many sets without knowing that we are—but we are only members of harming putative groups if we know (or can reasonably be expected to know) that we are. This knowledge, together with the condition that its members could form a group to tackle the harm to which each of its members stand in this epistemic relation, in a sense, ‘solidifies’ the set into a putative group. Moreover, the knowledge that each of its members possesses is relevant to the moral evaluation of their subsequent actions that is here being advanced. For just as Olivia was not evaluating Nigel’s membership of the club as such, neither is he doing so with hers. Rather, it is her *remaining* a member that is being evaluated; it is what she does once she comes to know that she is a member that matters. If she fails to act to secure her withdrawal—that is, continues to perform those consumption actions which constitute her membership of this group—then she is acquiescing in, tacitly approving of or endorsing and is complicit in the harm the harming putative group causes, and thereby is hitting the target of the operative vices and failing to hit the target of the operative virtues.

The Demandingness Defence

The second defence we may make on Olivia’s behalf is that withdrawing from the harming putative group may be unduly demanding to the extent that it does not constitute a moral wrongdoing to remain a member. If withdrawing from the harming putative group is achieved by ceasing to perform those actions which, in aggregate, cause the harm, then it looks like Olivia is going to have to stop doing almost everything. For surely environmental problems are caused by the aggregated consequences of *everything* that we all do; all our heating, eating, washing, travelling, and everything we manufacture, buy, use and throw away. For Nigel, withdrawal is a straightforward matter of cancelling his membership dues. There may be some costs associated with his resignation; he may have to travel further to an alternative club; alternative clubs may be more expensive; or he may lose touch with friends he had made there. These costs are relatively modest. But if withdrawing from the harming putative group responsible for causing global environmental problems is either impossible or unreasonably demanding and associated with an undue level of self-sacrifice, it may be difficult to justify the claim that withdrawal from *this* harming group is an obligation at all. That is, if withdrawal is not a reasonable option then remaining a member may not hit the target of the vices of indifference, arrogance, hypocrisy or cowardice after all.⁸

⁸ For the purposes of clarity of argument, I focus very specifically on an evaluation of a course of action under the description ‘remaining a member (or withdrawing from) a harming group’. However, I acknowledge that in doing so the characteristic nuance of all-things-considered virtue ethical evaluations of agents is not captured. It might be, for example, that Nigel has additional reasons to remain a member and play at the club. For example, he might be exhibiting the virtue of compassion by supporting a fellow member through a bereavement.

To evaluate this defence of remaining a member requires an assessment of how demanding it would be to withdraw from this harming putative group. This can be understood as the required assessment of the ‘circumstances’ element⁹ of Sandler’s agent-relative target principle of right action; it may be that the circumstances—which we will go on to explore—are such that hitting the targets of the identified virtues and avoiding hitting the target of the identified vices is unduly demanding (although the action is still ‘available’ to the agent in the sense of physically possible), and alternative courses of action better hit the target of the virtues than withdrawing from the harming group. We need, therefore, to know precisely what it would take to withdraw from the group. One way of determining this is to start with a prior account of the harm in question. This account will determine which actions have the consequences that aggregate to cause the harm, which in turn provides us with an account of the actions which constitute membership. It is these actions which we have to judge the demandingness of refraining to perform. We must begin, then, with an account of which harm, or what level of harm, we will use to determine what its causes are, the extent and make-up of the membership of the group which causes it and, in turn, what it will take for a member of this group to cease being a member.

Let us take a comprehensive view of the harm in question as being all the starvation, disease, individual death and species extinction which results from longitudinal collective action environmental problems like global climate change, atmospheric and marine pollution, ozone depletion, deforestation and so on. These problems are caused by the aggregated consequences of the actions of almost all of the billions of human beings in the world, from poor sub-Saharan farmers felling trees to make a cooking fire to rich Northern consumers purchasing furniture made from non-sustainably sourced timber. While the difference between their individual consumption levels is stark when assessed on the basis of their relative levels of material wealth, an assessment on the basis of their contribution to environmental problems reveals no difference; both their contributions are inconsequential, so it appears difficult to justify the claim that the rich Northern consumer *is* part of the group causally responsible for environmental problems and the poor sub-Saharan farmer is not. On this understanding of the harm in question, and the actions the consequences of which aggregate to cause it, withdrawal from the group *is* extremely demanding. The sub-Saharan farmer would have to cease gathering firewood, without which he cannot cook and feed his family. That is, gathering and burning firewood is among the actions the consequences of which aggregate to cause global climate change and deforestation. These actions therefore constitute the farmer’s membership of the harming putative group, and withdrawal from the group requires the farmer to stop performing them. But how demanding would it be for the rich Northern consumer like Olivia? Her consumption levels are much higher, but she also enjoys a greater level of comfort, convenience, security and luxury. Perhaps withdrawal from the harming putative group is less demanding for her.

⁹ An action is right to the extent that it better hits the targets of the operative virtues taken together (i.e., it is more virtuous) than the other courses of action available to a particular agent *under the circumstances* (Sandler 2007: 94).

One way of coming to appreciate how demanding withdrawal from the harming putative group may be for the rich Northern consumer would be to consider the work of The Global Footprint Network, who have developed a measure known as *ecological footprint*, an assessment, measured in ‘global hectares’, of ‘the ecological assets that a given population requires to produce the natural resources it consumes...and to absorb its waste, especially carbon emissions’.¹⁰ While we should only take attempts at such measurements as indicative, according to their Footprint Calculator, if one were to reduce one’s use of resources to what are arguably unreasonably demanding levels—never travelling, eating only a locally-grown vegan diet, living in a perfectly energy-efficient home using no non-renewable energy—it is still the case that living in a rich Northern country like the UK it is just not possible to reduce one’s ecological footprint below the level which the planet could accommodate if all humans were to live such lifestyles,¹¹ let alone (we may add) to below the level of membership of the harming putative group. This limit to the extent to which one can reduce one’s ecological footprint is imposed by the fact that the calculator allocates each citizen a share of the state’s footprint: 62% of each individual’s ecological footprint is accounted for by ‘services’, that is, the infrastructure over which individuals have no personal control. This phenomenon is called ‘lock in’ (Sanne 2002; Jackson and Papathanasopoulou 2008; Schinkel 2011) and the greenhouse gas emissions associated with such infrastructure may be called ‘structural emissions’ (Aufrecht 2011). These are analogous to those of Nigel’s golf balls that the management’s policies ensures are dumped down the embankment, and over which Nigel has no direct control. The level of unilateral reductions required to get the footprint as low as it allows (i.e., excluding infrastructure and structural emissions) is extremely demanding, certainly beyond the reach of most. To unilaterally reduce one’s ecological footprint *further* than this limit would require not being allocated a share of the state’s footprint and associated structural emissions. It is not clear what it would take for an individual to justify not being allocated this share, but intuitively it would be very demanding, involving perhaps complete withdrawal from society. Of course, a plausible response here is to say that since reducing structural emissions is only possible at the political level, it is therefore not appropriate to consider them in relation to unilateral reductions. However, the issue the Footprint Calculator has been invoked to explore is that of the demandingness of withdrawal from the harming putative group, and doing so certainly makes clear that, in carbon-dependent societies, engaging in unilateral reductions to the extent that one could claim to have removed oneself from dependence on structural emissions—perhaps by no longer significantly benefitting from them—would be unreasonably demanding.

It seems, therefore, that the demandingness defence deals a fatal blow to the claim that it is an obligation—grounded in a virtue ethics account of wrong action—to withdraw from the harming putative group that is causally responsible for global

¹⁰ ‘Footprint Basics—Overview’. 2011. Global Footprint Network. http://www.footprintnetwork.org/en/index.php/GFN/page/footprint_basics_overview/.

¹¹ Using a previous incarnation of the Footprint Calculator, I was only able to reduce my footprint from the UK average of 4.89 Earths to 3.2 Earths.

environmental problems. Withdrawal is too demanding; the poorer members of the group would be required to sacrifice what little material security they have, and the richer members of the group would be required, beyond excessively difficult unilateral reductions to the elements of their ecological footprint over which they have direct control, to withdraw from society to the extent that it would be justifiable not to allocate them a share of the ecological footprint and structural emissions of the state.

I will present two arguments to show that the demandingness defence is not fatal to the argument of this paper, which is to show that we are under a moral obligation to engage in a certain subset of unilateral reductions on the grounds that consumption actions constitute moral wrongdoings. Firstly, even if it is the case that full withdrawal from the harming putative group responsible for the harmful impacts of environmental problems is unreasonably demanding, this does not entail that making no effort whatsoever towards withdrawal is morally acceptable. On the one hand, if we find ourselves a member of a harming group withdrawal from which places unreasonable demands on us, we are under an obligation to work to bring about the conditions in which withdrawal is made possible. To draw an analogy with membership of the golf club, if Nigel found in the small print that to resign his membership before its term was complete would incur a considerable financial penalty, this does not entail that he can remain a member for his full term with no moral qualms. Rather, given the vices remaining a member hits the target of and the virtues it fails to hit the target of, he is under an obligation to attempt to remove this barrier of demandingness from his resignation. He should lobby the committee members to call an extraordinary meeting to change the constitution and the rules governing membership. He should investigate consumer protection laws to determine whether the imposition of this financial penalty is legal. In other words, he should engage in promotion activities—activities to promote just institutions—to bring about the possibility of his withdrawal from the harming group in a way that does not impose unreasonable demands on him and other members who wish to resign. In the case of members of the harming group responsible for environmental problems, they should engage in promotion activities for collective measures that reduce the demandingness of withdrawal; lobbying for the banning, subsidisation and taxing of the appropriate products and activities such that the financial and social penalties currently imposed on those who wish to withdraw from the group—that is, on those who engage in unilateral reductions—are not unduly demanding.

On the other hand, that full withdrawal is unduly demanding does not entail that we are under no obligation to engage in those non-demanding actions or refrainings which would contribute towards securing our withdrawal *if* full withdrawal was possible. Again, to draw an analogy with the golf club membership, that Nigel is unable at present to resign his official membership of the golf club due to the considerable financial penalty for doing so does not entail that he can continue to play golf there with no moral qualms. He may not be able to fully withdraw from the harming group because of the demandingness of doing so, but he should do what he can towards withdrawing. Ceasing to play golf there is, at present, all he can do. Doing this still hits the target of many of the virtues—respect, sympathy, empathy, integrity and so on—and avoids hitting the target of many of the vices—indifference,

disrespectfulness, self-centredness, hypocrisy—which are operative in cases where full withdrawal *is* possible. In the case of the harming group responsible for global environmental problems, while it is not currently possible for members to reduce their ecological footprint to the extent that constitutes withdrawal from the group, in addition to promoting collective measures to make this possible, members should unilaterally reduce in ways that are not unduly demanding. These reductions would be required if full withdrawal were possible, and so should be engaged in even though it is not possible. Failing to engage in such unilateral reductions hits the target of the vices of disrespect, apathy, self-centredness and so on. Since failing to engage in these unilateral reductions just is performing certain kinds of consumption actions, these consumption actions are moral wrongdoings insofar as their performance hits the target of these vices and is a failure to hit the target of the relevant virtues. For the rich Northern consumer, failure to further unilaterally reduce does not hit the target of these vices since to do so is unreasonably demanding, cutting into their subsistence emissions which are ‘essential and even urgent for the fulfilment of vital needs’ (Shue 1993: 55), in which case they are under an obligation to engage in promotion activities that make further reductions (both unilateral and as part of collective schemes) less demanding.¹² For the sub-Saharan farmer, *any* unilateral reduction is unduly demanding, and if he performs any consumption actions at all, these do not constitute moral wrongdoings since achievable alternatives to those consumption actions are not available.

To begin introducing the second response to the demandingness defence consider the following concern from Cripps (2011: 182):

If there is no appropriate cut off point for inclusion as one of those collectively responsible, people whose contributions are comparatively tiny could become members of putative groups collectively responsible for hugely significant harms. At the extreme, they could become responsible for such harms merely by existing. This is counterintuitive. For example, almost everyone has some carbon footprint, but that does not necessarily render everyone including (say) a South American rainforest tribe collectively responsible for environmental harm.

Cripps’s response to this concern is to introduce a ‘cut off point for inclusion’ with the following criterion: ‘those with a carbon footprint above the level at which

¹² An alternative, prior course of action here is to cultivate virtues such as frugality that mitigate the demandingness of certain unilateral reductions. Thank you to Lieske Voget-Kleschin for suggesting this to me. Although this paper is concerned to develop an argument concerning the vices and virtues associated with remaining within and withdrawing from a harming group in general, the resources of the environmental virtue ethics literature is available to draw on in articulating the specifically *environmental* vices (e.g., Cafaro’s 2005 gluttony and greed) and the virtues (e.g., Jamieson’s 2007 temperance, humility and mindfulness) that underpin an evaluation of remaining within or withdrawing from the harming group responsible for global environmental problems. In addition, thank you to an anonymous reviewer for highlighting that, in certain carefully assessed circumstances where particular unilateral reductions were unduly demanding but individuals had available financial resources, carbon offsetting and investing in carbon negative technologies would potentially be alternative ways of exhibiting the appropriate virtues.

there would be no harm were everyone polluting only to that level' (ibid.: 182). Now, as the work of The Global Footprint Network has shown, this criterion *would* include, if not a South American rainforest tribesman, then many more than who Cripps argues that it would include, namely, 'the global elite', that is, 'Westerners and the rich minorities in poor countries' (ibid.: 172). For even if everyone lived like the sub-Saharan farmer, at least some deforestation and atmospheric pollution would occur.

For it to be the case that it is only the global elite which constitute the harming putative group, Cripps's criterion for inclusion in the group must be relaxed from a 'no harm' criterion to an 'acceptable level of harm' criterion. That is, if we agree that a certain level of anthropogenic climate change, deforestation and marine pollution is acceptable in return for the benefits yielded by the activities that cause them, and any harm above that level is unacceptable, then it will only be the global elite (and not (most of) the global poor) that meet this criterion. However, this may not fully meet the demandingness defence, for withdrawal from the global elite may still be unduly demanding.

What consideration of the implications of Cripps's stipulation of the global elite as the harming putative group opens the way to, however, is identifying a subset of the larger harming putative group and justifying its status as a harming putative group in its own right. Above, we started with a prior account of the harm that is in question in order to determine the membership of, and conditions for withdrawal from, the harming putative group, and we set the level of harm as low as possible to encompass all harm caused by global environmental problems. But an alternative strategy is to start not with a prior account of the harm in question but, rather, directly with an account of a harming putative group whose membership is grounded by the harm caused by the aggregated consequences of consumption actions which it would not be unduly demanding to refrain from performing. We might call such actions *paradigmatic consumption actions* in reference to the way in which these are the ones typically highlighted by environmental organisations that consumers should consider moderating—turning appliances off at the plug, turning down the thermostat by a degree, driving a little less, and so on. The harm caused by the aggregated consequences of this class of actions is only a subset of the total global environmental harm caused by all consumption, but it is almost certainly significant. In a similar fashion to the first response to the demandingness defence, the fact that that we cannot provide an argument that covers *all* global environmental harm does not entail that we should not consider arguments that cover a portion of it. The harm in question has not been identified on grounds independent of consideration of the actions that cause it, but there seems no good reason why it should be. Rather, what is relevant is that the new harming putative group thus identified (a subset of the larger harming group from which it is too demanding to fully withdraw at present) plausibly meets the two criteria for such groups: it is 'grouped' by the predictable harm caused by the aggregated consequences of its actions (i.e., harm that is additional to that caused by those consumption actions that it is unduly demanding to refrain from performing), and it could plausibly constitute a formal group to tackle the harm.

The demandingness defence against the accusation of wrongdoing in remaining a member of the harming putative group responsible for global environmental harm can thus be overcome in two ways. Firstly, it may be argued that even if full withdrawal is too demanding, members are still under an obligation to promote the conditions that would make withdrawal possible and non-demanding, and in the meantime to engage in those actions and refrainings which would contribute to securing withdrawal if full withdrawal were possible. Secondly, a subset of the total harm in question can be identified by reference to the same set of actions, i.e., those which are not unduly demanding to refrain from performing. In turn, a new harming group may be identified and an argument of the same structure advanced: that to remain a member of this group—constituted in this case by the performance of paradigmatic consumption actions—constitutes a moral wrongdoing.

Conclusion

I have proposed an argument for justifying the moral obligation for individuals in rich, industrialised economies in the global North to reduce their personal consumption. I developed an understanding of consumption actions as constituting membership of a harming group and a virtue-based account of the moral wrongdoing of remaining a member of such a group. This account was tested against two possible objections. Two responses to the most persuasive objection—that withdrawal from the harming group constituted by those who perform actions the consequences of which aggregate to cause environmental harm is unduly demanding—were offered. Firstly, the set of consumption actions which constitute moral wrongdoings was moderated to those which it would not be unduly demanding to refrain from performing, i.e., paradigmatic consumption actions. Secondly, it was argued that the harming group from which there is an obligation to withdraw could be identified by reference to the harm caused by these paradigmatic consumption actions which it was not unduly demanding to refrain from performing. It was claimed that despite this apparent moderation, the resulting moral obligation nonetheless accounted for a significant degree of consumption and its associated environmental harm.

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References

- Anderson, E., & Pildes, R. (2000). Expressive theories of law: A general restatement. *University of Pennsylvania Law Review*, 148, 1503–1575.
- Aufrecht, M. (2011). Climate change and structural emissions. *International Journal of Applied Philosophy*, 25, 201–213.
- Baatz, C., & Voget-Kleschin, L. (2019). Individuals' contributions to harmful climate change: The fair share argument restated. *Journal of Agricultural and Environmental Ethics*. <https://doi.org/10.1007/s10806-019-09791-2>.
- Brennan, G., & Hamlin, A. (1998). Expressive voting and electoral equilibrium. *Public Choice*, 95, 149–175.
- Cafaro, P. (2005). Gluttony, arrogance, greed and apathy: An exploration of environmental vice. In R. Sandler & P. Cafaro (Eds.), *Environmental virtue ethics*. Lanham, MD: Rowman and Littlefield.
- Cripps, E. (2011). Climate change, collective harm and legitimate coercion. *Critical Review of International Social and Political Philosophy*, 14, 171–193.
- Das, R. (2003). Virtue ethics and right action. *Australasian Journal of Philosophy*, 81, 324–339.
- Engelen, B. (2006). Solving the paradox: The expressive rationality of the decision to vote. *Rationality and Society*, 18, 419–441.
- Glover, J. (1975). It makes no difference whether or not I do it'. *Proceedings of the Aristotelian Society, Supplementary Volumes*, 49, 171–209.
- Hargreaves Heap, S. (1989). *Rationality in economics*. Oxford: Basil Blackwell.
- Hursthouse, R. (1999). *On virtue ethics*. Oxford: Oxford University Press.
- Jackson, T., & Papatheasopoulou, E. (2008). Luxury or lock-in? An exploration of unsustainable consumption in the UK: 1968–2000. *Ecological Economics*, 68, 80–95.
- Jamieson, D. (2007). The moral and political challenges of climate change. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 475–482). Cambridge: Cambridge University Press.
- Johnson, B. (2003). Ethical obligations in a tragedy of the commons'. *Environmental Values*, 12, 271–287.
- Knights, P. (2012). *Consumption, environment and ethics: An analysis of moral and welfare arguments for reducing personal consumption*. PhD Thesis. University of Manchester.
- O'Neill, J., Holland, A., & Light, A. (2008). *Environmental values*. London: Routledge.
- Parfit, D. (1984). *Reasons and persons*. Oxford: Clarendon Press.
- Sandler, R. (2007). *Character and environment: A virtue-oriented approach to environmental ethics*. New York: Columbia University Press.
- Sandler, R. (2010). Ethical theory and the problem of inconsequentialism: Why environmental ethicists should be virtue-oriented ethicists. *Journal of Agricultural and Environmental Ethics*, 23, 167–183.
- Sanne, C. (2002). Willing consumers—Or locked-in? Policies for sustainable consumption. *Ecological Economics*, 42, 273–287.
- Schinkel, A. (2011). Causal and moral responsibility of individuals for the (harmful consequences of) climate change. *Ethics, Policy and Environment*, 14, 35–37.
- Shue, H. (1993). Subsistence emissions and luxury emissions. *Law and Policy*, 15, 39–59.
- Sinnott-Armstrong, W. (2005). It's not my fault: Global warming and individual moral obligations. In W. Sinnott-Armstrong & R. Howarth (Eds.), *Perspectives on climate change: Science, economics, politics, ethics* (pp. 293–314). Oxford: Elsevier.
- Slote, M. (2001). *Morals from motives*. New York: Oxford University Press.
- Swanton, C. (2003). *Virtue ethics: A pluralistic view*. Oxford: Oxford University Press.
- Traxler, M. (2002). Fair chore division for climate change. *Social Theory and Practice*, 28, 101–134.
- Vandenbergh, M., Barkenbus, J., & Gilligan, J. (2008). Individual carbon emissions: The low-hanging fruit. *UCLA Law Review*, 55, 1701–1758.