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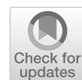

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LIABILITY FOR EMISSIONS WITHOUT LAWS OR POLITICAL INSTITUTIONS

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ABSTRACT. Many climate ethicists maintain that climate policy costs should be borne by those who historically emitted the most greenhouse gases. Some theorists have recently argued, however, that actors only became liable for emitting once the emissions breached legitimate legal regulation governing emissions. This paper challenges this view. Focusing on the climate responsibility of states, it argues that even if we assume that legitimate legal regulation is needed to remove excusable ignorance of entitlements to emit or is constitutive of such entitlements, it does not follow that states should be exonerated from responsibility for all pre-legal emitting. This is because the pre-legal emissions may have violated moral duties not to behave recklessly and to promote the emergence of the relevant regulation. The paper closes by noting how grounding liability for emitting in such duties complicates the link between past emissions and liability.

I. INTRODUCTION

An effective response to climate change requires transitioning to carbon neutrality, adapting to the climatic changes that are no longer avoidable, and compensating those who suffer climate harm. What would be a just way of sharing the costs of doing these things? Many theorists believe that an important part of the answer is given by the Polluter Pays Principle (PPP), which states that costs should be shared in proportion to how many greenhouse gases (GHGs) one has emitted. This way of sharing the burden is seen as appropriate

because it follows, as Peter Singer notes, from the intuitive thought that 'people should contribute to fixing something in proportion to their responsibility for breaking it'.[1] The thought is that the greatest polluters should shoulder the most costs not because they deserve this as 'punishment' for emitting but because they have the weakest complaint against taking the costs considering that they created the problem.[2]

PPP comes with a set of well-known constraints, however, limiting the extent to which it can serve as a complete account of climatic burden sharing. The principle obviously does not apply to dead actors' emissions, but many also argue that it should not be applied to emitters that were excusably ignorant of anthropogenic climate change. Moreover, there is widespread agreement that emitters should not be expected to shoulder any climate policy costs if doing so would prevent them from reaching, or maintaining, a decent standard of living.[3] But while this shows that focusing on past emitting alone is insufficient, it has not led theorists to question the central standing of PPP for climate justice. Instead, theorists have argued that responsibility for emitting needs to be supplemented by other principles, such as in Simon Caney's influential account.[4] The idea is that even though not all emitters can or should be held responsible for emitting, sufficiently many emissions were produced relatively recently (e.g., post 1990) by affluent emitters to make responsibility the primary criterion for allocating climate policy costs.

[1] Peter Singer, 'One Atmosphere', in Stephen Gardiner et al. (eds.) *Climate Ethics: Essential Readings* (Oxford University Press, 2010), 181–199, 190.

[2] See especially Simon Caney, 'Climate Change and the Duties of the Advantaged', *Critical Review of International Social and Political Philosophy* 13 (2010): 203–228. For the burden-sharing debate in climate ethics, see Edward Page, 'Climatic Justice and the Fair Distribution of Atmospheric Burdens: A Conjunctive Account', *The Monist* 94 (2011): 412–432, and Dominic Roser and Christian Seidel, *Climate Justice* (Routledge, 2017). Stephen Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change* (Oxford University Press, 2011), 415, notes that we might think that polluters should pay because they are responsible for harm or because they have appropriated an unfair share the atmosphere's ability safely to absorb GHGs, but these claims can also be advanced in combination (harmful emissions are grounds for liability only if they exceed the emitter's fair share of emissions).

[3] A further idea is that we should not hold actors responsible for emissions needed to satisfy vital interests or basic needs. However, this makes the mistake of inferring exemptions from permissions. See Göran Duus-Otterström, 'Subsistence Emissions and Climate Justice', *British Journal of Political Science* (forthcoming).

[4] Caney, 'Climate Change and the Duties of the Advantaged'. Caney argues that PPP is the primary principle of just climatic burden sharing and that the ability to pay principle should cover the 'remainder' left by this principle (e.g., costs associated with the emissions of dead or poor polluters).

Recently, however, some theorists have offered a new and potentially more fundamental challenge to PPP.[5] They defend what I shall call:

> *The laws-before-liability principle* (LLP): Actors are only morally liable for having emitted if the emissions breached, at the time of emitting, legitimate legal regulation.

'Moral liability' here means to lack a justified complaint against being held cost responsible.[6] LLP thus states that actors should not be held cost responsible for emitting until the emissions breached legitimate legal rules governing GHG emissions, such as a binding emissions quota. This is potentially fatal to emissions-based theories of climate justice since it entails that emitters have a justified complaint against being held responsible for emitting as long as the requisite rules are missing.

Two things should be noted about LLP. First, the legal regulation must be in force at the time of emitting. This is important because it rules out holding actors retroactively liable for emitting according to legal regulation that was enacted at a later point in time. Second, the regulation must be legitimate, meaning that it must meet whatever criteria are needed to give it normative authority. Carmen Pavel, for example, argues that the regulation must emanate from impartial, inclusive, and epistemically competent political institutions.[7] The reliance on legitimacy means that LLP is in an important sense parasitic on a prior account of what gives law normative authority, which is obviously a complicated question in its own right. Here, however, we can leave the legitimacy condition unspecified since LLP is not tied to a particular account of legitimacy. It is enough to keep in mind that the defenders of the principle are talking about the 'right kind' of legal regulation – the kind of regulation which would furnish the conditions of fair liability – and not about regulation simpliciter.

[5] Paul Bou-Habib, 'Climate Justice and Historical Responsibility', *The Journal of Politics* 81 (2019): 1298–1310; Carmen Pavel, 'A Legal Conventionalist Approach to Pollution', *Law and Philosophy* 35 (2016): 337–363.

[6] J.M. Firth and Jonathan Quong, 'Necessity, Moral Liability, and Defensive Harm', *Law and Philosophy* 31 (2012): 673–701.

[7] Pavel, 'A Legal Conventionalist Approach to Pollution', 361. Bou-Habib argues that the legal regulation must instead flow from institutions that are minimally morally acceptable, beneficial compared to feasible alternatives, and maintain integrity. This follows the account defended by Allen Buchanan and Robert Keohane, 'The Legitimacy of Global Governance Institutions', *Ethics & International Affairs* 20 (2006): 405–437.

It should immediately be said that those who defend LLP do not rely on the implausible claim that actors are never morally liable for performing legally permitted acts. They do not question, for example, the permissibility of holding 'legal' slave owners cost responsible for having owned slaves. But they think that climate change is the kind of case where breaching of legitimate legal rules is a precondition for liability. Why this is so depends on the version of LLP advanced. According to what I call the *conventionalist* version of LLP, the reason is that emissions are not wrong unless they breach legitimate legal regulation. According to what I call the *epistemic* version of LLP, by contrast, the point is that actors cannot reasonably be expected to *know* that they emit wrongfully many emissions unless emission duties are specified by such regulation, making it unfair to hold them liable for doing so. Both versions agree that liability for emitting requires fault on part of the emitter, but they differ as to why emitters were not at fault for pre-legal emissions.[8]

Should we accept LLP? I doubt it. On the one hand, it is far from clear that liability for emitting *does* presuppose fault. As several climate ethicists have argued, there is nothing obviously unfair about holding non-culpable emitters cost responsible for emitting insofar as they benefit from it.[9] On the other hand, even if fault is essential, it is debatable whether legal regulation has the kind of importance that defenders of LLP envision. We might argue, for example, that emitters were at fault for emitting as soon as they became aware that emissions contribute to harm and avoiding the emissions would not have been unreasonably costly.[10] Still, I can understand the attraction of LLP, especially in its epistemic version. It articulates a natural worry about pre-legal liability for an act like emitting GHGs. My aim in this paper, therefore, is not to engage in external criticism of the principle but instead to respond to it on its own terms. For the argument I want to make seeks to show that *even if* legitimate legal regulation plays the role that defenders of LLP envision, this does not lead to the conclusion that emitters cannot be liable for their pre-

[8] For fault-based liability for emitting, see Steve Vanderheiden, *Atmospheric Justice* (Oxford University Press, 2008), 149.

[9] See Axel Gosseries, 'Historic Emissions and Free Riding', *Ethical Perspectives* 11 (2004): 36–60; Caney, 'Climate Change and the Duties of the Advantaged'; Edward Page, 'Give it up for Climate Change: A Defence of the Beneficiary Pays Principle', *International Theory* 4 (2012): 300–330.

[10] See John Broome, *Climate Matters* (W.W. Norton, 2012), 54–59; Avram Hiller, 'Climate Change and Individual Responsibility', *The Monist* 94 (2011): 349–368.

legal emissions. This is because these emissions may have amounted to taking an unjustified risk of over-emitting or obstructed legitimate legal regulation from emerging in the first place. I shall put this argument in terms of two objections, which I refer to as the *recklessness objection* and the *non-promotion objection*. My claim is that these objections, taken individually or in combination, are enough to reject LLP in either of its two versions.

My focus in making this argument is on states. LLP is certainly not specific to states, but since discussions of climate justice tend to target the international level and LLP is most relevant when applied to this level, I shall assume that we are considering states' liability for emissions produced before a legally binding international emissions treaty emerged. This should not be read as necessarily endorsing collective responsibility, however. Individualists about (climate) justice can just take the term 'state' to refer to the population of a country, the idea being that a state is a big emitter insofar as it is inhabited by people who have emitted a lot.

When applied to states, it should be clear how potentially significant LLP is for the burden-sharing question. If, as some think, legitimate legal regulation of emissions did not emerge at the international level until the Kyoto Protocol entered into force in

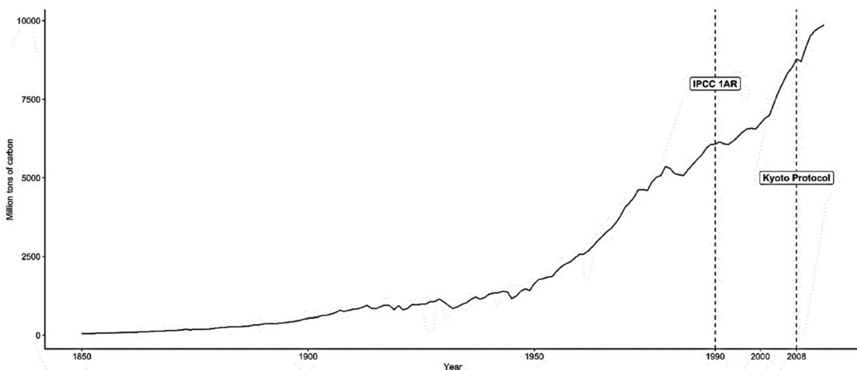

Figure 1. Global Carbon Emissions from Fossil Fuels, Cement Manufacture, and Gas Flaring, 1850-2014 (million tons of carbon). Comment: Data from T. Boden et al., 'Global, Regional, and National Fossil-Fuel CO2 Emissions', Carbon Dioxide Information Analysis Center, 2017. 'IPCC 1AR' refers to the first assessment report of the Intergovernmental Panel on Climate Change, which is often taken mark the end to excusable ignorance of anthropogenic climate change.

2008, then this would exempt states from as many as 123,604 million metric tons of carbon compared to if liability for emitting started at 1990. Figure 1 shows the drastic difference. What gives LLP a truly radical potential, however, is that the right kind of regulation might *still* be missing at the international level, meaning that the preconditions for liability are yet to emerge.[11] To be sure, this would not mean that the costs of climate change could not be distributed in a just way among states, for there are other factors on which climate duties could be based, such as states' ability to pay. It would, however, change standard thinking about climate justice. If LLP is true and the basis for liability for emitting emerged only recently if at all, then states' record of emitting will play a much less significant role for burden sharing than many climate ethicists think.

The paper is structured as follows. In the two following sections, I present and discuss the epistemic and conventionalist versions of LLP. I argue that both versions are vulnerable (with some exceptions and caveats) to the recklessness and non-promotion objections. The upshot is that it is possible that states were liable for their pre-legal emissions and that LLP thus fails as a general proposition. I then address whether states were in fact liable for their pre-legal emissions. This is an important question since the *possibility* of pre-legal liability does not show that such liability is appropriate in the world as it actually went. I argue that there is good reason to think that many states did emit in a reckless and obstructionist way, meaning that LLP does not yield its skeptical conclusion in practice either. Finally, in the concluding section, I offer a brief discussion of retroactive legal liability.

II. THE EPISTEMIC VERSION

Why would anyone think that legitimate legal regulation is a precondition for liability for emitting? The answer would be obvious if liability meant legal liability, for one cannot be legally liable unless one violates a law. LLP, however, refers to *moral* liability. It states that actors cannot fairly be held cost responsible for things they did while the behavior in question was legally unregulated. It would be

[11] Pavel entertains this possibility; see Pavel, 'A Legal Conventionalist Approach to Pollution', 362. Note that LLP would also have radical implications if legitimate legal regulation were to be abolished in the future.

impermissible, for example, to expect states to pay for emissions according to a treaty which entered into force after these emissions were produced. This makes LLP a genuinely normative principle.

According to the *epistemic* version of LLP, the reason legitimate legal regulation is a precondition for liability is that states were excusably ignorant of their moral entitlements to emit until such rules emerged.[12] This version of the principle accepts that there was a pre-legal fact of the matter concerning how many emissions were too many, morally speaking, but it maintains that it would not be fair to hold states liable for emitting too many emissions when – as was the case when the atmosphere was unregulated – they did not know, and could not be expected to know, how much they were morally permitted to emit. Thus, it draws an intriguing analogy to the familiar excusable-ignorance objection to liability, though the ignorance in question is moral rather than empirical.

Paul Bou-Habib has recently offered a defense of the epistemic version of LLP.[13] His argument is that while states did have moral duties to keep their emissions below a certain level in the pre-legal setting, it would rarely be fair to hold them liable for breaching these duties as they faced 'significant burdens of judgment in identifying their emissions duties'.[14] To know how much they were permitted to emit, states needed to know both the size of the overall emissions budget as well as the morally correct way of sharing that budget. Such knowledge, however, was extremely difficult to acquire. It follows that even though a state might in fact have breached its emissions duties in the pre-legal setting, it usually could not be expected to have known this. The lack of knowledge undermines liability, Bou-Habib argues, since no state should be held cost responsible for over-emitting when it was excusably ignorant of doing so.[15]

[12] It is an open question whether the right kind of regulation exists at the international level, but I shall assume so for ease of presentation.

[13] Bou-Habib, 'Climate Justice and Historical Responsibility'. Note that Bou-Habib does not describe his view in this way, and the same goes for Carmen Pavel below. The terminology used in this paper is my invention. My hope is that this terminology allows for a more structured discussion of Bou-Habib's and Pavel's important views.

[14] *Ibid*., 1303.

[15] *Ibid*., 1306. Bou-Habib's argument also has a constructive part, which is that the absence of institutions challenges the legitimacy of the economic status quo. I set this part of his argument to one side here, but Bou-Habib's idea is that ability-to-pay type principles are appropriate when states' wealth have been acquired in an under-regulated setting. For this point, see also Megan Blomfield, 'Historical Use of the Climate Sink', *Res Publica* 22 (2016): 67–81.

Bou-Habib thinks that legitimate legal regulation of the atmosphere was needed, for the most part, to furnish the conditions for fair liability.[16] This is because such regulation, by mandating certain emissions cuts or setting out legally binding emissions quotas, removed excusable ignorance of one's emissions duties. Bou-Habib suggests that this kind of guidance emerged with the Kyoto Protocol and that it continues to be delivered by the Paris Agreement. Thus, he thinks that states have been liable for over-emitting since 2008. Before that, however, only *clearly* excessive emitters were liable, and these were not many – certainly not many enough to make a principle like PPP appropriate.[17]

Given that Bou-Habib's argument is supposed to be an epistemic one, a crucial question is how it handles the gap between institutional and pre-institutional emissions duties. 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 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.[18]

We might think that Bou-Habib performs a sleight of hand here since it is not clear how the rules offered by legitimate institutions can do anything to remove the kind of excusable ignorance states were supposedly afflicted by, which was ignorance about their *pre*-institutional emissions duties. But Bou-Habib's claim is not that the institutional duties are the same, content wise, as the pre-institutional duties. Rather, his claim is that states may be guilty of over-emitting in an institutional *or* a pre-institutional sense. The reason legitimate institutions remove excusable ignorance is not that they formally declare states' pre-institutional emissions duties but that they generate a different kind of duty, namely the duty to comply with legitimate institutions.[19] This duty may or may not

[16] Bou-Habib generally speaks of institutions rather than laws, but since the role of institutions in his account is to issue binding commands, this is not an important difference.

[17] *Ibid*., 1306. Bou-Habib makes an exception for clearly excessive emitters since such emitters could not reasonably doubt that they were breaching their emissions duties. However, he seems to think that few states fit this description. This is evident from the fact that the moderate version of what he calls the 'preinstitutional liability claim' (which he rejects) would not be problematic if many states were emitting in a clearly excessive way. Bou-Habib takes the United Kingdom as an example and argues that it was not a clearly excessive emitter.

[18] *Ibid*., 1304.

[19] Thus, Bou-Habib's argument relies on states having political obligations. For a good introduction to the vast literature on political obligation, see John Horton, *Political Obligation* (Bloomsbury, 2017).

coincide with the moral entitlements states enjoyed in the pre-institutional setting.

A. *The Recklessness Objection*

Suppose Bou-Habib is right that most over-emitting states could not have known that they breached their emissions duties in the pre-legal setting. Would this establish the conclusion that they could not fairly be held liable? I want to suggest that the answer is no, for the emissions might still have breached a moral duty not to behave recklessly.

Recklessness is the conscious taking of an unjustified risk. In criminal law, recklessness is a type of *mens rea*, or the culpable intention an offender displayed in breaking the law.[20] However, the concept of recklessness can also be extended beyond criminal cases. We might say that agents act recklessly whenever they act in unjustified disregard of the risk posed by their acts. In such situations, while the agents do not seek to bring about harmful consequences, they are indifferent or insufficiently sensitive to the possibility of such consequences.

Recklessness can ground fault-based liability for pre-legal emissions precisely because these emissions may have amounted to taking an unjustified risk. The idea is that although it might be unclear how much an actor is permitted to emit, this does not mean that 'anything goes', for there is still a risk of over-emitting and actors may be held liable if they fail to respond appropriately to this risk.[21] To see why this is plausible, suppose that Bou-Habib is correct that most states were not clearly excessive emitters in the pre-legal setting. Suppose further, however, that some of these states had reason to *suspect* that they were over-emitting, for example because they emitted more per capita than most other states. This is enough to put them at fault, for if these states did little or nothing to mitigate the risk of over-emitting, then even though they could not be charged with deliberately overshooting their moral entitlements,

[20] Andrew Ashworth and Jeremy Horder, *Principles of Criminal Law*. 7th ed. (Oxford University Press, 2013), 176.

[21] Another way of putting the point is that choosing not to reduce emissions would be insufficiently precautionary. This point is made in passing by Simon Caney, 'Justice and the Distribution of Greenhouse Gas Emissions', *Journal of Global Ethics* 5 (2009): 125–146; see also Gardiner, *A Perfect Moral Storm*, 417.

they still behaved recklessly in relation to these entitlements. Put differently, it is enough to *probably* or *quite possibly* be an excessive emitter to generate duties to limit emissions. Call this the 'recklessness objection'.

The recklessness objection is effective against the epistemic version of LLP because it does not presume that states were able to tell what their emissions duties were. It only exploits the fact that there must have been levels of pre-legal emitting at which states had reason to think that they might well be over-emitting.[22] This of course assumes that there *were* levels of emitting that ran the risk of being excessive, but this is surely unproblematic. The problem of climate change is after all that there are too many emissions, and it must have been clear to states at least since 1990 that they would need to limit their collective emissions to avoid dangerous climate change. The IPCC in its very first assessment report noted that carbon dioxide would 'require immediate reductions in emissions from human activities of over 60% to stabilize their concentrations at today's levels',[23] and the Framework Convention on Climate Change, while not the legally binding emissions treaty that defenders of LLP have in mind, declared that states should act with the 'aim of returning individually or jointly to their 1990 levels' of GHG emissions.[24] So, while it is fair to say that states could not be expected to have known exactly how the reductions required to stave off dangerous climate change should have been distributed, a state acting in good faith could hardly have denied that, for many of them, a fair and effective response might well have required them to emit less.[25] It is important to note that for the purposes of assessing whether a state acted recklessly, it is irrelevant whether the state in fact over-

[22] In this way, the recklessness objection avoids a problem which besets the otherwise insightful discussion in Derek Bell, 'Does Anthropogenic Climate Change Violate Human Rights?' *Critical Review of International Social and Political Philosophy* 14 (2011): 99-124. Bell suggests that actors 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' (*ibid*., 115). This suggestion is vulnerable to Bou-Habib's epistemic challenge. See also Aaron Maltais, 'Radically Non-Ideal Climate Politics and the Obligation to at Least Vote Green', *Environmental Values* 22 (2013): 589–608.

[23] IPCC, *Climate Change: The IPCC 1990 and 1992 Assessments*, 63. Available at: https://www.ipcc.ch/site/assets/uploads/2018/05/ipcc_90_92_assessments_far_full_report.pdf

[24] UNFCCC, 1992, article 4 § 2b.

[25] Indeed, one way to criticize Bou-Habib is to question whether states really *were* unsure about whether they over-emitted. There is a difference between being unsure about how the mitigation burden ought to be shared and being unsure about whether one must reduce emissions.

emitted. The question is whether they did enough to mitigate the risk of over-emitting once they realized that this was a real possibility.

The recklessness objection obviously relies on that over-emitting is wrong, and worse than under-emitting, but this is something someone like Bou-Habib accepts. To evaluate whether recklessness offers a reason to reject the epistemic version of LLP, it is thus not necessary to consider whether, all things considered, it might have been morally justified to breach one's emissions duties because of the economic benefits of doing so. The point is that if one thinks that deliberate over-emitting would have been wrong, then one ought to think that running a risk of over-emitting would also have been wrong in some circumstances.

But what does the recklessness objection mean more concretely for what states ought to have done? When would a risk of over-emitting cease to be unjustified? The answer depends on how wrong over-emitting would have been. If it would have been seriously wrong, states would have been required to be quite sure that they emitted within their moral entitlements. This would have required deep emissions cuts in many cases. If over-emitting would only have been a minor wrong, however, it might have been enough if it was more likely than not that the state over-emitted. Working out a theory of recklessness in emitting would thus involve settling difficult moral questions. Settling these questions is not necessary, however, to see that excusably ignorant states may have been liable for pre-legal emissions. There is little doubt, for example, that states that substantially *increased* emissions despite having reason to suspect that they were over-emitting acted recklessly. They must have known that they very likely exceeded their entitlements and thus very likely acted wrongly. This is enough to show that the epistemic version of LLP fails, for it means that the certainty of over-emitting is not a precondition for incurring liability.

B. *The Non-Promotion Objection*

Suppose that the recklessness objection is unpersuasive. This would still not establish the conclusion that liability for pre-legal emissions would be inappropriate, for there is a second ground for liability.

This ground flows from what John Rawls called the 'natural duty of justice', especially the part of this duty which enjoins us to 'further just arrangements not yet established, at least when this can be done without too much cost to ourselves'.[26] The idea is that if everyone had a duty to promote the establishment of legitimate legal regulation, then those that did not adequately push for such regulation can rightly be held liable for this. Call this the *non-promotion objection*. 'Non-promotion' here covers everything from actively opposing to merely failing to strive for regulation, but since such acts are all potential violations of the duty to promote, I shall treat them as one category, which for ease of expression I refer to as 'obstruction'.

The epistemic version of LLP is vulnerable to the non-promotion objection as the duty to promote does not pose nearly as severe epistemic problems as figuring out one's emissions duties. The latter arguably requires working out a full theory of global and intergenerational justice.[27] Figuring out whether one discharges the duty to promote, by contrast, just asks whether one has taken reasonable steps to establish rules or institutions. It is less likely that states could claim excusable ignorance here, particularly when it came to acts that were clearly obstructive, although as I argue later there are some real questions regarding *which* rules or institutions states were duty bound to promote.

In response to the non-promotion objection, it would not be plausible for proponents of LLP to deny the natural duty of justice itself. There is a convincing case for pre-political duties to promote institutions combatting climate change.[28] Indeed, Bou-Habib himself notes that 'it is unreasonable that states should escape liability for their excessive emissions if they themselves prevent legitimate institutions from being established'.[29] What might be questioned, however, is whether such duties vindicate the idea of liability for pre-

[26] John Rawls, *A Theory of Justice*, rev. ed. (Oxford University Press, 1999), 99. The natural duty of justice also requires us 'to support and to comply with just institutions that exist and apply to us' (*ibid.*). Rawls called this duty 'natural' because it applies to every person 'independent of his voluntary acts' (*ibid.*). In what follows, I write as if states have natural duties. Readers who find this awkward can just imagine that I am referring to individuals populating the states. For individual promotion duties and climate change, see Elizabeth Cripps, *Climate Change and the Moral Agent* (Oxford University Press, 2013).

[27] Simon Caney, 'Just Emissions', *Philosophy & Public Affairs* 40 (2012): 255–300.

[28] Bell, 'Does Anthropogenic Climate Change Violate Human Rights?'; Cripps, *Climate Change and the Moral Agent*; Aaron Maltais, 'Failing International Climate Politics and the Fairness of Going First', *Political Studies* 62 (2014): 618–633.

[29] Bou-Habib, 'Climate Justice and Historical Responsibility', 1308.

legal *emitting*. We might think that obstruction and emitting are distinct sources of liability, such that even if a state was liable for obstructing legal regulation of climate change, this would not make it liable for emitting or vice versa. This is Bou-Habib's view. He notes that 'not all states that emitted excessively after 1990 can be accused of obstructionism'.[30]

Bou-Habib's response overlooks a crucial possibility, however, which is that states' emissions might have been obstructive. This would be so if the emissions affected the emergence, and shape, of regulation in a negative way. If the number of emissions affected the prospects of legal regulation, then they would be directly relevant for the duty to promote.

How could the number of emissions affect the prospects of legal regulation? There are at least three different possibilities. First, climate change is a paradigmatic collective action problem: it can only be avoided if sufficiently many contribute to a solution, but there is an incentive for each to hang back, partly out of a fear of being a 'sucker'. In such situations, by reducing emissions, one can assure others that they will not be put at a relative disadvantage by choosing to cooperate. Second and relatedly, by reducing emissions one can communicate a readiness to cooperate. Reducing emissions can be what game theorists call be a 'costly signal', i.e., an act that communicates an earnest willingness to cooperate. Third, by reducing emissions, one may serve as a role model for others. This is especially relevant for high-income industrialized states, because if such states were to move to lower emissions without a major sacrifice to living standards, they would demonstrate that a high-welfare and low-carbon future is possible, thereby removing one reason to resist progressive climate policy.[31] If reducing emissions can have any of these effects, the choice to reduce emissions comes within the

[30] *Ibid.*

[31] The collective action problem is set out by Scott Barrett, *Why Cooperate? The Incentive to Supply Global Public Goods* (Oxford University Press, 2007), and David Victor, *Global Warming Gridlock* (Oxford University Press, 2011). The idea that going first takes away a reason for others to hang back is defended by Henry Shue, 'Face Reality? After You! A Call for Leadership on Climate Change', *Ethics & International Affairs* 25 (2011): 17–26. For costly signaling in international relations, see Erik Gartzke et al., 'Signaling in Foreign Policy', *Oxford Research Encyclopedia of Politics* (available at: https://doi.org/10.1093/acrefore/9780190228637.013.481). The notion of leading by being a role model is laid out by Charles Parker and Christer Karlsson, 'Climate Change and the European Union's Leadership Moment: An Inconvenient Truth?' *Journal of Common Market Studies* 48 (2010): 923–943. For a normative defense of such leadership, see Maltais, 'Failing International Climate Politics'.

purview of the duty to promote. It means that states can be liable for obstructing *because of* the way it emits.

This is not to suggest that states would be guilty of obstructionism as soon as their emissions failed to promote legal regulation. Stated more fully, the non-promotion objection holds that a state was morally liable for emitting if (i) emitting less would have made legal regulation of the atmosphere more likely, (ii) the state was aware or should have been aware of this, (iii) emitting less would not have been unreasonably burdensome, and (iv) the state's failure to emit less was not offset by other ways of promoting the legal regulation. There are, then, several additional hurdles that must be passed before one could conclude that a state was liable for emitting because it would have made legal regulation more likely by emitting less. Condition (iv) is especially important because while the duty to promote mandates taking reasonably demanding steps to build institutions, it does not specify exactly what these steps are. Deficiencies as far as one's emissions go may be offset by enhanced action in other respects. However, the mere possibility that emissions were directly relevant for promotion is enough to show that Bou-Habib's response is problematic. If states' emissions obstructed the emergence of much-needed international regulation of the climate, then it is not mysterious why they may be liable for these emissions.

Suppose, however, that the number of emissions were unimportant for the prospects of legal regulation. Would it then follow that states were not liable for their pre-legal emissions for reasons of obstruction? Not necessarily, for it is possible that states obstructed the emergence of legal rules precisely *because* they did not want to limit their emissions. This would also be a ground for liability, because when an actor's motive for blocking legal regulation is that it wants to keep engaging in a behavior, it is reasonable that it is liable for engaging in this behavior.[32] This is no stranger than saying that thieves who manage to block the enactment of laws against theft are morally liable for stealing and not just for blocking the laws.

[32] Bou-Habib seems to agree with this. He remarks that 'it is unreasonable that states should escape liability for their excessive emissions if they themselves prevent legitimate institutions from being established' ('Climate Justice and Historical Responsibility', 1308). I take the implicit thought to be that if states prevented institutions because they did not want to limit emissions, then liability for emitting would be reasonable.

There are, then, two ways in which the duty to promote might ground liability for pre-legal emissions: the emissions might in themselves have amounted to a violation of the duty to promote, or the desire to produce these emissions might have been the reason the duty to promote was violated. The epistemic version of LLP is vulnerable to both possibilities because neither disputes that states were excusably ignorant about what a fair or just allocation of GHG emissions looked like. The conclusion is that excusable ignorance of one's emissions entitlements is not enough to conclude that there is no liability for emitting.

III. THE CONVENTIONALIST VERSION

Let us now consider the conventionalist version of LLP. This version states that emissions cannot be wrong unless they are governed by legitimate legal rules because emitting GHGs is only *conventionally* wrong, i.e., wrong because it violates a relevant agreement or decision about how many emissions are too many.

The conventionalist version of LLP has recently been given a thoughtful defense by Carmen Pavel. Pavel's thesis is that 'we cannot hold people responsible for polluting without a system of legal rights in place that assigns entitlements, protections, and obligations'.[33] The key part of her argument is the observation that environmental pollution often serves legitimate interests. GHG emissions, for example, is a side effect of such benign activities as 'driving cars, running factories or producing energy'.[34] This is feature of environmental pollution is important, Pavel argues, because it means that it would be inadvisable to seek to reduce pollution to zero. Instead, people's legitimate interest to engage in or benefit from polluting activities must be balanced against the equally legitimate interest people have in not being harmed by pollution. Pavel's idea is that environmental pollution only becomes wrongful once it is excessive as determined by an appropriate balancing of the interests involved.[35]

Having established that pollution calls for a balancing of harms and benefits, Pavel then argues that legal decisions are essential to

[33] Pavel, 'A Legal Conventionalist Approach to Pollution', 338.
[34] *Ibid.*, 344.
[35] *Ibid.*, 341–344.

determine the level at which pollution becomes excessive. Her idea is that since the balance can typically be struck in many ways, none more obviously correct than the others, striking it must be up to the relevant community. This in turn necessitates a legitimate legal or political process since it is through such a process that the community can give authoritative shape, in the form of legal rights and entitlements, to their collective opinion about how much environmental harm would be too much.[36]

For Pavel, then, the idea of liability for pre-legal emissions is incoherent. Whether emissions are morally impermissible depends on whether they violate legal rights or exceed legal entitlements, but these things do not exist prior to legal conventions. Important to note is that Pavel does not suggest that this conclusion will hold for all harms. Her legal conventionalism is restricted in the sense that it grants that some rights and obligations do exist independently of conventions. Emitting GHGs, however, does not belong to this category. Here legal conventions are needed to '*create and specify* rights and obligations'.[37]

Pavel takes her argument to challenge PPP as a principle for allocating climate policy costs.[38] As this makes clear, her argument assumes that legal conventions may not be retroactively applied. While this is a widely accepted view, it is worth noting that there is no formal contradiction between legal conventionalism and retroactivity, because one might hold that the wrongness of an act depends on its legality but think that relevant laws *apply* in a retroactive way. I return to retroactivity below.

One worry about Pavel's argument is that it seems to assume that the interest to pollute and the interest not to suffer environmental harm are universally shared and equally distributed. If the interest to pollute is mainly had by people who will not suffer harm, then we might think that the argument aggregates interests across individuals in an inappropriate way. But Pavel handles this difficulty through the nature of the balancing process. In her view, legitimate balancing calls for a decision-making process which takes all relevant interests

[36] *Ibid*., 342.
[37] *Ibid*., 343. Italics in original.
[38] *Ibid*., 353.

into account and in addition meets epistemic and participatory requirements.[39] It follows that if only a few would have an interest in polluting, a legitimate balancing process would not give this interest much weight.

A. *The Recklessness Objection*

Pavel's argument is, however, vulnerable to the same recklessness and non-promotion concerns that beset the epistemic version. Consider the recklessness objection first. It might seem that the conventionalist version of LLP is immune to this objection since it draws on the risk of over-emitting. Whether this is so depends, however, on how we interpret legal conventionalism. If legal conventionalism means that laws must be in force for environmental rights and duties to exist, it is clear that the recklessness objection must be incoherent. There would then be no standard in virtue of which pre-legal emissions could have been 'excessive'. But there is a weaker interpretation of legal conventionalism which leads to a different conclusion. In what follows, I want to argue that conventionalists should not consider it decisive that legal conventions are in force; and that once this is recognized, the conventionalist position goes in an epistemic direction and becomes vulnerable to the recklessness objection.

The key question to ask legal conventionalists is *why* legal regulation is supposed to be a precondition for wrongness. The answer is presumably that legal regulation reflects a social agreement among relevantly situated actors as to how, in this case, the interests of emitting and protecting the environment should be balanced. But then the mere fact that legal decisions have been made seems in principle unimportant. Suppose we know for sure that emitting at a certain level will be struck down as excessive by a legitimate decision-making process that is yet to take place. It seems that it would then be wrong to emit at this level for the same reason that it would be wrong to do so once the process has taken place, i.e., because it would give undue weight to the interest to engage in environmentally harmful behavior. It is not at all obvious why it should make a principled difference whether the decision-making process has oc-

[39] *Ibid*., 361.

curred. Instead, it looks as though we ought to 'pre-obey' the outcome of the process. It is crucial to note that such a duty does not challenge the idea that conventions determine wrongness. It accepts that legal conventions determine how many emissions are too many. What it shows is just that it seems as if emitting can be conventionally wrong even though the relevant legal conventions have not been enacted. This is so if the right kind of procedure *will* strike them down as excessive.

How might someone like Pavel respond? The natural answer is to take the argument in an epistemic direction. The thing about pre-obedience, conventionalists might argue, is that we cannot predict the outcome of a balancing process where there are legitimate interests on both sides of the equation and people disagree about how to weigh them. We must wait for legal decisions because this is the only way we can know what the conventions are. Now I doubt that this answer is always true. It often seems possible to at least rule out some outcomes as out of bounds ahead of time. Just like the epistemic version, the conventionalist version of LLP should arguably allow for pre-legal liability for clearly excessive emitting, i.e., levels of emitting a legitimate balancing process would definitely prohibit. But the key point is that if we must wait for legal decisions because of our inability to predict the future, then this suggests that the conventionalist position is actually a version of the epistemic view. The reason actors should not be held liable for exceeding their future legal entitlements is that these entitlements are *inaccessible* to them, not that they lack normative force. If legal conventionalists want to deny that their position is ultimately epistemic in this way, they must double down on the claim that acts simply cannot be conventionally wrong before legal decisions have been made. The challenge is then to explain why the actual *taking* of decisions should be pivotal even if we could predict what our fellow community members will decide.[40]

If the conventionalist version of LLP ultimately boils down to a variant of the epistemic version, as seems plausible for the reasons just given, then it is vulnerable to the recklessness objection. The charge of recklessness would be possible as soon as actors have

[40] Conventionalists might argue that if we can predict the outcome of the decision-making process, then this means that the relevant convention already exists. However, this argument obviously cannot be made while maintaining that legal *decisions* are necessary for conventions.

reason to suspect (1) that emissions will be regulated in the future and (2) that their emissions will fall afoul of the balancing of interests encoded in this regulation. Obviously, an actor who *knows* that their emissions will be deemed excessive but emits anyway does something morally questionable, but the point of stressing recklessness is that one can concede that actors typically cannot be certain about what future legal regulation has in store for them. Since recklessness merely requires that one took an unjustified risk, it is enough that the actor knew that it was probably or quite possibly emitting too many GHGs as defined by a legitimate balancing process.

Note that nothing I have said so far means that states *did* behave recklessly in relation to their future legal entitlements. I have merely sought to show that there is an interpretation of conventionalism under which the charge of recklessness becomes possible. States' actual liability for pre-legal emissions is addressed in the next section. Before that, however, we should also consider how the conventionalist version of LLP fares against the non-promotion objection.

B. The Non-Promotion Objection

The non-promotion objection, it will be recalled, states that actors may be liable insofar as they obstructed the emergence of legitimate legal regulation of the atmosphere. The conventionalist version of LLP is vulnerable to this objection since stressing the natural duty of justice is not the same as preempting the answer as to how emissions should be allocated.[41] The main appeal of the conventionalist version is that it questions the idea of holding actors responsible for emitting when what counts as too many emissions remains to be settled. But the duty to promote does not rely on, or invoke, justice in the distribution of emissions. All it says is that states must expend reasonable efforts trying to enact legitimate legal regulation of climate change. This does not presuppose a particular standard of climate justice.

[41] Note that conventionalism is compatible with recognizing the natural duty of justice, for as Pavel rightly notes, conventionalists need not say that all wrongs are conventionally wrong (*Ibid*., 343). If conventionalists accept the natural duty of justice, then this furnishes one way in which acts may be non-conventionally wrong.

As before, however, the question is whether the non-promotion objection can ground liability specifically for pre-legal emissions. In the previous section, I suggested that the answer is yes, provided that at least one of two conditions hold: that the emissions contributed to making the emergence of legitimate legal regulation less likely; or that the reason for obstructing was a desire to keep emitting. There is no reason to think that conventionalism about emissions entitlements changes this analysis. The conventionalist version of LLP is thus also vulnerable to the non-promotion objection. Indeed, it seems that the only way defenders of the conventionalist version could categorically reject the idea of liability for pre-legal emitting on grounds of obstruction would be by rejecting the natural duty of justice itself. But such a thoroughgoing brand of legal conventionalism would surely be too strong since it would entail that blocking desperately needed regulation cannot be wrong, at least not if the blocking is successful.

IV. WERE STATES LIABLE?

So far, I have argued that even if we grant LLP's assumptions, it is possible that states were liable for emissions they produced before legitimate legal regulation of the atmosphere emerged. This is enough to conclude that LLP is incorrect as a general proposition. It does not, however, show that LLP is mistaken when it claims that states should be exonerated for their pre-legal emitting. After all, it is possible that states' pre-legal emissions were neither reckless nor obstructive. If this is the case, then LLP might still succeed as an argument against basing international burden sharing on past emitting. Whether LLP succeeds in this sense in the topic of the present section.

I will keep this part of the argument brief for it is clear enough that many states did emit in reckless or obstructing ways in the pre-legal setting. Consider recklessness first. It is important to keep in mind that the general trend during the 1990s and much of the 2000s – the period when LLP applies at least according to Bou-Habib – was one of increasing emissions.[42] This is significant because while we might debate whether states had to reduce their emissions to act

[42] Boden et al., *Global, Regional, and National Fossil-Fuel CO2 Emissions.*

with sufficient precaution, it seems clear that increasing emissions from an already high level meant taking a significant risk of over-emitting. Whatever states' emissions duties were, it is unlikely that they gave high-emitting states room to increase emissions. States that were reasonably confident that they were emitting less than they were morally entitled to, such as low-income states, could however increase their emissions without acting recklessly.

Note that the charge of recklessness might apply even if we interpret, per the conventionalist version of LLP, legal conventions as constitutive of emissions duties. This is because the conventionalist position could, as noted above, be read as saying that actors ought to refrain from committing acts that will be deemed conventionally wrong in the future. On this interpretation of conventionalism, we could say that since states knew that legitimate international regulation of emissions would probably require them to limit their emissions, they acted recklessly insofar as they did not adjust their behavior accordingly ahead of time. A state like the United States, for example, must have known that its extensive emissions ran a substantial risk of exceeding the entitlements it would be accorded by a legitimate emissions treaty. Thus, it was (at the very least) reckless in pursuing the emissions path it did. A conventionalist might respond that insofar as states could predict that the future legal rules would not hold them retroactively liable for emitting, they technically speaking could not breach any legal entitlements in the pre-legal setting. But it is surely morally wrong to take the opportunity to emit extensively because one suspects that one will soon be called on to reduce emissions. This kind of legalism is not what is attractive about conventionalism.

Consider next the duty to promote. It is safe to say that there was no shortage of states that violated this duty either.[43] To be sure, the obstructive acts were sometimes direct, such as when states resisted or pulled out of treaties, but it also seems plausible that states hindered the emergence of legal regulation via their emissions behavior. Many high-emitting states adopted a 'you first' stance to mitigation and made late or insignificant emissions cuts, if they cut emissions at all. As Henry Shue has argued, if these states would instead have led the way by reducing emissions, then the prospects for international

[43] See Vanderheiden, *Atmospheric Justice*, ch. 1; Gardiner, *A Perfect Moral Storm*, 128–140.

cooperation and agreements would almost certainly have been better.[44] This makes their refusal to reduce emissions a failure to promote, at least if reducing emissions would not have been unreasonably burdensome.

An argument against this is that high-emitting states made the emergence of legal regulation *more* likely since, in worsening the climate problem, they made the need for legal regulation more pressing. But even if we grant the dubious premise that emitting more made legal regulation more likely, this hardly counts as discharging the duty to promote. After all, we would not say that burglars 'discharge' the duty to promote when they incentivize homeowners to set up a neighborhood watch. The criterion for living up to the duty must be moralized in some way, either in terms of the intentions of the agent or in terms of the means used. The possibility that high-emitting states were an impetus for climate action by virtue of making climate change worse would not show that these states discharged their duties to promote.

But what about the discretion that accompanies the duty to promote? I mentioned earlier that the duty to promote is indeterminate in the sense that it demands that actors expend reasonable effort trying to build institutions or enact rules but does not say exactly how. So, what is to say that states' emissions, while detrimental to the prospects of legal regulation, were not offset by other forms of advocacy? The response here is that it is hard to see what such offsetting would consist in when it comes to states. When we think about high-emissions behavior that is consistent with the duty to promote, we have in mind cases like the activist who flies across the world to inspire climate action. It is difficult to see what a state-based equivalent of this would have been. Rather than facing a choice between promoting effectively and reducing emissions, it is more likely that states could have further promoted emergence of legal regulation by curbing their emissions in addition to taking more direct forms of political advocacy. This makes their failure to do so a violation of the duty to promote.

The non-promotion objection admittedly raises questions about *which* regulation states had a duty to promote. Rawls spoke of 'just arrangements', but if we tie the duty to promote to a thickly mor-

[44] Shue, 'Face Reality? After You!'

alized standard like justice, then defenders of LLP will complain – perhaps rightly – that we should not hold states liable for failing to promote legal regulation the normative status of which was either epistemically inaccessible or nonexistent. The content of the duty can, however, be construed in a more modest way. For example, we could say that 'legitimate' legal regulation in this context just refers to legal rules that would help combat dangerous climate change without being strongly partial to some states. It is not clear that the 'promotion of what?'-question has much force against a standard as thin as this. And since some states failed to promote even according to this standard, they were clearly guilty of obstructionism. Hence, the duty to promote is able to ground pre-legal liability even if political disagreements between states were so profound that no state could be faulted for failing to promote any particular international treaty.

I conclude that many states were guilty of both recklessness and obstructionism in the pre-legal setting. This means that defenders of LLP should not oppose liability for pre-legal emitting in practice either. It is important to note, though, that if we take LLP seriously enough to ground pre-legal liability in these ways, then this complicates the role of past emissions for burden sharing. As noted in the introduction, a common idea in the climate ethics literature has been that the duty to take climate policy costs should be roughly proportionate to the number of emissions produced, at least when we are dealing with sufficiently affluent actors who knew or should have known about anthropogenic climate change.[45] This is not an idea we can retain if we rely on recklessness or obstructionism to ground liability, because neither factor allows for a straightforward connection between the number of emissions and liability. The duty to promote admits, for example, that two states are unequally liable even though they emitted the same, either because their emissions affected the prospects for legal regulation differently or because the two states were unequally guilty of obstructing in ways other than emitting. Indeed, this duty is compatible with the possibility that some major emitters bear no liability at all for their pre-legal emissions. This would be the case if their emissions were completely inconsequential for whether legitimate legal regulation came into

[45] See Roser and Seidel, *Climate Justice*, 118–129 (discussing the Polluter Pays Principle).

existence. The duty to promote also admits that minor emitters can be significantly liable insofar as an emissions reduction on their part would have been highly consequential. The duty not to be reckless, meanwhile, will distinguish between emitters based on whether they thought that their emissions were within their entitlements. This duty will make fine-grained distinctions between states depending on how flagrantly, if at all, their emissions amounted to taking a risk of over-emitting. All of this makes the relationship between emissions and liability more complex. We would need to assign liability following a careful investigation into how far various states offended against either duty through their pre-legal emissions. It is unlikely that such an investigation would yield something like the Polluter Pays Principle as it is commonly interpreted.

V. CONCLUSION

I have argued two things. First, even if one were to accept the assumptions that underpin LLP, this would not preclude that states were liable for their pre-legal emissions. These emissions might have posed an unjustified risk of over-emitting or hindered legal rules from being enacted, and it is plausible that states would be liable for producing such emissions. Second, some states did act in a reckless or obstructionist way in the pre-legal setting. The upshot is that there is nothing inherently morally problematic about holding states cost responsible for (some of their) pre-legal emissions. However, I also noted that if we rely on recklessness and obstruction to ground liability, then this further complicates the relationship between liability and the number of emissions.

The argument I have offered obviously permits holding states cost responsible for emissions according to a treaty that was not in force at the time of emitting. This might seem problematic considering that we tend to think of retroactive applications of law as unjust. Let me end, therefore, by offering some brief reflections on why retroactivity should not worry us in this context. A first thing to

note is that the ban on retroactivity is generally reserved for criminal law.[46] What we recoil at is the thought of *punishing* someone for conduct that was not criminal at the time of acting. When it comes to allocating climate policy costs, however, we are simply trying to allocate the burden of solving a common problem, and while this might be accompanied by moral criticism, it does not (or at least need not) express condemnation. This makes retroactivity less problematic, because it does not put actors in a position where they may be condemned as criminals despite acting within the bounds of law. In addition to this, the resistance to retroactivity itself might be questioned. The main reason retroactivity is seen as problematic is that it would be unfair to punish or otherwise disadvantage actors without giving them a reasonable chance to adjust their behavior first. But insisting on 'fair notice' does not necessarily vindicate a ban on retroactive applications of law, for if actors know that some conduct *will* become illegal and that the relevant laws *will* be retroactively applied, then they would have everything they need as far as an opportunity to avoid legal liability goes.[47] Such 'anticipated retroactivity' actually seems pertinent to the situation in which states found themselves regarding climate change. Since states were aware that emissions could well be relevant for how a future climate treaty would allocate cost, a later decision to allocate costs in this way would not come out of the blue. Taken together, these considerations suggest that retroactive legal liability for emitting is not unjust, or at least that LLP cannot draw support from our usual resistance to retroactive criminal law.

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[46] See Paul Robinson, 'Fair Notice and Fair Adjudication: Two Kinds of Legality', *University of Pennsylvania Law Review* 154 [2005]: 335–398. Retroactivity is more common in civil law than in criminal law. For discussion, see Bernard Bell, 'In Defense of Retroactive Laws', *Texas Law Review* 78 (1999): 235–268; Evan Zoldan, 'The Civil Ex Post Facto Clause', *Wisconsin Law Review* 4 (2015): 727–784; and Daniel Farber, 'How Legal Systems Deal with Issues of Responsibility for Past Harmful Behavior', in Lukas H. Meyer and Pranay Sanklecha (eds.) *Climate Justice and Historical Emissions* (Cambridge University Press, 2017), 80–106.

[47] For a critical discussion about the importance of notice, see Douglas Husak, *Ignorance of Law* (Oxford University Press, 2016). See also Peter Westen, 'Two Rules of Legality in Criminal Law', *Law and Philosophy*, 26 (2007): 229–305 (arguing that norms against retroactivity is usefully thought through via the *mens rea* requirement).

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