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Liability for Emissions without Laws or Political Institutions

Some theorists have recently argued that liability for greenhouse gas emissions presupposes positive law regulating emissions at the time of emitting. According to one account, this is because rights and duties in relation to environmental pollution do not exist before positive law. According to another account, it is because over-emitting actors could not reasonably have known that they were over-emitting until an institution emerged that regulated emissions. The paper claims that these accounts are mistaken. Drawing on the idea that actors had a duty to promote the emergence of just legal regulation, it argues that an actor is typically liable for pre-legal emissions if emitting less would have made just legal regulation more likely, the actor was aware or should have been aware of this, and emitting less would not have been unreasonably burdensome.

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1. Introduction

The central question of climate justice is how the burden of averting (more) dangerous climate change should be distributed. An influential answer holds that the burden should be distributed among those who, in over-emitting greenhouse gases, caused the problem. This is the message of the so-called Polluter Pays Principle. While the Polluter Pays Principle cannot supply the whole answer to just climatic burden sharing—it does not apply to the emissions of dead polluters, for example—it is widely thought that living, culpable and affluent actors should pay for having polluted, at least when the emissions exceeded the actors' fair share of the atmosphere's absorptive capacity.²

The pollution-centered view has recently been called into question by Carmen Pavel (2016) and Paul Bou-Habib (2019), who in a pair of interesting papers argue that the idea of making polluters pay for past emissions overlooks the role of positive law for liability. More specifically, they argue that it is largely impermissible to hold actors morally liable for emitting greenhouse gases unless the emissions were in breach of legally promulgated duties. For Pavel, this is because pre-legal liability would apply a nonexistent normative standard. As she puts it, 'there are no moral entitlements with respect to pollution prior to legal conventions that establish them' (Pavel 2016, 337). For Bou-Habib, by contrast, the point is that climate change is so complex that actors cannot reasonably figure out that they are over-emitting on their own. Institutions that authoritatively set out legal rights and duties are needed fairly to hold actors liable for emitting. The shared conclusion is that we should place little weight on historical emissions in deciding how the costs of climate policy should be shared since it is not until relatively recently that there has been an international legal regime for regulating GHGs (if there is one even now).

These are important and novel arguments. They complete and crystallize, in different ways, the skepticism that has been brewing in the literature about the idea of holding actors liable for emissions in the absence of political institutions.³ It should immediately be pointed out that neither Pavel nor Bou-Habib rely on the (implausibly strong) view that liability always presupposes positive law. They do not

² Methodologically, this debate treats the climate challenge as a question of distributing remedial responsibility (Miller 2007, 98). It is not obvious that this is the right approach, but I will not question it here. For general discussion of the problems of Polluter Pays Principle (PPP), see Roser and Meyer (2010) and Gardiner (2011, 414–20). For PPP as a fault-based principle, see Shue (1993) and Vanderheiden (2008). For PPP as a forward-looking principle, see de Sadeleer (2002). For PPP and excusable ignorance, see Vanderheiden (2008 ch. 6) and Bell (2011a). For PPP and dead emitters, see Caney (2005) and Duus-Otterström (2014). A popular idea is to supplement PPP with the Ability to Pay principle; see Caney (2010) and Page (2011). Bowman (2019) questions the proportionality assumption that gives rise to the need to supplement PPP.

³ See, e.g., Miller (2008), Meyer & Sanklecha (2014), Blomfield (2016).

take issue with, for example, holding people liable for having owned slaves even though owning slaves was not illegal at the time.⁴ But they think, not implausibly, that climate change is importantly different from a case like slavery since emitting greenhouse gases is neither invariably wrong nor a clear violation by one actor of another actor's moral rights. The causes of climate change are more amorphous and more morally benign, and this makes liability for pre-legal actions more problematic.⁵

The aim of this paper is to argue that Pavel and Bou-Habib's challenge fails. The response I develop draws on John Rawls's idea that there is a natural duty to promote the emergence of just institutions. The argument proceeds in two steps. I first argue that if a state in the pre-legal situation failed to promote, or helped prevent, the occurrence of international laws regulating emissions, then the state can rightly be held liable for this.⁶ I then argue that since states can fail to promote such laws by not curbing their emissions, we can rightly take pre-legal emissions into account in discussions of burden sharing. I offer this argument—which is intended to be broadly internal to the Pavel and Bou-Habib's projects while avoiding the familiar charge that the natural duty of justice cannot be rendered concrete enough to support ascriptions liability—in section 4. I begin by offering a closer presentation of Pavel and Bou-Habib's challenge.

2. Positive Laws and Liability

At its core, Pavel and Bou-Habib's challenge to the pollution-centered view of climate justice draws on the principle I call:

Laws before Liability for Emissions (LLE). An actor's liability for greenhouse gas emissions presupposes that there was, at the time of emitting, legitimate positive law determining the amount of emissions that the actor was entitled to emit.

I will look closer at how Pavel and Bou-Habib defend and qualify this principle in sections 3 and 4. In this section, I specify the principle and explain why it is potentially highly important.

Let us begin by explaining the key terms. 'Liability' should here be understood as

⁴ Bou-Habib uses the example of slavery (2019, 1303). Pavel uses assault as an example of rights violations in the absence of legal conventions (2016, 341).

⁵ Bou-Habib approvingly quotes David Miller's remark that 'Global warming is not like slavery, where there was a clear historic wrong that required, and may still require, redress' (Miller 2009, 136).

⁶ Bou-Habib notes that 'political obstructionism' challenges his argument (Bou-Habib 2019, 1308), but I argue that he underestimates the extent to which it does so. I return to this issue in section 4.

the responsibility to take on a cost or burden: an actor is 'liable' for causing an outcome insofar as the actor has a responsibility to take on some cost or burden in virtue of having caused the outcome, where 'responsibility' is used in a normative sense to indicate that the actor either has no moral right to reject paying or, more strongly, should pay.⁷ Importantly, liability thus understood is not the same as actually paying for having caused the outcome. We can be liable without being held liable and vice versa. Liability is also not a legal concept. The point of LLE is that actors are not *morally* liable for emissions until there are legitimate laws governing emissions, meaning that actors are not cost-responsible for these emissions. It can be tricky to get one's head around this point since holding actors liable is often the same thing as holding them legally liable, that is, imposing on them a legal responsibility to take on a cost or burden. But the simple idea behind LLE is that we must not hold actors legally liable unless they are morally liable. It thus rules out, among other things, holding actors retroactively legally liable for emissions that occurred before emissions were legally regulated.

LLE expresses a general relationship between emissions liability and positive law and is just as applicable to the domestic level as it is to the global level.⁸ But discussions about climatic burden sharing are typically aimed at the international level, and what the principle then rules out is specifically the idea of holding states liable for emissions that occurred before there was an international treaty setting out states' entitlements to emit in the form of legally binding mitigation commitments or emissions quotas.⁹ This idea stands in stark opposition to proposals based on liability for pre-treaty emissions, such as the famous Brazilian Proposal. The Brazilian Proposal, which Brazil injected into the negotiations leading up to the Kyoto Protocol, held that states should be assigned climate mitigation targets as a function of their cumulative emissions since 1850, the argument being that states that had contributed more to climate change should be given greater remedial burdens. LLE deems any such approach misguided. For most of human history, the

⁷ Liability can be fault-based or strict depending on whether causation is sufficient for liability (Vanderheiden 2008). The sense of liability invoked by LLE is fault-based, but it need not draw on thicker moral notions such as moral blame (Shue 1999; cf. Miller 2007, 86–90). For a paper discussing retroactive liability for emissions from a legal perspective, see Farber (2017).

⁸ I understand laws in a positivist way throughout the paper. Taking a natural-law approach would challenge LLE in ways not addressed here (Marmor 2011).

⁹ Since we are now speaking of international treaty law, it is clear that 'legally binding' does not mean 'enforceable' or 'enforced'; it only means that the treaty sets out mandatory emissions quotas to states. But it is worth noting that there are dimensions that need further development once LLE is applied to the international level. First, what is the relevance of having approved the treaty? For example, if 'only' 95 percent of the world's states were to ratify an international treaty, would liability be limited to those states or would the remaining 5 percent also be liable for their emissions? Second, what is the relevance of domestic laws for international liability? If a state is overshooting unilaterally adopted emissions target, would the state be liable to other states? These are important questions, but since they do not pertain to the core claim of LLE I set them to one side.

atmosphere was an unregulated commons which could be freely used, and since liability presupposes legitimate law *at the time of emitting*, it would be impermissible to hold states liable for emissions they undertook during that period.

The reference to ‘legitimate’ law is crucial because it indicates that, for proponents of LLE, breaching a legally promulgated emissions duty is not sufficient for being liable for emitting. A legally binding emissions treaty only grounds liability for emissions if it meets a standard of legitimacy. For Pavel this means that the treaty must have been adopted through a reasonably impartial, inclusive, and not seriously epistemically defective political process (Pavel 2016, 361). Bou-Habib (2019, 26), relying on Buchanan and Keohane’s (2006) well-known account of the legitimacy of global institutions, argues that the treaty must amount to, or flow from, institutions that are minimally morally acceptable, beneficial compared to feasible alternatives, and maintain integrity.

LLE has significant ramifications for the way climate policy costs ought to be shared. A widely endorsed view in the climate justice literature is that actors are not liable for emissions undertaken in excusable ignorance of anthropogenic climate change. This is often taken to mean that states are not liable for emissions prior to 1990, the year of the Intergovernmental Panel on Climate Change’s first Assessment Report. LLE, however, threatens to remove a large chunk of post-1990 emissions as well. Bou-Habib thinks that the first legitimate and legally binding climate treaty was the Kyoto Protocol and consequently maintains that liability for emissions started in 2008. That would exempt states from liability for up to 119,500 million metric tons of carbon compared to the standard approach of holding states liable for emissions from 1990 and onwards (Figure 1).

Pavel for her part questions the legitimacy of the Kyoto Protocol and notes that the preconditions for liability might *still* be missing at the international level. That would of course have even more significant implications than Bou-Habib’s more optimistic assessment. Both Pavel and Bou-Habib reject that the preconditions of emissions liability began with the 1992 United Nations Framework Convention on Climate Change on the grounds that the Convention did not include legally binding emissions quotas.¹⁰

¹⁰ Bou-Habib (2019, 1307) makes this point explicitly; Pavel (2016, 362) makes it implicitly.

Figure 1: Global Carbon Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring, 1751–2014 (million tons of carbon)

Comment: Data from Boden et. al. (2017). 1990 is often considered the year when ignorance of anthropogenic climate change was no longer excusable. 2008 marks the beginning of the first commitment period of the Kyoto Protocol.

But LLE undermines not only pollution-based approaches to climatic burden sharing. In exonerating actors of many past emissions, it also undermines benefit-based ones (Blomfield 2016; Bou-Habib 2019). Some climate ethicists argue that current people are cost-responsible for previous generations' emissions insofar as they possess the fruits of the emissions (Shue 1999; Roser & Meyer 2010; Page 2012; Goodin 2013; Duus-Otterström 2014). But if previous generations did nothing wrong in emitting as much as they did (because the emissions were not legally regulated at the time) then it is more difficult to see why current actors would be cost-responsible for possessing the benefits that their emissions created.

3. Laws before Liability for Emissions: Two Defenses

LLE asserts that moral liability for emissions presupposes that emissions were legally regulated at the time of emitting. An actor is not liable for emitting unless the emissions breached a duty laid down by legitimate law. In this section, I consider Pavel and Bou-Habib's arguments for this principle. In section 4, I explain why these arguments are unsuccessful even if we accept their contention that knowing and avoidable contribution to harmful climate change is insufficient to ground liability.

3.1 Pavel's conventionalist defense

Pavel's argument is one of *legal conventionalism*. Legal conventionalism is the view that 'duties and rights ... arise out of legal conventions, that is legal decisions made by the community or the relevantly situated people in that community (judges, legislators)' (Pavel 2016, 343). Pavel accepts, however, that 'we have rights and obligations to treat each other in certain ways by virtue of our common humanity that both precede and transcend political communities' (ibid., 343). What she rejects is that environmental pollution is a case in which these pre-political rights and obligations apply. Her view is thus conventionalist *with respect to pollution*. She thinks that 'we cannot hold people responsible for polluting without a system of legal rights in place that assigns entitlements, protections, and obligations' (ibid., 338).

The key notions in Pavel's argument are the ideas of balancing legitimate interests and multiple equilibria. Pavel assumes that we are only liable for inflicting harm on others if the harm amounts to a rights violation. But she argues that to determine whether a harmful activity amounts to a rights violation in a case like environmental pollution, it is not enough to look only at the harm caused by the activity; we must also look at the benefits people gain from engaging in it. People have a legitimate interest in 'driving cars, running factories or producing energy' (ibid., 344). Hence it would be excessive to deem all pollution as impermissible just because it is harmful. What we instead need to do is balance the interests we all have in polluting and in avoiding environmental harm.

Pavel thinks that the rights relating to pollution arise from the balancing of legitimate interests. Thus, for her, the reason legal conventionalism is appropriate with respect to pollution is simply that pollution cannot amount to a rights violation until the balancing has occurred. This makes pollution importantly different from cases in which rights are violated irrespective of legal conventions, such as assault. Those who assault others are liable because they violate pre-political moral rights. Pollution, by contrast, belongs to a class of harms comprising 'tragedy of the commons problems and other scenarios in which people have an interest in engaging in activities that cumulatively have a tendency to cause harm, but prohibiting these activities causes harm to the people who have an interest in engaging in them' (ibid., 342). Here legal conventions are needed to '*create and specify* rights and obligations with respect to pollution' (ibid., 343, italics in original), and this is so even though pollution might set back interests protected by our moral rights, such as bodily integrity or property rights. The fact that pollution sets back interests protected by moral rights is not enough to show that it is a rights violation since, again, we also have a legitimate interest in engaging in activities that pollute.

The idea of balancing is crucial for Pavel, because if harmful pollution were always morally impermissible, it is not clear why legal conventions would be needed for liability. Yet balancing as such is not enough to establish legal conventionalism since we might just think that the line between permissible and impermissible emissions can be drawn without legal conventions, for example, by scientists or philosophers. Pavel argues, however, that legal conventions are necessary since there are many ways in which the balance between polluting and harm could be struck, none of them more correct than the others, and since the ‘kind of judgments for fine-tuning different trade-offs required by considering the relative importance of different interests and harms in the case of pollution cannot be the result of abstract moral theorizing’ (ibid., 357). Pavel’s argument, then, is that since the issue concerns striking a balance between actors’ interests, and since there are ‘multiple equilibria’ in doing this, how the balance is struck must be up to the actors, via some legitimate lawmaking process.

What follows from this is a strong limitation on relying on a principle like the Polluter Pays Principle in the context of climate change. The Polluter Pays Principle holds that actors should be held cost responsible for emitting too many greenhouse gases. Pavel’s response is that this position is incoherent until there are legal conventions regulating the extent of actors’ emissions. Pollution is only grounds for liability if it violates rights, and our pollution rights are created and specified by positive law. Thus, until there are legal conventions, the notion of ‘too many greenhouse gases’ is vacuous.

I give my response to Pavel in the next section. Here I just want to flag some general questions her argument faces. First, while Pavel repeatedly writes that we ‘cannot’ hold actors liable for pre-legal pollution, it is not clear whether she means this literally or if it is just another way of saying that doing so would be inappropriate or incoherent. It is most reasonable, however, to make the latter reading. Thus understood the point is not to deny that we could hold someone cost responsible in the absence of law but rather that doing so would in an important sense be premature: since laws are constitutive of rights and obligations regarding pollution, we simply lack the conceptual tools to say that an actor’s pre-legal emissions are wrong. However, second, while Pavel seems to understand her view as ruling out retroactive application of laws, this conclusion does not follow from her premises. Pavel writes in the present tense: she says that polluters are ‘only responsible if they *produce* effects above a threshold defined in the law’ (ibid., 354. *Italics added.*). But we could accept the claim that environmental rights and obligations depend on legal conventions while thinking that the conventions could be applied retroactively *once*

they emerge.¹¹ To make her argument speak against retroactivity, then, Pavel would have to add a component explaining why retroactive application of legal conventions would be wrong. The obvious choice would be to stress the importance of giving actors a fair warning. Third, Pavel's argument seems to assume that the interests in harming and not being harmed by pollution are symmetrically distributed. Her argument is at least most compelling when pollution benefits and harms everyone roughly the same. Yet climate change might be a case where the harms mainly befall people who themselves benefit little from the pollution. This kind of asymmetry can cause problems for non-consequentialist forms of justification (Ashford 2003, 294–301).

3.2 Bou-Habib's epistemic defense

Unlike Pavel, Bou-Habib (2019) accepts that there is an answer as to what each actor was morally entitled to emit before the emergence of legitimate laws governing emissions. Thus, for him, the problem with pre-legal liability is not that it holds actors to a nonexistent standard of excessive emissions. The problem is rather that liability would be unfair in the absence of certain epistemic conditions. Bou-Habib believes that 'past actors who could not reasonably have been expected to know that they were emitting excessively did not acquire original duties of compensation merely on account of their having undertaken excessive emissions' (ibid., 1305). Thus, in addition to excusable ignorance of the phenomenon of anthropogenic climate change, he posits that there is excusable ignorance of one's own *entitlements to emit*. His argument is (i) that actors should not be held liable for excessive emissions if they could not reasonably have known that their emissions were excessive, and (ii) that actors often could not reasonably have known that their emissions were excessive until legitimate institutions emerged. The fact that Bou-Habib speaks of 'institutions' rather than 'laws' need not detain us because the role of institutions in his account is mainly to promulgate legally binding duties to states.

While not universally accepted, many agree that it would be unfair to hold actors liable for emitting when they were excusably ignorant of climate change, particularly since doing so would impose burdens on actors who did not enjoy a fair opportunity to avoid liability.¹² Bou-Habib is right to point out that the same concerns might speak against holding actors that were excusably ignorant of their own over-emitting liable. The more controversial part of his argument, then, is the claim that

¹¹ I am grateful to Lukas Meyer for pointing out that Pavel's argument is compatible with retroactivity.

¹² Hart (2008) offers a classic defense of giving actors a fair warning in the context of legal punishment. But see Caney (2010), Bell (2011a) and Gardiner (2011) for a more nuanced (and critical) view of the role of excusable ignorance in climatic burden sharing.

legitimate institutions are necessary to remove excusable ignorance of one's own over-emitting. The pivotal step in the argument here is to do with the ability of institutions to reduce 'social complexity,' by which Bou-Habib means 'an evolving condition of a society in which its members affect each other's outcomes in increasingly significant ways along multiple and interconnected causal pathways that are difficult to discern' (ibid., 1300-1301). Bou-Habib thinks that given the great social complexity of climate change, it would be unreasonable to expect states to figure out their entitlements to emit greenhouse gases on their own. International institutions that authoritatively specify the entitlements to emit are needed. It follows that, absent institutions, we cannot fairly hold states liable for their emissions. Even states who were aware of anthropogenic climate change should be exonerated for emitting, provided that their emissions were not extreme enough to fall outside the 'gray area' of reasonable disagreement (ibid., 1306).¹³

Like Pavel, Bou-Habib notes that institutions are not necessary for liability across the board. For example, it would not be unfair to hold slave owners or murderers liable for having enslaved or murdered people during a time when such acts were legally prohibited. But murder and slavery are clear *mala in se* in which social complexity is exceedingly low. Reasonable actors did not need institutions to know that slavery or murder was unjust—everyone should have known that owning one slave was already one too many. The case of climate change is different, Bou-Habib argues. Here social complexity is so high that pre-institutional liability would be unfair: even though an actor in the pre-institutional setting may *in fact* be emitting too much, it could not reasonably be expected to *know* this given that there is reasonable disagreement over both the overall aims of climate policy (e.g., the global temperature target) and the right way of allocating the burdens of meeting that aim (ibid., 1306).

There is a tension in Bou-Habib's argument that should be registered upfront. His argument assumes that there is a correct answer to whether someone emits excessively; institutions do not *create* the very notion of 'excessive emissions' like on Pavel's account. This naturally raises the question of whether legitimate institutions are also *sufficient* for liability. Consider this passage:

'the conclusion that historical climate duties arise from past excessive emissions is only secure for all past excessive emissions from the moment after which legitimate institutions of global climate governance promulgated emissions

¹³ Bou-Habib gives this negative argument to undermine what he calls the 'preinstitutional liability claim' (2019, 1303). His positive argument is that the absence of legitimate institutions does challenge the legitimacy of the economic status quo (cf. Caney 2006; Blomfield 2016). I set Bou-Habib's positive argument to one side since I am interested in challenging specifically his negative argument.

duties to states, since it is only after this moment that we can confidently say of past actors that they should have known that they were breaching their emissions duties' (ibid., 1304)

The reference to 'emissions duties' is unclear. Are these the moral duties states have pre-institutionally or the legal duties that institutions create? Given that Bou-Habib wants to offer an epistemic argument, the answer should presumably be the former. But then we immediately see the tension: why assume that the institutions track states' pre-institutional moral duties as opposed to promulgating legal duties that are out of whack with them?

There are two ways Bou-Habib could respond. He could argue that legal duties generate moral duties. On this view, regardless of whether an institution tracks an actor's pre-institutional moral duties, once the institution generates legal duties, the actor has a moral duty to discharge these duties. This would be like saying that actors incur content-independent political obligations to reduce emissions once a legitimate institution requires it.¹⁴ Or he could argue that there is a determinate list of potentially just institutional schemes even though actors have no way of telling which of these schemes is correct.¹⁵ In such circumstances one could argue that, for any scheme selected, the actors must take it as specifying their moral emissions duties since each scheme specifies pre-institutional moral duties just as plausibly as any other scheme on the list.

Bou-Habib does not explain how he proposes to avoid the tension between moral and legal duties. My sense, however, is that he assumes something like the first response. That would be fine, but it is worth noting that it would weaken the link to epistemic considerations, for the role of institutions is then restricted to coordinating the efforts of actors in reasonable disagreement. Opting for the second, semi-procedural option would allow a clearer link to epistemic considerations. In any case, since it would be implausible to assume that institutions somehow magically manage to track the pre-institutional moral truth, something needs to be added in order to complete Bou-Habib's argument for LLE.

4. The Promotion Argument

It is worth pausing to take in the controversial implications of these arguments. The traditional way to challenge liability for past emissions is, again, to stress excusable ignorance of climate change. Even though states or their populations were contri-

¹⁴ For a good introduction to the vast literature on political obligation, see Horton (2010).

¹⁵ This move resembles Klosko's (2004) semi-procedural theory of political obligation, which in turn is inspired by Rawls (2005), especially Rawls's notion of the burdens of judgment.

buting to dangerous climate change in the past, so this argument goes, for a long time they could not reasonably know this, and so it would be unfair to hold them liable for doing so (Vanderheiden 2008; Bell 2011a; Farber 2017). LLE makes the stronger claim that even after states or their populations became aware that they were contributing to dangerous climate change, there is still no basis for holding them liable for emissions until laws regulating emissions are adopted. If we make the plausible assumptions that it was within the power of states to emit less and that emitting less would not have been overdemanding, this is tantamount to saying that it would be unfair to hold actors liable for knowingly causing reasonably avoidable harm to others. We might think that this simply cannot be unfair.¹⁶

LLE also has the counterintuitive implication that liability for emissions could go away again. Suppose the Paris Agreement counts as a legally binding and legitimate treaty. Suppose further that the Paris Agreement were to implode, pushing international climate politics into a state of anarchy until a new treaty comes into force 2030. LLE then entails that any emissions between now and 2030 could not rightly serve as a basis for liability. But it can be difficult to see why states would not be liable for emissions emitted in the coming decade just because there is no longer a legally binding and legitimate climate treaty. The emissions must be judged against the backdrop of an impending and scientifically established climate disaster. We might think that the 2030 treaty can and should hold states legally liable for what they emitted.

These problems are mitigated by the fact that neither Pavel nor Bou-Habib argue that laws are strictly necessary for liability for emissions. Their arguments admit that we could fairly hold actors liable for *clearly* excessive pre-legal emissions. Bou-Habib is explicit about this. He notes that those who undertook ‘extremely high emissions’ are liable because they can ‘be expected to have known that they were breaching their emissions duties’ (2019, 1303). But Pavel’s view also leaves some space for pre-legal liability since some ways of striking the balance between pollution and harm are simply ‘beyond the pale’ (Pavel 2016, 361). There is no reason to think, for example, that pollution that completely or almost completely discounts harm must await social balancing before we can reject it as morally wrong. Pavel wants to handle such cases via her criteria for legitimacy, which among other things call for inclusive legislative procedures (Pavel 2016, 361). But we are arguably able to identify some levels of emission as *substantively* excessive independently of procedures. For example, it seems substantively excessive to emit at a rate twenty times greater than what would be consistent with avoiding dangerous climate

¹⁶ To be precise, such liability can be *comparatively* unfair but it does not seem *noncomparatively* unfair (Feinberg 1974). For an argument that it would be wrong to cause (expected) harm by emitting reasonably avoidable emissions, see Hiller (2011).

change if emitted by everybody. Pavel's legal conventionalism, then, does not rule out that *some* emissions profiles are grounds for pre-legal liability.

Since extreme emissions call for a different conclusion, it is more accurate to say that Pavel and Bou-Habib are drawing on:

Laws before Liability for Non-Extreme Emissions (LLE)*. An actor's liability for non-extreme emissions presupposes that there was, at the time of emitting, legitimate positive law determining the amount of emissions that the actor was entitled to emit.

When we restrict the discussion to non-extreme emissions, it may seem that Pavel and Bou-Habib have a convincing case after all. Few people doubt that *some* level of emission is morally permissible; the relevant consideration when it comes to liability for emissions is whether someone has over-emitted, not merely whether they have contributed to harm. But how could we tell that a non-extreme emitter is 'over-emitting' unless laws or political institutions regulating the atmosphere are in place? The alternative seems to be that states should anticipate—and be held liable for exceeding—the quotas they *would* enjoy under just a climate treaty. But that idea will look dubious to anyone who feels the force of Pavel and Bou-Habib's arguments. Why assume that there is a pre-legal answer as to how emissions should be allocated, or expect states to have epistemic access to it?¹⁷

Part of the discussion will of course be determined by the share of emissions qualifying as 'extreme.' LLE* will not speak against the idea of allocating climate policy costs based on past emissions if most past emissions were in fact extreme. But Pavel and Bou-Habib reject that most emissions were extreme; they attack the Polluter Pays Principle precisely because they think that most emissions fell within a range where laws were required to say how many emissions were too many. To convince people who agree with this, just stressing the duty to avoid contributing to harm will not do. Instead, we must explain why states can be liable for pre-legal emissions even if (1) the emissions are non-extreme and there either (2a) is no truth to the matter as to what a just level of emissions would be or (2b) states cannot be expected to know what this level is. I offer such a response in what follows. The response only assumes that actors have a duty to promote, or at least not obstruct, the *emergence* of just legal regulation. Positing such a modest duty, I argue, is enough to reject LLE (and LLE*).

¹⁷ This is the difficulty with Bell's otherwise insightful discussion of promotion duties and climate change. Bell suggests that actors in a pre-legal situation are morally required to 'reduce their greenhouse gas emissions to a level that they can reasonably believe would be consistent with the specification and allocation of duties by effective institutions' (Bell 2011b, 115).

4.1 Liability and promotion duties

The fundamental problem with LLE (and LLE*) is that it overlooks that there is a moral obligation to *set up* legal regulation such that actors may be liable for failing to do so. This idea could be explained in several ways, but it is often—and in my view most powerfully—subsumed under John Rawls’ account of the natural duty of justice. In what follows, I assume that Rawls offers a plausible way of speaking about these issues.

Rawls famously posited a natural duty of justice to ‘to support and to comply with just institutions that exist and apply to us’ (Rawls 1999, 99). The duty to support and comply with just institutions is a natural duty, Rawls maintained, because it applies to everyone regardless of voluntary transactions such as consent or promises. Just like everyone has a duty not to be cruel, everyone has a duty not to undermine or disobey just institutions that pertain to us.¹⁸ Rawls recognized that we sometimes find ourselves in situations where just institutions are yet to be established. What the natural duty of justice then requires is that we work towards *establishing* just institutions. As Rawls put it, each person has a duty to ‘further just arrangements not yet established’ (Rawls 1999, 99). Since this kind of duty is about promoting the emergence of just institutions when there are none, we may refer to it as the ‘duty to promote.’¹⁹ Rawls added that our promotion duties are tempered by an overdemandingness proviso. We should not be held liable for failing to promote institutions in ways that would involve ‘too much costs to ourselves’ (ibid., 99).

Promoting duties allow for a decisive argument against LLE (and LLE*). The first step of the argument is simply to note that if an actor in the pre-legal situation failed to promote, or helped prevent, the occurrence of international laws regulating emissions, then the actor can rightly be held liable for this precisely because it amounted to a breach of the actor’s promotion duty. The second step is to realize that an actor can breach their promotion duties by failing to curb emissions. The upshot is that we can rightly take pre-legal emissions into account in current discussions of burden sharing. States may be liable for pre-legal emissions insofar as their emissions helped prevent, or failed to promote, the emergence of laws regulating emissions.

To anticipate an objection, it may seem that the argument falls victim to the

¹⁸ It is worth noting that, for Rawls, natural duties were strictly for individuals (Rawls 1999, 99 - 100). In what follows, I write as if states or governments have natural duties. Readers who find this awkward can just imagine that states or governments ‘have’ natural duties because they are populated by individuals that have these duties.

¹⁹ Cripps (2013, 116) uses the same term to denote individuals’ duty to enable collective action. This is part of what I mean by ‘promoting duties’, but on my usage such duties must be directed at creating legal regulation. For a critical discussion of promotion duties in non-ideal circumstances, see Valentini (2017).

standard objection that natural duties of justice are too vague. Promoting duties leave it to the actors' discretion *how* they go about promoting just regulation and thus cannot, it may be thought, sustain anything like liability for emissions, let alone a determinate cost-sharing principle like the Polluter Pays Principle. Yet the argument I offer is intended to show that promoting duties do have quite determinate implications for emissions even when we concede that actors could have discharged those duties in different ways. Indeed, I shall argue that we get something close to a principle allocating climate policy costs according to past emissions from positing promoting duties. The novel part about the argument lies not stressing in promoting duties but in showing how these duties sustain the idea of liability for pre-legal emissions in the context of climate change.

I will not spend much time defending the first step of the argument since I take it to be uncontroversial that actors can have duties to work towards legally regulating that which ought to be legally regulated and may be liable for failing to discharge these duties. But to see why it is plausible that actors can be pre-legally liable for what we might call their 'climate behavior,' it is helpful to consider the case of the United States. After having been authoritatively informed about anthropogenic climate change in 1990—arguably significantly earlier²⁰—the United States increased its total emissions of CO₂e by roughly 16 percent 1990-2007 and maintained per capita CO₂ emissions of around 19 tons throughout the period (Boden et al. 2017). In addition, the country badly crippled the Kyoto Protocol by not ratifying it and helped bring about the failure at the Copenhagen climate summit (Gardiner 2011, 127–40; Keohane and Victor 2011). Meanwhile, the George W. Bush administration was seeding doubts about the veracity and urgency of climate change (Vanderheiden 2008, 15–44, 197–206). Given this track record, it would be odd to insist that the United States could not rightly be held liable just because there was no legally binding climate treaty. The United States was instrumental in undercutting the very legal regulation that would have put it in a position to be held liable in the first place. If we believe that the country was under a duty to promote legal regulation of climate change, we must be prepared to take this obstruction as a basis of fair liability.²¹

²⁰ The Johnson administration received a scientific warning about climate change as early as 1965 (Gardiner 2011, 78). A side note is that it is not clear that United States is liable for its emissions even now according to LLE. The country never ratified the Kyoto Protocol and the current administration has announced its intention to pull out of the Paris Agreement.

²¹ I am not suggesting that joining the Kyoto Protocol would have been painless for the United States. Victor notes that the country put itself in a bind by agreeing to an 'unachievable' emissions reduction by seven percent in the run up to the treaty (Victor 2011, 207); Sunstein (2007) argues that the Kyoto Protocol would have been economically detrimental to the United States. But saying that the treaty would have been costly does not automatically show that the treaty would have been unreasonably demanding such that it went beyond the United States' promotion duty.

Yet it is one thing to say that states can be liable for failing to promote legal regulation of climate change. To respond to LLE (and LLE*) we must also show that states can be liable for their pre-legal *emissions*. This second step of the argument is more complicated, but in the abstract the answer is clear. Emissions are a way in which states can fail to discharge their promotion duties. More specifically, a state can make legal regulation of climate change less probable by refusing to curb emissions and more probable by curbing emissions.

How can emissions affect the emergence of legal regulation? Three mechanisms can be highlighted. First, climate change is a paradigmatic collective action problem; it can only be avoided if sufficiently many states contribute to a solution, yet there is an incentive for each state to hang back, partly because of the fear of being a ‘sucker.’ In such situations, by reducing emissions, a state can assure other states that they will not be put at a relative disadvantage by choosing to cooperate. Second and relatedly, in reducing emissions a state can communicate a readiness to cooperate. Reducing emissions can be seen as a ‘costly signal,’ that is, a signal that demonstrates an earnest willingness to combat climate change. Third, the state may serve as a role model or template for how a transformation to lower emissions could occur. This is especially relevant for high-income industrialized countries, where the mere act of moving to lower emissions without unreasonable sacrifice is thought important because it shows that a low-carbon future is possible.²²

Since states’ emissions are relevant for the prospects of international legal regulation, they are *directly* relevant to whether states are discharging their promotion duties. This is important because it shows that Bou-Habib’s approach to promotion duties is unsatisfactory. Bou-Habib agrees that states had a duty to promote legal regulation of climate change. He writes that ‘it is unreasonable that states should escape liability for their excessive emissions if they themselves prevent legitimate institutions from being established and from promulgating emission duties to them’ (2019, 1308). But he does not think that this offers a challenge to his argument since ‘not all states that emitted excessively after 1990 can be accused of obstructionism’ (ibid.). This point automatically goes through if we divorce the degree to which a state emits from the degree to which it obstructs. Once we realize that emissions are directly relevant for promotion duties, however, the picture is more complicated. Some states may be ‘obstructing’—preventing the emergence of legal regulation—simply because they are emitting excessively.

²² The collective action problem at the heart of climate change is laid out well by Barrett (2007) and Victor (2011). The idea that going first takes away some reasons for others to hang back is defended by Shue (2011). For costly signaling in international relations, see, e.g. Gartzke et al. (2017). The idea of leading by being a role model is laid out by Parker & Karlsson (2010) under the heading of ‘directional leadership.’

Of course, since we are now deriving liability for emissions from a natural duty to promote legal regulation, we should not look at emissions in isolation. As I argue in the next section, we should rather look at the total package of a state's climate-related behavior. But before we develop the promotion argument further, let us first consider how the argument in its basic form squares with the conventionalist and epistemic defenses of LLE (or LLE*). The conventionalist defense is vulnerable to the argument since stressing promotion duties is not the same thing as preempting the answer as to how emissions should be allocated. The main appeal of the conventionalist defense is that it questions the practice of holding actors liable for emitting 'unjustly many emissions' when the prior question of just allocation has not been settled. Critics are no doubt correct that proponents of pre-legal liability uncritically tend to assume something like an equal per capita right to emit (Blomfield 2016; Bou-Habib 2019). But the promotion argument does not, as such, invoke a full standard of justice in the distribution of emissions. All it says is that states whose emissions fail to take us closer to just legal regulation may be held liable. Hence, it does not fall victim to the critique that we must not hold actors liable according to a non-existent standard.

The epistemic defense is also vulnerable to the promotion argument. The epistemic defense holds that institutions are needed since it is unclear what our entitlements are in a complex issue like climate change. Yet promotion does not pose nearly as severe an epistemic problem as figuring out whether one emits within one's moral entitlements. Here the question is simply whether a state has taken reasonable steps to make the emergence of legal regulation more likely, and while I do not doubt that a detailed answer can be quite complex here too, it is clear that significantly *increasing* one's emissions did not, as states were no doubt aware, help the cause of getting an international climate treaty curbing climate change. This is an important result since increasing emissions was the general trend during the 1990s and much of the 2000s. It would be quite difficult to argue that states cannot fairly be held liable for post-1990 emissions on the grounds that they took every reasonable step to promote just regulation of climate change.

In sum, the promotion argument supplies a robust response to LLE (and LLE*). I do not suggest that it is the only response we could give. For example, as noted above, we could simply argue that actors may be held liable for knowingly inflicting reasonably avoidable harm on others (Hiller 2011). It is fair to say, though, that the promotion argument is closer to the intuitions that sway people like Pavel and Bou-Habib and in that sense is less of an external critique. The argument only requires that we accept the uncontroversial idea that actors have duties to work towards legally regulating what ought to be legally regulated. As long as we bear in mind that the relevant sense of 'over-emitting' draws on whether one has done enough to

promote the emergence of legal regulation of emissions, this gives us what we need to hold states liable for having over-emitted.

5. Discussion and Objections

The general thrust of the promotion argument is that a state is liable for pre-legal emissions if (i) emitting less would have made just legal regulation more likely, (ii) the state was aware or should have been aware of this, and (iii) emitting less would not have been unreasonably burdensome. However, given that the source of liability is a failure to promote, we cannot say that a state is automatically liable for emissions as soon as conditions (i)-(iii) are met. The duty to promote requires taking reasonably demanding steps to bring about legal regulation, but it does not specify exactly what these steps are. It yields a promotion ‘quota’ which can be met in different ways. The duty to promote therefore admits that a high-emitting state can compensate for emitting by promoting legal regulation in other ways, much like when a climate activist is flying across the world to mobilize people.

Since the promotion argument only requires that actors meet a promotion quota, it may be wondered why past emissions are relevant for burden sharing after all. The quota suggests that states had discretion in the way they went about promoting legal regulation. But the point is that states generally *did not* engage in the sort of behavior that would have justified their failure to significantly curb emissions. It is plausible, therefore, to treat their refusal to curb emissions as a source of liability—and to take their emission records as a rough approximation of the extent to which they have violated their promotion duty. A more detailed analysis would no doubt need to consider the extent to which states violated the duty to promote in ways other than emitting. For example, the promotion argument entails that we should attribute more liability to a state that refused to curb emissions *and* engaged in disinformation about climate change than a state that merely refused to curb emissions. But this point does not change that emission records are relevant for current burden sharing in their own right.

Given that the source of liability is a failure to promote, the promotion argument will not treat all emissions the same. The argument is sensitive to how much emissions reductions affected the emergence of legal regulation. A state whose failure to reduce emissions significantly hindered the emergence of legal regulation would be more liable than a state whose equivalent failure to mitigate was politically inconsequential. Taking this more nuanced perspective adds some complexity but, importantly, does not fundamentally alter the way we typically think about liability for historical emissions. Bigger emitters would still be more liable than small emitters since, other things being equal, their emissions are more consequential for

the prospects for international cooperation. For example, it is more detrimental to international cooperation when China refuses to curb emissions than when Poland does so, simply because China's emissions play a larger role for climate change. Since the promotion effects will generally vary with the size of a state's emissions, we could probably approximate the promotion argument reasonably well simply by tracking contributions to cumulative emissions. It is worth recalling in this context, though, that the promotion argument only requires expending *reasonable* efforts. This means that the argument can explain the widespread intuition that states are not liable for so-called subsistence emissions (Shue 1993). States are not liable for subsistence emissions since refraining from such emissions would be unreasonably demanding. This reduces liability for emissions especially among poor states.

The promotion effects of emissions show why the familiar objection to promotion duties—that they are too vague to sustain ascriptions of liability—fails in at least this context. While there may be reasonable disagreement about exactly what different states were required to do fully to discharge their duty to promote just legal regulation, given the actual history of international climate politics, failing to significantly reduce non-subsistence emissions is enough to *violate* this duty. This is important because it shows that even if one were to doubt my idea that the extent of non-subsistence emissions yields a reasonably close approximation of states' failure to promote, emissions are not, as LLE/LLE* holds, free from liability just because they were not in breach of positive law. When a state's emissions amount to a violation of the duty to promote, the state is liable for those emissions even if it might well have been unclear whether the emissions were excessive in some more substantive sense.

An objection to the promotion argument is that the link between curbing emissions and promoting legal regulation is more tenuous than I have been letting on since a state often may make legal regulation *more* likely by emitting. This is the case, so this objection goes, whenever a state's emissions help create the need for legal regulation. But making legal regulation more likely is not sufficient for discharging one's duty to promote. After all, when a burglar 'incentivizes' homeowners to form a neighborhood watch, we do not think that he is thereby promoting greater home security. It is crucial to consider the intentions of the action, that is, whether the action is performed *in order to* discharge one's promotion duty. That is why a state like the United States should not be seen as having worked for an international climate treaty simply because its emissions helped create the need for it. Doing so would blur the distinction between the burglar and the institutions created to contain the burglar.

But *what* did states have a duty to work towards? The United States, to keep using that example, did not oppose international climate agreements across the board.

Instead, glossing over some detail, it argued that a fair agreement must also regulate developing-country emissions (Agrawal & Andresen 1999). While the country was guilty of undermining specifically the Kyoto Protocol, what is to say that they did not discharge their promotion duties in some other way? This objection necessitates adding some further nuance to what we have said so far. A first thing to note is that it is not enough merely to have promoted *some* legal regulation. As Rawls put it, promotion duties require working for ‘*just* arrangements not yet established’ (Rawls 1999, 99. Italics added). But how should we understand ‘just’ regulation here? The appropriate response is not to insist on a detailed answer as to how, say, the global carbon budget is to be shared between states. That would fall into the trap of presupposing a nonexistent or epistemically inaccessible standard and thus be vulnerable to the critics discussed in this paper. Instead, we should index the promotion duties against a fairly minimal conception of legal regulation which allows for reasonable disagreement. A plausible proposal is that a relevantly just treaty, judged from a pre-legal perspective, is one that at least (i) curbs global emissions and (ii) allocates emissions more evenly than the status quo. If this is correct, any state that without unreasonable sacrifice could have made a treaty fulfilling (i) and (ii) more likely was under a duty to do so. It is plausible that many states failed to meet this condition, either because they did not work for such a treaty or because they did not make reasonable sacrifices in order to bring it about. Hence, the condition is sufficient to ground liability in many states.

Some may have lingering doubts about the promotion argument because we tend to be uneasy about retroactive legal liability. The promotion argument says that it may well be permissible for a climate treaty to hold states legally liable for emissions that, at the time of emitting, were in breach of no legally promulgated duty. To these readers who feel that this is a problem, I would like to offer three concluding thoughts. First, in holding states liable for pre-legal emissions, we are not holding them liable according to a standard that did not exist at the time of emitting. The promotion argument holds that states are liable for pre-legal emissions insofar as the emissions breached a duty that they *did* have—namely, the duty to promote. Thus, the argument does not rely on holding states under moral duties that emerged only later in time. Second, while the promotion argument maintains that breaching such duties is grounds for retroactive legal liability, it is important to stress that the issue at hand is not about punishment. In holding states liable for past emissions, we are not inflicting morally condemnatory harm as much as we are seeking to distribute the responsibility for dealing with a common problem. This is significant because while resistance to retroactivity is very strong in relation to criminal law—indeed, even a human right—we may find retroactivity less controversial in other

areas of law, including international treaty law.²³ It is not uncommon, for example, for governments to implement taxation law retroactively (Gribnau & Pauwels 2013).²⁴ Third, the main reason retroactivity in law is considered a problem is that it gives actors insufficient control over whether they are held liable: actors should receive a fair warning about which conduct is prohibited so that they have a chance to adjust their behavior accordingly (Hart 2008).²⁵ But actors can receive a ‘fair warning’ that some conduct is liable to future retroactive regulation even though positive law is yet to be enacted. In the climate case at least, states were surely put on notice that emissions were likely to be taken as grounds for liability at least since 1990. In terms of giving fair warnings, then, it is plausible that liability for emissions emerged well before the enactment of legally binding climate treaties.

6. Conclusion

Critics have argued that actors are not liable for greenhouse gas emissions prior to legitimate laws regulating emissions. I have challenged this argument by suggesting that emissions might run afoul of the natural duty to promote the *emergence* of such laws. To be sure, this does not show that the costs of climate policy ought to be allocated simply as a function of past emissions, as straightforward versions of the Polluter Pays Principle suggest. The promotion argument attenuates the relationship between emissions and liability and necessitates paying attention to precisely how emissions got (or get) in the way of effective political solutions to climate change. Yet the argument shows that even if one accepts premises like those endorsed by Pavel and Bou-Habib, there is nothing unfair about being held liable for pre-legal emissions when the emissions served to prevent just legal regulation of climate change, the polluter was aware of this, and the emissions were reasonably avoidable.

²³ Article 11 of the Universal Declaration of Human Rights holds that, ‘No one shall be held guilty of any penal offence on account of any act or omission which did not constitute a penal offence, under national or international law, at the time when it was committed.’ This corresponds to the legal maxim *nulla poene sine lege*, which traditionally includes three adjacent principles: (1) no punishment unless for a crime; (2) no action is a crime unless it violates the law; (3) no retroactive application of criminal law. For a seminal treatment of *nulla*, see Hall (1937); see also Popple (1989).

²⁴ My hunch is that this difference is explained by criminal law’s condemnatory function since, in terms of bare setbacks to interests, the consequences of changing a tax code can be greater than a criminal fine. However, Robert Goodin has in conversation suggested that the key difference is that people can *comply with* retroactive tax laws—they can simply pay the new tax—whereas this is not the case for crimes already committed. In the United States, there is a specific debate about whether the constitution prohibits retroactive laws generally or only retroactive criminal law (Zoldan 2015).

²⁵ Another common complaint about retroactivity in law is that it allows the legislator to pick (with the benefit of hindsight) ‘winners’ and ‘losers’, thus enabling favoritism and corruption (Bell 1999).

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