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The Modern Slavery-Climate Change Nexus: Resurrecting Environmental Determinism, Reinforcing Saviourism and Absolving the West

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ABSTRACT

The modern slavery-climate change nexus is emerging as a trendy topic. It combines two powerful consensus narratives, modern slavery and climate change, and has been uncritically embraced by scholars, charities, campaigners and corporations. In this article, we argue that rather than representing an exciting advancement in society–environment scholarship, the modern slavery-climate change nexus resurrects the long-discredited theory of environmental determinism. It absolves the West of its historical responsibilities for labour exploitation and environmental destruction, from which it continues to benefit, while shifting the burden of action to the global majority. By doing that, it provides Western states, corporations and even academics with a convenient storyline which allows them to reinforce neoliberal agendas whilst positioning themselves as saviours, and corporations to continue exploitative practices whilst presenting as ethical.

1 | Introduction

In 2013, the *Guardian* published an article entitled, 'Climate Change and Slavery: The Perfect Storm?' (Conaway 2013). The article referenced Bales (1999), an influential academic often credited with popularising the concept of modern slavery, and called for an investigation into the links between climate change and modern slavery. That same year, the Conservative government in the UK introduced two policies: the 'hostile environment' policy, to make life difficult for undocumented migrants in the UK so they would leave voluntarily; and the Modern Slavery Bill, to position the UK as a global leader in the abolition of modern slavery. In 2015, the UK passed the landmark Modern Slavery Act, which created a broad category of exploitation, encompassing human trafficking, forced labour, slavery and servitude. One of the most striking features of this law is that it requires corporations with an annual turnover of over £36 million—many directly or indirectly accused of halting meaningful climate change action, like BP, Glencore, Centrica, Shell UK, Tata Steel UK, Tesco, etc.—to publish yearly modern slavery statements. Yet it imposes no penalties for non-compliance, rendering the requirement almost meaningless. At the same time, there has been a surge in policy and academic work on the links between modern slavery and climate change, demanding urgent action (Bales 1999, 2016; Bales and Sovacool 2021; Brown et al. 2021; Das and Chakrabarti 2025; Decker Sparks et al. 2021; Hobbs 2023; Jackson et al. 2020; Kara 2022; Mwendwa et al. 2024; Rogerson et al. 2024).

In particular, geographer Brickell et al.'s (2018) *Blood Bricks* project has been instrumental in establishing the intersection of climate change and modern slavery as a key area for research and policy interventions. Following the footsteps of Bales (2016), Brickell and colleagues attempt to uncover 'the converging traumas of modern slavery and climate change' in Cambodia (Brickell et al. 2018, 11). *Blood Bricks* gave the final push to what became known as the 'modern slavery-climate change nexus', sparking a small explosion of research, funding

and policy interventions. The core argument is the following climate change increases people's overall vulnerability, which increases their likelihood of becoming victims of modern slavery (Bales 1999; Bales and Sovacool 2021). Modern slavery, in turn, accelerates climate change, as modern slaves are used to destroy the planet (Brown et al. 2021; Couzens and Stephens 2023; Jackson and Decker Sparks 2020; Ogunniyi 2024). Tackling the modern slavery—climate change nexus is presented as a one-size-fits-all solution to freeing the slaves and saving the planet or in Bales and Sovacool's (2021, 1) words, '[a]bolishing slavery is shown to be one of the most effective instruments for climate change mitigation, especially given that the costs of ending slavery seem on par to about $20 billion, or the expense of a single large nuclear power plant'.

As co-authors, one of us working on the politics of contemporary anti-slavery, the other in climate justice politics and activism, we felt compelled to unsettle this bizarre marriage between what we consider an imperial political category and what should be a pressing issue, but is increasingly functioning as a façade for business as usual. The first author, an anti-trafficking and development professional turned academic, has witnessed first-hand how contemporary anti-slavery interventions restrict mobility, labour and employment choices, whilst criminalising, stigmatising and destroying the lives of people deemed targets of such interventions. Through situated research, they work with people on the move, who are often stripped of agency by the contemporary anti-slavery industry in the majority world, exploring how they encounter, experience and escape interventions designed to protect them (Bhagat 2022, 2023). The second author, a climate activist turned academic, enters this debate from years of collective struggle against false solutions (e.g., carbon markets, carbon offsetting, nuclear energy, electric cars and gene-editing) to climate change in the minority world. Cloaked in the rhetoric of saving planet and people, such solutions allow Western states, corporations and neoliberal international institutions (e.g., IMF, World Bank) to uphold extractivist and imperialist agendas, while moving the burden of the green transition onto those least responsible for climate change (Hamouchene and Sandwell 2023; Kenis and Lievens 2015a, 2015b, 2016; Lang et al. 2024).

This article arises from the shared concern of both authors, who, through more than a decade of policy work, grassroots initiatives, activism, research and advocacy, have attempted to challenge mainstream climate change and modern slavery measures by exposing how they often harm the very people they claim to protect and reinforce the very systems they pretend to challenge. Our aim is neither to deny the urgency of climate action nor to suggest that extreme labour exploitation does not exist. We argue that the dominant literature, policy discussions and technocratic and neoliberal interventions to address these issues are seldom genuinely meant to 'save' or 'free' people or planet. Drawing on insights from years of participatory, ethnographic, feminist and activist research on modern slavery (Author 1) and climate change (Author 2), we argue that the nexus is neither helpful for addressing climate change nor does it meaningfully contribute to addressing extreme labour exploitation. By jumping on the modern slavery-climate change bandwagon, scholars, policy makers and campaigners sideline over 30 years of established critical literature, which considers mainstream climate policies as greenwashing at most (Hamouchene and Sandwell 2023; Lang et al. 2024; Rogers 2010) and critiques dominant modern slavery policies for often harming the very people they claim to protect (GAATW 2007; O'Connell Davidson 2015). The nexus establishes climate reductionistic narratives in fields where they were not prevalent yet, while mobilising the term modern slavery at a planetary scale. As we will show in what follows, this move not only absolves the West from its historical role in colonialism and slavery (Beutin 2023; Kempadoo and Shih 2022), along with its related responsibility for climate change (Whyte 2018), but also recasts the West as the saviour of both people and planet.

By merging two consensus narratives, a storyline is crafted that can easily win the hearts in an increasingly competitive fundraising environment and the merciless struggle for research, public and policy attention. Not only does this storyline offer an elegant shortcut to tackle both crises at once; it successfully mobilises a strong feeling of indignation and urgency, reinforcing the need to act immediately, unanimously and uncritically. But behind the headlines, the nexus reveals itself as reinforcing imperialist logics: it shifts blame and responsibility for climate action on the global majority, whilst mobilising saviourism language to legitimise some forms of exploitation and extraction while ignoring others. By shifting focus to climate change, the nexus enables modern slavery scholars, campaigners and practitioners to avoid uncomfortable structural questions, such as the role of borders, class, caste, indigeneity, colonialism, white supremacy and corporations in producing and sustaining the exploitation of racialised and gendered bodies. It legitimises anti-modern slavery practices often viewed as damaging to the very people they pledge to protect. Seen from the other side, the focus on modern slavery allows climate scholars, campaigners and policy makers to embark on yet another detour of fighting climate change without confronting the social, economic and political structures the West has historically built and benefited from, and which define the distribution of wealth, mobility and greenhouse gases until today. Not surprisingly, the nexus is backed by Western governments and neoliberal corporations—the very entities that have driven our planet to a hospice state, pushing us into an escalating climate crisis while creating hostile environments for racialised bodies on the move.

This article contributes to two fields of critical scholarship. First, it contributes to critical literature on modern slavery and anti-trafficking, including critical geography literature which has examined, criticised and theorised various dimensions of contemporary anti-slavery discourse (Aradau 2008; Bhagat 2022; Esson 2020; FitzGerald 2016; Laurie et al. 2015; Laurie and Richardson 2021; McGrath and Watson 2018; Waite et al. 2025; Yea 2021), and critical literature that exposes how this discourse has long served to exonerate the West—absolving it of responsibility for transatlantic slavery, imperialism and colonialism, while enabling the criminalisation and stigmatisation of sex work, border violence and the global perpetuation of neoliberal capitalism (e.g., Beutin 2023; Chuang 2014; Doezema 2010; Fudge 2025; GAATW 2007; Kempadoo and Shih 2022; Miller and Baumeister 2013; O'Connell Davidson 2010, 2015). Building on this literature, we demonstrate that modern slavery's recent marriage with climate change further extends this exculpatory function. Second, it

builds on and contributes to the critical geographical literature on climate change, in particular the literature on environmental determinism and climate reductionism (e.g., Farbotko 2025; Hulme 2011, 2023; Livingstone 2015; Piguet 2013; Selby et al. 2017). We show how what is presented as an exciting advancement in understanding human–environment relations amount to the resurrection of the heavily criticised geographical theory of environmental determinism, in its most recent form of climate reductionism. Exposing the logics of environmental determinism and climate reductionism that the nexus is built on allows us to interrogate the nexus's political function: it absolves the West and multinational corporations of their historical and ongoing roles in emissions, extraction and exploitation, perpetuates saviourism and shifts the burden of tackling climate change and labour exploitation onto the global majority. For the targets of these actions, it often means being subjected to undignified stereotypes (Andrijasevic 2007), stripped of their agency (Wijers 2015), criminalised for their practices (Gadd and Broad 2024) and integrated into a neoliberal and imperial world order (Shih 2023). Consequently, as we show, the nexus exposes a concerning tension: while Western corporations, governments and even academics have long profited from the exploitation of people and the planet, the nexus allows them to position themselves as champions of planetary justice, whilst upholding and profiting from the systems creating environmental destruction and disposability.

2 | Situating Modern Slavery and Climate Change

Modern slavery discourse selectively draws on transatlantic and white slavery abolitionist movements of the 18th and 19th centuries, whilst collapsing all the categories of labour exploitation like human trafficking, forced labour, debt bondage, exploitation and servitude into a catch-all category. Critical scholars argue that this overarching category thrives on the politically convenient binary between acceptable and unacceptable forms of exploitation (O'Connell Davidson 2010). Whilst the category holds legal definition only in the UK and Australia (Craig et al. 2019; Gadd 2024), several actors in the UK (e.g., government, funders, charities, academics) have played a major role in popularising it as a global catchphrase. Since the introduction of the Modern Slavery Bill in 2013, more than a billion dollars have been invested in addressing modern slavery both domestically and across the UK's former colonies and other countries in the global majority (Bhagat and Quirk 2024a). This investment includes a £375 million contract for victim care services, a commitment to allocate £200 million in Official Development Assistance (ODA) towards anti-modern slavery initiatives, the establishment of dedicated research funding streams, shaped by predefined research agendas such as the Modern Slavery and Human Rights Policy and Evidence Centre (MSPEC) and the establishment of the Global Commission on Modern Slavery (Bhagat and Quirk 2024b), which recently declared that 'every country must adopt comprehensive modern slavery legislation' (Global Commission on Modern Slavery & Human Trafficking 2025). Collectively, these initiatives have acted as mechanisms for the internationalisation of the modern slavery agenda, accompanied by imperial tendencies to overwrite the established legal categories of exploitation in many countries.

Whilst critical modern slavery and anti-trafficking literature has problematised the categories of human trafficking, forced labour and servitude (Bernstein 2019; Beutin 2023; Kempadoo 2015; Kempadoo and Shih 2022; de Martínez Vedia 2021; McGrath and Watson 2018; O'Connell Davidson 2010; Shih 2023), this literature appears incapable of halting, or even slowing, the continued proliferation of the dominant and often damaging, modern slavery discourse and corresponding anti-trafficking measures, across the world. This includes its increased intersection with other narratives, such as county lines—transfer of drugs by young people (Lee Koch 2024), cuckooing—confiscation of homes of vulnerable people for criminal activities (Stone 2018), organ harvesting—selling of organs for profit (Stammers 2022), online scamming—compound labour regimes run by trafficked people to scam people (Franceschini et al. 2024) and now even climate change (Brickell et al. 2018). The modern slavery discourse seems to parasitically latch onto the latest developments, capitalising on new, highly sellable research, impact and funding opportunities (Bhagat 2025). Perhaps the most telling example is the recent £10 million Leverhulme grant awarded to examine the relationship between slavery and war, signalling not only the appropriation of the latest 'hot topics' but also the further institutionalisation, and potential militarisation, of the field. Yet, most recent critiques of modern slavery remain reformist, viewing the modern slavery agenda as broken but fixable from within (Craig et al. 2019; Gadd and Broad 2024; LeBaron 2020; Marmo and Bandiera 2022). Far from dismantling this broken and damaging system, this strand of reformist literature seeks to repair it, often inadvertently reinforcing and globalising a UK-backed imperial category of exploitation. In doing so, it advances geopolitical motives by attempting to insert the language and framework of 'modern slavery' in legal systems across the world.

Like modern slavery, dominant climate narratives evoke the need for a collective, unanimous and urgent response, often marginalising critical perspectives and internal debates in service of a higher, more pressing universal goal (Kenis and Lievens 2014; Machin 2013; Swyngedouw 2010). Whilst climate change requires urgent structural socio-economic, cultural and political change, the dominant discourse serves to justify neo-colonial agendas under the guise of net-zero targets, the green transition and resilience building for climate adaptation (Hamouchene and Sandwell 2023; Kenis and Lievens 2015a; Kolinjivadi et al. 2023; Lang et al. 2024; Mikulewicz and Taylor 2020). Whilst the needed change fails to materialise, climate change has gained discursive prominence and is increasingly employed as a marketing tool to sell everything, from products and businesses to policies and grant proposals. Multimillion-dollar investments in market systems (e.g., carbon trading, payments for ecosystem services) and speculative technologies (e.g., carbon capture and storage, solar radiation management, gene-editing) are supposed to offer politically neutral ways out of the crisis (Kenis and Lievens 2015a, 2015b). To the extent climate policies tackle emissions, they tend to outsource the burden of the green transition to marginalised, gendered and racialised communities in the global majority world (Hamouchene and Sandwell 2023; Lang et al. 2024). From carbon trading and offsetting to the electrification of the vehicle fleet and payments for ecosystem services (including REDD+), all build on and reinforce a logic of uneven development. The global minority continues to emit vast amounts of greenhouse gases while outsourcing the

responsibility to the global majority, which becomes the cheap provider of carbon sinks, carbon credits and critical minerals for the Western green transition. This imperialistic logic is concealed behind a rhetorical façade of solidarity, unanimity and collaboration. Strategically mobilising slogans of unity, such as Kofi Annan's 'we are all in the same boat' and Greta Thunberg's call to 'unite behind the science', the dominant narrative is one of win–win solutions to safeguard 'our common future' (Brundlandt 1987; see Kenis and Lievens 2014).

In these narratives, climate change is reduced to a problem of atmospheric CO_2 concentrations, whereby CO_2 is reified as an external threat demanding a unified global response (Swyngedouw 2010). The flaw in such reasoning lies in the equation of all human activities, which are stripped of their qualitative properties, thereby obscuring their vast political, social, cultural and economic differences (Lohmann 2012). Carbon trading systems are a case in point. From the perspective of the carbon market—and arguably, from the perspective of the climate itself—it does not matter where and how emissions are reduced, as long as the total amount of greenhouse gases in the atmosphere stabilises or decreases (Kenis and Lievens 2015a). However, from the perspective of society, it matters significantly whether, respectively, hospitals or arms factories, marginalised communities or millionaires, are targeted as sources of emissions. Although the research fields of climate change and modern slavery have mainly developed alongside each other, they have more recently been integrated into what is now referred to as the modern slavery-climate change nexus.

3 | Modern Slavery-Climate Change Nexus: A Resurrection of Environmental Determinism

Following Brickell et al.'s award-winning *Blood Bricks* project, there has been a swift uptake of the modern slavery-climate change nexus, resulting in numerous academic and public-facing publications within just a few years (e.g., Brickell et al. 2018; Brown et al. 2021; Decker Sparks et al. 2021; Glass 2023; Jackson and Decker Sparks 2020; Jackson et al. 2020; Wang and Lotfi 2025). Scholars working on the nexus have largely overlooked a well-established critical modern slavery and anti-trafficking literature and have instead chosen to draw upon the work of Kevin Bales (1999, 2007, 2016). While Bales' work on modern slavery evolved into the dominant paradigm in the field, it has been strongly criticised on several grounds: the problematic conflation of trafficking with slavery (O'Connell Davidson 2015), racial blindness (McGrath 2013), the individualisation of systemic problems and reliance on moral appeals (Kempadoo 2015), and his inconsistent and unsubstantiated 'guesstimates' (Segrave et al. 2018). One area of critique that has been underexplored is that Bales and the normative anti-trafficking literature attempt to link modern slavery and climate change in a way that echoes the discredited theory of *environmental determinism*, which posits that the environment and climate directly shape human societies and cultures (Livingstone 2012; Meyer and Guss 2017; Radcliffe et al. 2010). Whilst the nexus is presented as a novel and exciting step in understanding environment–society relations, we contend that its core arguments reproduce this discredited geographical theory and must be subjected to similar critiques.

Environmental determinism was geography's contribution to Social Darwinism and marked the discipline's entry into modern science during the late 19th century (Peet 1985). It is often credited to Ellen Churchill Semple, the first woman president of the Association of American Geographers, who in her book *Influences of Geographic Environment* (Semple 1911), linked climatic conditions to the rise of civilisation, settlement, culture, language, regional character and political organisation (Frenkel 1992). Semple gave legitimacy to scientific racism by positioning Northern Europeans as 'energetic, provident, serious, thoughtful rather than emotional, cautious rather than impulsive' due to the climatic conditions of their civilisations (Semple 1911, 620). Building on Semple's contribution, proponents of environmental determinism argued that temperate climates foster societal and cultural superiority, a view used to justify colonial domination and racial hierarchies (Livingstone 2012). Interestingly, they also used these deterministic theories to justify both the existence of transatlantic slavery and its abolition (Asaka 2017; Huntington 1915; Livingstone 2015). Despite now being a widely discredited theory in geography, Ernste and Philo (2009) highlight that deterministic tendencies—be they environmental, economistic or spatial—still persist in the discipline. Furthermore, environmental determinist ideas remain embedded in bestsellers. Examples include Jared Diamond's Pulitzer Prize-winning book *Guns, Germs and Steel: The Fates of Human Societies* (1997), Lewis Dartnell's *Origins: How the Earth Shaped Human History* (2019), Tim Marshall's *Prisoners of Geography* (2016) and Ian Morris' more recent *Geography is Destiny* (2022). All these works argue that 'Environment molds history' in some way or another, to quote Diamond (1997). Blaut (1999) shows that, similar to its 19th century counterparts, Diamond's work is fundamentally Eurocentric in how it explains the global prominence of European civilisation, and the same critique applies to several other geography bestsellers. Moreover, Mike Hulme (2011, 2023) points out that mainstream climate discourse tends to show deterministic, or at least reductionistic, features, in how it depicts future societies, namely as largely determined by climate. For Hulme (2011, 247), this is partly the consequence of the hegemony of modelling-based predictive natural sciences in both scientific and popular climate discourse, leading to a situation in 'which climate is first extracted from the matrix of interdependencies that shape human life within the physical world' and 'then elevated to the role of dominant predictor variable'. Importantly, as Hulme (2023) shows, climate narratives are increasingly mobilised for political aims, as they point at an easy external culprit to explain wildfires, floods, wars and famines, thereby circumventing more complex social and political questions. This logic is mirrored in the modern slavery-climate change nexus, which oversimplifies the complex interplay between climate and society. By claiming that there is a simple causal relation between climate change and modern slavery, the nexus presents itself as a schoolbook example of climate reductionism, which should be understood as a contemporary form of climate determinism.

In essence, the reasoning that underlies the nexus is the following: climate change increases vulnerability, which in turn increases the risk of exploitation, and thus the likelihood that people will be subjected to forms of modern slavery (Bales 2016; Bales and Sovacool 2021; Boyd et al. 2018; Brickell et al. 2018; Brown et al. 2021; Jackson 2020; Jackson and Decker

Sparks 2020; Jackson et al. 2020; Kara 2022; Ogunniyi 2024). To demonstrate this pattern, Brickell et al. (2018) have studied how climate change worsens rural indebtedness, causing small farmers to become debt-bonded labourers in urban brick kilns in Phnom Penh. Bales and Sovacool (2021) investigated how climate-induced sea-level rise and flooding in agricultural areas disrupt food supplies and thereby contribute to modern slavery. Mackay et al. (2020) looked into the effects of climate-induced operating costs in the fishing industry, and how the offsetting of these costs increases the risk of modern slavery. Bharadwaj et al. (2021) argue that climate change has to be understood as a stress multiplier, as it compounds the effects of existing vulnerabilities. The problem with these lines of reasoning is not that they are inaccurate, but that they are self-evident. Fundamentally, the argument consists of a chain of tautologies. 'Vulnerability is a function of the character, magnitude, and rate of climate change and variation', as the IPCC (2007, 6) states. Moreover, it is common sense that vulnerability opens the door for exploitation. Even mainstream bodies, like the NHS, define vulnerability in people as the 'inability to take care of themselves or protect themselves from exploitation' (Public Health England 2022).

The flip side of the argument holds evidently true as well: modern slavery contributes to climate change (Bales and Sovacool 2021; Brown et al. 2021; Wang and Lotfi 2025). Scholars have demonstrated the contribution of modern slavery, or modern slaves, to logging in Bangladesh, India, Ghana, the DRC, Gabon and Peru, charcoal production in Brazil, the destruction of mangroves through fish processing in Bangladesh, illegal oil palm plantations in Indonesia, mining and quarrying across the DRC and the destruction of Russia's boreal forests (Bales 2016; Brown et al. 2021; Jackson and Decker Sparks 2020; Jackson et al. 2024; Navasardova et al. 2015; Trunov 2017). Drawing on these examples, they argue that modern slavery destroys the planet. Here again, the problem is not that this would not be the case, but that it is self-evident. Almost all human activities produce CO_2. Therefore, it would be far more challenging to show that modern slavery, or any other human activity, does *not* contribute to climate change. In other words, focusing on modern slavery as the main cause of environmental destruction and the necessary target of climate action, is a political choice.

The main research agenda of the nexus's proponents, namely demonstrating that climate change affects modern slavery, and vice versa, is therefore both limited in its scholarly contribution and politically significant. As its central theses are self-evident, the nexus fails to provide meaningful explanatory insight. We can elucidate this point by substituting one side of the equation with a relatively random other term. This immediately reveals a multitude of other, equally valid, nexuses: war and climate change, modern slavery and war, climate change and housing, housing and modern slavery, etc. In each of these cases, it is relatively straightforward to argue that one side of the equation affects the other. This is not merely a fictional exercise: from floods in Nigeria (Milman et al. 2022) to the famine in Madagascar (Harding 2021), from the Syrian war in 2011 (Kelley et al. 2015) to global migration (Vince 2022) and even the increasing number of shootings in the US (Carrington 2022), all have been attributed to climate change. The problem with attributing events to climate change is that it conceals the broader ecological, social, economic, cultural and political dimensions underlying them (for the Syrian case, see e.g., Eklund et al. 2022, Selby et al. 2017). Rather than addressing complex structural relations, such as imperialist geopolitics or deeply uneven global trade relations, the focus shifts to CO_2 as the main culprit, the conveniently externalised enemy (Swyngedouw 2010). In such logics, climate change becomes a convenient scapegoat for a wide range of phenomena, from war to migration and now also modern slavery, thereby diverting attention from political, social and economic factors (Hulme 2023).

Jackson and Decker Sparks (2020) take the thesis yet one step further and argue that CO_2 emissions will continue to rise unless decisive action is taken to halt modern slavery. Bales (2016), in turn, claims that eradicating modern slavery offers a shortcut for tackling climate change: 'Abolishing slavery is shown to be one of the most effective instruments for climate change mitigation' (Bales and Sovacool 2021, 1). It is a familiar move in the history of environmental politics and policies: rather than dealing with much more entrenched socio-political, cultural and economic structures, such as the growth economy or capitalist social relations, the prospect is created that climate change can be tackled with unambiguous means, in this case 'freeing the slaves', thereby allegedly creating universal win–win situations (Kenis and Lievens 2015a). However, as we will show in what follows, if liberation is turned into a means serving another end, there is not much liberating about it anymore.

4 | The Political Function of the Modern Slavery-Climate Change Nexus

If almost every human activity contributes to climate change, then choosing what to focus on is a political decision. Viewed from that perspective, it is not neutral to take modern slavery as a focus of climate action. By doing so, the modern slavery-climate change nexus creates a convenient narrative to blame livelihood practices in the global majority world, despite the well-established reality that it is the West which is historically primarily responsible for climate change and many other forms of environmental destruction. Steeped in the Eurocentric legacy of environmental determinism, it deploys neo-colonial narratives and racist stereotypes, framing nations like Bangladesh, DRC, Russia and Cambodia as victims of their own geography and barbaric practices. For example, Bales and Sovacool (2021, 4) criticise traditional practices of shrimp cultivation in coastal Bangladesh, showcasing how 'Bengal tigers prey on the only small mammals left—the child slaves' due to the destruction of wildlife habitats. Whilst tiger–human interaction and occasional conflict have long been issues in the Sundarbans delta and in other regions of the world where the two coexist, Bales uses this example as a rhetorical tool to shock his audience and call for an urgent, uncritical and universal response. Simultaneously, human activity and suffering are tied to criminal local agents and outdated practices, while the environment of coastal Bangladesh is presented as a predatory and unforgiving landscape. Such emotionally charged accounts resurrect the environmental determinism trope of the past, implying that these places are trapped in cycles of suffering dictated by their environmental and barbaric cultural realities, now even with global implications, as it would be exactly these practices which play a key role in causing climate change.

Had the nexus stayed within the confines of the academic debate, it might have been received as a fairly unproductive but ultimately harmless intellectual undertaking. However, from its inception, the nexus has been mobilised in policy and advocacy work, its impact extending far beyond academia. For example, Anti-Slavery International (ASI), in collaboration with the International Institute for Environment and Development (IIED) and the Ovibashi Karmi Unnayan Program (OKUP), recently launched the Climate Change & Modern Slavery Hub to address modern slavery in the context of climate-induced migration (Anti-Slavery International 2024). ASI's accompanying map illustrates the nexus exclusively within the global majority, implying that both slaves and slaveholders are concentrated there and that these are the places where climate action must take place, or where responsibility is located. Such initiatives deflect accountability, casting the global majority as both victim and culprit, while exculpating Western states and corporations, reinforcing Western saviourism and diluting Western responsibility. We will now demonstrate three interrelated ways in which this nexus functions politically, thereby underscoring how it echoes the legacy of earlier forms of environmental determinism.

4.1 | Shifting the Blame and Responsibility to the Global Majority

The modern slavery-climate change nexus shifts attention away from the role of the state, the economy and multinational corporations in causing both climate change and vulnerability to exploitation, focusing instead on actions of individuals and smaller entities primarily in the global majority world. By doing that, it shifts the responsibility for and burden of addressing Western-created problems to those least responsible for them. For example, Bales (2016) claims that 'modern-day slavery is destroying the planet' and argues that 'if modern slaves were a country, they would be the third largest emitter of carbon dioxide in the world, after China and the United States' (Bales and Sovacool 2021, 1). This conclusion follows from his questionable attempt to calculate the emissions produced by modern slavery, and from the observation that the industries marked by the highest levels of exploitation, like forestry, mining, brick kilns and fisheries, are all at the forefront of environmental destruction. We will not deny that businesses (large or small, formal or informal) which are indifferent to human well-being are likely to be indifferent to the environment as well. The structural relation between the exploitation of the majority world and the environment is well established (e.g., Fraser 2023; Mies 1986). However, the claim that 'freeing the slaves' could therefore 'save the planet' is far less straightforward. First, the rationale conflates correlation with causation, a fallacy seen in other popular, often regressive, environmental narratives such as Malthusianism or populationism, which misattribute climate change to population growth simply because a correlation is observed at the global scale (Angus and Butler 2011). In actual fact, these patterns are symptoms of deeper structural causes—*Z*-factors—that underlie and produce both climate breakdown and phenomena like population growth or, in this case, modern slavery (Kenis and Lievens 2015a, 2015b). Second, even if there was a causation, there is no reason to assume that 'freeing the slaves' would halt environmental destruction. In fact, the opposite is just as plausible: pressure to end labour exploitation may push businesses to intensify the exploitation of nature to preserve profit margins. This is not intended to downplay the importance of tackling labour exploitation. Our point is that pursuing it out of environmental concerns is ethically and strategically flawed. When the fight against extreme labour exploitation becomes a means serving another end, and success is measured in terms of environmental outcomes, there is not much liberating about it anymore (see Kenis and Lievens 2015b). Third, the assertion that 'modern-day *slavery* is destroying the planet' easily slips into the argument that 'modern-day *slaves* are destroying the planet'. For example, Bales and Sovacool (2021, 1) note that '[g]lobally *those in slavery* ... contribute disproportionately to environmental destruction and carbon emissions'. A bit further they state about people in slavery that '*their* environmental impact is inordinately large' (Bales and Sovacool 2021, 3). This interpretive leap echoes the logics of Malthusianism and other reactionary environmental discourses, which shift responsibility for the climate crisis to 'the poor' and away from Western governments, corporations and investors (Kenis and Lievens 2015a, 2015b). Bales and Sovacool's (2021, 8) suggestion that those freed could be employed 'to rebuild, replant, support, and protect the natural areas they have been previously forced to exploit and destroy', this time in legally permitted forms of neoliberal labour exploitation, further troubles the narrative. In effect, this means the absorption of 'freed individuals' into 'contract slavery' (Bales et al. 2009), a move that ultimately benefits multinational corporations. It paves the way for Western investors, often with poor environmental track records, to embark on new terrains of capital accumulation, this time capitalising on the new market of environmental reconstruction, while being secured of an influx of cheap labour. In other words, it paves the way for the exploitation of these regions under the pretence of saving them. Bales and Sovacool highlight carbon credits as a potential source of funds, ignoring two decades of critique on carbon trading and offsetting (Carbon Trade Watch 2007; Gilbertson and Reyes 2009; Kenis and Lievens 2015a, 2015b; Lohmann 2012).

4.2 | Demonising Local Practices and Perpetuating Saviourism

The modern slavery-climate change nexus is built on a storyline which depicts a range of common, and often traditional, livelihood practices (e.g., brick making, shrimp farming, artisanal mining) a priori as outdated, environmentally destructive forms of slavery, while largely overlooking their distinct socio-economic realities. Without wanting to romanticise these practices, it is important to see that this discourse perpetuates an implicit racism in how it ridicules these practices, assesses exploitation in these contexts according to Western standards, assumes they are inherently more environmentally destructive than technologically advanced or industrial variants, and coerces states to criminalise these practices. For example, Kara (2022), in *Cobalt Red: How the Blood of the Congo Powers Our Lives*, pushes a saviourism narrative that distorts the realities of artisanal mining in the Democratic Republic of Congo. His rhetoric of slavery dehumanises people of colour, strips agency from local communities, silences Congolese scholars, activists, citizens and miners, erases local knowledge and reinforces colonial tropes (see Katz-Lavigne and Lukobo 2023). Such narratives construct a peculiar geographical imagination of slaves and slaveholders,

paving the way for Western-backed scholars, corporations and states to act as liberators. This is apparent in discussions on so-called 'seafood slavery' (Sutton and Siciliano 2016; Tickler et al. 2018), where Western governments demonise small-scale shrimp traders in countries such as Thailand, the Philippines, Myanmar, Bangladesh and Cambodia as 'slave owners' destroying mangroves and penalise these countries for not addressing local practices, thereby opening up a space for Western sea food corporations. To justify the need for saving 'slaves' and the planet via corporate interventions, modern slavery-climate change nexus scholars use sensationalised examples. Think about Bales' (2016) claims that almost every enslaved child in Bangladesh's fishing camps has seen or heard of another being eaten by a tiger, and Brickell et al.'s (2018) dramatically staged story of limb amputations in Cambodia's brick kilns industry, attributed to outdated machinery and traditional practices. Again, this is not to deny that horrific events happen. The question is how these representations function politically. In essence, they legitimise the expanding influence and control of multinational corporations over these regions under the pretence of 'saving' them from slavery and environmental destruction. They create spaces for Western corporations to 'ethically' extract resources, under the guise of 'fair' exploitation and reinforce the dominance of corporate and global minority interests. Meanwhile, the burden of addressing exploitation and environmental degradation shifts disproportionately onto the global majority, forcing governments to criminalise their own citizens, prohibit their labour migration and dismantle livelihoods (Bhagat 2023; Howard 2014; Okyere 2022).

Academics working on the nexus are, inadvertently or not, implicated in this system. Through their research, they produce data and evidence that states exploit for political and economic purposes. For example, Bales and his associates at the Rights Lab utilised GIS and remote sensing technologies to map the prevalence of slavery in Brick Kiln Industry in Pakistan, India, Bangladesh and Nepal (e.g., Boyd et al. 2018; Jackson 2020). This research, which they call 'slavery from space', effectively provides Western governments and politicians with a blueprint for identifying so-called 'slaves' and 'slave owners', leaving it to their discretion to use this information for criminal justice responses, political manipulation and trade strategies.

4.3 | Absolving the West of Historical Harm and Shifting the Burden of Action Onto the Global Majority

The modern slavery-climate change nexus dilutes the West's responsibility and shifts the burden of action onto the global majority. This is exemplified by Brickell et al.'s (2018) *Blood Bricks* policy recommendations. Of the five policy recommendations put forward by the authors, only one targets the UK, specifically its Modern Slavery Act, an ineffective piece of legislation that merely offers suggestions to businesses with highly profitable supply chains, despite the fact that many have appalling exploitation and extraction histories. In contrast, three recommendations are directed at the Cambodian state, advocating enhanced regulations and criminal justice responses, such as labour and anti-trafficking laws. Similarly, scholars like Bales (1999), Jackson et al. (2020), Bharadwaj et al. (2021) and Glass (2023) endorse criminal justice responses to address the nexus. For example, Bales (1999, 2016), Bales and Sovacool (2021) emphasises the need for a stronger enforcement of international laws against modern slavery and related crimes, while Decker Sparks et al. (2021) adopt the language of criminal justice in response to those who allegedly destroy the planet via illicit mining. Likewise, there is a push to criminalise local seafood businesses in coastal Bangladesh, framing them as slaveholding entities destroying both people and planet and enforcing this criminalisation through trade bans that pressure states into compliance. It is well established that criminal justice responses to modern slavery and human trafficking often harm the people they claim to protect (Beutin 2023; Bhagat 2023; GAATW 2007; Kempadoo and Shih 2022).

Such policy recommendations absolve the West of accountability not only for climate change, but also for its history of colonial exploitation and extraction and for how these continue to shape the current socio-economic-political realities in the postcolonial world. For example, the French colonisation of Cambodia was marked by brutal exploitation of Cambodian labour and destruction of the environment, through the rubber plantations economy and extractive infrastructural projects, which led to the death of many Cambodian people (Aso 2010; Chandler 1979). Yet this well-documented history of French colonial oppression in Cambodia is absent from *Blood Bricks*' efforts to understand labour exploitation and environmental destruction. The use of traditional brick kilns in Cambodia is not the result of a lack of civilisation or malicious intentions, but a legacy of colonial era practices and policies which still structure the current socio-economic inequalities (see Diepart and Schoenberger 2017). By sidestepping this history, the project's recommendations absolve France from the reparations it owes to Cambodia. Such omissions have a concerning political effect. While the demand for reparations challenges the self-image of white Europeans and their descendants, modern slavery campaigns reinforce it (Quirk 2015). Hence, rather than facing the legacies of slavery, Western states lead a rescue industry that frames them as saviours of others. For a research project which foregrounds climate change as a key driver of modern slavery, it is furthermore troubling that only one, and the least developed of the recommendations, calls for climate action. This reinforces the impression that the nexus functions less as a tool for accountability than as a mechanism for deflecting responsibility and displacing blame. *Blood Bricks* is not an exception. Most work on the nexus disregards historical and present injustices faced by postcolonial countries or emphasises actions required by these countries, thereby shifting accountability, despite them having minimal historical responsibility for the position of their economies in global supply chains, let alone for climate change (Bharadwaj et al. 2021; Decker Sparks et al. 2021; Jackson and Decker Sparks 2020; Kadfak 2025; Tickler et al. 2018). To the extent that some of these countries have substantial current emissions, the latter should often be attributed to agricultural and industrial production for the global market, serving the global minority.

5 | Conclusion

Whilst the modern slavery-climate change nexus is presented as a new and exciting advancement in geographical scholarship, it reduces complex society–environment interactions to easily digestible causal relations. Whilst the nexus has a highly

seductive appeal—exactly because of its straightforward explanation, emotional resonance and ease of communication—it revives the widely criticised theory of environmental determinism, in its contemporary form of climate reductionism, including its Eurocentric, racist and colonial foundations. The nexus offers an uncritical and reductive explanation of systemic issues while diverting culpability away from those who perpetuate it. At the same time, the nexus benefits its proponents, both financially and professionally, further entrenching existing power dynamics and inequalities. Due to its strong focus on policy work and campaigning, the nexus is not merely an academic exercise. It has the potential to influence, if not shape, the international development sector. Through the funding of highly marketable projects, Western institutions superficially engage with issues that spark universal concern while failing to address the systemic injustices they uphold and perpetuate. Simultaneously, these projects often deepen the integration of local communities into the global market economy, all under the pretext of climate action, the liberation of slaves or some combination thereof. Bales' proposal to increase freed slaves' resilience by employing them in environmental reparation work, funded through carbon credit schemes, is one such example (Bales 2016; Bales and Sovacool 2021). This evolution follows a broader trend towards the 'climatisation of development' (Mikulewicz and Taylor 2020; Taylor 2015), which should, at least partly, be understood as an attempt to 'save' development by repackaging it with climate goals, thereby giving it new legitimacy and scope. As a next step, failing climate projects are now resuscitated by linking them with anti-slavery initiatives. For example, Jackson and Decker Sparks (2020) use the nexus to legitimise and reinvigorate a costly and failing initiative like REDD+ ('Reducing Emissions from Deforestation and Forest Degradation'). They argue that 'the incorporation of antislavery interventions with REDD+ would improve efficiencies, target more vulnerable populations, protect the environment, and support the Sustainable Development Goals (SDGs)' (Jackson and Decker Sparks 2020, 1). Yet, the REDD+ programme has been strongly criticised for its failure to reduce emissions, its market-driven foundations, high cost and harmful effects on people and communities, including the erosion of indigenous cultures (Asiyanbi 2016; Kolinjivadi 2015). Adding modern slavery to these programs will only reinforce these problems, providing additional arguments and tools for integrating local communities in the global market economy, the shifting of blame and the criminalisation of racialised populations.

At the same time, the modern slavery-climate change nexus absolves the West of its historical responsibility for the legacies of slavery, imperialism and colonialism. Built on racist stereotypes of bodies and practices in the majority world, it compels states to criminalise their own citizens and their livelihoods, expands neoliberal markets and legitimises ongoing Western-backed capitalist exploitation, all while attracting rapid funding and cheers of academic attention. In sum, the nexus is a tribute to contemporary disturbing trends: climate reductionism, bandwagon politics, the financialisaton of harmful research and practices, funding opportunism, neo-colonial practices and white saviourism. This way, the nexus inadvertently shapes both the fields of contemporary anti-slavery studies and climate scholarship, pulling them in a regressive direction.

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Data Availability Statement

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

References

Andrijasevic, R. 2007. "Beautiful Dead Bodies: Gender, Migration and Representation in Anti-Trafficking Campaigns." *Feminist Review* 86, no. 1: 24–44.

Angus, I., and S. Butler. 2011. *Too Many People? Population, Immigration, and the Environmental Crisis*. Haymarket Books.

Aradau, C. 2008. *Rethinking Trafficking in Women: Politics out of Security*. Palgrave Macmillan.

Asaka, I. 2017. *Tropical Freedom: Climate, Settler Colonialism, and Black Exclusion in the Age of Emancipation*. Duke University Press.

Asiyanbi, A. P. 2016. "A Political Ecology of REDD+: Property Rights, Militarised Protectionism, and Carbonised Exclusion in Cross River." *Geoforum* 77: 146–156.

Aso, M. 2010. "Rubber and Race in Rural Colonial Cambodia (1920s–1954)." *Siksacakra* 12/13: 127–138.

Bales, K. 1999. *Disposable People: New Slavery in the Global Economy*. University of California Press.

Bales, K. 2007. *Ending Slavery: How We Free Today's Slaves*. University of California Press.

Bales, K. 2016. *Blood and Earth: Modern Slavery, Ecocide, and the Secret to Saving the World*. Spiegel.

Bales, K., and B. K. Sovacool. 2021. "From Forests to Factories: How Modern Slavery Deepens the Crisis of Climate Change." *Energy Research & Social Science* 77: 102096. https://doi.org/10.1016/j.erss.2021.102096.

Bales, K., Z. Trodd, and A. K. Williamson. 2009. *Modern Slavery: The Secret World of 27 Million People*. Oneworld Publications.

Bernstein, E. 2019. *Brokered Subjects: Sex, Trafficking, and the Politics of Freedom*. University of Chicago Press.

Beutin, L. 2023. *Trafficking in Antiblackness: Modern-Day Slavery, White Indemnity, and Racial Justice*. Duke University Press.

Bhagat, A. 2022. "Trafficking Borders." *Political Geography* 95: 102598.

Bhagat, A. 2023. "'Who Is Not an Agent Here?': The Collateral Damage of Anti-Trafficking in Nepal." *Antipode* 55, no. 1: 70–89.

Bhagat, A. 2025. "Who's the 'Parasite' in Anti-Trafficking?" *OpenDemocracy*, June 2. https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/whos-the-parasite-in-anti-trafficking/.

Bhagat, A., and J. Quirk. 2024a. "Modern Slavery Funding Landscape in the United Kingdom (2013–2024)." Dataset, Brunel University of London. https://doi.org/10.17633/rd.brunel.25291315.v3.

Bhagat, A., and J. Quirk. 2024b. "Do We Really Need a Global Commission on Modern Slavery?" *OpenDemocracy*, April 10. https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/do-we-really-need-a-global-commission-on-modern-slavery-theresa-may-modern-slavery/.

Bharadwaj, R., D. Bishop, S. Hazra, E. Pufaa, and J. K. Annan. 2021. "Climate-Induced Migration and Modern Slavery: A Toolkit for Policy-Makers." Report, International Institute for Environment and Development & Anti-Slavery International. https://www.antislavery.org/wp-content/uploads/2021/09/ClimateMigrationReportSep2021_low_res.pdf.

Blaut, J. M. 1999. "Environmentalism and Eurocentrism." *Geographical Review* 89, no. 3: 391–408.

Boyd, D. S., B. Jackson, J. Wardlaw, G. M. Foody, S. Marsh, and K. Bales. 2018. "Slavery From Space: Demonstrating the Role for Satellite Remote Sensing to Inform Evidence-Based Action Related to UN SDG Number 8." *ISPRS Journal of Photogrammetry and Remote Sensing* 142: 380–388.

Brickell, K., L. Parsons, N. Natarajan, and S. Chann. 2018. "Blood Bricks: Untold Stories of Modern Slavery and Climate Change From Cambodia." Report, Royal Holloway University of London. https://antislaverycommissioner.co.uk/media/gmhfj3yn/blood-bricks.pdf.

Brown, D., D. S. Boyd, K. Brickell, C. D. Ives, N. Natarajan, and L. Parsons. 2021. "Modern Slavery, Environmental Degradation and Climate Change: Fisheries, Field, Forests and Factories." *Environment and Planning E: Nature and Space* 4, no. 2: 191–207.

Brundtland, G. H. 1987. *Our Common Future: Report of the World Commission on Environment and Development*. United Nations.

Carbon Trade Watch. 2007. "The Carbon Neutrality Myth: Offset Indulgences for Your Climate Sins." Report, Transnational Institute. https://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/CarbonNeutralMyth.pdf.

Carrington, D. 2022. "Almost 8,000 US Shootings Attributed to Unseasonable Heat—Study." *The Guardian*, December 16.

Chandler, D. P. 1979. "The Tragedy of Cambodian History." *Pacific Affairs* 52, no. 3: 410–419.

Chuang, J. 2014. "Exploitation Creep and the Unmaking of Human Trafficking Law." *American Journal of International Law* 108, no. 4: 609–649.

Conaway, C. 2013. "Climate Change and Slavery: The Perfect Storm?" *The Guardian*, December 13.

Couzens, E., and T. Stephens. 2023. "Editorial." *Asia Pacific Journal of Environmental Law* 26, no. 1: 1–8.

Craig, G., A. Balch, H. Lewis, and L. Waite, eds. 2019. *The Modern Slavery Agenda: Politics, Policy and Practice in the UK*. Policy Press.

Dartnell, L. 2019. *Origins: How the Earth Shaped Human History*. Penguin.

Das, R., and D. Chakrabarti. 2025. "Climate Change, Mobility and Modern Slavery." Report, Anti-Slavery International & International Institute for Environment and Development. https://www.antislavery.org/wp-content/uploads/2025/03/Climate-change-mobility-modern-slavery-1.pdf.

de Martínez Vedia, G. 2021. "Capitalism, Colonialism, and Imperialism: Roots for Present-Day Trafficking." In *The Historical Roots of Human Trafficking*, edited by M. Chisolm-Straker and K. Chon, 9–22. Springer.

Decker Sparks, J. L., D. S. Boyd, B. Jackson, C. D. Ives, and K. Bales. 2021. "Growing Evidence of the Interconnections Between Modern Slavery, Environmental Degradation, and Climate Change." *One Earth* 4, no. 2: 181–191.

Diamond, J. 1997. *Guns, Germs, and Steel: The Fates of Human Societies*. W.W. Norton & Company.

Diepart, J. C., and L. Schoenberger. 2017. "Concessions in Cambodia: Governing Profits, Extending State Power and Enclosing Resources From the Colonial Era to the Present." In *The Handbook of Contemporary Cambodia*, edited by K. Brickell and S. Springer, 157–168. Routledge.

Doezema, J. 2010. *Sex Slaves and Discourse Masters: The Construction of Trafficking*. Zed Books.

Eklund, L., O. M. Theisen, M. Baumann, A. F. Tollefsen, T. Kuemmerle, and J. Østergaard Nielsen. 2022. "Societal Drought Vulnerability and the Syrian Climate-Conflict Nexus Are Better Explained by Agriculture Than Meteorology." *Communications Earth & Environment* 3, no. 1: 1–9.

Ernste, H., and C. Philo. 2009. "Determinism/Environmental Determinism." In *International Encyclopedia of Human Geography*, edited by R. Kitchin and N. Thrift, 102–110. Elsevier.

Esson, J. 2020. "Playing the Victim? Human Trafficking, African Youth, and Geographies of Structural Inequality." *Population, Space and Place* 26, no. 6: e2309.

Farbotko, C. 2025. "Environmental Mobilities 1: Coming to Terms With Environmental Determinism." *Progress in Environmental Geography* 4, no. 4: 482–490.

FitzGerald, S. A. 2016. "Vulnerable Geographies: Human Trafficking, Immigration and Border Control in the UK and Beyond." *Gender, Place and Culture* 23, no. 2: 181–197.

Franceschini, I., L. Li, Y. Hu, and M. Bo. 2024. "A New Type of Victim? Profiling Survivors of Modern Slavery in the Online Scam Industry in Southeast Asia." *Trends in Organized Crime*. https://doi.org/10.1007/s12117-024-09552-2.

Fraser, N. 2023. *Cannibal Capitalism: How Our System Is Devouring Democracy, Care, and the Planet and What We Can Do About It*. Verso Books.

Frenkel, S. 1992. "Geography, Empire, and Environmental Determinism." *Geographical Review* 82, no. 2: 143–153.

Fudge, J. 2025. *Constructing Modern Slavery: Law, Capitalism, and Unfree Labour*. Cambridge University Press.

GAATW. 2007. "Collateral Damage: The Impact of Anti-Trafficking Measures on Human Rights around the World." Report, Global Alliance Against Traffic in Women. https://gaatw.org/resources/publications/908-collateral-damage-the-impact-of-anti-trafficking-measures-on-human-rights-around-the-world.

Gadd, D. 2024. "Misleading the World on Modern Slavery? Reassessing the Impact of the UK'S Anti-Trafficking Agenda." *International Criminology* 4, no. 4: 315–322.

Gadd, D., and R. Broad. 2024. "When Victims of Modern Slavery Became Offenders: The Unravelling of the UK'S Modern Slavery Agenda." *Journal of Human Trafficking* 10, no. 2: 302–315.

Gilbertson, T., and O. Reyes. 2009. *Carbon Trading: How It Works and Why It Fails*. Dag Hammarskjöld Foundation.

Glass, J. 2023. "Modern Slavery: The Hidden Obstacle to Achieving Climate Justice in the Asia-Pacific Region, and Beyond." *Asia Pacific Journal of Environmental Law* 26, no. 1: 62–86.

Global Commission on Modern Slavery & Human Trafficking. 2025. "Ending Modern Slavery by 2030 Will Not Happen Without Strong Leadership and Decisive Action." https://www.linkedin.com/posts/global-commission-on-modern-slavery_ending-modern-slavery-by-2030-will-not-happen-activity-7389669681584033793-rWEw/.

Hamouchene, H., and K. Sandwell. 2023. *Dismantling Green Colonialism: Energy and Climate Justice in the Arab Region*. Pluto Press.

Harding, A. 2021. "Madagascar on the Brink of Climate Change-Induced Famine." *BBC*, August 24.

Hobbs, S. 2023. "From Chains to Chainsaws: Modern Slavery and Deforestation in the Brazilian Amazon." *Environment and Planning E: Nature and Space* 7, no. 2: 834–861.

Howard, N. 2014. "Teenage Labor Migration and Antitrafficking Policy in West Africa." *Annals of the American Academy of Political and Social Science* 653, no. 1: 124–140.

Hulme, M. 2011. "Reducing the Future to Climate: A Story of Climate Determinism and Reductionism." *Osiris* 26, no. 1: 245–266.

Hulme, M. 2023. *Climate Change Isn't Everything*. Polity Press.

Huntington, E. 1915. *Civilization and Climate*. Yale University Press.

IPCC. 2007. *Climate Change 2007: Impacts, Adaptation and Vulnerability—Working Group II Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.

Jackson, B. 2020. *Slavery From Space: An Analysis of the Modern Slavery-Environmental Degradation Nexus Using Remote Sensing Data*. University of Nottingham.

Jackson, B., D. S. Boyd, C. D. Ives, et al. 2020. "Remote Sensing of Fish-Processing in the Sundarbans Reserve Forest, Bangladesh: An Insight Into the Modern Slavery-Environment Nexus in the Coastal Fringe." *Maritime Studies* 19, no. 4: 429–444.

Jackson, B., and J. L. Decker Sparks. 2020. "Ending Slavery by Decarbonisation? Exploring the Nexus of Modern Slavery, Deforestation, and Climate Change Action via REDD+." *Energy Research & Social Science* 69: 101610. https://doi.org/10.1016/j.erss.2020.101610.

Jackson, B., E. Weir, J. Mead, et al. 2024. "Integrating Policies Addressing Modern Slavery and Climate Change." Report, Modern Slavery & Human Rights Policy & Evidence Centre. https://www.modernslaverypec.org/resources/integrating-policies-modern-slavery-climate-change.

Kadfak, A. 2025. "Labour in Fisheries Through Migration Studies: Burmese Fish Worker Regularisation and Agency in the Thai Fishing Industry." *Geopolitics* 30, no. 1: 220–243.

Kara, S. 2022. *Cobalt Red: How the Blood of The Congo Powers Our Lives*. St. Martin's Press.

Katz-Lavigne, S., and E. M. Lukobo. 2023. "'Cobalt Red': A Regressive, Deeply Flawed Account of Congo's Mining Industry." *OpenDemocracy*, July 3. https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/cobalt-red-siddharth-kara-democratic-republic-congo-book-review/.

Kelley, C. P., S. Mohtadi, M. A. Cane, R. Seager, and Y. Kushnir. 2015. "Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought." *Proceedings of the National Academy of Sciences* 112, no. 11: 3241–3246.

Kempadoo, K. 2015. "The Modern-Day White (Wo)man's Burden: Trends in Anti-Trafficking and Anti-Slavery Campaigns." *Journal of Human Trafficking* 1, no. 1: 8–20.

Kempadoo, K., and E. Shih, eds. 2022. *White Supremacy, Racism and the Coloniality of Anti-Trafficking*. Taylor & Francis.

Kenis, A., and M. Lievens. 2014. "Searching for 'The Political' in Environmental Politics." *Environmental Politics* 23, no. 4: 531–548.

Kenis, A., and M. Lievens. 2015a. *The Limits of the Green Economy: From Re-Inventing Capitalism to Re-Politicising the Present*. Routledge.

Kenis, A., and M. Lievens. 2015b. *De Mythe van de Groene Economie: Valstrik, Verzet en Alternativen*. EPO.

Kenis, A., and M. Lievens. 2016. "Greening the Economy or Economizing the Green Project? When Environmental Concerns Are Turned Into a Means to Save the Market." *Review of Radical Political Economics* 48, no. 2: 217–234.

Kolinjivadi, V. 2015. "The Problem With REDD+." *Resilience*, December 23. https://www.resilience.org/stories/2015-12-23/the-problem-with-redd/.

Kolinjivadi, V., G. Van Hecken, and P. Merlet. 2023. "Fifteen Years of Research on Payments for Ecosystem Services (PES): Piercing the Bubble of Success as Defined by a Northern-Driven Agenda." *Global Environmental Change* 83: 102758.

Lang, M., M. A. Manahan, and B. Bringel. 2024. *The Geopolitics of Green Colonialism: Global Justice and Ecosocial Transitions*. Pluto Press.

Laurie, N., and D. Richardson. 2021. "Geographies of Stigma: Post-Trafficking Experiences." *Transactions of the Institute of British Geographers* 46, no. 1: 120–134.

Laurie, N., D. Richardson, M. Poudel, S. Samuha, and J. Townsend. 2015. "Co-Producing a Post-Trafficking Agenda: Collaborating on Transforming Citizenship in Nepal." *Development in Practice* 25, no. 4: 465–477.

LeBaron, G. 2020. *Combatting Modern Slavery: Why Labour Governance Is Failing and What We Can Do About It*. John Wiley & Sons.

Lee Koch, I. 2024. "From Criminals to Slaves: 'Modern Slavery,' Drug Trafficking, and the Cultural Politics of Victimhood in Postcolonial Britain." *Current Anthropology* 65, no. 2: 267–291.

Livingstone, D. N. 2012. "Changing Climate, Human Evolution, and the Revival of Environmental Determinism." *Bulletin of the History of Medicine* 86, no. 4: 564–595.

Livingstone, D. N. 2015. "The Climate of War: Violence, Warfare, and Climatic Reductionism." *Wiley Interdisciplinary Reviews: Climate Change* 6, no. 5: 437–444.

Lohmann, L. 2012. "Financialization, Commodification and Carbon: The Contradictions of Neoliberal Climate Policy." *Socialist Register* 48: 85–107.

Machin, A. 2013. *Negotiating Climate Change: Radical Democracy and the Illusion of Consensus*. Bloomsbury Publishing.

Mackay, M., B. D. Hardesty, and C. Wilcox. 2020. "The Intersection Between Illegal Fishing, Crimes at Sea, and Social Well-Being." *Frontiers in Marine Science* 7: 589000.

Marmo, M., and R. Bandiera. 2022. "Modern Slavery as the New Moral Asset for the Production and Reproduction of State-Corporate Harm." *Journal of White Collar and Corporate Crime* 3, no. 2: 64–75.

Marshall, T. 2016. *Prisoners of Geography*. Scribner.

McGrath, S. 2013. "Fuelling Global Production Networks With Slave Labour? Migrant Sugar Cane Workers in the Brazilian Ethanol GPN." *Geoforum* 44: 32–43.

McGrath, S., and S. Watson. 2018. "Anti-Slavery as Development: A Global Politics of Rescue." *Geoforum* 93: 22–31.

Meyer, W. B., and D. M. T. Guss. 2017. *Neo-Environmental Determinism: Geographical Critiques*. Springer.

Mies, M. 1986. *Patriarchy and Accumulation on a World Scale*. Bloomsbury Publishing.

Mikulewicz, M., and M. Taylor. 2020. "Getting the Resilience Right: Climate Change and Development Policy in the "African Age"." *New Political Economy* 25, no. 4: 626–641.

Miller, R. M., and S. Baumeister. 2013. "Managing Migration: Is Border Control Fundamental to Anti-Trafficking and Anti-Smuggling Interventions?" *Anti-Trafficking Review* 2: 15–32.

Milman, O., O. Adetayo, D. Lu, F. Kelliher, and L. Taylor. 2022. "'Nature Is Striking Back': Flooding Around the World, From Australia to Venezuela." *The Guardian*, October 20.

Morris, I. 2022. *Geography is Destiny*. Macmillan.

Mwendwa, K. A., C. M. Aurah, R. A. Opiyo, and A. Warria. 2024. "Climate Change, Environmental Stressors, and Child Labor: The (In) visible Links." In *The Palgrave Handbook on Modern Slavery*, edited by M. K. Kapardis, C. Clark, A. Warria, and M. Dion, 31–51. Springer.

Navasardova, E. S., I. N. Klyukovskaya, I. S. Galstyan, K. V. Kolesnikova, and R. V. Nutrikhin. 2015. "Some of the Corruptogenic Factors of Environmental Legislation in The Russian Federation." *International Journal of Economics and Financial Issues* 5, no. 3: 8–14.

O'Connell Davidson, J. 2010. "New Slavery, Old Binaries: Human Trafficking and the Borders of "Freedom"." *Global Networks* 10, no. 2: 244–261.

O'Connell Davidson, J. 2015. *The Margins of Freedom: Morden Slavery*. Palgrave Macmillan.

Ogunniyi, D. 2024. "Climate Change and the Modern Slavery Conundrum in Africa: Reimagining the Relevance of Human Rights Law." *Human Rights Law Review* 24, no. 1: ngad043.

Okyere, S. 2022. "Moral Economies and Child Labour in Artisanal Gold Mining in Ghana." In *International Child Protection: Towards Politics and Participation*, edited by N. Howard and S. Okyere, 29–55. Palgrave Macmillan.

Peet, R. 1985. "The Social Origins of Environmental Determinism." *Annals of the Association of American Geographers* 75, no. 3: 309–333.

Piguet, E. 2013. "From 'Primitive Migration' to 'Climate Refugees': The Curious Fate of the Natural Environment in Migration Studies." *Annals of the Association of American Geographers* 103, no. 1: 148–162.

Public Health England. 2022. "Guidance Vulnerabilities: Applying All Our Health." https://www.gov.uk/government/publications/vulnerabilities-applying-all-our-health/.

Quirk, J. 2015. "Reparations Are Too Confronting: Let's Talk About 'Modern-Day Slavery' Instead." In *On History: Beyond Trafficking and Slavery Short Course, Volume Four*, edited by J. Quirk and G. LeBaron, 85–89. OpenDemocracy.

Radcliffe, S. A., E. E. Watson, I. Simmons, F. Fernández-Armesto, and A. Sluyter. 2010. "Environmentalist Thinking and/in Geography." *Progress in Human Geography* 34, no. 1: 98–116.

Rogers, H. 2010. *Green Gone Wrong: How Our Economy Is Undermining the Environmental Revolution*. Scribner Book Company.

Rogerson, M., J. Grosvold, and K. Alves. 2024. *Climate Change and Modern Slavery in Public Procurement*. Modern Slavery and Human Rights Policy and Evidence Centre.

Segrave, M., S. Milivojevic, and S. Pickering. 2018. *Sex Trafficking and Modern Slavery: The Absence of Evidence*. Routledge.

Selby, J., O. S. Dahi, C. Fröhlich, and M. Hulme. 2017. "Climate Change and the Syrian Civil War Revisited." *Political Geography* 60: 232–244.

Semple, E. C. 1911. *Influences of Geographic Environment: On the Basis of Ratzel's System of Anthropo-geography*. H. Holt and Co.

Shih, E. 2023. *Manufacturing Freedom: Sex Work, Anti-Trafficking Rehab, and the Racial Wages of Rescue*. University of California Press.

Stammers, T. 2022. "Organ Trafficking: A Neglected Aspect of Modern Slavery." In *Modern Slavery and Human Trafficking: The Victim Journey*, edited by C. Murphy and R. Lazzarino, 41–59. Bristol University Press.

Stone, N. 2018. "Child Criminal Exploitation: "County Lines", Trafficking and Cuckooing." *Youth Justice* 18, no. 3: 285–293.

Sutton, T., and A. Siciliano. 2016. *Seafood Slavery: Human Trafficking in the International Fishing Industry*. Center for American Progress.

Swyngedouw, E. 2010. "Apocalypse Forever?" *Theory, Culture and Society* 27, no. 2–3: 213–232.

Taylor, M. 2015. *Livelihoods, Agrarian Change and the Conflicts of Development*. Routledge.

Tickler, D., J. J. Meeuwig, K. Bryant, et al. 2018. "Modern Slavery and the Race to Fish." *Nature Communications* 9: 4643. https://doi.org/10.1038/s41467-018-07118-9.

Trunov, A. A. 2017. "Deforestation in Russia and Its Contribution to the Anthropogenic Emission of Carbon Dioxide in 1990–2013." *Russian Meteorology and Hydrology* 42, no. 8: 529–537.

Vince, G. 2022. "Is the World Ready for Mass Migration due to Climate Change?" *BBC*. https://www.bbc.com/future/article/20221117-how-borders-might-change-to-cope-with-climate-migration.

Waite, L., H. Lewis, R. Murray, and E. Tomalin. 2025. "Faith, Bordering and Modern Slavery: A UK Case Study." *Environment and Planning C: Politics and Spaces* 43, no. 3: 416–432.

Wang, Y., and M. Lotfi. 2025. "How Climate Change and Modern Slavery Interact in the Supply Chain: A Conceptual Model Development Through a Systemic Review." *Business Ethics, the Environment & Responsibility* 34, no. 4: 1516–1539.

Whyte, K. 2018. "Settler Colonialism, Ecology, and Environmental Injustice." *Environment and Society* 9, no. 1: 125–144.

Wijers, M. 2015. "Purity, Victimhood and Agency: Fifteen Years of the UN Trafficking Protocol." *Anti-Trafficking Review* 4: 56–79. https://doi.org/10.14197/atr.20121544.

Yea, S. 2021. "Towards Critical Geographies of Anti-Human Trafficking: Producing and Precluding Victimhood Through Discourses, Practices and Institutions." *Progress in Human Geography* 45, no. 3: 513–530.