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Contesting just transitions: Climate delay and the contradictions of labour environmentalism



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ABSTRACT

The notion of 'just transition' (JT) is an attempt to align climate and energy objectives with the material concerns of industrial workers, frontline communities, and marginalised groups. Despite the potential for fusing social and environmental justice, there is growing concern that the concept is being mobilised in practice as a form of 'climate delayism': a problem more ambiguous than open forms of denialism as it draws in multiple and conflictual agents, practices, and discourses. Using an historical materialist framework, attentive to both energycapital and capital-labour relations, we show how JT is vulnerable to forces and relations of climate delay across both fossil capital and climate capital hegemonic projects. We review this through an engagement with the climate obstructionism literature and the theory of labour environmentalism: the political engagement of trade unionists and workers with environmental issues. As tensions within the labour movement surface amidst the unsettling of the carbon capital hegemony, we assess the degree to which (organised) labour-as an internally differentiated, contradictory movement—is participating in climate breakdown through a 'praxis of delay'. Trade unions and industrial workers are often implicated in resisting or undermining transitions, but this is related significantly to their structural power relations vis a vis the fossil hegemony. Notably, JT negotiations are themselves structurally embedded within the carbon capital economy. The general preferences of trade unions for social over environmental justice might be prevalent but are neither universal nor inevitable; JT is open and contested political terrain, and labour-environmental struggles remain imperative for building just energy futures.

1. Introduction

The concept of 'just transition' (hereafter JT) is one of the most important discursive constructions in contemporary environmental politics. Developed in the late 20th century as a union initiative in the global North to reconcile occupational and environmental objectives, the concept has since become a key feature in global climate and energy politics (Morena et al., 2020; Stevis, 2023; Stevis & Felli, 2015, 2020). This includes energy transition policies such as the Paris Agreement's commitment to "Tak[e] into account the imperatives of a just transition of the workforce" (UNFCCC, 2015, p. 1) the Silesia Declaration on Solidarity and Just Transition from the 2018 UN climate summit (UN, 2018), and within the EU's Just Transition Fund (Commission, 2021). In the US, President Joe Biden has argued that energy transitions provide "opportunities to create well-paying union jobs" whilst also "deliver [ing] an equitable, clean energy future" (White House, 2021). From the perspective of labour environmentalism, loosely defined by Stevis et al. (2018) as "the political engagement of trade unionists and workers with environmental issues" (p. 442), JT provides the strategic orientation for organised labour to rally workers behind ambitious climate action, while insisting that efforts towards decarbonisation are not made at the cost of workers, communities, and regions whose lives are currently enmeshed within high-carbon industries (Lahiri-Dutt, 2023; Snell, 2018; Young et al., 2023), or, indeed, whose lives are—or are about to become—embroiled within the production of low-carbon technologies and infrastructures (Andreucci et al., 2023; Pearse & Bryant, 2022; Zografos & Robbins, 2020).

Notwithstanding JT's rise as one of the most promising 'hybrid' environment-labour concepts, its substantive meaning is indeterminate and contested (Flanagan & Goods, 2022). JT proposals vary drastically in scale, scope, depth, and ambition (Cha et al., 2022; Stevis & Felli, 2020), and JT principles contain internal contradictions and tensions

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(Ciplet & Harrison, 2020; Eckersley, 2021). Its diffusion into mainstream climate politics has had rather paradoxical results for labour. The concept has doubtless played the starring role in spreading labour environmentalism globally, "re-plac[ing] the values of international solidarity and social justice at the heart of both the union and climate agendas" (Rosemberg, 2020, p. 53). But while it has come to exemplify the trade union movement's productive contribution to the climate debate, the proliferation of new understandings and meanings has also often led to the downplaying or even the erasure of its links to the movement. Given these developments, there is a need to (re)assess the contested politics of JT, paying close attention to the dilemmas, contradictions, conflicts, and trade-offs that arise within efforts to shape and pursue a JT in policy and practice (Ciplet & Harrison, 2020; Houeland et al., 2021; Kalt, 2021; Thomas, 2021; Thomas & Doerflinger, 2020).

One rising concern is the extent to which JT has become embroiled in the strategies and practices of climate delayism (Heffron & McCauley, 2022; Levidow, 2023; Newell, 2021; Normann & Tellmann, 2021; van Bommel & Höffken, 2023), a more subtle and complex phenomenon than outright climate denial, but one that is increasingly common, drawing in multiple and conflictual agents, practices, and discourses (Ekberg et al., 2023; Lamb et al., 2020; Mann, 2021; McKie, 2023). In this paper, we add to the literature appraising the complexities of climate delay by mapping the forms in which JT is being-or is at risk of being-mobilised, including by organised labour, to obstruct climate action, rather than advance or accelerate transition within a socially just framework attentive to both the urgency and uneven development of carbon constraint. Engaging with recent debates in environmental labour studies (Räthzel et al., 2021; Stevis et al., 2018), we consider both the ways in which JT has been captured or distorted by vested interests in the service of climate delay and the political tensions and controversies inherent within JT itself, as well as labour environmentalism more broadly. We conclude that JTs have in some measure departed from their original intention; the concept has been (partially) gripped, captured, and repurposed by forces of delay, but this is, in large part, internal to the capital-labour relation and thus needs confronting on that basis, including through the struggles of and within labour environmentalism.

These struggles are linked to an unfolding conjunctural shift in the global energy system in which fossil capital, sustained through a "multiscalar regime of obstruction" (Carroll, 2020, p. 9), is simultaneously dominant, built on hegemonic relations installed over successive periods of social democratic and neoliberal capitalism, and destabilised, through a contemporary combination of restless 'climate' capital, shifting state priorities, and social pressure for purposive and equitable transitions and deliberate disassembly (Newell, 2021). This coexistence of a fossil-based energy system with an emerging, low- or zero-carbon energy system denotes what Grubert and Hastings-Simon (2022) term the 'mid-transition', a period characterised by "climate and energy system non-stationarities" (p. 12), during which each system imposes operational constraints on the other. Crucially, the low-carbon system is developing under high-carbon (fossil capital) restrictions. Although antagonistic, these systems are mutually constitutive, with carbon-based systems powering processes of decarbonisation and mainstream (JT) pathways to 'decarbonisation' further locking in carbon-based infrastructures (e.g. platform electrification, carbon capture and storage). We argue therefore that negotiations regarding the creation and implementation of JT policy are themselves structurally embedded within the carbon capital economy, which conditions, but does not determine, JT outcomes-obstructing, constraining, and enabling the potential range of alternative (geographically specific) environmental labour strategies and actions available. Framing energy system change as a global conjunctural moment leaves room for indeterminant forces and spatial difference in the constitution of JT outcomes without losing sight of the structural dynamics underpinning the political economy of JT. Economic and institutional structures can be changed (at times qualitatively) through collective (political) agency (Bieler & Morton,

2018).

The paper hereafter is organised as follows: first, we introduce the notion of climate delay and further outline our theoretical approach. We then set out the history and contemporary usage of-and tensions within-the JT concept, before discussing agency and the contested role of organised labour. Next, we examine energy-capital-labour relations and the ways in which (resistance towards) socioenergy system change is dominated by two hegemonic projects: one built around the maintenance of fossil capital and the other around strategies of 'green' accumulation, with many actors operating across both hegemonic formations. Within the context of capitalism's organic (climate) crisis, labour environmentalism must orient itself within a dynamic landscape profoundly shaped by these competing, intersecting blocs. We then investigate how JT, in discourse, policy, and practice, is contributing to a politics of delay, including through labour's ecological modernisation, and how this politics manifests in different forms across the fossil capital-climate capital spectrum. Finally, we focus more explicitly on the role of labour, exploring how various strategies, traditions, and embedded actions emerge around the processes and practices of JT.

1.1. What is climate delay?

Although climate delay has been characterised as the new denial, it is not a new phenomenon (Kleczka, 2023; Shue, 2023); delay, as Fernández (2022) maintains, "has always been the primary purpose and consequence of climate denial" (para. 2). However, as outright denial has become increasingly untenable, a politics of delay has flourished and is in many ways more dangerous (Buller, 2021).

According to Lamb et al.'s (2020) influential categorisation, climate delay refers to a multiplicity of overlapping strategies, narratives, and policy-focused discourses that "exploit contemporary discussions on what action should be taken, how fast, who bears responsibility and where costs and benefits should be allocated" (p. 1). These discourses accept the existence of climate change but justify inaction or inadequate efforts to deal with it, leading, by design or circumstance, to "deadlock or a sense that there are intractable obstacles to taking action" (Lamb et al., 2020, p. 1). Buller (2021) argues that, in a similar vein to greenwashing, 'delayism' might be at its most dangerous when "creating a false sense of progress that undermines the effective action we need" through "false solutions" that "often lock in the injustices and inequalities that underlie the climate crisis in the first place" (para. 11). For some, the energy transition discourse *itself* is a delaying tactic, used by governments and corporations as cover for continuing the use of technologies that are known to be unsustainable and unjustifiable in the long term (Faucet, 2010).

In a contribution aimed at integrating multiple perspectives and diverse actors, Ekberg et al. (2023) connect historical and ongoing forms of denial and scepticism (including literal denial, response scepticism, etc.) to the complex ways in which the status quo is reproduced through various modes of delay and embedded processes of inaction. Indeed, while climate delay might include subtle yet insidious, organised forms of intentional delay, such as the deceptive marketing deployed by fossil fuel companies to impede action on climate change (Supran & Oreskes, 2021), it also includes myriad (often unintentional) actions locked into the 'everyday' activities of social actors. Capturing the nuances in this landscape of delay requires critical analysis of how situated social actors and material social practices form, contest, sustain, and disrupt a politics of delay, including through industrial relations.

Ekberg et al. (2023) argue that active climate obstruction (a concept covering both outright denial and more subtle delay) is a phenomenon primarily associated with the global North. Crucially, for the purposes of this paper, this is where organised labour has become most entangled within the strategies, practices, and narratives of multiple forms of climate delay, hence our primary focus here is on the North. That said, Edwards et al. (2023) have begun the work of locating forms of climate delay in the global South, both in domestic policy and politics and in

global and transnational networks. They argue that obstruction is especially fraught in the global South "due to historical and contemporary structures of inequality bolstering justifications for various forms of delay" (p. 3).

In rethinking energy transitions conceptually from and for the global South, Kumar et al. (2021) propose focusing on the conflicts and contradictions thrown up by balancing urgency and justice; while urgency is crucial, justice needs thought, participation, and deliberation. The challenge, therefore, is to move towards an agenda of "just urgency and urgent justice" (p. 154), identifying and drawing political attention not only to the jeopardising but also the enabling dynamics between urgency and justice (van Bommel & Höffken, 2023). This approach contextualises and differentiates the phenomenon of climate delay as much as the field of energy transitions. Place-specific understandings of situated lived experiences are thus crucial, as are comparative methodologies, not only within global North or global South settings but between these settings as well (Chen & Li, 2021).¹ Drawing on Hart (2018), we propose exploring localised energy transitions, and the related dynamics of urgency, delay, and (in)justice, in different parts of the world not as pregiven, bounded, or taxonomic cases, but as connected vet spatio-historically distinctive reconfigurations in a multi-scaled, relational energy landscape, both refractive and constitutive of the wider relations and processes of socioenergy change that, in turn, bear down on (entangled) energy, labour, and land struggles.

More specifically, under capitalist social relations, there will be resistance to accepting climate policy and action in both the global South and North due to the impact (both real and perceived) on work and (un)employment (Räthzel et al., 2021), especially regarding the need to phase out fossil fuels. For instance, while workers and union representatives in the Niger Delta customarily frame JTs and the geographical 'phase-out dilemma' (i.e. who should phase out production first, and who should 'pay' for it, in the context of historical, economic, and sociotechnical disparities) through a development mandate or the need to alleviate poverty, those on the Norwegian continental shelf legitimise continued production by constructing narratives of the 'cleanest' extraction and the duty to responsibly meet (Europe's) energy demand during transition (Jordhus-Lier et al., 2022). However, these dynamics around transition and delay, while specific, are not discrete; they are, rather, internally related, embedded within world-historical processes of accumulation and production in which workers have been increasingly set in competition with each other at multiple scales, often along territorialised and racialised lines, unsettling and disguising relations of (international) working-class solidarity.

In sum, the differential (spatial) attributes and strategies of actors and institutions that constitute various climate positions demand scrutiny, but these are embedded within the social (global) divisions of labour within which people are constituted and act (Stevis, 2022). That is, the entities and forces contesting JT are constituted relationally within broader historical and geographical (re)configurations of material political economy and systems of social reproduction. Crucially, union strategies and alliances continue to be profoundly mediated by their relationship to fossil capital, and the 'jobs versus climate dilemma' still inhabits much of the territory of labour environmentalism (Kalt, 2021), often leading workers and their representatives into (misplaced) alliances with forces of obstruction and delay.

From this historical materialist perspective, attentive to both the variability *and* positionality of agential voices, we approach (organised) labour as an internally differentiated, contradictory movement and JT as a terrain of struggle with structural and political limitations. Moreover, following Bieler and Morton (2018), we understand discourse as a

material social practice: "Discourse does not simply act upon people; rather, people act through discourse, so the world cannot be reduced to discourse alone" (p. 72). In short, 'discourses of delay' are dialectically entangled within the materialities of modern capitalist socioecological relations. This provides the theoretical orientation to consider the extent to which organised labour participates in the material reproduction of climate breakdown through a 'praxis of delay', which might be partially maintained through JT discourses.

2. Just transition: building a contested concept

Emerging in the late 20th century, just transition was built around a call to protect workers, their families, and communities when and where jobs and opportunities were impacted by environmental change, policy, or regulation (Galgóczi, 2020; Stevis, 2023; Wilgosh et al., 2022). The key point of departure was to identify the protection of livelihoods and the protection of the environment (at various scales, including the workplace) as entangled and interdependent, but often conflicting within and between different occupations, communities, and social groups (spatially and temporally), and in need of political intervention. The strategy was promoted by unions in the US and Canada in collaboration with sections of the environmental movement to address tensions and build alliances between social and environmental justice traditions and priorities (Pinker, 2020). Accordingly, for many workers, representatives, and activists operating at the intersection between labour and environmental politics, JT serves as a "unifying rallying cry" (Kreinin, 2020, p. 41): a demand to bring social justice and ecological transformation into the same frame of action and to resist attempts to divide labour and environmental movements, practices, and policies (Räthzel et al., 2021; Räthzel & Uzzell, 2013).

JT then fell off the agenda in North American labour politics but survived and subsequently flourished due to a network of national (Argentina, Australia, South Africa, Spain, the UK) and international trade union organisations globalising the concept from the late 1990s onwards (Morena et al., 2020; Stevis & Felli, 2020). Bodies such as the International Trade Union Confederation (ITUC), the European Trade Union Confederation (ETUC), and Sustainlabour have since established the idea within international climate agreements and sustainability guidelines. However, the choice by unions, led by the ITUC, to strategically associate JT with global mainstream climate policy, governance, and (in)action comes with its own promises, problems, and paradoxes (Korsnes et al., 2023; Rosemberg, 2020; Stevis, 2023). As Bouzarovski (2022) argues, although social justice and economic inequality are now part of the climate change conversation, mainstream transition policy debates are dominated by "techno-managerial framings ... underpinned by narrow cost-benefit analyses ... [which] risk perpetuating new forms of enclosure and division" (p. 1004). For instance, the European Green Deal (EGD) includes a key JT principle to leave no person or place behind, but at the same time prioritises market mechanisms and increased global competitiveness (Commission, 2019), which at best signals "the expected beneficiaries of the green transition to be within EU member states only" (Vela Almeida et al., 2023, p. 6).² Measures such as unlocking private investment are very unlikely to address the climate urgency at the scale and pace that is needed (Bourgin & Sol, 2021).

Nevertheless, as Bouzarovski (2022) also affirms, JT has "galvanised activists, intellectuals, and policy advocates from across the political spectrum" (p. 1003). Energy justice scholars contend that JT provides the means for fusing or subsuming other disparate justice-oriented approaches to climate, energy, and environmental research and praxis within a single, comprehensive, cross-cutting framework. In this vein,

¹ The notion of the 'global South' is itself contested. Care is needed so as not to reify North-South dichotomies, (unconsciously) entrenching practices of inequality and domination (Schneider, 2017), or present the 'South' or the 'North' as fixed unities or wholes.

 $^{^{2}}$ For Samper et al. (2021), the EGD is nothing more than an "attempt to extend the neoliberal hegemonic formation within European climate politics" (p. 8).

Abram et al. (2022) maintain that the concept provides an "integrated, whole-system perspective on justice (procedural, distributive, recognition, and restorative) that can help in identifying systemic solutions to address environmental and socio-economic concerns" (p. 1033). Indeed, at its most far reaching, the framework provides the strategic basis for connecting the principles of fairness and equity to notions of sustainability in a way that insists not only that 'transition' should be 'just', but that ecological justice *requires* deep societal transformation (Sweeney & Treat, 2018).

Due to (fear of) this galvanising potential, and in particular since its inclusion in the 2015 Paris Agreement and its legitimisation within the UN, a wide range of actors and stakeholders have adopted, appropriated, debated, and manipulated what is now a concept with divergent and ambiguous definitions and interpretations (Wang & Lo, 2021). The notion thereby functions as a kind of "empty signifier through which conflicting visions can be expressed without, however, having to expose their disagreements" (Felli, 2014, p. 379). If this plasticity is arguably the concept's main strength, leading to its relative success within the labour movement, it might also be its main weakness; while the concept is flexible and translatable, it is vulnerable to powerful interests who can reframe and distort what is signified by the term (Goods, 2021; Wang & Lo, 2021).

Consequently, JT faces many political, methodological, and practical challenges, including an alleged inoperability on the ground (Kreinin, 2020). This inoperability has been a source of criticism, including from those who might otherwise be supportive. Notably, given the goal is to interweave environmental and labour concerns in a way that "implicitly challenge[s] binaries between labour and environmental interests" (Flanagan & Goods, 2022, p. 482), the labour-oriented strategy has come under attack from some within the climate justice movement, who, given the "dearth of practical proposals for Just Transitions" (which is put down to a combination of contingent and structural factors) are sceptical that it is the best approach, and fear that it might even be a dangerous distraction (Müller, 2018, para. 6). Müller (2018), for instance, urges the continued search for "realistic Just Transition proposals" but warns that we must not "make the necessary rapid phase-outs of destructive industries such as coal, cars and cows in the global North dependent on the existence of realistic proposals for Just Transitions in these sectors" (para. 11).

If this disquiet comes from the standpoint of 'climate', the following quote from a peat worker in the Irish Midlands also indicates misgivings and tensions from the standpoint of 'jobs':

It is not a just transition; it is just a transition ... I would have very little faith in the just transition, to be honest. ... [T]he just transition is a political thing. It's politicised and it's all a game. (Quoted in Banerjee & Schuitema, 2022, p. 7)

This impression, informed by a deep cynicism that the notion is being deployed by politicians merely to avoid "negative PR", suggests that the concept in practice might be failing to live up to its declarations, and that more work needs to be done to convince workers that JT is anything more than a "soundbite" (Banerjee & Schuitema, 2022, p. 7).

Indeed, Platform, Friends of the Earth Scotland, and Greenpeace published a report in 2020 exploring North Sea oil and gas workers' views on the industry and found that a staggering 91% of survey respondents had not even heard of the concept. Reaffirming their commitment to a worker-led JT, the authors write: moving to a job outside of the oil and gas industry, with more than 50% saying they would be interested in a renewables related career, and 38% expressing a preference for rig decommissioning. Lennon maintains: "it is clear that [oil and gas workers] are intensely aware of the impact their current work has on the world—and want to do something about it" (para. 4).³

3. Questions of agency and the contested role of unions

The (organised) worker is an active geographical agent involved in the (re)making of capitalist landscapes. However, labour agency, organised or not, is embedded within and across a variable landscape, determined spatiotemporally and institutionally, which conditions, enables, and constrains its action and engagement. Questions about who, where, and what constitutes 'the worker' or the 'working-class', or whose voices, actions, or struggles 'count' in discussions about JT, are crucial for understanding environmental-labour issues, as is the relative role of unions across different geographies of labour and JT (Räthzel et al., 2021).

Lawreniuk (2021), for instance, argues that (our understanding of) forms and forces of labour agency now need to be woven into the new forms of climate agency emanating from those already on the frontline of the climate crisis in the fields and factories of the global South, forged through a subaltern politics that intuitively links crises across industrial, social, and ecological domains. Lawreniuk locates a potent political agency within a resistance enacted against the circumstances in which labour takes place under climate change "as it manifests in everyday livelihoods and through labour relations" (p. 174).

For Coe (2021), labour agency is always highly geographical, constrained by the intersecting (ecological) structures of capital, the state, community, and local labour markets in which workers are situated. While foregrounding the involvement of trade unions in environmental politics and uncovering the internal politics of the labour movement is essential work in understanding the shifting geographies of labour-environment relations, Coe claims there is a need to "zoom out beyond the environmental interventions of organised labour in order to appreciate the full gamut of labour-climate change interactions" (p. 451).

By contrast, Kleinheisterkamp-González (2023), drawing on Huber (2022a), argues the case for an environmental labour geography developed as a field *for* organised labour, in which we clearly distinguish between individual and organised (i.e. collective, intentional) forms of worker agency, and that we understand the climate crisis as fundamentally a class issue. Kleinheisterkamp-González claims that this does not mean we should ignore the importance of individual agencies in informing policies and practices or overlook other identities and subjectivities that shape (labour) agency, nor, indeed, should we only focus on trade unions or specific workers when assessing the contested demands of JT. But it is important to delimit the concept of labour agency to *organised* expressions of agency⁴ to derive useful generalisations for struggles on the ground, and to recognise that a well-organised labour movement will be necessary to bring about JT.

Whether we view these stances as complementary, coactive, or at odds, trade unions remain a key, if neglected/contested, stakeholder with a pivotal role in framing and building a case for JT and developing associated processes and policies (Hampton, 2018; Stevis & Felli, 2015;

The rhetoric of a just transition means nothing if impacted workers are not at the heart of shaping policies that affect their livelihoods and communities. [...] Clearly, campaigners and NGOs lobbying for just transition and policymakers tasked with implementing one have failed to reach oil and gas communities. (Jeliazkov et al., 2020, pp. 6, 9)

However, as report contributor Lennon (2020) asserts elsewhere, more important than this figure is the 82% who said they would consider

³ Other key findings from this report further corroborate the Irish peat worker's misgivings about JT in practice: 43% of oil and gas workers surveyed had been made redundant or furloughed since March 2020, over 50% deemed government support at all levels nowhere near enough, and job security satisfaction was rated 1.9 out of 5 (Jeliazkov et al., 2020).

⁴ This should be understood widely, as including campaigns, parties, community unionism, worker centres, and other non-traditional forms of collective labour organising.

Sweeney & Treat, 2018). How workers and their representatives organise and mobilise, both in the workplace and across the wider (global) political economy and society, will fundamentally help shape energy and sustainability struggles, pathways, obstructions, and futures (Hampton, 2015; Huber, 2022a; Pearse & Bryant, 2022; Prinz & Pegels, 2018; Wilgosh et al., 2022). However, the conflicts, tensions, and promises associated with labour environmentalism go beyond a simple division between those working in carbon intensive (status quo/sunset) industries and those working in low-carbon (transition/sunrise) industries. Encumbered by the "economic power of capital" (Mau, 2023, p. 142), trade unions in all industries and geographies are internally differentiated and contradictory actors, especially at times of crisis. Climate action simultaneously promises "job loss and creation, industry destruction and renewal, and can pit members' short against long-term interests" (Flanagan & Goods, 2022, p. 485). Thus, the fundamentally contradictory role of unions within capitalism-in which they "represent both an accommodation to capitalism and also a challenge to its priorities" (Darlington, 2014, p. 197)-is extended and amplified.

Moreover, as Galgóczi (2020) explains, although there is no inherent conflict between climate/environment policy objectives and labour, (just) transitions are delineated by the capital/labour relationship. If historical processes of workplace and industrial restructuring have been based on capital's profit interest, the objective of lower carbon emissions is not made on this basis, certainly not for high-carbon industries nor necessarily for capital in general, as discussed in the next section. Indeed, labour might push back against 'green' changes in the workplace when these processes follow the same historical patterns as other antagonistic business reorganisations. Hence, the imperative of green restructuring throws up particular challenges for unions, and even class-oriented unions can get pulled in opposing directions from each other and within their membership.

To reiterate, here we are using predominantly global North, institutionalised, and (inter)national labour actors to draw out these heightened concerns around climate delay. However, following Stevis (2022), we encourage an approach that places labour, climate, and union agency within a relational framework in which forms and practices of climate delay are mutually constituted within a spatially (globalised) interconnected division of labour.

4. The organic crisis of capital: from fossil capitalism to climate capitalism?

The notion of hegemony is a useful conceptual framework for capturing the dialectics of economic and political-cultural power and exploring how alliances and strategies are formed through sociopolitical interventions involving multiple actors. Broadly speaking, hegemonic power refers to how consent is secured, organised, and maintained at multiple scales (Carroll, 2020). The capitalist class seeks favourable conditions for accumulation through the construction of "historical blocs" (Gramsci, 1971, p. 690). During an organic crisis, when bourgeois claims to universality are exposed and weakened (such as this moment of socioecological crisis), competing blocs start to vie for power. These blocs, as Harris (2021) explains, "coalesce a ruling consensus around a configuration of accumulation and social relations. This necessitates a broadly supported elite consensus, with a political and social base among the working and middle class" (p. 333). Here we focus on two blocs: one continues to uphold the central role and power of fossil capital, while a rival bloc is assembling around strategies of green accumulation. However, these are contested and overlapping projects with many actors operating across both hegemonic configurations.

Fossil capitalism pertains to the present, dominant form of capitalism in which the spiralling growth of commodity production has become wedded to a spiral of fossil fuel combustion. According to Malm (2016), the initial shift to fossil fuels was driven not by issues of price, scarcity, or even technological potency but by class interests, which have perpetuated their use, spread, and embeddedness ever since. In particular, the transition to coal in the labour process reaffirmed the system's preference for private competition over social cooperation in the realm of energy and gave capital the upper hand in its disciplinary struggles with workers, both in the workplace (mechanisation, generalisation) and on the labour market (urbanisation, centralisation). Mitchell (2011) shows how the later (relative) shift to oil was again largely driven by capital's drive to escape the organisational demands and actions of labour. Overreliance on coal started to empower workers in strategically important and interconnected industries such as coal, rail, and shipping. Oil, which could be extracted and transported with smaller workforces, allowed capital to avoid political and physical blockages and choke points along fossil capital commodity chains.

Although the fossil industry is closely aligned with what Harris (2021) has theorised as an authoritarian bloc, the coevolutionary and constitutive relationship between fossil fuels and capital helps to explain why fossil capital still holds so much sway, even within projects of green accumulation.⁵ The material particularities and spatial diffusion associated with the renewable energy transition are particularly challenging for a system built on a conception of energy constructed in the 19th century as a unit of equivalence for a fossil-fuelled industrial capitalism (Daggett, 2019). Fossil fuels have since become so tightly woven into the fabric of global capitalist social relations that any policies or practices aimed at moving away from this socioenergy system are not only antagonistic to incumbent interests but also threaten to destabilise and disrupt the reproduction of capitalist social relations more broadly.

The fossil fuel incumbency and its political coalitions employ methods of delay to push back meaningful societal action on climate change as far as possible to avert stranded assets, ensure our (lived, constructed, and perceived) dependency on oil continues, and maintain levels of control over other industries, nation states, and the wider world (Diamanti, 2021; Wilgosh et al., 2022). Pledges aside, most fossil-based energy companies are not pursuing meaningful change and remain significantly wedded to their business-as-usual scenario of fossil fuel-driven capitalism, while employing strategies of hedging against or resisting a green energy transition (Tilsted et al., 2022). There are signs nonetheless that sections of fossil capital are exploiting the delay they underwrite to manoeuvre themselves into a position to capture the processes and outcomes of transition itself (Carroll, 2020; Christophers, 2022).

For increasing fractions of the capitalist class, however, the systemic threat of climate breakdown and an unfolding legitimacy crisis is greater than the risks associated with energy transition, which has resulted in the rise of a competing project of 'climate capitalism'. For Sapsinski (2015), climate capitalism describes neoliberal attempts to mitigate climate change through market measures. Here we extend this framing to include state-oriented green growth approaches to the climate crisis, in that the strategy is to mitigate and adapt to climate change through state investment without significantly disrupting or challenging (and in some instances simply reinforcing) capitalist relations more broadly.

Climate capitalism thus describes a spectrum of contested marketand state-driven climate policy prescriptions, transition pathways, and material outcomes but can be usefully conceptualised as a "passive revolution" (Gramsci, 1971, p. 289), i.e. "a class project of proprietors that seeks to transform everything, except the class power relations of capitalist property" (Mookerjea, 2019, p. 574). Whether neoliberal, ecomodernist, or neo-Keynesian in approach, a 'green' passive revolution is about managing transition and linking the future of capitalism to

⁵ While the concrete materiality of fossil fuels has been critical to the development, maintenance, and dominance of imperial (post)industrial capitalism, we should be wary of slipping into crude forms of energy determinism or reductionism, and rather seek to grasp how "capitalism's production of distinctive genres of futurity are mediated by the social, economic, and regulative abstractions that fossil fuels make available" (Diamanti, 2021, p. 28).

green accumulation, while neutralising disruptive forces through the co-option, displacement, and partial fulfilment of socially transformative demands (Callinicos, 2010; Morton, 2010; Spash, 2021).

This spectrum is very wide, extending from the so-called 'self-regulating market' approach of neoliberalism, through forms of weak ecological modernisation that emphasise the power of technology and processes of 'profitable' substitution, and on to stronger varieties of ecological modernisation and interventionism that accentuate the role of the state, ranging from managerial reform to deeper structural reform (but not transformational) approaches to transition (Hampton, 2018). These social democratic forms often comprise elements that are linked to both hegemonic and counter-hegemonic projects. However, as Dale (2023) warns:

The consensus view, that a transition to a greener economy is in train, is largely false [...] And wherever decarbonisation initiatives are perceived as insufficiently growth-friendly, political forces mobilise to deprioritise and delay.

There is then a tension within capital between strategies, blocs, and sectors in which processes of 'transition wrecking' and 'transition capture' unfold amidst practices and narratives of both acceleration and delay. Different state-capital hybrids tend towards one regime or strategy or another, but most now straddle both socioenergy worlds. Within the context of this organic crisis, individual trade unions are subject to the material and ideological forces of the market, the state, and class (Hampton, 2018; Hyman, 2001); however, this is a heterogeneous and dynamic landscape of competing class fractions, nationalist interests, industrial sectors, and hegemonic projects.

5. Just transition and the politics of delay

In simplified terms, we have noted how certain forces of capitalist preservation operate to deny, impede, or obfuscate the need for *any* change through a regime of obstruction that protects streams of revenue throughout the fossil energy landscape. This includes various actors seeking to block action but also those seeking to delay climate action long enough until they have manoeuvred themselves into a position to control and profit from global energy transition; in other words, climate objectives are ostensibly agreed with, but the necessary policies are postponed to a distant future or linked to hypothetical or noncommercialised technologies (Carroll, 2020; Carton, 2019; Christophers, 2022). In both instances we find a "doubling down on existing accumulation strategies" and attempts "to shape, in a direct way, the (sociopolitical) conditions of production" (Carton, 2019, p. 764).

Whether we portray delay as a goal, tactic, or outcome, those with a vested interest in preserving fossil-based capitalism will utilise any forms of obstruction available to them to prevent climate action as often and for as long as possible. The distinction between outright obstruction and strategic delay is often difficult to pinpoint, in part down to the intentional methods by these actors to muddy the waters, and in part because many of the same actors operate across both strategies in different contexts. Either way, the outcome is 'business as usual', albeit with varying commitments from different actors in terms of ramping up renewables alongside fossil portfolios (Christophers, 2022; Ioualalen & Trout, 2023).

By contrast, certain political, economic, and social forces of capitalist preservation gather around the need for more urgent action and do not immediately appear to constitute a dynamic of delay.⁶ Instead, various interests seek to engineer or capture the processes of transition by internalising new energy forms, relations, spaces, and practices through

an emergent accumulation strategy that strives to "shepherd the world to a safe landing without disrupting its essential nucleus in capitalist relations of production" (Carroll, 2020, p. 12). Even within more far-reaching social democratic programmes, however, the overriding commitment remains to capital accumulation and not to decarbonisation per se; thus, the pace of change remains far too slow, even to meet the Paris goals, and the processes of transition remain tied to capital's growth imperative (Carroll, 2020; Mastini et al., 2021; Spash, 2021). Consequently, even the rapid global buildout of renewable capacity from 2017 to 2022 only managed to meet 51% of *new* energy demand (DNV, 2023).

But what role does JT discourse play in justifying or perpetuating these different forms of capitalist climate delay? As we have noted, JT is a pliable concept, which leaves it vulnerable to capture and dilution by both fossil capital and climate capital hegemonic projects. Furthermore, 'justice' is not a static object (Velicu & Kaika, 2017), and who defines what is just and for whom is open, contested, and determined by power struggles in particular contexts (Kalt, 2021).

In terms of the explicit preservation of the status quo, powerful incumbent actors have been found to appropriate and (re)deploy JT discourses in overt efforts to *maintain* fossil capital hegemony, including by spuriously aligning organised labour with the interests of fossil capital (Carroll, 2020; Goods, 2021; Newell, 2021; Wright et al., 2022). This sees the notion of justice repackaged around the contribution of fossil fuels to collective wellbeing, while the decarbonisation aspects of transition are rendered ineffective, unattainable, or undesirable, even, *using* a narrative of (in)justice for fossil workers, frontline communities, and the (global) working class in general. Major state interventions to address the climate crisis are denounced as too costly, the repercussions are predicted to fall unduly on 'hard-working people', and JT is redirected to point to the alleged harm done by a change in high-emission behaviours and practices.

In these instances, fossil capital hegemony is reframed, defended, and renewed through an incorporation of justice and JT, but one based on a "grammar and hierarchy of justice centred around justice equalling jobs and fossil fuels equalling jobs, societal wellbeing and humanitarianism" (Goods, 2021, p. 15). In Australia, for example, a fossil-fuel alliance—comprising industry, government, and unions—has been working to establish a hegemonic temporal narrative by asserting the historical importance of fossil fuels to 'collective wellbeing' and by emphasising the alleged threat to national prosperity and security posed by decarbonisation. This illustrates how past articulations condition and limit the possibility to change (Wright et al., 2022).

These strategies and narratives can be identified using Lamb et al.'s (2020) discourses of climate delay, including the "fossil fuel solutionism" discourse, from the category focused on pushing non-transformative solutions (and where disruptive change is considered not necessary) (pp. 2, 3); the discourse that "change is impossible", which "reifies the current state of things and denies the ability of societies to organize large socio-economic transformations" (pp. 2, 4); and the "appeal to well-being", "appeal to social justice" and "policy perfectionism" discourses, from the grouping that emphasises the downsides of climate action (and where change is deemed too disruptive) (pp. 2, 4).

This does not mean that unions or workers supporting fossil fuels are doing so without material reason or class consciousness (although some might be). However, we should not equate the views or motives of labour and capital even when formally the same. Shared discourses or policy positions refract differential positions within a global political economy of social divisions and industrial relations (Stevis, 2022). Simply put, when it comes to constraining fossil fuel production, appeals to justice are very different coming from companies or shareholders who might 'lose out' to similar appeals coming from workers and communities whose vital human interests are threatened and have little faith that new, well-paid (unionised) 'green jobs' are on the horizon. Indeed, as Newell (2021) points out, businesses continually relocate their

⁶ As Parsons (2023) puts it: "Even on the grandest stages, the language of the climate emergency, used so liberally by world leaders from Joe Biden to Antonio Guterres, is in most cases a smokescreen; window dressing for the environmental status quo" (p. 174).

operations or enact technological change, despite the devastating impacts on workers and communities, and there are rarely calls to deal with the social effects of adjustment. Yet fossil fuel industries are seemingly afforded special privileges due to their structural power, which results in a somewhat "ironic twist" as "powerful fractions of capital invoke a previously undetectable concern for workers' welfare when faced with profit losses due to enhanced action on climate change" (Newell, 2021, p. 233).

Perhaps more significantly in terms of appreciating the longer-term effects of climate delay, JT has been increasingly utilised within mainstream climate and energy debates and policies. Here the concept is directed not towards sustaining the fossil capital status quo (at least explicitly) but rather towards sustaining capitalist social relations through processes of green passive revolution. Within these climate capital hegemonic strategies, its meaning ranges from dominant technomanagerial, market-driven framings to more progressive proposals focused on distributional and procedural justice aspects.

At one end of this climate capital spectrum, market-driven approaches to JT are based on the purported compatibility between neoliberalism and sustainability: i.e. growth, innovation, and job creation are attached to green technologies, but the processes of investment, retraining, and so on are abandoned to market mechanisms. Some unions have (more or less) aligned with this approach, helping to frame JT as a win-win for capital and labour. For example, the UK Trades Union Congress (TUC) has on occasion pushed back against neoliberal governmental policies, and some affiliated unions have pursued climate issues even when obstructed by government and corporate actors. Nevertheless, in trying to create partnerships with government and business, the TUC has effectively adopted a very watered-down approach to environmentalism, overlooking fundamental tensions in pursuing truly just transitions, and essentially acceding to the marketisation of the climate (Hampton, 2015). Although neoliberal approaches to green capital projects are distinct from attempts to deny or refuse the need for any (immediate) action, the role afforded to the market (e.g. carbon pricing) means little substantial difference in terms of climate action.

Broadly speaking, however, unions in the global North have adopted a position that Barca (2019) terms "labour's eco-modernism" (p. 226), a convergence between labour and mainstream ecological modernisation.⁷ According to Barca, this form of environmentalism, which is based on a mix of market and non-market regulation, dominates discourses in mainstream, global environmental politics. From a labour environmentalist perspective, it revolves around a "labour-friendly green growth plan" (p. 233) in which labour organisations, including the ETUC for example, align themselves with a hegemonic bloc advocating for a JT strategy based on creating blue-collar clean energy jobs. As Hampton (2015, 2018) explains, although ecological modernisation-with its emphasis on the roles and alliances of both state and non-state actors, the use of a wider range of instruments alongside market mechanisms, and a greater sensitivity to the social implications of climate policy-is distinct from neoliberal climate political economy, it nonetheless comes close to neoliberal framings due to the acceptance of the overarching framework of capitalist private property relations and its market-based climate policy tools. Nugent (2011) draws the following distinction: "Whereas the hegemonic power bloc has drawn on ecological modernization to reaffirm neoliberalism ... neoliberalism has also been challenged to some degree by labor-environmentalism that draws on ecological modernization discourse in the form of Green New Dealism" (p. 77).

In as far as Green New Deals (GND) are negotiated between the state, citizens' groups, trade unions, and business, Levidow (2022) suggests the relevant policy framework is Green Keynesianism (often overlapping with Green Growth), which seeks to square state-led stimulus for capitalist growth with environmental measures, reconciling high-quality jobs with a low-carbon economy. Despite the rhetoric, the more prominent role played by the state remains in sustaining incumbents through forms of financial support, delaying a shift away from dominant fossil fuel regimes (Newell, 2021). Technofixes, such as carbon capture and storage (CCS), are thus prevalent in many (global North) GND agendas, often (at least partially) driven in by trade unions in carbon-intensive sectors, which have either criticised GNDs for omitting CCS (as in the US) or appropriated GNDs for CCS (as in the UK) (Levidow, 2022).⁸

The main rival position within labour environmentalism, according to Barca, centres around the notion of environmental justice, a grassroots or subaltern perspective that in contrast to ecomodernism identifies capitalism as the real culprit of the ecological crisis. Despite this deep rift within (labour) environmentalism, Barca (2019) reminds us that this division is "internal to a broadly defined sustainability front, which stands opposite to the continuation of fossil-driven economic growth ... that characterizes the bulk of the world economy" (p. 227). That said, Cha et al. (2022) warn that environmental justice too can be 'neoliberalised' owing to its operationalisation, spatialisation, and administration. When moving from theory to praxis, the role of the state in progressing JT becomes problematic. The state is not an ally or neutral force but rather a site of contestation (Pulido, 2017). Although many JT programmes and policies are state-led or -run, the state itself commonly delivers false promises or ignores the needs of vulnerable communities, forces them into competition over resources (in order to attract capital, which is why local mobilisations around social justice can often translate as unjust transitions elsewhere), and generally perpetuates violence on many communities seeking a JT: "As a result, the power structures that cause environmental injustice remain, sometimes hidden inside environmental justice politics" (Cha et al., 2022, p. 3).

While unions in the global North have strengthened their engagement with environmental issues and movements in the last 10 years, especially discursively, at the operational level they tend to fall within an instrumental, balanced, or reformist approach towards greening and JT, with an emphasis on growth-based sustainability solutions and no real integration of environmental priorities (Montesano et al., 2024). The roots of JT in union demands around negotiation, strong safety nets, and robust public employment have deteriorated somewhat through the twin processes of internationalisation and institutionalisation, resulting in a "preference for investment, innovation, and ecological modernisation as seen in the European Green Deal" and "JT narratives [that] appear to preserve the status quo" (Wilgosh et al., 2022, p. 15). Even where union strategies of social dialogue are more expansive, they tend towards affirmative rather than transformative solutions to injustice. Notably, "[s]ome actors appear to be abandoning the term for its job-centric connotations, opting instead for different nomenclature" (Wilgosh et al., 2022, p. 15).

⁷ Ecological modernisation here refers to its dominant, mainstream (liberal/ bourgeois) forms emphasising 'green growth' and the possibility of sustaining a growth-oriented paradigm with incremental technological transitions. It should be noted, however, that there are those who argue for socialist versions of ecological modernisation, which has provoked intense debate among Marxist political ecologists and others around questions of climate politics, agency, technology, and (de)growth (e.g. Heron, 2022; Huber, 2022b; Levien, 2023).

⁸ A richer discussion about JT and the forces of climate delay/action as they relate to 'Green New Dealism' is outside the scope of this paper. For an account of Green New Deals in the US and the UK, see Levidow (2022), who analyses the divergences on decarbonisation among trade unions and the tensions between system change and continuity. Using China as a case study, Chen and Li (2021) examine the hierarchical structure in the global division of labour, focusing on the massive scale of informality in the green economy, before calling for a more organic integration of a global South perspective in the studies of a 'Global Green New Deal'. For a full critical account of the various mainstream Green New Deal'.

6. Just transition and the labour praxis of delay

In some cases, industrial and mining unions have been found to simply reject JT. In the case of United Mine Workers of America (UMWA), Abraham (2017) puts this rejection into historical context and argues that "waning militancy" heralded an inability to secure sufficient institutional leverage within a "limited corporatist system" to implement and facilitate a JT for Appalachian coal miners (p. 219). Abraham contrasts UMWA, which was unable to consolidate its 1970s era of budding labour environmentalism, with the German industrial union for mining, chemicals, and energy, IG BCE, which the author claims has been able to successfully shape a more just transition for miners in the Ruhr region due to workers' sustained militancy. This militant approach forced employers and the government into accepting comprehensive and democratic worker input into the energy sector's policymaking. Abraham is not idealising today's mining communities as progressive strongholds but is arguing that when unions fight for a degree of strong, worker-led influence over industrial planning (as encapsulated in Germany's neo-corporatism), JTs are more likely.

Abraham maintains that corporatism does not always block environmental reform or pacify workers. However, IG BCE's stance has been described elsewhere as business unionism, sitting somewhere between an oppositional and a defensive/reactive transition strategy (Kalt, 2022), and thus bestriding 'fossil capital preservation' and 'neoliberal climate capital' projects. According to Keil and Kreinin (2022), IG BCE has "weaponised the term 'just transition' ... using it to argue for workers' continued high consumption rights in the sunset sectors, rather than environmental justice" (p. 570). Traditionally, German unions have formed part of the "historic bloc of the growth coalition" (p. 564) and thus "actively delayed climate action through protecting well-paid jobs in ecologically destructive industries" (p. 566). Meanwhile, in borrowing from social movement unionism, Germany's metalworkers' union, IG Metall, has gained new members at grassroots level by being more society oriented, and the union evidently views renewable energy as an opportunity for strategic union renewal. However, JT is still predominantly framed around technological fixes and the fight for a "fairer, green treadmill" (p. 570). Although Keil and Kreinin find some counter-hegemonic narratives and measures within German unions, these voices tend to be marginal and dispersed.

Other European unions are often less sector specific, and the heightened differential impact of climate change on their members means their positions are even more contradictory. This is well illustrated by the European federation IndustriAll Europe, which Thomas and Doerflinger (2020) chart as oscillating between hedging strategies, with relation to steel, and a supportive approach, with relation to electronics. Such 'hedging' strategies pursued by trade unions avoid directly opposing environmental regulations but do try to shape them to minimise their costs, similar to strategies increasingly pursued by corporations to minimise compliance costs through either promoting an alternative policy instrument or effectively weakening existing ones through advocating low-cost designs (Meckling, 2015). However, when IndustriAll argues that climate goals cannot be achieved without carbon capture and storage, claiming that, outside green steel, there are "few commercially viable ways" to reduce emissions from European heavy industry-before conceding that "not all uses of captured CO2 result in emissions reductions"-the federation is more clearly aligning with neoliberalised climate delay (IndustriAll, 2022, paras. 2, 7).

Goodfellow and Natarajan (2021) bring questions of (declining) trade union membership and labour environmentalism into the same frame of analysis to interrogate the (historical and ongoing) disconnect between environmental and labour issues, or climate activism and the labour movement. Through an analysis of the UK union Unite's decision to support the addition of a third runway at Heathrow, they suggest that this general discord is due to a failure to consider not only the interests of other groups of workers (at multiple spatial and temporal scales) but also their own members' longer-term and wider interests. British unions have long centred their organising around "cementing the interests of the perceived ideal-type worker" (p. 135), concerned with the limited (defensive) role of enshrining British growth, job creation, and good working conditions, even if these come at the expense of a general working class or international solidarity, now and into the warming future. To the extent that Unite is interested in environmental concerns as regards Heathrow, sustainability is recast within a narrow ecomodernist frame in which the union encourages the use of the 'cleanest', quietest' aircraft, or focuses on the reduction of pollution in, around, and getting to the airport.

6.1. Locating climate delay

Climate delay can be very hard to discern and can be identified in what appear to be oppositional actions, strategies, or discourses. For example, Lamb et al. (2020) argue that "the push towards incremental solutions [such as technological optimism or voluntarism] tends to avoid all options [i.e. transformative, binding] that are most threatening to existing power structures and practices" (p. 4). This approach provides cover for ongoing unsustainability and impedes strong near-term climate action. This is a position we agree with in this paper. At the same time, Stern (2020) usefully reminds us that this claim (i.e. the drive towards incremental measures tends to avoid possibilities for transformation) might *itself* be a discourse of delay:

[F]ocusing only on transformational change may crowd out promising [feasible, immediate] incremental efforts. ... Whether incremental and transformational change compete in a zero-sum fashion [as Lamb et al. propose] is an empirical question. Some incremental changes may even facilitate transformation. (p. 1)

A fuller discussion around the relative merits and implications of incremental and/or transformative approaches to JT is outside the scope of this paper. What is of significance here is to note how delay can stem from different (and often contradictory) transition positions and how (in)justice can be located within strategies and discourses of both delay and acceleration. In other words, there is an evident need for transformative change; but given the urgency of the crisis there is the simultaneous need to work immediately within (and against) existing structural relations. Newell (2021) discusses this core dilemma:

Short-term action may mean going with the grain of where power lies and facing up to the reality of where control of production, finance and technology is currently concentrated. On the one hand, it is precisely the reluctance of incumbent actors to address challenges of sustainability through denial, greenwashing, false solutions and foot-dragging that has led to our current predicament. [...] On the other hand, the window of opportunity to avoid more catastrophic forms of climate change is closing, and so insisting on addressing all social inequalities and challenging power relations as a precondition to transition can also be a recipe for intransigence. (pp. 230, 232)

Globally, policies are leading to delay in practice. In the US it is estimated that the Inflation Reduction Act (an amended Build Back Better Plan) will increase emissions reductions by 2030 from 28% to 37%, but still short of a US target of at least 50% (Bistline et al., 2023). In the EU there has been a similar increase in climate ambition as part of the European Green Deal, but current plans are well short of the 55%

⁹ The UMWA recently changed its formal position, releasing its energy transitions <u>initiative</u> in 2021. Notably, while it now essentially backs a shift towards renewables, one of the three key principles (alongside new jobs and preserving communities) is to preserve coal jobs, primarily through developing CCS. Moreover, we should note the language used by the union's president, Cecil Roberts: "We talk about a 'just transition' all the time. I wish people would quit using that. There's never been a just transition in the history of the United States".

objective (European Scientific Advisory Board on Climate Change, 2024). Both include JT provisions including funding: "transformative investments [to] create good-paying union jobs to lift up the middle class and bring tangible benefits to communities that are often overlooked and left behind" (The White House, 2023); and "ensur[ing] that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind" (Commission, 2024). However, these plans currently represent forms of incrementalism that appear to be inade-quate to limit global temperature increase to 1.5C, or even 2C (UN, 2023).

We can also locate forms of climate delay across the spectrum of strategies and positions in labour environmentalism. Research in this area has begun to categorise various positions and strategies pursued by trade unions relating to energy and JTs (e.g. Kalt, 2022; Stevis, 2023; Thomas & Doerflinger, 2020). These should not be understood as mutually exclusive positions but rather as fluid and contradictory responses, found not only across the movement more broadly but also within the same unions at different levels, sectors, scales, places, and moments. Notwithstanding the open obstruction of oppositional stances, it is relatively easy to spot delay within instrumental, minimalist, and defensive positions, or hedging strategies that push to minimise regulation, pursue (only) incremental approaches to phaseouts, and consider there to be a trade-off between employment and environmental protection. Delay is also prevalent within the dominant, affirmative position, which is ostensibly supportive of JTs but follows an ecological modernisation paradigm of a green economy within existing institutional parameters. We might also locate delay within transformative positions to the extent that they rule or crowd out incremental change; however, this brings us back to questions about what forms of incrementalism can be considered just and ecologically sustainable, and/or lay the groundwork for, or open into, more transformative, confrontational, or organic change.

The accommodations made by unions and their social democratic political allies have, intentionally or not, shifted partnership models of JT almost to a point of "uncritical endorsement" of market-driven, green growth agendas (Sweeney & Treat, 2018, p. 3). This passive alignment with the very same forces driving emissions in the first place sees unions participating not only in forms of climate delay but also in the reproduction of new forms of climate colonialism to the extent that the costs of transition are shifted onto indigenous and marginalised communities, especially in the global South, through the generation of green sacrifice zones (Parsons, 2023; Zografos & Robbins, 2020). And yet, as Sweeney and Treat (2018) note, it is often *because* unions generally support action on climate change that some have been reluctant to challenge the ongoing processes of energy liberalisation and privatisation in fear of appearing to obstruct the transition to a low carbon future.

Canadian union activist Brian Kohler clearly spelt out the danger for labour in terms of the so-called 'jobs versus climate dilemma' over a decade ago. Kohler argued that labour's first choice is to determine whether existing jobs can be made 'sustainable'; JT is the backup plan. However:

Herein lies a trap. [...] Additional fear and distrust [are] being deliberately sown by some industrialists who want workers to fight the battle [against climate action] ... not because they think they will win, but to buy time to create their own transition program—a transition program for billionaires and CEOs. [...] When they are ready, these corporations will declare themselves green and leave their workers without jobs, without credibility—the last defenders of the indefensible in the eyes of the public—and without sufficient political power to even negotiate decent severance packages. However, in the interim, the delaying tactics will have done severe damage—possibly even fatal—to the battle against climate change. (Kohler, 2010, pp. 572–574)

Put another way, workers are mobilised as climate delay infantry before being abandoned and subsequently left without a JT.

Workers, embedded within the capitalist mode of production, are recruited into a kind of "systemic madness" in which for so many "making a living is also part of unmaking life on many scales: becoming sick from pollutants, destroying local environments, destabilizing the global climate" (Hansen, 2019, para. 4). Trade unions, tasked with winning immediate social gains for their members, are internally contradictory actors, tied-in geographically, historically, and sectorally specific and differentiated ways-to capital's competitive processes of exploitation and appropriation. These are the (re)sources of increased profits, which might allow for (negotiated) wage gains without endangering a company's competitiveness and thereby jobs. Hence, Hansen (2019) argues, the interests of capital and sections of organised labour in the global North have become increasingly aligned behind global processes of socioecological domination and degradation. This has taken a further complex and conflictual turn as we move towards societal pressure to close down whole (profitable) industries.

Working-class people are "intrinsically ecological subjects" (Barca & Leonardi, 2018, p. 489) dependent upon a healthy ecosystem and stable climate. This "working-class ecology" is a systemic relation mediated by multiple positionalities, from income and occupation to gendered and racial identification, and reflects different forms of work spanning factory, domestic, and social reproductive work, and more. Industrial workers are primary agents of energy and matter transformation through the labour process, while being themselves part of nature. Inasmuch, they "typically embody the ecological contradictions of capitalism" (Barca & Leonardi, 2018, p. 489).

Moreover, the limitations and contradictions of trade unionism itself complicates matters further. The movement emerged as an agency of working-class representation, and union actions such as strikes transform workers into collective agents capable of challenging capital's power; but unions also have an inherently competitive character, and they commonly narrow the movement's ideological agenda. Ultimately, their function stems from a regime of private property (Barker, 2014; Darlington, 2014). Trade unions appear therefore "as agencies of both struggle for and containment of workers' demands" (Barker, 2014, p. 52). Or, as Velicu and Barca (2020) maintain when discussing the presuppositions of the JT narrative: "the position of being a waged worker, no matter how valuable and entitled to benefits, serves to reproduce the same alienation and reification of workers as proletarians, depending on a wage relation (the job) to survive" (p. 265).

Structurally embedded within the carbon capital economy, workers and unions are not only subject to the mechanisms of industrial relations, such as 'job blackmail' or the 'jobs versus climate dilemma', but they are materially drawn into delaying action on climate through their alienated participation in the reproduction of fossil capitalist social relations (Jordhus-Lier et al., 2022). The reified processes of producing, appropriating, and othering Nature, inherent within the capitalist mode of production, means workers and unions get recruited into climate and environmentally destructive behaviour. There is thus a contradiction, not only between capital and labour but within labour itself. When moving from denial to delay, we find that while organised labour, or at least the overwhelming majority, does not deny climate change nor the need for climate policy explicitly, and sections at various scales from local branches to transnational federations might be at the forefront of calling for more radical action, it does nonetheless structurally and discursively participate in a praxis of climate delay and consequently plays a key role in the maintenance of carbon capital hegemony.

One possible way beyond this impasse is offered by Goodfellow and Natarajan (2021), who argue that union environmentalism in the age of climate crisis calls on unions to look beyond their perceived membership base and embrace a more holistic understanding of 'the worker', and, hence, a more coherent and unifying understanding of environmental concerns as labour concerns. Crucial to their argument, this reorientation around a more expansive role could draw in new constituencies of people, many of whom are younger and more climate aware, offering the potential to increase membership (and power) and centre

climate change in their political activities in a mutually reinforcing strategy.

7. Conclusion

The concept of a 'just transition' (JT) seeks to reconcile climate and energy goals with the practical concerns of industrial workers and marginalised communities. However, there is a growing worry that it is being manipulated as a form of strategic climate delayism. Our analysis delved into labour environmentalism, examining how tensions within the labour movement are surfacing amidst shifts away from fossil industries. We assessed the degree to which organised labour might be contributing to climate breakdown through a 'praxis of delay.' Drawing on recent debates in environmental labour studies, we considered how vested interests distort JT for climate delay purposes and explored the inherent political tensions within the concept itself.

Not every disagreement over policy responses to the climate crisis is obstructionist. Disagreements might be due to proposals being deemed to fall short of what is required, or actions perceived to perpetuate, misdiagnose, or unjustly displace the problem. Proposals that overburden the already disadvantaged both within the global North and/or between the North and South will be rightly criticised by workers, communities, and activists and might not be best characterised as (intentional) obstruction. Nonetheless, it might still constitute a form of climate delay. Thus, forms of obstruction and delay need to be deciphered and parsed out in terms of both actors and intentions, and this agency must be theorised from situated, relationally understood sets of socioecological practices (Loftus, 2020). The notion of a praxis of delay is a way to try to capture these nuances within and relating to the theory and practice of labour environmentalism, and to ensure that the narratives and 'doings' of unions and other actors are always understood as being embedded within power-infused material conditions.

We have shown how JT gets entangled within processes and relations of climate delay; however, JT is open and contested terrain, not least within the labour movement. We concur with Ciplet (2022) that as we direct our attention to the intricacies and complexities of power dynamics in JT efforts, there is a need for further approaches seeking to understand not only the forces impeding change but also the transformative potential of coalitional transition efforts in "shifting the political economic structures that cause, sustain, and deepen social, economic, and environmental injustices" (p. 315). Indeed, as Barca and Leonardi (2018) argue, "consciousness of the material contradictions embodied in working-class ecology can generate particular forms of social and political activism, i.e. working-class environmentalism" (p. 489). We therefore need theoretical and empirical analyses that explore not only where, how, why, and to what extent unions and workers are wrapped up in a praxis of delay, but also ones that build awareness and understandings of when and how they are pulling towards—or are (also) engaged in-a praxis of ecosocial transition.

We emphasise the need to understand organised labour as an internally differentiated, contradictory movement and how discourse plays a crucial role in the material socioecological relations that may sustain a praxis of delay within the JT framework. Further research should examine and compare (variations in) JT in practice, including how it relates to (overcoming) climate delay, in a diverse set of interrelated geographical contexts.

CRediT authorship contribution statement

Steven J. Harry: Writing - review & editing, Writing - original draft, Investigation, Data curation, Conceptualization. Tomas Maltby: Writing - review & editing, Project administration, Conceptualization. Kacper Szulecki: Writing - review & editing, Conceptualization.

Declaration of competing interest

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