



Climate Change and Lessons from the Abolition of Slavery

Rob Lawlor & Nathan Wood

To cite this article: Rob Lawlor & Nathan Wood (17 Oct 2025): Climate Change and Lessons from the Abolition of Slavery, Ethics, Policy & Environment, DOI: [10.1080/21550085.2025.2574218](https://doi.org/10.1080/21550085.2025.2574218)

To link to this article: <https://doi.org/10.1080/21550085.2025.2574218>



© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 17 Oct 2025.



Submit your article to this journal [↗](#)



Article views: 15



View related articles [↗](#)



View Crossmark data [↗](#)

Climate Change and Lessons from the Abolition of Slavery

Rob Lawlor ^a and Nathan Wood ^{a,b}

^aThe Ethics Centre, University of Leeds, Leeds, UK; ^bCleaner Production Promotion Unit, School of Engineering and Architecture, University College Cork, Cork, Ireland

ABSTRACT

A number of authors have made a comparison between the abolition of slavery and action to combat climate change. Most authors, however, make similar claims, suggesting that progress on climate change will require a transformation in moral perception. Although this is an important lesson, we will argue that it is not the most interesting or important lesson. Ultimately, we end with a cautiously optimistic conclusion, suggesting that we may be closer than we think to significant action on climate change. Less optimistically, however, the evidence suggests that any solution is likely to involve unpalatable compromise and/or unpalatable confrontation.

ARTICLE HISTORY

Received 8 August 2023
Accepted 3 October 2025

KEYWORDS

Economic sanctions; feasibility; International Paretianism; international law; extortion; compensation

1. Introduction

In *This Changes Everything*, Naomi Klein quotes the following, from the historian David Brion Davis:

The abolition of New World slavery depended in large measure on a major transformation in moral perception – on the emergence of writers, speakers, and reformers. . . who were willing to *condemn* an institution that had been sanctioned for thousands of years and who also strove to make human society something more than an endless contest of greed and power. (Davis, 2006, p. 1. Emphasis added) Quoted in (Klein, 2015, p. 463)

And Klein is not alone in making a comparison between the abolition of slavery and attempts to mitigate climate change: the comparison has been made many times.¹ Most authors, however, only briefly make the comparison, emphasizing that the abolition of slavery was ethically motivated and/or required a transformation in moral perception.² In this paper, we will argue that there are many more points that should be highlighted in relation to climate change, when considering the history of the abolition of slavery.

In This Paper, We Highlight the Following Key Lessons, in the Following Sections:

2. At the National Level, Slavery was Not Simply Banned

2.1 In America, it took a civil war

2.2 In Britain (and most countries other than America) compensation had to be offered to the slave owners for the abolition of slavery to be politically viable.

CONTACT Rob Lawlor  r.s.lawlor@leeds.ac.uk  The Ethics Centre, University of Leeds LS2 9JT, UK

© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

3. At the international level, there was no international treaty. Rather, some countries took the lead, and pressured others into following their example.

4. Additional key factors:

4.1 The transformation of moral perception involved the rejection of arguments which appealed to free market ideology.

4.2 Logical argument and consistency played a crucial role.

4.3 Closely linked to the previous section, the law also played a crucial role leading to the abolition of slavery.

5. Finally, drawing on the lessons above, and relating them to climate change, we will argue that we actually do not know how close we are to taking significant action on climate change – and we may be closer than we think. But this may involve unpalatable compromise and/or unpalatable confrontation.

2. The National Level

The first lesson that we will emphasize is that, at the national level, the abolition of slavery was not straightforward, and it came at a significant cost. In America, it took a civil war and in Britain (and elsewhere) it required compensation to the slave owners.

2.1. *The American Civil War*

There is a common view that the American civil war was not a war about slavery. David Brion Davis rejects this interpretation of history, and talks about the ‘revolutionary meaning’ of the Civil War, stating that

Few wars in human history have led to such a radical outcome as the liberation of some four million slaves – which meant the confiscation without compensation, which had been paid in some form in most slave emancipations, of a hitherto legally accepted form of property. (Davis, 2006, p. 298)

Acknowledging the opposing interpretations, he also emphasizes that it was ‘a revolutionary message that the South and then the nation would long struggle to suppress’ (Davis, 2006, p. 298).³

And, in response to the claim that the war was not a war about slavery, Davis quotes President Lincoln commenting that the Thirteenth Amendment, which abolished slavery, ‘rooted out “the original disturbing cause” of the great rebellion and civil war,’ and Davis refers to this evidence as ‘a definitive response to all those who later insisted that slavery was not the cause or major issue of the Civil War’ (Davis, 2006, p. 322)

Although he doesn’t mention climate change in particular, Davis does emphasize the significance of this misremembering of history for contemporary ethical issues and movements for social change, stating:

Since there has unfortunately been little continuity in American movements for reform – due in part to a long national tradition of forgetting history, of ‘present-mindedness’ – it is crucially important to remind ourselves that some struggles for greater fairness and justice have succeeded; they are part of our past and thus open possibilities in our future. (Davis, 2006, p. 322)

The optimistic lesson to take from this is that struggle for change, and for justice, can succeed. The pessimistic note, however, is that it took a civil war to achieve this change.

We will return to the topic of military conflicts in [section 3](#), focusing on the international context, but first, in the hope that civil wars will not be required to make progress on climate change, we will focus on the history of the abolition of slavery in Britain.

2.2. *Compensation to British Slave Owners*

While Britain did avoid a civil war, that isn't to say that the abolition of slavery in Britain was ideal or unblemished. In Britain, there was compromise rather than conflict, and compensation was paid to the slave owners. Nicholas Draper states that 'The payment of compensation was central to the final dismantling of the slave system' (Draper, [2013](#), p. 4) and Davis emphasizes that compensation 'had been paid in some form in most slave emancipations'⁴ (Davis, [2006](#), p. 298). Focusing on Britain, Catherine Hall states:

£20 m (equivalent to 40% of state expenditure in 1834) was paid in compensation by the British government to the slave owners to secure their agreement to the loss of 'their' property – despite the fact that the moral basis of the campaign against slavery was that it was wrong to hold property in people. (Hall, [2013](#))

Naturally, many people will focus on the injustice of paying compensation to the slave *owners* rather than to the slaves. We will come to this. First though, we must emphasize the figure: 40% of state expenditure! This cost was so substantial that it incurred a debt which, according to HM Treasury, wasn't paid off until 2015' (Olusoga, [2018](#)).

Here, we should acknowledge David Olusoga's concern that there is a temptation to focus on, and memorialize, a few abolitionists (Olusoga, [2023](#)). We recognize this danger, and we hope to avoid it. Indeed, our intention is to explicitly present this history as one which involved morally problematic compromise. At the same time, our aim is to consider what did actually lead to the abolition of slavery. And, just as Davis argues – in relation to the American Civil War – that it is 'crucially important to remind ourselves that some struggles for greater fairness and justice have succeeded,' we should also recognize the fact that Britain was willing to incur a significant cost, spending a huge portion of state expenditure, in an effort to achieve a moral goal. (And Britain was not alone in this, as Davis and Draper emphasized.) As we will see in [section 3.2](#), this is important to highlight in response to authors like Posner and Weisbach who argue that countries only act out of self-interest and do not make significant sacrifices for the sake of others. Clearly, the payment of compensation to the slave owners is controversial, to say the least, but there may still be lessons to learn from this aspect of the history of the abolition of slavery.

Hans Joachim Schellnhuber argues that the fossil fuel industry must implode (Carrington, [2015](#)) and Daniel Aldana Cohen states that

The [2018] IPCC report makes it clear that if we make the political choice of bankrupting the fossil-fuel industry and sharing the burden of transition fairly, most humans can live in a world better than the one we have now. (Cohen, [2018](#))⁵

But how likely is it that governments will be willing to make decisions that will effectively bankrupt the fossil fuel industry? To judge this, we need some context.

The interests of fossil fuel related industries have, to varying extents, become intertwined with the interests of individuals and groups which form governments through a number of means. Fossil fuel interests have actively lobbied at national, regional and global levels to protect their interests (Newell & Paterson, 1998). These lobbies have been successful in proliferating their positions, so much to that governments and even international conventions (such as the UNFCCC) have incorporated their positions (Newell & Paterson, 1998). This process has been significantly aided through the use of political donations and significant expenditure on lobbying. From 2000 to 2016 over \$2 billion was spent on climate related lobbying activity within the US congress, with the largest contributors coming from the fossil fuel, transportation and utilities sectors (Brulle, 2018).⁶ Brulle found expenditure on lobbying had a relationship to the introduction and probability of passage of climate legislation.

The impact of such lobbying has been amplified by individuals who moved between government, industries and special interest groups via the 'revolving door.' The revolving door describes scenarios where individuals who hold public offices transfer to the private organizations within the same sector, and vice versa. The Greens/European Free Alliance's report, *Revolving Doors and the Fossil Fuel Industry* found 88 cases of revolving doors involving the fossil industry within 13 European countries (Huter et al., 2018). Describing the effects of this dynamic, they wrote:

lines are blurred between political and economic power when the same people that one day are regulators become high-paid employees of major corporations the next. Policy advisors, State Secretaries and politicians find themselves sought after by organisations who wish to use their contacts, knowledge and strategic insights in order to increase their own reach, influence and sometimes, profits. (Huter et al., 2018)

When the interests of private organizations and public offices conflate through the repeated movement of individuals between them, public offices can fail to take action on issues which conflict with the interests of private organizations.

Government action on climate change is further hindered by the potential responses of private organizations who often own and provide investment in energy infrastructure and who governments often rely on for outside investment into new energy projects. Industry groups and companies often threaten non-co-operation or relocation in preemptive responses to climate policy which may impact their interests (Newell & Paterson, 1998). For example, in the face of having their lobbying licenses removed by the European Parliament over misleading EU decision makers, ExxonMobil and oil association FuelsEurope, threatened to curb investment in the EU's upcoming energy transition (Corporate Europe Observatory and Food and Water Europe, 2019).

If this is the reality of the political landscape, it is tempting to think that any serious attempt to make progress on climate change may require the government to sweeten the pill for the large corporations that would be affected by regulations.

This clearly leads to a thought that many will find unpalatable. Nevertheless, evidence (from the history of slavery) suggests that this option ought to be taken seriously regardless. Just as the governments paid compensation to the slave owners, in order to 'secure their agreement' and therefore to make the abolition politically viable, we need to take seriously the possibility that, alongside the introduction of legislation to cut greenhouse gas (GHG) emissions radically, countries might need to

pay compensation for lost profits to the companies responsible for the majority of emissions.⁷ A similar idea would be for governments ‘to buy a controlling stake in the fossil fuel companies,’ nationalizing the fossil fuel companies (Jones, 2019). To many, this approach may not sound as unpalatable as the simple idea of offering compensation. However, if we assume that the aim would be to keep the fossil fuels in the ground, we must recognize that nations would be buying the companies primarily to block further business. And, if we ask why they would do this, rather than simply introducing legislature that would impose serious limits on the fossil fuel industry, the most natural answer seems to be that purchasing a controlling stake of fossil fuel companies would effectively pay compensation to the those who currently control them, potentially securing their agreement.

To be clear, however, we should emphasize that the claim is not that the fossil fuel companies are *entitled* to compensation.⁸ Rather, the claim is simply that offering compensation may be justifiable if this is necessary to achieve the goal. Nevertheless, there are some important ethical issues to consider, and to clarify, here.⁹

2.2.1. *Climate Mitigation and Extortion*

Stephen Gardiner, has discussed extortion in detail, in the context of international agreements and treaties,¹⁰ and particularly in relation to economic realists, such as Eric Posner and David Weisbach, who defend International Paretianism, the principle that all nations should benefit from a climate treaty – or, at least, not made worse off. Gardiner argues that, if richer countries refuse to sign treaties, unless there is something in it for them, this ‘appears to endorse extortion’ (Gardiner, 2016, pp. 88–96) (Gardiner, 2017). However, there is a crucial difference between the governments paying compensation to the slave owners (or to fossil fuel companies), and the case that Gardiner considers, in which rich countries demand compensation from poorer countries. Here the crucial difference concerns the role of the government, and the relation between the government and its citizens, and the way that citizens may be implicated in the wrongdoing of the state.

In the case of rich countries demanding payment from the poorer countries, the rich country is the wrongdoer. This state is the perpetrator of the extortion, and the poorer country is the victim. And if the citizens of the richer country support the government in refusing to act on climate change unless they will benefit, these citizens are complicit in the wrongdoing. Gardiner emphasizes the importance of this, emphasizing that most people do not want to see themselves as extortionists, and would not therefore want their governments to commit extortion in their name. Therefore, where we see extortion, we should highlight it, and call it what it is.

In the slavery case, however, the situation is quite different. In this case, it is the slave owners who are the extortionists. The government, on the other hand, is the one acceding to the extortion. As you might expect, however, there is a complication, as many MPs would have owned slaves, or otherwise have close links to those who owned slaves (Hall et al., 2016, pp. 288–297) (Draper, 2013, pp. 279–302). If we focus on the wider public, however, and focus on *their* support for the compensation payments, then support for the compensation looks commendable. One could even argue that it would have been irresponsible, and therefore wrong, to refuse to accede to the demands. This might be the case if the abolition of slavery would not have been possible otherwise, or if the abolition of slavery would otherwise have required a civil war.

Similarly, therefore, if a government decided to pay compensation to fossil fuel companies in order to secure their agreement, then it looks like the fossil fuel companies would be the extortionists, rather than the government. And if we consider the issue in relation to taxpaying citizens, we should not say that the citizen is complicit in extortion.¹¹ Rather, (if there were no better alternatives) we should commend the citizens for being willing to support their government in making a significant financial sacrifice in order to achieve a moral aim. As Gardiner emphasizes: ‘acceding to extortion is sometimes the best option. (It costs you the ransom, but at least you get your daughter back.)’ (Gardiner, 2016, p. 91)

2.2.2. *The General Public and the Slaves Themselves*

Despite acknowledging the fact that some MPs were slave owners, more needs to be said here to draw a clearer distinction between the government (and the MPs) and the general public, and perhaps also, more generally, to draw a distinction between the wealthy elite and the majority of the public. And we also need to ask *why* governments supported compensation, rather than confiscation without payment on the one hand, or the rejection of abolitionism on the other hand.

In Britain, the country was largely divided on slavery. Hall et al state that

It has been known since Draper’s *The Price of Emancipation* (2010) that between 5 and 10% of the British elites ... appeared in the slave compensation records in the 1830s ... (Hall et al., 2016, p. 22)

More generally, ‘15 to 20% of the British rich were directly entwined in the slave-economy’ (Hall et al., 2016, p. 251), and ‘many of those not dependent on slavery for their wealth will have had family connections with those who did so depend’ (Hall et al., 2016, p. 251). Ultimately they conclude, *for the elites*, there were ‘few areas of British life’ with ‘no connections to slave-ownership’ (Hall et al., 2016, p. 251).¹²

In contrast, the general public were opposed to slavery. Draper emphasizes that (approaching the emancipation) there was ‘extraordinary public support’ for the abolitionists (Draper, 2013, p. 3), and Brown went even further, stating that ‘If the question could have been decided by public opinion, the slave trade would have been abolished at once’ (Brown, 2006, p. 23). Indeed, the public opposition to slavery was significant enough that a key question that Draper considers is: ‘how did [the slave owners] represent themselves ... in a society increasingly hostile to slavery?’ (Draper, 2013, p. 2)¹³

Clearly this was a key element, leading to the approach that was taken in Britain, with the abolition of slavery being driven largely by the public opposition to slavery and also by rebellions and resistance from the slaves themselves, while the demand for compensation came primarily from the powerful elite (Draper, 2013, pp. 3, 15) (Brown, 2006, p. 23; Hall et al., 2016, p. 22). Draper emphasizes the extent to which the interests of the elite were not only in conflict with the enslaved, but were also in conflict with the interests of the general public: ‘A section of the British elite ... utilised its political influence for more than two centuries to defend its interests’ not only ‘at the expense of the enslaved’ but also ‘at the expense of the mass of the British people’ (Draper, 2013, p. 15). In relation to the compensation in particular, the general public are ultimately the ones paying.

Similarly, it is important to note that, in addition to the writers and speakers highlighted in the Davis quote at the very beginning of this paper, the support for

the abolition of slavery also took the form of action, as well as words. A notable example is the British boycott of goods produced by slaves, such as sugar and rum (Midgley, 1996). (Abolition Project, n.d.) And Davis states that ‘in 1833 Parliament [in Britain] received more than five thousand antislavery petitions ... including a monstrous half-mile-long petition, sewn and pasted together by a team including Buxton’s¹⁴ daughter Priscilla, and signed by 350,000 women’ (Davis, 2006, p. 238). And, of course, we should not ignore the actions of the slaves themselves. Draper, for example, credits the downfall of the system of slavery to ‘the combined effect of resistance by the enslaved and popular political activity by the abolitionists’ (Draper, 2013, p. 15).

Brown writes:

The antislavery movement, we now know, involved far more than the small circle of propagandists and elite politicians whom the first chronicles tended to lionize. Resistance by the enslaved, themselves, helped put the legality of slaveholding on trial in the English and Scottish courts in the 1760s and 1770s and helped diminish sympathy for Caribbean slave-owners, thereafter, especially following slave trade abolition in 1807. (Brown, 2006, p. 21)¹⁵

Of course, we could argue about the relative importance of each of these different actors and activities, but it is not likely that we would be able to untangle these in order to rank each activity by importance and effectiveness. We suggest that it is more important, and more practical, to take a more general lesson from the points emphasized in this section: ‘The success of the British antislavery movement depended on a [wide]¹⁶ variety of actors’ (Brown, 2006, p. 22).

In relation to climate change, we should be aiming to emulate this wide variety of actions by a variety of actors. We need writers (and now broadcasters) to challenge the status quo, to challenge people’s views on consumerism, energy use and policy choices and to raise awareness about climate change. We need people to march, to block traffic, and to petition parliament. We need to support the divestment movement. We need to support students striking to protest against government inaction on climate change. And, where feasible, the countries that are least responsible for, and most at risk from, climate change should challenge the injustice. And the rest of us should support these countries, and refuse to accept the logic that our governments should put our own interests first, at the expense of these countries (see 3.2). And, more generally, we need the general public to make it clear to politicians that the public supports action to mitigate climate change and opposes injustice (even if it might be willing to be conciliatory occasionally, and to make compromises, if necessary). And, as we will argue in [sections 4 and 5](#), we need people to take (adversarial) legal action, and to provide financial support to those pursuing legal action.

3. There was No International Agreement, or Treaty, to Abolish Slavery

When considering climate change mitigation from an international perspective, much of the focus is on international treaties, and the various attempts of governments from different nations to *agree* on a course of action and to then co-operate in carrying out that course of action. And, from ethicists and political philosophers, there is significant debate

about what a fair distribution of burdens would look like. This is natural, of course, and these are clearly relevant issues.

However, if a global effort to reduce carbon emissions across the planet will require unprecedented social and economic change (IPCC, 2018), it is worth looking back at what is arguably the most significant social and economic change in history so far – the abolition of slavery – to consider how it was achieved – and also to emphasize how it was *not* achieved.

In particular, the abolition of slavery was *not* the result of a negotiated treaty, entered into voluntarily by the various nations. On the contrary, some countries took the lead, and others then followed their example. Except, to a large extent, it may be more accurate to say that other countries were *made* to follow. Davis writes:

After outlawing its own gigantic slave trade in 1808 (the same year in which the United States took similar action), Britain adopted a long-range policy of pressuring and bribing other maritime powers, even at the cost of millions of pounds, to say nothing of decades of diplomacy and the expansion of anti-slave-trade naval patrols, with the goal of stopping the flow of African slaves into both the Atlantic and Indian Oceans. (Davis, 2006, p. 13)

Davis talks of ‘pressuring,’ ‘bribery’ and ‘naval patrols.’ This is clearly a long way from the idea of representatives sitting round a table and simply agreeing on a fair distribution of burdens, hoping to agree a way forward. Of course, even if authors discussing climate change focus on the negotiation of treaties, this needn’t suggest that there is no acknowledgment of the imbalance of power and the influence this may have on negotiations. As discussed in [section 2.2](#), if we appeal to pragmatic considerations to ensure that rich and powerful nations have an incentive to co-operate, this begins to look like extortion, rather than climate justice. Nevertheless, even if they acknowledge the power relations and the non-ideal realities of actual international politics, this is still a long way from military action and naval patrols. The historian Mary Wills states:

In 1807, the Abolition of the Slave Trade Act was passed by British parliament, which declared illegal Britain’s role in the enforced transportation of African people, to be sold as slaves in the Americas. A squadron of Royal Navy vessels was sent to the West African coast to enforce this legislation and, over the next 60 years, pursued a number of state endorsed methods to suppress the slave trade. (Wills, 2015)

Wills emphasizes that ‘the British slave trade remained economically viable at the time of its abolition’ and that ‘Britain therefore made an economic sacrifice which was to a large extent the result of a moral aversion to the slave trade’ (Wills, 2015).¹⁷

In addition, Wills also emphasizes that there was no international agreement to abolish the slave trade. She states that, although Denmark and the USA abolished their slave trade at a similar time, France, Portugal and Spain were less willing. ‘British efforts, therefore, turned to targeting the slave trades of these nations’ (Wills, 2015). This involved the ‘stop and search’ of suspected slave ships of other nations, and Wills referred to ‘gunboat diplomacy,’ emphasizing that Britain became ‘increasingly aggressive’ and ‘increasingly interventionist.’ (See (Wills, 2015) for more details.)

Although she states that ‘the Atlantic slave trade was by and large at an end by the 1860s’ (Wills, 2015), Wills does acknowledge that there is debate about how successful the naval patrols were, and whether they played a significant part in abolishing slavery. In addition, there were (and remain) questions about the legality, and the

morality, of these military interventions, even if they were motivated by moral concerns. And, of course, even if we conclude that these military interventions were justified, it would not immediately follow that military interventions to force other countries to reduce their emissions would also be justified. Much more argument would be needed to justify that conclusion. And it is not our aim to provide (or to reject) those arguments here. Rather, our aims are 1) to emphasize that it may be over optimistic to think that nations will simply come to an agreement, and 2) to argue that there is a strong argument in favor of the claim that there needs to be more focus on the ethical implications that follow.

3.1. What Can States Do?

What methods can and should countries use to put pressure on other countries to reduce their emissions? Above, we emphasized the naval patrols, but Wills also highlights the use of ‘inducements and bribes,’ and in the modern context, another strategy that is worthy of further discussion is economic sanctions. Again, our aim in this paper is not to argue for or against economic sanctions, but to argue that it is plausible to think that methods such as economic sanctions could be used by some countries against others in order to pressure countries into co-operating. (See (Ellis, n.d.) on the ethics of economic sanctions.) In addition, economic sanctions – and other approaches that may involve some degree of coercion – would need to be considered in the context of international law. As such, we also need to consider international law, not only in terms of the law, as it is now, but also in terms of how it might develop in the future. As such, there ought to be more discussion about the ethics, and feasibility, of options other than ideal treaties signed by cooperating countries.

A good example of this sort of work is Catriona McKinnon’s ‘Endangering humanity: an international crime?’ (McKinnon, 2017) When I (Lawlor) have used this paper in teaching, students have typically been skeptical, particularly contrasting international law with standard domestic law, arguing that an international law against endangering humanity would be unenforceable. Clearly, international law has complications that differ from domestic law, but it doesn’t seem plausible to suggest that these complications render international law entirely useless. On the contrary, international law can play an important role, particularly when states attempt to justify actions (e.g. military action and/or economic sanctions) that would otherwise be hard to justify, but which might be justifiable when those actions are recognized to be a legitimate response to violations of international law.

Commenting on the US Senate voting for the Byrd-Hagel Resolution, ruling that the US should not sign the Kyoto protocol, former Vice President Al Gore stated, ‘I think it is the moral equivalent of a war crime. I think it is in many ways the most serious crime of the post-world war two era. The consequences of what they have done are almost unimaginable.’¹⁸ (‘Big Oil v the World, Episode 1, Denial,’ 2022) (Jeffries, 2022)

With this in mind, it is worth considering whether certain actions should be *legally* recognized as violations of international law (as war crimes are) and not just considered *morally* equivalent to war crimes. This is what makes McKinnon’s paper important.

3.2. Feasibility and Ethics

At this point, it is worth revisiting questions relating to feasibility and ethics.

As we saw earlier, Posner and Weisbach defend International Paretianism, arguing that nations will need to be won over by self-interested (rather than moral) considerations, meaning that treaties will have to be made attractive to all nations, including those who are the most responsible for, and the least vulnerable to, climate change. Gardiner argues that this would entail a “‘polluted pays” (and also “polluters get paid”) policy’ (Gardiner, 2016).

To clarify their position, Posner and Weisbach insist that International Paretianism is not ‘an ethical principle but a pragmatic constraint,’ asserting that,

in the state system, treaties are not possible unless they have the consent of all states, and states only enter treaties that serve their interests. (Posner & Weisbach, 2010, p. 6)

And in support of their position, Posner and Weisbach insist that

history supplies very *few* cases where states act against their own perceived interests in order to satisfy the moral claims of other states . . . states *usually* define their interests in terms of the well-being of their populations. (Posner & Weisbach, 2010, p. 6 - our italics)

But here it is worth emphasizing that the world view of economists may in fact contribute to the problem, rather than just *reflecting* the harsh realities of the world. This conclusion seems to be supported by Frank, Gilovich and Regan in their paper, ‘Does Studying Economics Inhibit Cooperation?’ They write:

In an ever more interdependent world, social cooperation has become increasingly important—and yet increasingly fragile. With an eye toward both the social good and the well-being of their own students, economists may wish to stress a broader view of human motivation in their teaching. (Frank et al., 1993, pp. 170–171)

Perhaps more importantly, we should emphasize that ‘few’ and ‘usually’ imply that even Posner and Weisbach acknowledge that there are exceptions. The evidence presented thus far suggests that the abolition of slavery was one such exception. Some nations may have been coerced into abolishing slavery, but the fact that Britain made a decision to abolish the slave trade and to suppress the slave trade elsewhere, at significant economic cost, demonstrates that powerful countries are not always motivated solely by narrow self-interest. In democracies, states at least sometimes give weight to the wishes of the public. Matt Karp claims that, in America, the overthrow of slavery was ‘won in the field of democratic mass politics’ (Karp, 2019), and we have already seen that, in Britain, there was ‘extraordinary public support’ for the abolitionists (Draper, 2013, p. 3).¹⁹

Wills emphasized that historians consider the British suppression of the slave trade ‘costly moral action,’ and states that the ‘naval suppression of the slave trade can be regarded as an early example of military humanitarianism – that is coercion based on morally justified arguments of social and moral progress’ and ‘at all times involved ideological pressure’ (Wills, 2015).²⁰

Likewise, it seems unlikely that a civil war was in America’s self-interest, and as we have seen, Davis characterizes the American Civil War as a ‘revolutionary’ war, that led to ‘the liberation of some four million slaves.’ And, ending her talk with a direct comparison with climate change, Wills cites Davis concluding that the abolition of the slave trade ‘was

a willed achievement that inspires confidence in other movements for social change' (Wills, 2015). (Also see (Davis, 2006, p. 331).)

Reflecting on the implications for the topic of climate change, the lesson we should learn from history should *not* be that states only act in self-interested ways, and that any treaty must therefore provide benefits for all. Rather, recognizing that we only need one counter-example to reject the claim that International Paretianism is *necessary* for a policy to be feasible, one important lesson we should learn from the history of the abolition of slavery is that states – like individuals – *can* have motives other than self-interest. Therefore, policies *can* be feasible without satisfying International Paretianism.²¹ And, if there can be exceptions, it is noteworthy that climate change is an exceptional case.

Another lesson we can learn from history is that the general public *do* care about justice, and this can then impact on state policies. This is an important conclusion if Gardiner is right that insisting on International Paretianism would ultimately result in extortion, and that many individuals will not want to be complicit in extortion.

It is also worth exploring further the implications of a focus on feasibility.

International Paretianism is neither necessary nor sufficient for a policy to be feasible. A lot depends on context, and power dynamics in particular.²² In numerous ways, therefore, feasibility needn't recommend International Paretianism. As in the case of slavery, citizens may have moral objections, such that they may not want the state to act in purely in self-interested ways if this would be unethical and/or amount to extortion (and/or involve violations of international law). In other cases, some states might use force (or the threat of force) to get other states to comply, rather than offering special inducements. As in the abolition of slavery, we might think it is an open question which is the lesser evil: paying compensation to the worst polluters (as in the polluter gets paid principle) or conflict (and bloodshed).

However, military action need not be the only alternative to incentives. For example, other options, like economic sanctions, could be considered. And, even where military action is considered, conflict needn't be at the level of all out war. As in the case of slavery, military action could involve naval patrols, for example blocking the transportation of gas, oil, petrol and coal etc.

3.3. Feasibility and International Law

This also highlights, again, the significance of international law. If we are going to take feasibility seriously, and if we accept that self-interest will be a significant influence (even if not the only consideration), the self-interested calculations of the various states should not be unconstrained. The self-interested calculations should take place within the constraint of acceptable options, excluding those which are clearly unjust.

Despite its limitations, international law seems to be the most likely candidate to provide these constraints. But there is no reason to think that we should have to rely on the law, as it stands. The law is never final. It is always being refined and updated, to ensure it is fit for purpose.

Stephen Gardiner introduces the idea of a global test, which he presents in the context of discussing the 'theoretical storm'.²³

The theoretical storm is 'constituted by our current theoretical ineptitude' (Gardiner, 2011, p. 41). Gardiner claims that 'Theoretically, we are currently "inept," in the (nonpejorative) sense of lacking the skills and basic competence for the task' (Gardiner, 2011, p. 41). Gardiner emphasizes the fact that the *theoretical* storm is part of the perfect moral storm by appealing to what he calls the global test.

Suppose that human life on this planet were subject to some serious threat. Moreover, suppose that that this threat was both caused by human activities, but also preventable by those activities. Add to this that the existing social and political systems had allowed the threat to emerge, and then shown themselves to be incapable of adequately responding to it. (Gardiner, 2011, p. 217)²⁴

Gardiner then suggests that we ask two questions:

Would such failure license a criticism of the existing social and political systems? If so, how serious a criticism would this be? (Gardiner, 2011, p. 217)

Clearly, Gardiner believes that the answer to the first question is, yes – as do we. While we are not suggesting that it is the only thing that is lacking, current international law does seem to be one social and political system which is not doing what we need it to do, to avoid catastrophic climate change, precisely because it is not providing sufficient constraints on the self-interested calculations of states. Given the extent to which unconstrained GHG emissions can harm the interests of other nations, and their citizens, and even threaten the *existence* of some nations, it would be hard to argue that strengthening international law to protect nations (and people) from these harms would not be justified. McKinnon's suggestion to recognize endangering humanity as an international crime is one plausible option, but not the only one. And, as argued before, the recognition that a state is violating international law would then be an important consideration if other states were to explore the options available to *persuade* this state to reduce emissions. And, if it came to it, the appeal to international law would be an important element of any attempts to justify coercive actions involving economic sanctions, or even some form of military action, such as – for example – naval patrols to block the transportation of petrol, liquified natural gas and coal etc. Using military force to block shipments of coal from one nation to another in a context in which there is no prohibition against the trading, shipping or use of coal looks very different from the same actions in a context that includes international law prohibiting (or regulating and limiting) the shipments of petrol, gas and coal etc.

4. Key Factors

Sections 2 and 3 focused on the national and international respectively. This section will now focus on elements that can be considered relevant to either or both of these contexts. And, in the latter parts of section 2, we emphasized the importance of a wide variety of actors and actions. In this section, we build on that point to highlight additional parallels and lessons.

4.1. Free Market

In *23 Things They Don't Tell You About Capitalism*, Ha-Joon Chang argues that 'there is no such thing as a free market.' He highlights the fact that every developed nation in the world (including the champions of free trade) have regulated markets, with health and safety regulations, environmental regulations, and so on. He states, 'A market looks free only because we so unconditionally accept its underlying restrictions that we fail to see them' (Chang, 2011, p. 1). When new environmental regulations are proposed, there will be those who oppose them insisting that they should be rejected because they are not compatible with a free market. And because these new regulations have been proposed, and are being debated, we see them clearly. And, depending on our views, we may oppose them if they conflict with free market ideology. But existing regulations are in the background, out of sight, and taken for granted – and we rely on them without recognizing the extent to which we rely on them and *accept* them, and we accept them without recognizing the extent to which they conflict with free market ideology.

As an example, Chang discusses the 1819 act to ban the use of young children in cotton factories. To be clear, this only applied to children under the age of nine. Those between 10 and 16 could still work in the factories – though they would be restricted to 12 hours a day. And the 'new rules applied only to cotton factories, which were recognised to be exceptionally hazardous to workers' health' (Chang, 2011, p. 2). Of course, no one today believes that the 1819 act undermines the free market. But, at the time: 'Opponents saw it as undermining the sanctity of the freedom of contract and thus destroying the very foundations of the free market' (Chang, 2011, p. 2).

However, as bizarre as it may seem today, Chang could have given slavery as an example.²⁵ Davis emphasizes that many of those who defended slavery and who opposed the abolition of slavery appealed to free market ideology:

...any radical attack on slavery challenged the basic American premise that any institution is justified and in harmony with natural law if it is the result of a free market and the free competition of individual self-interest. (Davis, 2006, p. 262)

Of course, the slaves were not free, and this flaw in this argument is so obvious that it is difficult to comprehend that people really did appeal to free market ideology to oppose the abolition of slavery. But we suggest that historians of the future will look back at the current situation, and find it similarly difficult to believe that people appealed to the importance of free market ideology to oppose regulations and policies which are intended to combat climate change, and thus to *protect people from harm*: an appeal to the importance of a free market in this context demonstrates a blindness that is comparable to the blindness of those who failed to recognize the obvious fact that the slaves' lack of freedom undermined the claim that slavery could be defended by appealing to free market ideology. Obviously, authors like Naomi Klein already emphasize the need to challenge neoliberalism and free market ideology in the context of combatting climate change (Klein, 2015). Emphasizing the parallel with slavery and free market ideology, however, is a significant addition to that argument, highlighting the absurdity and the moral blindness of those who appeal to the importance of the free market to oppose effective action to combat climate change.²⁶

4.2. Logical Argument and Consistency

An attempt to change moral perception can take many forms. For example, one could appeal to emotion and intuition.²⁷ Here though, we will highlight the role and importance of logical argument and consistency (which will also lead into the discussion of the law in the remaining sections of this paper). For the abolitionists, and the slaves themselves, *consistency* was a powerful weapon.

Discussing the case of La Amistad, Davis claims that

The central issue, for key leaders like Lewis Tappan, the wealthy silk merchant who with his brother, Arthur, largely financed the American Anti-Slavery Society, was the *glaring discrepancy* between American positive law – that is, the explicitly enacted statutes that recognized slaves as legitimate private property – and the fundamental doctrine of natural rights embodied in the declaration of Independence (Davis, 2006, p. 16 Emphasis added).

Similarly, Davis states that slaves in the northern states appealed to the ‘same natural-rights language that the whites employed against so-called British tyranny. It was this contradiction that helped the reformers to pass laws for very gradual slave emancipation ...’ (Davis, 2006, p. 7)

Similarly, discussing the situation in Britain, Draper’s book *The Price of Emancipation*, includes a section called ‘The *contradictions* of the ameliorationist British slave-owner’ (Draper, 2013, pp. 50–58 - our italics). Draper begins this section with the statement, ‘The energies of abolitionists were increasingly devoted to tearing away the veil of amelioration.’ While the slave owners insisted they were improving conditions for the slaves and providing education, their claims were challenged, with abolitionists highlighting weaknesses and inconsistencies.

Critics of amelioration demonstrated, for example, that ‘fear’ of the whip had never been removed (Draper, 2013, p. 52); that the ‘threat of violence was intrinsic to slavery’ (Draper, 2013, p. 53); and that slave owners who had thought to teach the slaves to read stopped the practice when it was observed that ‘if the slaves were taught to read, they will certainly cease to be slaves’ and that ‘when they see clearly what their real condition is, they will themselves alter it.’ (Evidence of Rev. Thomas Cooper, quoted in (Draper, 2013, pp. 53–54)) As such, they highlighted the extent to which the claims made were *inconsistent with the facts*.

Now consider how the examples above relate to climate change. Many writers emphasize the correlation between people’s political views and their attitudes to climate change and climate science, linking climate change denial (or the denial of risk) with hierarchical or individualist world views (Klein, 2015, pp. 35–36, 471–472) (Kahan, 2010) and with conservative thought (Dunlap & Jacques, 2013; McCright, 2011; McCright & Dunlap, 2011).

Some of those who highlight this correlation present it as evidence against the use of moral argument, arguing that we are not likely to change people’s minds with argument. Amanda Machin, for example, argues against approaches which seek to establish a consensus through argument, and instead defends an approach based on negotiation (Machin, 2013).²⁸ And other authors suggest that, rather than emphasizing evidence that may challenge people’s core beliefs, we should instead aim to reframe arguments, such that we can persuade people with arguments that *align* with their existing world views (Feinberg & Willer, 2019; Hornsey & Fielding, 2017; Wolsko et al., 2016).²⁹ Following (Hornsey & Fielding, 2017), we will call this the “jiu jitsu” model of persuasion,³⁰ and we

will take the Hornsey and Fielding paper to be indicative of this general approach. They state, ‘rather than taking on people’s surface attitudes directly ... the goal of jiu jitsu persuasion is to identify the underlying motivation, and then to tailor the message so that it aligns with that motivation ... the goal would be to yield to those values and to use them to capture attention and trigger change’ (Hornsey & Fielding, 2017, p. 469). For example, we might aim to get support for green policies, from certain groups, by emphasizing the potential for economic growth, rather than arguing for the importance of mitigating climate change (Hornsey & Fielding, 2017, p. 469). And many of the examples are not surprising. In addition to individualistic versus communitarian world views, or hierarchical versus egalitarian world views, Hornsey and Fielding also highlight the influences of vested interests and social identity.

We do not want to suggest that there can never be a place for jiu jitsu persuasion. However, we must not overstate the significance of jiu jitsu persuasion. Hornsey and Fielding themselves emphasize that they ‘do not intend to imply that explication is ineffective,’ and they emphasize that ‘the fact that the majority of the public are on board with the dangers of carbon emissions ... remind us that, for most people, the communication of scientific consensus is sufficient’ (Hornsey & Fielding, 2017, p. 470). Acknowledging that clear explication can, and often is, effective for many, or even most, they claim that a ‘two-tiered strategy would be optimal: Messages about evidence and scientific consensus that should be sufficient for the majority, and a jiu jitsu approach for the unconvinced minority.’ However, no evidence is presented to support the bold claim that jiu jitsu persuasion is the *only* viable alternative to simple explication. In contrast, we suggest that the evidence from the history of the abolition of slavery gives us good reason to challenge, and ultimately reject, this two-tier strategy. Essentially, there is no reason to believe that these two options are the only viable options. Indeed, the evidence suggests that this approach would be excessively limiting. If the slaves and abolitionists had been committed to this two-tier strategy, this would have ruled out a number of actions that seem to have been crucial to the abolition of slavery.

It is true that the abolition movement clearly *did* seek to persuade those with vested interests by appealing directly to those vested interests, in most countries (other than the US) – in the form of compensation, as we saw. However, we must consider the history as a whole, rather than focusing only on the compensation paid to slave owners.³⁰ As we emphasized in section 2.2.2, the resistance and rebellions by the slaves themselves played an important role in the fight for the abolition of slavery, and it is clear that the slaves did not *yield* to the values of the slave traders, or align their arguments to the ideologies of the slave owners. Similarly, the abolitionist movement was combative, and it involved moral argument and condemnation, as highlighted by the Davis quote at the beginning of this paper. And, as we stated above, it also depended on appeals to arguments, and facts, highlighting inconsistencies, and rejecting claims that could not be supported by evidence.

As such, we should not allow the arguments of Hornsey and Fielding, and others, to convince us that we must limit ourselves to gentle persuasion, or to think we must always align our arguments to the ideologies of our opponents. We need to highlight corruption, and expose deception,³¹ just as the abolitionists exposed the dishonesty and the flaws in the claims of the ameliorists, and we should be willing to morally condemn those who prioritize power and greed above all else.

Furthermore, the over emphasis on jiu jitsu persuasion assumes that we cannot change people's more foundational beliefs – their 'root attitudes' as Hornsey and Fielding call them. But historical evidence suggests we can. And even when root attitudes remain (or *seem* to remain), such as free market ideology or hierarchical views, the attitudes themselves may change radically. Before 1819, free market ideology meant allowing children under the age of 9 to do exceptionally hazardous work in cotton factories. No modern defender of the free market thinks that that is what the free market means today. Similarly, views that would be characterized as hierarchical views today would very likely be considered radically egalitarian in the 18th century.

In her song 'Crazy in Alabama,' Kate Campell sings about her experiences of being a young white child in Alabama during the civil rights movement, seeing clashes between the KKK and civil rights campaigners. She sings, 'the train of change was coming fast to my hometown – We had the choice to climb on board – Or get run down.' Sometimes it is appropriate to challenge people's attitudes, and to highlight the flaws in their position. And often you don't have to persuade everyone. If a minority stubbornly hold on to their views, it may be that they will have a choice ... 'to climb on board – Or get run down.' We suggest that something very similar can be seen in the history of the abolition of slavery. In Britain, colonial slavery was abolished in 1833. Keith McClelland states that 'The political terrain had shifted irrevocably after 1833' and that it was 'no longer possible to defend slavery after 1833' (McClelland, 2016), and Draper states that, as early as 1836, 'William Gladstone was perceptibly uncomfortable when confronted ... with the *idea* of the existence of a "pro-slavery" party before Emancipation' (Draper, 2013, p. 71. Emphasis added.).

The political terrain shifted significantly with the abolition of slavery, and it continued to shift in the centuries that followed, and it will (presumably) continue to shift in the future. These changes are not achieved by refusing to challenge people's moral frameworks or root values, or by limiting ourselves to gentle persuasion, appealing only to claims that we believe others will embrace without any potential for conflict.

Although a lot of progress has been made in this area already, we must continue to emphasize that there is an overwhelming consensus in the scientific community (Cook et al., 2013; Oreskes, 2004), just as the abolitionists highlighted the facts that challenged the claims of the ameliorists. And we must emphasize the sophistication of climate science, eliminating the misconception that the belief in anthropogenic climate change is based primarily or solely on the observed *correlation* between carbon emissions and changes in temperature and, perhaps most importantly, we must highlight the ways in which the fossil fuel industry has intentionally spread confusion and doubt (Mulvey et al., 2015; Oreskes & Conway, 2012).

In relation to those who oppose new policies or new regulation, e.g. appealing to free market ideology, we must continue to point out what should be obvious. A free market does not give us the freedom to harm others. When activities threaten to harm the environment, wildlife and people, we regulate those activities to eradicate (or to limit) those harms. *Consistency* therefore demands that we should also take action to restrict the emission of greenhouse gases. We must highlight the inconsistency of the British government declaring a climate emergency (Climate Emergency Declaration, 2020; Kuenssberg, 2019), while continuing to subsidize the fossil fuel industry (Carrington, 2019b; Farand, 2018), supporting

increased air travel (Harvey, 2019a) and opening new coal mines (Harvey, 2023). And, ultimately, we must emphasize the inconsistency between the amount of carbon dioxide that we can emit safely and the quantity of fossil fuels that corporations already have in their reserves (Cohen, 2018; IPCC, 2018; McKibben, 2012, 2013) – and we must emphasize the fact that fossil fuel exploration continues.

4.3. *The Role of the Law*

While logical argument and consistency can be important in persuading individuals and changing public opinion, the history of the abolition of slavery suggests that there is one thing more important than logical argument and consistency and that is logic and consistency being recognized by the *law*.

In the section above, we highlighted the case of *La Amistad*, the discrepancy between American positive law and the Declaration of Independence, and the fact that slaves appealed to the same natural rights language that whites employed against the British, emphasizing that ‘It was this contradiction that helped the reformers to pass laws for very gradual slave emancipation’ (Davis, 2006, p. 7).

In addition, we must recognize the important role of the law more generally. Clearly, it would be absurd to suggest that anti-slave campaigners should have ignored the law, and simply appealed to the moral conscience of slave owners, asking them to give up their slaves voluntarily. The force of law was clearly required. But this is not the only way in which the law was important. In addition, the law was important because – more so than individuals – the legal system aims to be consistent, and to avoid blatant contradictions. As highlighted above, it is because of this that the law was a powerful tool for the abolitionists.

In addition, we must also recognize the role of the law in changing and shaping public opinion, and helping to keep it stable. Although it is often overlooked, due to the focus on more obvious effects of the law (such as deterrence), the law has a significant *expressive* role, leading people to internalize the values promoted by the law (Carbonara et al., 2008; McAdams, 2000; Tang et al., 2003). Carbonara, Parisi, and Wangenheim, for example, refer to lawmakers as ‘Norm Entrepreneurs’ highlighting the role of law in shaping social values and norms (Carbonara et al., 2008).³² As mentioned in the previous section, ‘the political terrain ... shifted irrevocably’ after slavery was abolished in 1833.

Similarly, if governments made bold decisions to introduce significant policies to combat climate change, this would itself be an effective way to change public opinion, and would send a clear message to everyone that climate change is an urgent issue that the government takes seriously. There would undoubtedly be vocal objections from some, but this would not change the fact that the political terrain would have shifted. And history suggests that policies that were considered radical when they were introduced could soon be internalized to such an extent that ‘radical’ policies could come to be considered conservative and mainstream.

5. We don't Know Where We are (A Cautiously Optimistic Conclusion)

Finally, in this section of the paper, we will highlight a lesson which may be the most important lesson to take from the history of slavery, and is also – in many ways – a conclusion that follows from the sections above.

If we are tempted to become pessimistic about the possibility of making effective changes to combat climate change, we must remind ourselves that we don't actually know how close we are to a breakthrough, and we may actually be much closer than we realize.

Again, this is primarily a result of the role that the law has to play and the way the law works. For example, many are skeptical about the importance of the Paris Agreement, claiming that it lacks teeth, as there is no enforcement mechanism. Similarly, many are dismissive of declarations of a climate emergency that acknowledge the problem but do not legally compel governments to act. These are clearly legitimate concerns. Despite this, it does not follow that these agreements and declarations are of no value. To illustrate why this is the case, consider the role of the Declaration of Independence in the abolition of slavery in America, as discussed above. Prior to the abolition of slavery in America, a pessimist might have complained, what is the point of the human rights embodied in the Declaration of Independence if they don't actually protect individuals, and if they do not prevent one individual from owning another as a slave? This is clearly a reasonable complaint. But we can see now that it would have been a mistake to conclude that the Declaration of Independence was of no value. In the end, as discussed in [section 4](#), it did in fact play an important role in the abolition of slavery in America.

Just as the declaration of human rights would eventually become an important element in the abolition of slavery, the focus on human rights is becoming increasingly influential in relation to action on climate change (Heffron, 2021). Similarly, just as the Declaration of Independence would ultimately play an important role in social change, climate agreements and declarations may – at some point in the future – serve a similar purpose. Despite criticism, to date 187 nations have ratified the Paris Agreement (UNFCCC, 2020b), and 184 of those nations have submitted Nationally Determined Contributions (NDCs) (UNFCCC, 2020a), which represent the efforts each nation is undertaking to reduce their emissions. Whenever governments formally and explicitly acknowledge key facts, or make commitments (even if not legally binding), this is potentially significant. Even if initially toothless, these agreements could, plausibly, gain greater significance as a result of future legal action. We are already beginning to see this.

The United States Supreme Court rejected two government motions to reject or delay a lawsuit filed by 21 plaintiffs that allege 'the United States government knowing inaction on climate has violated their right to "life, liberty, and property" as enshrined in the due process clause of the Fifth Amendment' (Herrara, 2018). In 2018, the Dutch government was instructed by the Hague court to increase emissions cuts, demanding greenhouse gas reductions of 25% by 2020 (Neslen, 2018). In the same year, the New York state attorney filed a lawsuit alleging that ExxonMobil, a multinational oil and gas corporation, had mislead investors regarding the financial risks that climate change poses to the business (Tollefson, 2018). In the UK, when anti-fracking campaigners sought legal action, the High court reached a decision which 'will make it easier for campaigners to lobby against licensing new sites' (Harvey, 2019b) and it also concluded that 'the government failed to

take into account scientific developments that call into question whether it was correct to agree gas was low carbon' (Harvey, 2019b). Similarly, appeals to the Paris Agreement and to the declaration of a climate emergency are likely to be influential in relation to the expansion of Heathrow airport (Harvey, 2019a; Laville, 2019; Powley & Hook, 2019). And, as we make final edits to this paper, in July 2025, the International Court of Justice has just 'ruled that States have an obligation to protect the environment from greenhouse gas (GHG) emissions,' and 'that if States breach these obligations, they incur legal responsibility and may be required to cease the wrongful conduct, offer guarantees of non-repetition and make full reparation depending on the circumstances' (United Nations, 2025). Potentially, this ICJ ruling could be crucial in giving these agreements and declarations their teeth.

Being optimistic then, we suggest that we may not yet know the true value of the Paris Agreement, declarations of climate emergencies, or of other agreement, treaties and commitments. We may only be able to see the value *after* we have succeeded. But any time a country declares a climate emergency or makes some other commitment to combat climate change, there is a hope that somehow, somewhere, someone will use the law to hold countries to their commitments. And, given the nature of the law, this has the potential to kickstart radical and rapid change, as we saw with the abolition of slavery. And, at the international level, we don't know when a nation, or a group of nations, might take the initiative and put pressure on other countries to take real action to combat climate change. And, if they do, appeals to treaties and other commitments are likely to play a crucial role in justifying what might otherwise look like unjustified coercion or hostility.

Less optimistically, the history suggests that any solution reached is unlikely to be the ideal solution. It is likely to involve unpalatable compromises and/or unpalatable confrontation, or both. This does not mean that we should dismiss literature which focuses on more idealized discussions of what morality demands. The evidence suggests that these arguments remain a powerful catalyst for change, contributing to a shift in moral perception. However, it does mean that there does also need to be more focus on the feasibility – and the moral permissibility – of less ideal strategies.

Notes

1. For example, see (Carrell, 2012; Carrington, 2015; Hayes, 2014; Mouhot, 2011; Nikiforuk, 2012; Rusbridger, 2015; Winston, 2013; DiCaprio, 2016; Beinhocker, 2019a, 2019b; Ferdinand, 2022; Shahar, 2016).
2. Of the papers referenced above (Winston, 2013), goes into a bit more detail, but has a slightly different focus. And another notable exception is (Mouhot, 2011). However, we don't discuss this paper here as our focus is very different from his. Mouhot highlights a different set of similarities (between slavery and the use of fossil fuels). Another exception is Dan Shahar (2016), but we reject his interpretation of the history of the abolition of slavery. See footnote 9.
3. Also see (Davis, 2006, pp. 297–322. Especially 304–305) and (Blight, 2001).
4. With America being the notable exception, as noted above.
5. Also see (Carrington, 2019a; Hayes, 2014) and (Smith et al., 2019)
6. This figure includes lobbying by environmental and renewable energy organizations but throughout the study neither of these groups accounted for more than 5% of the final figure.
7. See (Griffin, 2017) and (Heede, 2014)

8. Some may defend this view. We will not address this in detail, except to note that the actions of many of these companies (and the fact that they have known about these dangers for many decades) count against this view (Mulvey et al., 2015; Oreskes & Conway, 2012). Of course, in the case of slavery as well, there was debate about whether slave owners *deserved* to be compensated. See (Draper, 2013, pp. 75–113)
9. Here, it is worth acknowledging that Shahar (2016) also highlights the compensation that was paid to slave owners in many countries, arguing that we should learn lessons from this period of history. However, we reject the lesson that Shahar draws from the history of the abolition of slavery. He overstates the ‘conciliatory strategies,’ and (at very least) understates the more adversarial parts of the history, failing to take into account the details that we highlight in sections 2.2.2, 4.2, and 4.3. In addition, we also reject Shahar’s history of environmentalism, which he presents as the motivation for his argument. Perhaps we will respond to Shahar elsewhere. However, for now, we will simply acknowledge that we are aware of Shahar’s chapter, drawing on the compensation that was paid to slave owners, and state that there is little in his chapter that we agree with.
10. And also in the context of future generations (Gardiner, 2016, pp. 96–99).
11. If anyone is complicit, it is the shareholders, not the general public. Indeed, this would be a further point in favor of the divestment movement.
12. Also see (Draper, 2013, p. 3)
13. In this section, we are focused primarily on the British context, in particular emphasizing elements other than the compensation. But, highlighting a similarity between the UK and the American context, it is worth mentioning that Matt Karp argues that, in America, ‘the overthrow of slavery was neither byproduct of capitalist development, nor the triumph of an enlightened activist vanguard, but a battle waged and won in the field of democratic mass politics’ (Karp, 2019).
14. Thomas Fowell Buxton: ‘As the London abolitionists formed the Society for the Mitigation and Gradual Abolition of Slavery in 1823, Thomas Fowell Buxton emerged as its main parliamentary leader’ (Davis, 2006, p. 237).
15. Contrast this quote from Brown, and the previous quote from Draper, with Shahar’s claim that environmentalists are too political (Shahar, 2016, p. 246).
16. What Brown actually says here is that it depended on ‘a wider variety of actors than the older studies tended to allow.’ We made the slight tweak because the comparison with earlier studies was not relevant to the point we were making.
17. It should also be noted, however, that Wills also emphasizes the distinction between ‘slavery’ and the ‘slave trade,’ as many of the moral objections focused in particular on the latter, given the conditions and the high mortality rates (Wills, 2015).
18. An anonymous referee challenged this point, complaining that “Gore’s statement (and the authors’ comments that follow) appear to treat war crimes as having a determinate level of gravity, such that there is something meaningful about declaring something ‘morally equivalent to a war crime.’ However, as with other types of crimes, war crimes can vary dramatically in their moral gravity. For instance, it is a war crime to seize or destroy enemies’ property . . .” However, there is an established understanding of ‘war crimes’ which does indeed have a determinate level of gravity. For example, Article 8 of the ‘Rome Statute of the International Criminal Court’ defines ‘war crimes’ in such a way that they are, indeed, limited to ‘grave breaches’ and ‘serious violations’. (International Criminal Court, 2021, p. 5) It seems clear that this is also what Gore has in mind. And Gore’s point combines well with McKinnon’s argument because war crimes are the paradigm example of international law, and they are the example of international law that many would consider justified and valuable, worthy of being enforced, or of having some political force in other ways, which fits with the point we are making in this section.
19. As such, the study of history could be one way to introduce economists to ‘a broader view of human motivation.’ See (Frank et al., 1993) and (Chang, 2014).
20. Incidentally, the example of ‘gunboat diplomacy’ also highlights the fact that the ‘economic realists’ are simply wrong when they insist that ‘the *only way* for other nations to ensure . . .

cooperation is through a special inducement, such as cash or extra emissions rights' (Gardiner, 2016, p. 88).

21. Perhaps economists over-estimate the role of self-interest, and under-estimate the role of other motives, in relation to states just as Frank et al argue that they do in relation to individuals (Frank et al., 1993).
22. Consider the following example: Country A has a resource, R, which country B wants. Country B has the wealth to buy R. Clearly, we can see how countries A and B could reach an agreement here, which would benefit both countries. However, in addition to wealth, country B is also the world's biggest military power. In contrast, country A has no military, and no significant allies. Finally, country B has no moral objection to using military force to simply take what it wants, without having to pay anyone. In this context, International Paretianism is not feasible. Unfortunately, evidence from history would seem to suggest that using force to get what you want, regardless of justice, has often been politically feasible (or at least considered to be feasible), even if things haven't always gone as smoothly for the invading country as they would have liked. (Here, it is worth emphasizing that Posner and Weisbach do not focus on whether the state *actually* benefit or not. Rather, on their account, 'all states must *believe themselves* better off by their lights as a result of the climate treaty.' (Posner & Weisbach, 2010, p. 6 - our italics))
23. In *The Perfect Moral Storm*, Stephen Gardiner characterizes climate change as a perfect *moral* storm, in which three independent storms – the global storm, the intergenerational storm and the theoretical storm – converge to create a particularly devastating storm (Gardiner, 2011).
24. And see pages 217–219.
25. At least in America.
26. Here we should acknowledge that an anonymous referee challenged us on this discussion of the free market, suggesting that the relationship between slavery and free market ideology was complex. The referee did not challenge our claim (or, rather, Davis's claim) that people did appeal to the free market to challenge the abolition of slavery. But he suggested that 'Many of the key figures in free-market thought were explicitly anti-slavery (e.g. Adam Smith, Richard Cobden), and defenders of slavery often presented themselves as fighting back against free-market ideas (e.g. Thomas Carlyle labelling free-market economics as the "dismal science" in his "Occasional Discourse on the Negro Question").' While this is an interesting observation, highlighting additional complexity to the situation, it does not change our argument. Our argument does not rely on the strong claim that everyone who defended the free market opposed slavery as a result. The comparison that we highlight here only relies on two claims, both of which seem relatively uncontroversial, and neither of which were rejected by the referee: first, that *some* defenders of slavery appealed to the free market to oppose the abolition, and second, that *some* defenders of the (current) status quo appeal to the free market to oppose regulation aimed to combat climate change.
27. To clarify, we are not opposed to appeals to emotion or intuition. See, for example (Roeser, 2012), and (Roeser, 2018) for arguments about the importance of emotion in moral argument, particularly in the context of science and technology. And see (Hooker, 2002; Sandberg & Juth, 2011), and (Lawlor, 2009) for arguments about the importance of intuition in moral argument.
28. Also see (Lawlor, 2017)
29. There are also elements of this in (Shahar, 2016)
30. Shahar, for example, appeals to the example of the compensation in support of this sort of strategy, arguing against more confrontational approaches, but he fails to explore the other details of the history which we have focused on in this paper (Shahar, 2016).
31. See (Mulvey et al., 2015; Oreskes & Conway, 2012)
32. Also see section 4 for an example of how individuals internalize the values and norms from the law.

Acknowledgments

We are grateful to the Arts and Humanities Research Council (AHRC) for funding Rob Lawlor's project, "Climate Change, Ethics and Responsibility: an interdisciplinary approach" (AH/L006650/1). Among other things, this project funded a couple of workshops which brought together ethicists and historians to consider whether there were lessons we could learn from the history of the abolition of slavery. We are also grateful to all those who attended and contributed to discussions.

Likewise, we are grateful to those who commented on previous drafts presented at the University of East Anglia and the University of Leeds, and we are grateful to the anonymous referees who provided a number of helpful comments, some of which led to some significant additions to the paper.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

The work was supported by the Arts and Humanities Research Council [AH/L006650/1].

ORCID

Rob Lawlor  <http://orcid.org/0000-0002-9621-2977>

Nathan Wood  <http://orcid.org/0000-0001-8082-1746>

References

- Abolition Project. (n.d.). *Consumer action (boycotts of sugar and rum): The abolition of slavery project*. Retrieved December 5, 2018, from http://abolition.e2bn.org/campaign_17.html
- Beinhocker, E. (2019a, September 20). Climate change is morally wrong. It is time for a carbon abolition movement | Eric Beinhocker. *The Guardian*. Retrieved September 22, 2019, from <https://www.theguardian.com/commentisfree/2019/sep/20/climate-change-morally-wrong-carbon-abolition-movement>.
- Beinhocker, E. (2019b). I am a carbon abolitionist. *Democracy Journal* [preprint]. Retrieved September 22, 2019, from <https://democracyjournal.org/arguments/i-am-a-carbon-abolitionist/>
- Big Oil v the World, Episode 1, Denial. (2022). BBC. Retrieved July 26, 2023, from <https://www.bbc.co.uk/programmes/p0c9qlv1>
- Blight, D. W. (2001). *Race and reunion: The civil war in American memory*. Belknap/Harvard Press.
- Brown, C. L. (2006). *Moral capital: Foundations of British abolitionism* (New ed.). The University of North Carolina Press.
- Brulle, R. J. (2018). The climate lobby: A sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016. *Climatic Change*, 149(3), 289–303. <https://doi.org/10.1007/s10584-018-2241-z>
- Carbonara, E., Parisi, F., & Wangenheim, G. V. (2008). Lawmakers as norm entrepreneurs. *Review of Law and Economics*, 4(3), 779–799. <https://doi.org/10.2202/1555-5879.1320>
- Carrell, S. (2012, April 6). Nasa scientist: Climate change is a moral issue on a par with slavery. *The Guardian*. Retrieved January 13, 2017, from <https://www.theguardian.com/environment/2012/apr/06/nasa-scientist-climate-change>

- Carrington, D. (2015, July 10). Fossil fuel industry must “implode” to avoid climate disaster, says top scientist. *The Guardian*. Retrieved March 18, 2019, from <https://www.theguardian.com/environment/2015/jul/10/fossil-fuel-industry-must-implode-to-avoid-climate-disaster-says-top-scientist>
- Carrington, D. (2019a, January 15). Immediate fossil fuel phaseout could arrest climate change - study. *The Guardian*. Retrieved January 16, 2019, from <https://www.theguardian.com/environment/2019/jan/15/immediate-fossil-fuel-phaseout-could-arrest-climate-change-study>
- Carrington, D. (2019b, January 23). UK has biggest fossil fuel subsidies in the EU, finds commission. *The Guardian*. Retrieved May 17, 2019, from <https://www.theguardian.com/environment/2019/jan/23/uk-has-biggest-fossil-fuel-subsidies-in-the-eu-finds-commission>
- Chang, H.-J. (2011). *23 things they don't tell you about capitalism*. Penguin.
- Chang, H.-J. (2014). *Economics: The user's guide: A pelican introduction*. Hard Back. Pelican.
- Climate Emergency Declaration. (2020). *Climate emergency declarations in 1, 355 jurisdictions and local governments cover 814 million citizens, climate emergency declaration*. Retrieved February 14, 2020, from <https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/>
- Cohen, D. A. (2018, November. 2). Apocalyptic climate reporting completely misses the point. Retrieved November 7, 2018, from <https://www.thenation.com/article/mainstream-media-un-climate-report-analysis/>
- Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., & Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters*, 8(2), 024024. <https://doi.org/10.1088/1748-9326/8/2/024024>
- Corporate Europe Observatory and Food and Water Europe. (2019). *EU Parliamentarians buckle under ExxonMobil lobby pressure*, Corporate Europe Observatory. Retrieved May 13, 2019, from <https://corporateeurope.org/en/2019/04/eu-parliamentarians-buckle-under-exxonmobil-lobby-pressure>
- Davis, D. B. (2006). *Inhuman bondage: The rise and fall of slavery in the new world*. OUP USA.
- DiCaprio L. (2016). *Signature ceremony for the Paris Agreement*. Retrieved March 18, 2019, from <https://www.youtube.com/watch?v=m-FM845gial>
- Draper, N. (2013). *The price of emancipation: Slave-ownership, compensation and British society at the end of slavery* (Reprint ed.). Cambridge University Press.
- Dunlap, R. E., & Jacques, P. J. (2013). Climate change denial books and conservative think tanks. *The American Behavioral Scientist*, 57(6), 699–731. <https://doi.org/10.1177/0002764213477096>
- Ellis, E. (n.d.). Ethics of economic sanctions. *Internet encyclopedia of philosophy*. <https://iep.utm.edu/ethics-of-economic-sanctions/>
- Farand, C. (2018). *Uk worst of G7 countries for 'hiding' fossil fuel subsidies - report*. Desmog UK. Retrieved June 12, 2018, from <https://www.desmog.co.uk/2018/06/04/uk-worst-g7-countries-hiding-fossil-fuel-subsidies-report>
- Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass*, 13(12), e12501. <https://doi.org/10.1111/spc3.12501>
- Ferdinand, M. (2022). *Decolonial ecDecolonial ecology: Thinking from the Caribbean world* (A. P. Smith, Trans.; 1st ed.). Polity.
- Frank, R. H., Gilovich, T., & Regan, D. T. (1993). Does studying economics inhibit cooperation? *Journal of Economic Perspectives*, 7(2), 159–171. <https://doi.org/10.1257/jep.7.2.159>
- Gardiner, S. (2017). The threat of intergenerational extortion: On the temptation to become the climate mafia, masquerading as an intergenerational Robin Hood. *Canadian Journal of Philosophy*, 47(2–3), 368–394. <https://doi.org/10.1080/00455091.2017.1302249>
- Gardiner, S. M. (2011). *A perfect moral storm: The ethical tragedy of climate change* (1 ed.). Oxford University Press.
- Gardiner, S. M. (2016). In defence of climate ethics. In S.M. Gardiner, & D.A. Weisbach (Eds.), *Debating climate ethics* (pp. 87–134). Oxford University Press.
- Griffin, P. (2017). *CDP carbon majors report 2017*. Climate Accountability Institute. Retrieved March 20, 2019, from <https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3>

- rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1499691240
- Hall, C. (2013, February 27). Britain's massive debt to slavery. *The Guardian*. Retrieved January 15, 2017, from <https://www.theguardian.com/commentisfree/2013/feb/27/britain-debt-slavery-made-public>
- Hall, C. (2016). *Legacies of British slave-ownership* (Reprint ed.). Cambridge University Press.
- Harvey, F. (2019a, May 11). Climate emergency edict in UK to shape decision on Heathrow expansion review. *The Guardian*. Retrieved May 18, 2019, from <https://www.theguardian.com/environment/2019/may/11/climate-emergency-edict-in-uk-to-shape-decision-on-heathrow-expansion-review>
- Harvey, F. (2019b, March 6). High court rules government's fracking guidelines "unlawful". *The Guardian*. Retrieved March 7, 2019, from <https://www.theguardian.com/environment/2019/mar/06/high-court-rules-governments-fracking-guidelines-unlawful>
- Harvey, F. (2023, January 17). New Cumbria coalmine likely to break UK's climate pledge, analysis says. *The Guardian*. Retrieved July 31, 2023, from <https://www.theguardian.com/environment/2023/jan/17/cumbria-coalmine-uk-climate-goals-methane-emissions>
- Hayes, C. (2014, April 22). The new abolitionism. Retrieved November 5, 2024, from <https://www.thenation.com/article/archive/new-abolitionism/>
- Heede, R. (2014). Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854-2010. *Climatic Change*, 122(1-2), 229-241. <https://doi.org/10.1007/s10584-013-0986-y>
- Heffron, R. J. (2021). Energy multinationals challenged by the growth of human rights. *Nature Energy*, 6(9), 849-851. <https://doi.org/10.1038/s41560-021-00906-6>
- Herrera, J. (2018, July 30). *The supreme Court refuses to halt a climate change lawsuit brought by children and teenagers*. Pacific Standard. <https://psmag.com/environment/the-supreme-court-refuses-to-halt-a-climate-change-lawsuit-brought-by-children-and-teenagers/>
- Hooker, B. (2002). Intuitions and moral theorizing. In P. Stratton-Lake (Ed.), *Ethical intuitionism: Re-evaluations* (pp. 161-183). Oxford University Press.
- Hornsey, M. J., & Fielding, K. S. (2017). Attitude roots and jiu jitsu persuasion: Understanding and overcoming the motivated rejection of science. *The American Psychologist*, 72(5), 459-473. <https://doi.org/10.1037/a0040437>
- Huter, M. (2018). *Revolving doors and the fossil fuel industry: Time to tackle conflicts of interest in climate policy making*. The Greens/European Free Alliance. Retrieved May 15, 2019, from <https://www.greens-efa.eu/files/doc/docs/3d2ec57d6d6aa101bab92f4396c12198.pdf>
- IPCC. (2018). *Summary for policymakers of IPCC special report on global warming of 1.5°C approved by governments*. Retrieved March 8, 2019, from <https://www.ipcc.ch/2018/10/08/summary-for-policy-makers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>
- Jeffries, S. (2022, July 21). Big oil v the world review - how can these climate crisis deniers sleep at night? *The Guardian*. Retrieved July 26, 2023, from <https://www.theguardian.com/tv-and-radio/2022/jul/21/big-oil-v-the-world-review-climate-crisis-bbc>
- Jones, O. (2019, April 25). How to stop climate change? Nationalise the oil companies | Owen Jones. *The Guardian*. Retrieved July 24, 2019, from <https://www.theguardian.com/commentisfree/2019/apr/25/climate-change-oil-companies-extinction-rebellion>
- Kahan, D. (2010). Fixing the communications failure. *Nature*, 463(7279), 296-297. <https://doi.org/10.1038/463296a>
- Karp, M. (2019). The mass politics of antislavery. *Catalyst*, 3(2). Retrieved October 29, 2024, from <https://catalyst-journal.com/2019/10/the-mass-politics-of-antislavery>
- Klein, N. (2015). *This changes everything: Capitalism vs. the climate*. Penguin.
- Kuenssberg, L. (2019, May 1). UK parliament declares climate emergency. *BBC News*. Retrieved February 1, 2020, from <https://www.bbc.com/news/uk-politics-48126677>
- Laville, S. (2019, March 11). Judicial review of Heathrow Airport third runway decision begins. *The Guardian*. Retrieved May 18, 2019, from <https://www.theguardian.com/environment/2019/mar/11/judicial-review-of-heathrow-airport-third-runway-decision-begins>
- Lawlor, R. (2009). Intricate ethics: Rights, responsibilities, and permissible harm, by F. M. Kamm. *Mind*, 118(472), 1149-1152. <https://doi.org/10.1093/mind/fzp123>

- Lawlor, R. (2017). Rejecting Amanda Machin's complacent democracy. *Environmental Ethics*, 39(2), 211–233. <https://doi.org/10.5840/enviroethics201739215>
- Machin, A. (2013). *Negotiating climate change: Radical democracy and the illusion of consensus*. Zed Books.
- McAdams, R. (2000). An attitudinal theory of expressive law. *Oregon Law Review*, 339. <https://doi.org/10.2139/ssrn.253331>
- McClelland, K. (2016). Redefining the West India interest: Politics and the legacies of slave-ownership. In C. Hall (Ed.), *Legacies of British slave-ownership* (pp. 127–162). Reprint edition. Cambridge University Press.
- McCrigh, A. M. (2011). Political orientation moderates Americans' beliefs and concern about climate change. *Climatic Change*, 104(2), 243–253. <https://doi.org/10.1007/s10584-010-9946-y>
- McCrigh, A. M., & Dunlap, R. E. (2011). Cool dudes: The denial of climate change among conservative white males in the United States - ScienceDirect. *Global Environmental Change*, 21(4), 1163–1172. <https://doi.org/10.1016/j.gloenvcha.2011.06.003>
- McKibben, B. (2012, July 19). Global warming's terrifying new math. *Rolling Stone*. Retrieved January 13, 2017, from <http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719>
- McKibben, B. (2013). 'Foreword', in the burning question: We can't burn half the world's oil, coal and gas. so how do we quit? (Main ed.). Profile Books Ltd.
- McKinnon, C. (2017). Endangering humanity: An international crime? *Canadian Journal of Philosophy*, 47(2–3), 395–415. <https://doi.org/10.1080/00455091.2017.1280381>
- Midgley, C. (1996). Slave sugar boycotts, female activism and the domestic base of British anti-slavery culture. *Slavery & Abolition*, 17(3), 137–162. <https://doi.org/10.1080/01440399608575190>
- Mouhot, J.-F. (2011). Past connections and present similarities in slave ownership and fossil fuel usage. *Climatic Change*, 105(1), 329–355. <https://doi.org/10.1007/s10584-010-9982-7>
- Mulvey, K. (2015). *The climate deception dossiers: Internal fossil fuel industry memos reveal decades of corporate disinformation*. Union of Concerned Scientists. Retrieved November 4, 2017, from <http://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf>
- Neslen, A. (2018, October 9). Dutch appeals Court upholds landmark climate change ruling. *Environment. The Guardian*. <https://www.theguardian.com/environment/2018/oct/09/dutch-appeals-court-upholds-landmark-climate-change-ruling>
- Newell, P., & Paterson, M. (1998). A climate for business: Global warming, the state and capital. *Review of International Political Economy*, 5(4), 679–703. <https://doi.org/10.1080/096922998347426>
- Nikiforuk, A. (2012). *The energy of slaves: Oil and the new servitude*. Greystone Books.
- Olusoga, D. (2018, February 12). The treasury's tweet shows slavery is still misunderstood. *The Guardian*. Retrieved July 17, 2023, from <https://www.theguardian.com/commentisfree/2018/feb/12/treasury-tweet-slavery-compensate-slave-owners>
- Olusoga, D. (2023, March 28). Slavery and the Guardian: The ties that bind us. *The Guardian*. Retrieved July 17, 2023, from <https://www.theguardian.com/news/ng-interactive/2023/mar/28/slavery-and-the-guardian-the-ties-that-bind-us>
- Oreskes, N. (2004). The scientific consensus on climate change. *Science*, 306(5702), 1686–1686. <https://doi.org/10.1126/science.1103618>
- Oreskes, N., & Conway, E. M. (2012). *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. Bloomsbury Paperbacks.
- Posner, E. A., & Weisbach, D. (2010). *Climate change justice*. Princeton University Press.
- Powley, T., & Hook, L. (2019, October 16). The battle to block third runway at Heathrow resumes in court. *Financial Times*. Retrieved February 1, 2020, from <https://www.ft.com/content/aab1f548-f039-11e9-bfa4-b25f11f42901>
- Roeser, S. (2012). Risk communication, public engagement, and climate change: A role for emotions. *Risk Analysis*, 32(6), 1033–1040. <https://doi.org/10.1111/j.1539-6924.2012.01812.x>

- Roeser, S. (2018). *Risk, technology, and moral emotions*. Kindle. Routledge (Routledge Series in Ethical and Moral Theory). Retrieved March 16, 2019, from <https://www.routledge.com/Risk-Technology-and-Moral-Emotions-1st-Edition/Roeser/p/book/9781138646018>
- Rusbridger, A. (2015, March 16). The argument for divesting from fossil fuels is becoming an overwhelming one | Alan Rusbridger. *The Guardian*. Retrieved March 18, 2019, from <https://www.theguardian.com/environment/2015/mar/16/argument-divesting-fossil-fuels-overwhelming-climate-change>
- Sandberg, J., & Juth, N. (2011). Ethics and intuitions: A reply to Singer. *The Journal of Ethics*, 15(3), 209–226. <https://doi.org/10.1007/s10892-010-9088-5>
- Shahar, D. C. (2016). Turning adversaries into allies: Conciliation in environmental politics. In D. Schmidtz (Ed.), *Interdisciplinary handbooks in philosophy: Environmental ethics* (pp. 243–268). Macmillan Reference USA.
- Smith, C. J., Forster, P. M., Allen, M., Fuglestad, J., Millar, R. J., Rogelj, J., & Zickfeld, K. (2019). Current fossil fuel infrastructure does not yet commit us to 1.5 °C warming. *Nature Communications*, 10(1). Retrieved May 3, 2019, from <https://www.nature.com/articles/s41467-018-07999-w>
- Tang, H., Cowling, D. W., Lloyd, J. C., Rogers, T., Koumjian, K. L., Stevens, C. M., & Bal, D. G. (2003). Changes of attitudes and patronage behaviors in response to a smoke-free bar law. *American Journal of Public Health*, 93(4), 611–617. <https://doi.org/10.2105/AJPH.93.4.611>
- Tollefson, J. (2018, October 24). New York sues Exxon Mobil alleging climate-change deception. *Nature*. <https://doi.org/10.1038/d41586-018-07178-3>, ahead of print.
- UNFCCC. (2020a). *All NDCs, NDC registry*. Retrieved February 14, 2020, from <https://www4.unfccc.int/sites/NDCStaging/pages/All.aspx>
- UNFCCC. (2020b). *Paris agreement - Status of ratification*. Retrieved February 14, 2020, from <https://unfccc.int/process/the-paris-agreement/status-of-ratification>
- United Nations. (2025). *World court says countries are legally obligated to curb emissions, protect climate*. Retrieved July 30, 2025, from <https://news.un.org/en/story/2025/07/1165475>
- Wills, M. (2015). 'The suppression of the slave trade', in. Retrieved January 14, 2019, from <https://mymedia.leeds.ac.uk/Mediasite/Play/d4a2f8553dfd47b5801cae6b066c08d81d>
- Winston, A. (2013, February. 27). The climate change abolitionists. *The Guardian*. Retrieved March 18, 2019, from <https://www.theguardian.com/sustainable-business/blog/climate-change-abolitionists>
- Wolsko, C., Ariceaga, H., & Seiden, J. (2016). Red, white, and blue enough to be green: Effects of moral framing on climate change attitudes and conservation behaviors. *Journal of Experimental Social Psychology*, 65, 7–19. <https://doi.org/10.1016/j.jesp.2016.02.005>