

Climate change and agrarian struggles: an invitation to contribute to a *JPS* Forum

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ABSTRACT



This essay introduces and invites contributions to a new *Journal of Peasant Studies* Forum on 'climate change and critical agrarian studies'. Climate change is inextricably entwined with contemporary capitalism, but how the relationship between capitalism and climate change plays out in the rural world requires deeper analysis. In particular, the way agrarian struggles connect with the huge challenge of climate change is a vital focus for both thinking and action. In this essay, we make the connections between climate change and critical agrarian studies and identify competing, although overlapping, narratives. These narratives frame climate change debates and the way that the dynamics of climate change shape and are shaped by the rural world, whether through state policies, international governance, corporate influence, or agrarian struggles. We use a simple framework to examine different logics and strategies for anti-capitalist struggles that might connect climate change and agrarian mobilisations. We conclude with some overall reflections and suggestions for broad, guiding questions for future inquiry as part of the *JPS* Forum.

KEYWORDS

Climate change; agrarian struggles; critical agrarian studies

Introduction

Climate change is an existential threat to humanity and the planet and a cruel engine of myriad forms of injustice, disruption and destruction. The effects of climate change from human-made emissions of greenhouse gases are devastating and accelerating, yet are uncertain and uneven, both in terms of geography and socio-economic impacts. Emerging from the dynamics of capitalism since the industrial revolution — as well as industrialisation through state-led socialism — the consequences of climate change are especially profound for the countryside and its inhabitants. In this essay, we ask: what

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are the implications of climate change (and climate change mitigation efforts) for rural areas around the world, and how have rural people responded politically to these challenges?

Climate change is deeply entangled with the functioning of contemporary capitalism, as well as industrialism associated with state socialism.¹ Discussions range from Karl Marx's identification of the 'metabolic rift'², to wider debates about the 'Anthropocene' (Reisman and Fairbairn 2021), to how capitalism generates 'climate apartheid' and the contradictions that lead to climate chaos (Mwenda and Bond 2020; Rice, Long, and Levenda 2021). But how the relationship between capitalism and climate change plays out on the ground in the rural world has received less attention. In particular, the way agrarian struggles — led by peasants, pastoralists, fisherfolk, rural workers and others — connect with the challenge of climate change, linking to and going beyond the already widespread challenges to expropriation and extraction in rural areas, is a vital focus for both thinking and action.

This essay presents a set of notes and ideas from the *Journal of Peasant Studies* editorial collective and introduces a new *JPS* Forum on 'climate change and critical agrarian studies'. The essay is an invitation to contribute to the Forum, responding to the questions posed, or coming up with new ones. Contributions combining wider theoretical reflections with empirical analyses are welcomed.

The essay proceeds as follows. In the next section, we make the connections between climate change and critical agrarian studies through three themes. After presenting this background we identify four competing and overlapping narratives that frame climate change debates and influence how they play out in the rural world. These narratives in turn shape the nature of climate politics and the formation of agrarian struggles. We then use a framework to explore different logics and strategies for anti-capitalist and anti-state struggles that might connect climate change and agrarian mobilisations. We conclude with some overall reflections and suggestions of broad, guiding questions for future inquiry as part of the *JPS* Forum.

Climate change and critical agrarian studies: making the connections

In this first section, we explore the connections between climate change and critical agrarian studies, moving from debates about capitalism and 'nature', to situating climate change issues in rural contexts to discussions of climate change and agrarian politics.

Capitalism and 'nature'

Over the past few decades, the fields of ecological Marxism and political ecology have intensively explored relationships between capitalism and 'nature'. These concerns

¹Many authors explore the connections between climate change and capitalism from different angles (e.g., O'Connor 1998; Newell and Paterson 2010; Moore 2015, 2017; Klein 2015; Malm 2016, 2018; Millar and Mitchell 2017; Wainwright and Mann 2018; Gonzalez 2020; Newell 2021), but to assert such connections does not mean minimising the historical responsibility of what used to be called 'actually existing socialism' and of societies, notably China, that evolved in the direction of state capitalism. Both used (and China and Russia still use) carbon-intensive practices with major environmental consequences (Rogers 2015; Smith 2020). In recent years, China has been the number one national emitter of greenhouse gases and Russia number seven; the substantial emissions of the Soviet Union (until its dissolution in 1991) are evident in the data analysed by Griffin (2017, 8).

²In the third volume of *Capital*, Marx argues that 'capitalist property relations provoke an irreparable rift in the interdependent process of social metabolism, a metabolism prescribed by the natural laws of life itself' (Marx 1992, 949).

overlap with some of those of critical agrarian studies (Edelman and Wolford 2017), but we argue that we must go beyond past emphases.

The environmental dimensions of the interrelations between production, circulation, exchange, consumption and waste have been a key theme in ecological Marxism, specifically its focus on the 'metabolic rift' (Foster 1999; Foster, Clark, and York 2011). As highlighted in a significant literature, the metabolic rift occurred at a specific historical moment in the development of capitalism, and it continues wherever these conditions pertain: as capitalism penetrates a previously agrarian society, more commodities are produced that are circulated and consumed in distant places, the natural cycle of localised nutrient use and re-use is broken and the divide between agriculture and industry, as well as between rural and urban zones, widens (Schneider and McMichael 2010).

Jason Moore (2017) takes issue with the 'metabolic rift' argument, pointing out that humans and nature are not separated, but humans act in nature, part of a systemic 'world ecology'. Meanwhile, identifying multi-species realities, where nature–society separations are dissolved into hybrid assemblages, can offer deeper insights into the realities of the Anthropocene (Latour 2004; Haraway 2015; Haraway et al. 2016; Galvin 2018; Latour et al. 2018; Tsing, Mathews, and Bubandt 2019). However, Andreas Malm (2016) objects, and advocates a dialectical approach between humans and the natural world, in which interactions, relations and contradictions are central (cf. Soper 1995). This is a stance that echoes Raymond Williams (1980) and other cultural Marxists on the material and ideological entanglement of labour and nature. Radical, dialectical polarisations, including elaborations of the 'metabolic rift', can help expose the contours of politics around which mobilisation can occur, 'recovering a theoretical basis for ecological militancy' (Malm 2016, 156).

Emphasising the relations between capitalism and nature, James O'Connor (1998) identifies the 'second contradiction of capitalism' as the tendency for capitalism to utilise the natural resources upon which it depends at an unsustainable rate. The logic of capital in search of endless profit requires a continuous supply of cheap or free inputs (nature, labour, energy, food and so on), particularly on capitalism's frontiers, where inputs are mobilised, often violently and with little compensation (Peluso and Lund 2011; Patel and Moore 2017). This generates uneven development of capitalism across geographic spaces and societies over time (Harvey 2003; Smith 2008), providing the basis for colonial and imperial relationships.

In a similar vein, Nancy Fraser (2021, 120) argues that 'capitalism harbours a deep-seated ecological contradiction that inclines it *non-accidentally* to environmental crisis; [...] those dynamics are inextricably entwined with other, "non-environmental" crisis tendencies and cannot be resolved in isolation from them'. She argues that: 'The political implications are conceptually simple if practically challenging: an eco-politics capable of saving the planet must be *anti-capitalist* and *trans-environmental*' (ibid.; original emphasis). By 'trans-environmental' she means going beyond merely an environmental focus, as climate change is deeply entwined with the systemic crises generated by contemporary capitalism. She concludes that, 'Anti-capitalism is the piece that gives political direction and critical force to trans-environmentalism. If the latter opens eco-politics to the larger world, the former trains its focus on the main enemy' (Fraser 2021, 126).

Many of the arguments in ecological Marxism are foundational to the field of political ecology, although political ecology was in part a reaction to the ahistorical, functionalist

frameworks of the sub-discipline of cultural ecology that grew out of 1960s anthropology and that emphasised how cultural practices were 'adaptive' and reconciled imbalances between humans and their environment.³ In the 1970s and 1980s, the presence of militant peasant uprisings and radical groups, from Colombia to the Philippines and Vietnam, pushed political ecologists to argue that all life, human and non-human, produces value through labour. Society is shaped by the uneven ways in which labour was expended, extracted and distributed. Political ecologists have therefore focused on the material, relational and symbolic manifestations of power in agrarian settings, alongside a non-hierarchical, dialectical focus on scale and interactions between local and global dynamics (Rangan and Kull 2009; Sayre 2015). Rejecting the Malthusian implications of some interpretations of the 'Anthropocene' (Yusoff 2021; Malm and Hornborg 2014), political ecologists have instead increasingly engaged with the 'Capitalocene' (Moore 2017), the 'racial Capitalocene' (Vergès 2019) and the 'Plantationocene' (Haraway 2015; Tsing, Mathews, and Bubandt 2019; Wolford 2020; Carney 2021), all of which centre capitalism or the world economy in understandings of environmental change.⁴ Political ecology, like critical agrarian studies, recognises that capitalism, as with climate change, is not a global process that happens to local communities; rather, capitalism and climate change are social and ecological processes that are both produced and experienced at multiple sites and scales.⁵

These now-large bodies of work highlight how capitalism and climate change mutually constitute each other, and how this can lead to catastrophic consequences. Responses range from facilitating local action for climate justice (Temper et al. 2018), focusing on what Martínez-Alier (2002) calls 'the environmentalism of the poor', to revolutionary action against climate polluters. How then should climate change be addressed specifically in agrarian settings? Can the long tradition of critical agrarian studies (Edelman and Wolford 2017) draw inspiration from ecological Marxism, political ecology and other fields, and shed new light on this urgent problem?

In an important contribution, Henry Bernstein (2010, 300) highlights an 'inherited weakness' in many materialist conceptions of the 'development of the productive forces in capitalist agriculture' that embrace such development as 'forever progressive', ignoring the ecological havoc it wreaks. He suggests, as we do here, that many critical scholars critique the market while implicitly believing in its ability to manage climate change through adaptation and technological innovation. It is however necessary to grapple with the very real limits imposed by climate change and industrial production systems, and so envisage major transformations. There is a scalar logic at work here too: many scholars of political ecology and agrarian studies have analysed localised relations with the understanding that these take shape in the context of broader, global capitalist relations. With climate change, though, we are forced to examine such relations in the context of broader *environmental* relations as well. Just as capitalism is everywhere, so too is climate change.

³For example, Peluso (1992); McCarthy (2002); Davis (2002); Zimmerer and Bassett (2003); Hecht and Cockburn (2011); Robbins (2011); Watts (2013 [orig. 1983]); Barnes et al. (2013); Perreault, Bridge, and McCarthy (2015) and Peluso and Vandergeest (2020), among many other important contributions.

⁴For a recent discussion of the 'Plantationocene' concept by a range of scholars and activists, including many in political ecology and agrarian studies, see the recordings from a recent conversation, <https://einaudi.cornell.edu/research/global-research-priorities/conversation-plantationocene>.

⁵Thanks to Kasia Paprocki for this point.

We argue that climate change needs to be seen in its wider, historical context, and not just as a technical phenomenon emerging from anthropogenic greenhouse gas emissions. One challenge of climate change emerges from long-running patterns of 'uneven ecological exchange' and consequent 'ecological debt', which result in part from histories of colonial and imperial relations between the core and periphery (Roberts and Parks 2009; Foster and Holleman 2014; Aji 2021). Contemporary economic and political relations that result in forms of enclosure and extraction — particularly in the Global South — are often justified in the name of meeting net-zero commitments, offsetting targets or providing technologies for low-carbon transitions, and are the direct consequence of such historical processes and patterns of uneven exchange. This applies equally to the depredations of capitalist firms as well as to state-backed industrialisation led by state-owned enterprises and others. Any reflections to address climate change, therefore, must employ a more expansive, historically informed analysis that situates 'climate' within a wider set of environmental struggles in agrarian settings.⁶

We argue that new work in critical agrarian studies needs to retain the focus on local material histories and power relations, while embedding both in long-term analysis of global environmental change and understandings of the way in which this new historical moment and the phenomenon of climate change are shaped by both material limits and the legacies of colonial and imperial inequality. This requires thorough conceptualisations of the relations between capitalism (in its many forms, whether transnational, state-led or local) and diverse forms of 'natures' and 'socio-natures', including the climate, for agrarian settings.

Climate change and the rural world

How then do climate change and the rural world intersect? The rural world is the site where forests are both protected and exploited; where huge mining interests compete with small-scale miners and where rural industrial activity pollutes the air and destroys the land (Peluso 1992, 2017; Peluso and Watts 2001; Hecht and Cockburn 2011). Yet industrial capitalism has often treated nature as inexhaustible and rural inhabitants as disposable through the extraction of vast quantities of resources, from crops to oil, natural gas, minerals and more (Alonso-Fradejas 2021). Neoliberal, state socialist and populist governments alike have thus predicated national development on cheap natural resources and this tendency is likely to be aggravated in the context of climate change.

Climate change exacerbates the uncertainty and amplifies the risks attached to capitalist agriculture, thereby increasing the vulnerability of rural populations. Responses to climate change range from migration to locally based practices that respond to increased variability of rainfall (Mehta et al. 2019) to more institutionalised 'adaptation' and 'mitigation' schemes, often the centrepiece of rural development projects today. There is a plethora of labels, including 'climate-smart', 'nature-positive' or 'resilient' development, but how such concepts and programmes are constructed, through what forms of knowledge and practice, requires further scrutiny.⁷

⁶We are grateful to Max Aji for this important point.

⁷For example, see: Agrawal (2008), Pelling (2010), Ribot (2014), Nightingale (2017), Nightingale et al. (2020), Eriksen et al. (2021), Mehta et al. (2021), Paprocki (2021).

Too often, technocratic approaches frame interventions, obscuring more cosmopolitan ‘civic epistemologies’ and the intersecting uncertainties and diverse local understandings of climate change in particular settings (Szerszynski and Urry 2010; Wynne 2010; Jasanoff 2011). Such interventions in turn generate a new technocratically-driven politics of climate change, particularly in marginalised areas of the world where climate threats are deemed most pressing (Paprocki 2019). Further, this can replicate the colonial relations that overshadow or subordinate local perspectives, knowledges and ‘technologies of humility’ (Jasanoff 2007). Central to questions of climate and rural development are relations of power, with external interventions based on forms of accredited science often reinforcing the dominant visions of the powerful (Forsyth 2012). They thus may act to protect the inequitable *status quo* from the threat of climate change, shoring up exclusionary, sovereign notions of place, state rule and citizenship (Potter 2013).

Policy responses to climate change have an impact on social, economic and political relationships in the rural world. These include climate-financing, carbon-offsetting and sequestration schemes that transform rural landscapes through various forms of enclosure.⁸ Climate responses centred on shifts to low-carbon alternatives also involve the extraction of resources from rural areas to produce renewable energy and infrastructure, whether biofuels, hydropower or solar and wind farms (Franco et al. 2010; Borrás Jr et al. 2016; Barnes 2017; Dunlap 2018; Stock and Birkenholtz 2021; Torres Contreras 2021). Prompted by the climate challenge, and backed by donor and private finance, national plans the world over are full of investments in biofuel, hydropower, REDD+ carbon forestry and Bio-energy with Carbon Capture and Storage (BECCS) projects (Corbera 2012; Leach and Scoones 2015; Turnhout et al. 2017).

Such interventions require restructuring access to and use of resources, and the reframing of what are represented as climate-acceptable practices. Technocrats and investors continue to disparage and scapegoat agrarian production systems, such as mobile pastoralism, swidden agriculture and artisanal fishing, as destructive, wasteful and polluting, without deeper knowledge of the actual impacts of such practices on the environment and climate (Dressler et al. 2017; Franco and Borrás Jr 2019; Houzer and Scoones 2021).⁹ Meanwhile, dominant actors tolerate extractive and ‘productive’ corporations and state enterprises without question.

Climate change and agrarian politics

The impacts of climate change and responses to them are highly differentiated. Many suffer, while others prosper and accumulate (Watts 2013 [orig. 1983]). Very often the consequences of climate change are not spectacular, as presented in the form of a major drought, famine, hurricane or other disaster, but emerge as patterns of ‘silent’ or ‘slow’ violence (Watts 2013 [orig. 1983]; Peluso and Watts 2001; Nixon 2011; see also Benjaminson et al. 2012), occurring incrementally, over time and hidden from view. These

⁸Even though such policies have not been implemented in many parts of the world on a significant scale, and state and market agents continue with business as usual, they are significant indicators of the direction of future interventions.

⁹See also the many contributions on ‘green grabbing’ and related processes, including, Brockington and Duffy (2011), Arsel and Büscher (2012), White et al. (2012), Fairhead, Leach, and Scoones (2012), Mehta, Veldwisch, and Franco (2012), Rulli, Savioli, and D’Odorico (2013), Hunsberger et al. (2017), Dell’Angelo et al. (2017), Borrás Jr, Franco, and Nam (2020) and Liao et al. (2021).

differentiated consequences of both climate change itself and institutionalised responses to it have given rise to a new climate-related politics in rural areas.

Contemporary agrarian politics in many parts of the world have roots in the upheavals of the last century, including communist-inspired revolutions and anti-colonial struggles. While peasants did not lead these wars, they played an important role, often providing the mass base for the insurgent people's armies of the 'peasant wars' of the twentieth century (Wolf 1969). These struggles in turn shaped patterns of national development and underdevelopment and generated tensions between the imperial core and the colonised periphery (Rodney 1972; Amin 1974; Cooper and Stoler 1997; Carney 2011; Moyo, Jha, and Yeros 2013), resulting in historically embedded patterns of unequal ecological exchange that frame the current climate crisis (Ajl 2021).

Rural peoples have historically focused on four overlapping arenas of political contestation. These include: (1) changing social relations around property (especially access to the means of production, including access to land, forests, grazing or water); (2) labour regimes and relations; (3) income (profit or wages) and (4) consumption and social reproduction. The peasantry, alongside the rural labour force, differentiated by social class — along with co-constitutive social relations of race, ethnicity, caste, gender, religion and generation, among other elements — shape agrarian politics. From classic studies of agrarian societies, provocative questions arise, like those in Marx's *Eighteenth Brumaire*, about the conservative politics of some smallholding peasants (Marx 1982 [orig. 1852]). How do rural people become revolutionary, form alliances and create conditions for transformation? (Wolf 1969; Huizer 1972; Paige 1975)? What kinds of class alliances and agrarian transformations lead to which kinds of state and modes of political rule and institutions (Moore Jr. 1967)? Why and when do peasants — and other rural peoples — revolt (Scott 1977; but see Popkin 1979)?

While these classic concerns remain relevant, the context for agrarian struggles has shifted over the past century (Bernstein 2006; Akram-Lodhi and Kay 2009; Levien, Watts, and Yan 2018). Contemporary struggles remain firmly linked to global capitalism, but since the early 1980s autonomous agrarian social movements have often supplanted communist or socialist parties as the main protagonists. Many of these are not national in scope, but sectoral, subnational or transnational, single-issue campaigns, mobilising alongside stand-alone localised initiatives (Fox 1992; Edelman 1999; Moyo and Yeros 2005; Wolford 2010; Hall et al. 2015; Edelman and Borras 2016). Some combine class politics with identity politics around race, ethnicity, gender, religion or advocacy such as rural villagers dispossessed by large hydropower projects (Baviskar 1995). Others are rural environmental justice struggles against mining, pollution, 'fortress conservation', energy investments, concentrated animal production operations and industrial monoculture plantations.¹⁰

In addition to these localised conflicts, transnational agrarian movements have been prominent in struggles against neoliberal globalisation and against the World Trade

¹⁰'Fortress conservation' is the practice of barring people from forest and other environments that they traditionally used to conserve biodiversity and habitats. Most 'fortress' policies rest on a flawed notion of pristineness that sees 'natural' environments as apart from and uninfluenced by low-impact human activities. See the many contributions on resource extractivism and enclosure from different settings (e.g., Peluso and Watts 2001; Bebbington et al. 2008; Hecht and Cockburn 2011; Weis 2013; Martinez-Alier et al. 2016; Arsel, Hogenboom, and Pellegrini 2016; Adaman, Arsel, and Akbulut 2019; Scheidel et al. 2020; Shah et al. 2021; Kröger 2021).

Organisation (WTO) (Desmarais 2007; Edelman and Borras 2016). Asserting that ‘another world is possible’, they have advocated food sovereignty and agroecology as an alternative to the corporate, carbon-intensive industrial agri-food system.¹¹ More broadly, food sovereignty and agroecology have become central dimensions of social justice movements’ critique of neoliberalism and a political compass for the construction of positive, alternative futures (Gibson-Graham 1997, 2008).

Nancy Fraser argues that environmental justice movements are too narrowly focused and ‘fail to pay sufficient heed to the underlying structural dynamics of a social system that produces not only disparities in outcomes but a general crisis that threatens the well-being of all, not to mention the planet’ (Fraser 2021, 125). This a useful and pointed critique, but how does it connect with the agrarian contexts of concern here? If capitalism and climate change are linked, then class and co-constitutive social relations of race, ethnicity, caste, gender and generation must be put front and centre of any analysis of the causes and conditions of climate change, as well as of climate actions.

One consequence of the penetration of neoliberal capitalism into rural areas and the violence of states in processes of enclosure, extraction and exclusion is the appeal of nationalist, authoritarian and right-wing movements, offering populist solutions to protect ‘the people’ from both the state and the market. Authoritarian populist appeals have tapped into the disenfranchisement and long-term neglect of rural populations and sometimes articulate concerns around environmental protection and climate change, arguing for populist, non-interventionist, local responses.¹² In the same way, movements that are partly religion-based, such as Zero Budget Natural Farming in India, may project anti-science and exclusionary narratives, emphasising a mythical, golden pre-colonial past (Khadse et al. 2018).

An urgent question is whether contemporary agrarian movements have internalised climate change politics as a key context for and object of political struggle, and if so, how and to what extent? Conversely, we must ask whether environmental and climate justice movements take agrarian justice seriously and if so, how and to what extent?¹³ And further we must ask, how has the worldwide rise of various combinations of authoritarianism and populism, in which the rural world plays a significant role, influenced such processes? These questions suggest important issues for empirical research, exploring the connections between agrarian and environmental/climate struggles in different political contexts across the world.

Framing the climate challenge: contrasting narratives

Climate change and climate action have assumed growing urgency in recent years, whether in UN deliberations around the 2015 Paris Agreement through the Conference of the Parties (COP) process, scientific analyses of the International Panel on Climate Change (IPCC), or commitments of governments, corporations and financiers to ‘low-

¹¹See for example important contributions from, Patel (2009), Weis (2010), Perfecto and Vandermeer (2010), Wittman, Desmarais, and Wiebe (2010), Rosset and Altieri (2017), Bezner Kerr et al. (2018), Anderson et al. (2019), Holt-Giménez, Shattuck, and Van Lammeren (2021) and Akram-Lodhi (2021), among others.

¹²See, Scoones et al. (2018), McCarthy (2019), Neimark et al. (2019), McKay, Oliveira, and Liu (2020), Mamonova and Frangosa (2020), and Roman-Alcalá, Graddy-Lovelace, and Edelman (2021).

¹³See related discussion on the notion of ‘agrarian climate justice’ by Borras Jr and Franco (2018).

carbon' or 'net-zero' futures. Agrarian movements have increasingly engaged with these political spaces and international platforms (Chatterton, Featherstone, and Routledge 2013; McKeon 2015; Tramel 2016; Claeys and Delgado Pugley 2017; Routledge, Cumbers, and Derickson 2018), opening up debates to rural issues.

Inevitably, there are competing explanations for the causes and consequences of the climate crisis and for the course of appropriate climate action. As Mike Hulme (2009, 251) points out, 'one of the reasons we disagree about climate change is because we understand development differently' (see also Gupta 2010). Given the hegemony of capitalism in contemporary development, this means that when we disagree about climate change, it is often because we disagree about capitalism — and thus also about the appropriate role for agriculture and land use under capitalism, including wider patterns of ownership and control.

At the risk of reifying 'ideal types', we suggest that there are four main competing narratives about climate change and agrarian struggle. They all overlap, there are multiple strands within each, and they are often combined. But in thinking about how they emerge and are responded to in diverse agrarian settings, it is important to explore how different actors and their wider movements frame the climate challenge and the role of capitalism in particular, as this informs how actions are conceived and struggles are defined.

Corporate-driven, technological narratives

Corporate-driven, technological narratives frequently link business and philanthropic interests, connected through think-tanks, NGOs and elite organisations like the World Economic Forum. The basic assumption, sometimes implicit, is that there is nothing inherent in corporate capitalism that has led to the climate crisis. Proponents of this premise see capitalism as a self-correcting system that can simultaneously generate unbridled expanded reproduction of capital while pursuing effective climate change mitigation and adaptation. While corporate capitalism might have helped cause climate change in the past, they view this as largely accidental and suggest it can be reversed through an open market-place with the right commitments and incentives.

At the core of this narrative is the idea that the crisis is exogenous to the system of production: the market did not create the problem, therefore corporations and the technologies they can deliver can solve the climate crisis. This presumes new systems of incentives/disincentives, involving the 'marketising' of nature. In turn, a 'circular economy' is envisaged that allows for continuous capital accumulation, even in a low-carbon economy, where profits can be made from everything, from cultured meat to cool roofs to renewable energy installations. The primary goal is a win-win situation where corporations continue as profit-making enterprises under an emissions-reduction regime. The vision of the 'great transition', whereby capitalism is saved, patterns of accumulation are redefined and the worst of climate change is averted is, of course, a class project of Global North elites, in which offsets and fantasies of 'net-zero' are central, even though critics increasingly lambast these as 'dangerous traps' (Dyke, Watson, and Knorr 2021).

The technological fixes central to these approaches are fundamentally about achieving efficiency in production, circulation, exchange and consumption of commodities globally, or 'geoengineering' the planet to slow warming (Surprise 2018; Pearce 2019). This implies

technical competence and distributive and allocative *efficiency* (rather than justice), all with unbridled expanded reproduction of capital and economic growth without limits, celebrating a peculiarly Western vision of modernity and progress (Isenhour 2016). The controversial 'ecomodernist manifesto' published by the Breakthrough Institute (Asafu-Adjaye et al. 2015) encapsulates this view, with an argument for technology-led decoupling of economy and environment that has provoked many critiques (Caradonna et al. 2015; Hickel 2020; Albert 2020).

Promises of technological fixes generate market and policy expectations and in turn investment, powerfully framing and influencing the climate discussion (McLaren and Markusson 2020). Financial actors are always looking for new opportunities (Clapp and Isakson 2018). Techno-fix advocates point to intensification of production and circulation as 'land-sparing' alternatives that release land for protective conservation uses and 'half-earth' solutions (Wilson 2016). Some suggest conserving 30 percent of the planet's surface by 2030 (Dinerstein et al. 2020; Waldron et al. 2020). These and similar 'solutions' have been targets of both scientific and ethical scepticism (Büscher et al. 2017).¹⁴

Pro-corporate approaches frequently incorporate a 'techno-spatial fix' (Harvey 2003), with offsetting schemes that sell far-off carbon sinks, typically forest areas or monocrop tree plantations (Bumpus and Liverman 2008; Lovell, Bulkeley, and Liverman 2009; Huff 2021). Why, for instance, constrain the aviation industry from maintaining its operations when some communities of poor rural villagers in the Global South can instead benefit from a carbon sequestration scheme to create a 'net-zero' balance? Resources captured in this way also need to be protected from those assumed to be ecologically destructive users, such as poor villagers living in and around these areas, mostly in rural parts of the Global South. This may be the ultimate metabolic rift.

The logic of repair and restoration through market-led and technological interventions extends to rural settings in the form of 'climate-smart agriculture'. Taking many forms, the broad approach of 'climate-smart agriculture' (as well as 'sustainable intensification' or 'digital agriculture') aims to increase efficiency and productivity in agriculture and to reduce emissions. Effected through market-driven systems of incentives and disincentives, and via a plethora of projects, 'climate-smart' approaches are now widespread (FAO 2013; World Bank 2016). In this vision, capitalist farms, including large agribusinesses, using precision technologies, labour-displacing artificial intelligence and automation, and genetic engineering, constitute climate-smart farming systems, while traditional swidden agriculturalists or mobile pastoralists receive the blame for ecologically destructive farming and livestock-keeping practices (Taylor 2014; Clapp, Newell, and Brent 2018; Newell and Taylor 2018).

The corporate-led narrative champions market mechanisms, voluntary guidelines, corporate social responsibility, codes of conduct and business-led sustainability initiatives, but state enforcement and reliance on subsidies and regulatory frameworks are still very much part of the picture. To 'adapt' to climate change, public-sector investments protect capitalist interests and maintain business as usual. Fashionable proposals include huge publicly funded efforts around everything from geoengineering in space to building sea walls. Private philanthropy is also, ironically, called upon to restore resources destroyed by prior wealth accumulation (Morrison 2019; Pearce 2019; Ribeiro

¹⁴<https://openlettertowaldronetal.wordpress.com/>

2019). And in the cases of enclosure for climate-led initiatives, proponents of this narrative are quick to call on the military, police, paramilitaries and courts to enforce various kinds of 'fortress conservation' (Brockington 2002; Dunlap 2018; Verweijen and Marijnen 2018). Technological approaches to mitigating the climate crisis are no doubt essential (Hawken 2017), but everything depends on who controls the technologies and how they are inserted in a social and economic system and regime of accumulation.

Corporate-driven, technological narratives have significant promoters among commercial producers, such as the World Farmers' Organisation (WFO). For example, during the 2019 Madrid COP25, Theo de Jager, former president of Agri South Africa (AgriSA), and current president of the World Farmers' Organisation, declared that 'smallholder farmers need to be exposed to climate smart agriculture for sustainability' (Spore 2019). This echoes the commitments of large philanthropic organisations and foundations, such as the Bill and Melinda Gates Foundation, as well as the corporate business community, most prominently through the World Economic Forum (Schurman and Munro 2013; Wise 2019).

Climate emergency narratives

There are two main types of climate emergency narrative. On the one hand, scientists and even some national security experts point out that the widely accepted assessments, projections, targets and claims of the IPCC are negotiated findings subject to political influence that likely understate the severity and urgency of the crisis (Spratt and Dunlop 2019). More radical critics add that the IPCC is largely silent on capitalism's role in the crisis. On the other hand, other climate emergency narratives argue that disaster is imminent and that this justifies unusual, aggressive and sometimes undemocratic measures, including 'states of exception' where 'sovereign power' would sideline citizens' rights, agency and knowledge (Agamben 2005; Anderson 2017; Gills and Morgan 2020; Paprocki 2021). The two types sometimes overlap and the boundaries between them shift. While we applaud those who point to the gravity of the crisis and stress the imperative of radical action, we have deep reservations about the anti-democratic and authoritarian premises of the 'state of exception' advocates.

Proponents of authoritarian 'emergency' interventions typically stress projected increases in global temperature and identify thresholds and deadlines. These justify urgent measures, even though some critics argue that such 'deadline'-focused action may be dangerous (Asayama et al. 2019; Hulme 2019). Climate emergency narratives feature apocalyptic futures based on current trends and projections: melting glaciers, thawing permafrost, rising sea levels, droughts and heat waves, more severe El Niño and La Niña phenomena, irreparably damaged nature, rampant pollution and eventual civilisational collapse (Skrimshire 2010). They focus on the need for concerted, urgent, rapid action, no matter what, and adamantly reject any gradualist reformism. Meanwhile, grassroots, localised efforts at mitigation or adaptation are frequently rejected as piecemeal, too slow or insufficient.

There are increasing calls to declare 'climate emergencies', from global to local levels (Ruiz-Campillo, Castán Broto, and Westman 2021). Many cities, for example, have made such declarations, calling for changes in individual choices in food consumption and for a rethinking of transport, housing infrastructure and planning. The idea of 'degrowth',

involving a shift in patterns of economic production and consumption, has become a popular rallying point (Demaria and Latouche 2019; Gerber 2020; Hickel 2020; Kallis et al. 2020; Jackson 2021), although this too has attracted critique (Milanovic 2017).

A diverse political coalition links to these narratives, with ambivalent, sometimes contradictory ideas about the role of the state and wider democratic processes. In some cases, there remains a contradiction between calls for urgent, emergency action and suspension of democratic accountabilities, and calls for wider citizen involvement through 'citizens' assemblies' or other deliberative fora as a way forward. Others advocate something like radical 'war communism' (Malm 2020) through a revolutionary mobilisation of forces in the face of impending catastrophe, drawing inspiration from Vladimir Lenin and Rosa Luxemburg, amongst others (Bensaïd 2002a).

Climate justice narratives

There are multiple, sometimes competing, climate justice narratives, with contrasting politics around the relationship between climate change and capitalism in agrarian settings. Climate justice narratives start from the observation that inequalities and injustice are at the root of the causes and impacts of climate change (Adger et al. 2006; Marino and Ribot 2012; Swilling and Anneck 2012; Agostino 2015; Klinsky et al. 2017; Boyce 2018). They call for a 'just transition' (Swilling 2019) or the creation of just 'pathways to sustainability' (Leach, Stirling, and Scoones 2010). These approaches identify a range of injustices related to knowledge (whose knowledge counts?), procedure (who is involved in deciding?), distribution (who gets which benefits and who suffers what costs/risks?), and correctives (how are past wrongs addressed?). Proponents argue that a focus on different dimensions of justice is key to addressing climate change (Gardiner 2011). Climate change goes beyond the biophysical and technical and must be seen through the lenses of inequality and injustice (Newell and Mulvaney 2013; Lynch et al. 2019; Tuana 2019; Newell et al. 2020; Sultana 2021), extending beyond the rights of people to those of the living world, with a multi-species conception of environmental and climate justice (Tsing et al. 2020; Tschakert et al. 2021).

Although calls for 'climate justice' or 'just transitions' have become commonplace, the political implications are sometimes unclear (Schlosberg 2009). Some embrace a liberal rights-oriented notion of justice, underscoring allocation and compensation issues. Many of the corporate-led solutions through market and technological fixes have highly variable outcomes (Eriksen et al. 2021); in the now-pervasive discussion of 'planetary boundaries' (Rockström et al. 2009), ideas of justice are combined with perspectives on 'safe spaces' within boundaries. For example, Carl Folke and colleagues (2021, 834) indicate that 'the Anthropocene reality of rising system-wide turbulence calls for transformative change based on emerging technologies, social innovations, shifts in cultural repertoires, and a diverse portfolio of active stewardship of human actions in support of a resilient biosphere'. This, of course, raises big questions about the meaning and politics of transformative change, planetary stewardship and what technologies and social innovations are desired by whom.

Those who take a more radical approach to justice emphasise the rights of those already structurally marginalised, including the poor and future generations (Tschakert and Machado 2012), highlighting transformations within capitalism as the major

challenge (Malm 2016; Wainwright and Mann 2018). Still others focus on the rights of non-humans, invoking Andean ideas of *'buen vivir'*, *'Pachamama'* and the 'rights of nature', celebrating indigenous and non-Western constructions of inseparable human–nature relations, as highlighted by the Cochabamba declaration of 2010.¹⁵ Such approaches challenge conventional forms of knowledge production and underscore basic issues of epistemic justice (Temper and Del Bene 2016; Whyte 2018). Competing notions of fairness, justice, restitution, reparations and ethics, including non-Western ones, can provide a useful compass in contemporary climate politics (Baer 2011; Gardiner 2011; Schlosberg and Collins 2014; Harris 2016). More radical climate justice narratives highlight the historical injustices of unequal exchange and ecological debt, whereby climate challenges in the periphery are the direct consequences of long histories of exploitation and unequal relations of global power.¹⁶

These different framings of climate justice are manifested in contrasting approaches to capitalism. In some, if the disadvantaged are protected and have rights, then capitalist relations can be part of the solution. Like the other narratives, the climate justice narrative is also significantly differentiated, ranging from positions that are liberal and social democratic in orientation to more transformative approaches that seek to control capitalism and rein in its worst depredations and effects. Climate justice advocates include reformist positions around 'green new deals' and those associated with mainstream green parties (Ajl 2021; Newell 2019), while others take more radical positions on rights and justice and consider the critique of capitalism more fundamental. Large international coalitions and movements – such as La Via Campesina – often find themselves and their members in the various currents within these climate justice narratives, navigating between more reformist and radical positions.

Structural transformation narratives

For structural transformation narratives, the fundamental problem is that growth in contemporary economies is dependent on fossil capital (Mitchell 2011) and plantation production (Wolford 2020), producing wealth that is maldistributed across classes, regions and economies (Hickel and Kallis 2020). The solution is not to tinker at the margins, temporarily easing the crises of capitalism through technological, market or state welfare fixes, but to transform the relations of production that generate climate change in the first place, through reparation, redistribution and decolonisation (Watts 2004; Cadieux et al. 2019; Ajl 2020). This is a more radical vision of a 'green new deal' that restructures economies in favour of a low-carbon future under people's control (Ajl 2021; Mastini, Kallis, and Hickel 2021; Selwyn 2021).

From an agrarian perspective, structural transformation would include a radical shift from capitalist, industrial agriculture to a different model. This would transform the four fundamental dimensions of agrarian political economy: property, labour, income and consumption/reproduction. It would entail a three-pronged approach to food system transformation: dismantling the global food system controlled by large

¹⁵<https://www.therightsofnature.org/universal-declaration/>

¹⁶See, https://www.academia.edu/9167899/Calculating_Climate_Debt_A_Proposal and as highlighted in the People's Agreement of Cochabamba in 2010, <https://pwccc.wordpress.com/2010/04/24/peoples-agreement/>

corporations; taking over the state and developing new systems of deliberative governance and building something new, drawing from food sovereignty and agroecological ideas and practices, ushering in a new food regime (McMichael 2009; Weis 2010). All of these require an accompanying restructuring of access to and control over natural resources, including through redistributive agrarian reforms. Proponents of structural transformation approaches are not always or necessarily socialist in long-term perspective, although many draw on 'eco-socialism' (Löwy 2005; Le Quang and Vercoutère 2013; Fraser 2021) and feminist ideals of care (Agostino 2015; Fraser 2016; Klein 2020; Mehta and Harcourt 2021).

* * *

Many actors' and movements' positions of course span these narratives, shaping agrarian struggles around climate in different ways. Broad international coalitions – for example, La Via Campesina and its key members – can be seen as both a 'single actor' and as an 'arena of contestation' (Edelman and Borrás 2016). Within the movement, narratives of climate emergency, climate justice and structural transformation may combine. This contrasts with positions of rival movements, such as the defunct International Federation and Agricultural Producers (IFAP) and its informal successor, the World Farmers' Organisation (WFO), which emphasise a corporate-driven technological narrative centred on the promotion of biofuels and climate smart agriculture. How the climate challenge is framed and what narratives, with varied inflections and combinations, are pushed then has important implications for how we understand climate politics, and in turn agrarian struggles.

A politics of agrarian struggle for the climate change era?

These positions on climate change, capitalism and agrarian change are not forged solely by climate politics but have been moulded within wider political relations (Desmarais 2007). Not all responses by agrarian movements are explicitly anti-capitalist, as there are many tactical and strategic positions that evolve as alliances are forged. Anti-capitalist struggles also take various forms, from very localised 'do-it-yourself' transformations to movement actions engaged in wider contentious politics at the national and international levels.

In understanding agrarian struggles to confront climate change, oppositional choices between, for example, a village level seed saving-sharing campaign against a corporate seed business versus a national militant agrarian movement that demands for land reform and an end to industrial monoculture plantations, are misplaced. The challenge instead is to examine whether different groups straddle various narratives, and if so how and why; and whether groups coalesce, and if so, how and with what impact?

In discussing the politics of climate change and linking this to agrarian struggles, we find Wright's (2019) typology of 'strategic logics' of anti-capitalist struggles useful. These may be against corporate capitalism as well as wider forms of industrialism, whether notionally socialist or capitalist in character, and may involve alliances with foci of contention that go beyond climate change and may be in collaboration with other players who may not have an explicitly anti-capitalist orientation. Our focus is to enquire further into the diversity, scale and form of agrarian struggles that are addressing

climate change or confronting the negative consequences of climate change mitigation interventions in rural settings. Necessarily schematic, the typology identifies five broad 'strategic logics' that historically animated anti-capitalist struggles: 'smashing capitalism', 'dismantling capitalism', 'taming capitalism', 'resisting capitalism' and 'escaping capitalism' (Wright 2019, 38–64).¹⁷

'Smashing capitalism' is the classic logic of revolutionaries, following Marx and Lenin. To destroy in order to build requires seizing state power, as in the classic peasant revolutions of the past. For Wright, the twentieth-century experience demonstrated that destruction of the old system through revolution did not necessarily result in a truly emancipatory new system, and he questions the 'the plausibility of a strategy that attempts to destroy in a ruptural manner the dominance of capitalism' (ibid., 42), particularly as transitions to state socialism associated with different forms of modernising industrialism have not generated the basis for confronting climate change either.

'Dismantling capitalism' shares the fundamental goals of revolutionaries but accepts the scepticism about the ruptural overthrow of capitalism, while being firmly committed to democratic socialism. Instead, the idea is to have a 'gradual dismantling of capitalism and the building up of the alternative through the sustained action of the state' (ibid., 43). Many of the rural social movements that formed in Latin America in the 1980s and 1990s moved into this space as their initial gains included a deepening of the democratic state. Movements like the MST in Brazil sought to work within and beyond state institutions, building alliances in a Gramscian-style 'war of position' (Wolford 2010). Seizing state power occurs through 'a broad, mass-based socialist party capable of winning elections and staying in power for a sufficiently long time' (Wright 2019, 43). 'Smashing capitalism' and 'dismantling capitalism' both aspire to the 'ultimate possibility of replacing capitalism with a fundamentally different kind of structure, socialism' (ibid., 44).

By contrast, Wright argues that logics focused on 'taming capitalism' see capitalism as causing fundamental harm in society. Reformist 'social democracy' is emblematic of this approach informed by liberal, justice narratives. Capitalism, it is argued, can be 'tamed by well-crafted state policies', including through regulation and redistribution. Wright argues that 'to accomplish this requires popular mobilisation and political will; one can never rely on the enlightened benevolence of elites' (ibid., 45). Through such processes, more fundamental structural transformations may emerge, driven by 'mission-led' initiatives and 'entrepreneurial' state policies (Mazzucato 2021), but at the same time pushed by citizen action and mobilisation (cf. Scoones, Newell, and Leach 2015; Scoones et al. 2020). This might result, for example, in land redistribution and agrarian reform, alongside structural shifts in food systems and land use supported by state regulation and incentives to enhance climate mitigation.

'Resisting capitalism', for Wright, refers to 'struggles that oppose capitalism from outside of the state but do not themselves attempt to gain state power' (ibid., 49). Direct-to-consumer farm movements and other solidarity campaigns fit this description, as does the promotion of local economies involving a prefiguring of food sovereignty

¹⁷As with any typology, there are nuances and complexities that are overlooked, but as a provocation for analysis Wright's framework helps in thinking through the diversity of 'anti-capitalist' approaches, with potentially important insights into the diversity of agrarian struggles. There are of course other diagnostic typologies exploring the politics of climate change, such as that produced by Wainwright and Mann in *Climate Leviathan* (2018). There is no sense that any of these should necessarily be a starting point for analysis in this *JPS* Forum.

alternatives to capitalism. Resistance may be galvanised through urgent, ‘emergency’ narratives, as a route to people’s mobilisation. This logic overlaps with ‘escaping capitalism’. If capitalism is too powerful to fight and defeat, the best hope is to insulate from its damaging effects. Within this logic, according to Wright, ‘the “lifestyle” of voluntary simplicity can contribute to broader rejection of the consumerism and preoccupation with economic growth in capitalism’ (ibid.). Here alternative movements focused on regenerative agriculture, agroecology and food sovereignty, supporting local economies and food systems, are examples of where agrarian struggles are located.

Wright argues that a strategic combination of four of the five logics — dismantling, escaping, taming and resisting — offers the most effective route forward towards an anti-capitalist transformation that can confront climate and environmental change. It is not a matter of choosing which one logic is somehow ‘correct’ or devising a singular strategy he argues; rather, combining multiple logics and linked to different narratives, each centred on challenging capitalism and – we would add – other forms of climate-damaging industrialism. He calls this ‘eroding capitalism’, representing the case for progressive social change both ‘from above’ through state-oriented actions and through mobilisations ‘from below’ that create new, emancipatory social relations.

Who, though, are the potential social forces behind such political struggles? In classic agrarian studies, landless rural labourers and poor and middle peasants are the class fractions that are the most reliable forces for transformative change (Wolf 1969; Paige 1975). The processes of enclosure and extraction that neoliberalism accelerated (McCarthy and Prudham 2004), however, have changed agrarian class dynamics, as the recent wave of global land and green grabbing indicates. Today, there is a staggering rise in the number of people who originated from rural areas but are now partly or fully separated from their means of production and social reproduction. This includes those who remain in rural settings but are unable to construct a livelihood sufficient for their survival. These are the rural ‘surplus populations’, ‘working people’, ‘precariat’, ‘footloose labour’, ‘semi-proletariat’ and ‘fractured classes of labour’ (respectively, Li 2010; Shivji 2017; Standing 2014; Breman 1996; Moyo 2005; Bernstein 2006).

As rural class formations fracture under late capitalism, it is rare to find agrarian struggles of the classic types that are consistently anti-capitalist and categorically class-oriented. A combined force that, following Fraser (2021), is ‘sufficiently’ anti-capitalist, trans-environmental and agrarian and that acts to ‘erode capitalism’ (Wright 2019) may not be widespread at present. But social forces, political movements and struggles are built over time. As Mike Davis (2020, xviii) argues, class capacities emerge conjuncturally, in the confluence of struggles and within class antagonism, and this is where the most radically transformative organising occurs. Generating an anti-capitalist politics to confront climate change in the context of diverse, sometimes competing, non-class forms of identity is a major challenge, reflecting a ‘non-linear’ version of Marx for our times (Bensaïd 2002b).

This conjuncture offers a politically aspirational opportunity for bringing rural movements, interests and identities together. Such a focus is nonetheless fraught with contradictions: some actions may satisfy the demands of environmental justice campaigners, but undermine the immediate interest of agrarian justice movements. Much will depend on context, but empirical investigation of diverse experiences may shed light on how a coalition of cross-class forces can form and under what terms.

In classical studies of agrarian politics, traditional allies of agrarian movements ranged from the ranks of the ‘enlightened’ educated middle class in small towns and their institutions (teachers/students and schools, religious practitioners and organisations) to political parties, usually communist and socialist parties, some of which had armed components (Huizer 1972; Wolford 2003). Alliances in this context often involved class-conscious politics, with an organising focus on landless labourers and poor and middle peasants, distanced from rich farmers and the agrarian bourgeoisie. Such alliance formation is less evident today. For better or for worse, a bewildering array of NGOs has supplanted such traditional allies for agrarian struggles (Edelman and Borrás 2016).

Changing rural class formations under neoliberalism alter how we ask questions about agrarian struggles today. Does the erosion of classic ‘peasants’ amid the rise of rural ‘working people’ lead to a decrease in the potential for agrarian struggles? If so, what does this imply for broader anti-capitalist and climate/environmental struggles? Does the upsurge in rural–urban and international migration undermine place-based struggles? And how does the rise of populist and often authoritarian politics rooted in rural settings change the character of struggles that connect agrarian and environmental issues? These are, of course, all empirical questions that need to be investigated in different settings.

Towards a research and action agenda linking climate change and agrarian struggles

How does all of this translate into an agenda for thinking and action that analyses and connects climate change and agrarian struggles? In laying out an agenda for future work linking climate change to critical agrarian studies, we draw on the frameworks introduced in this essay and identify three overlapping clusters of questions. These might apply to multiple settings, as individual cases, or as part of global, regional or local analyses:

- How and in what specific, local and global ways, does climate change differ from past environmental exclusions or threats? What combinations of narratives and strategies frame climate change and the institutionalised responses to it in agrarian settings? What exclusions and inclusions result from this?
- How are different people — in relation to class and other co-constituted axes of social difference such as gender, race, ethnicity, age, occupation — affected by climate change and the institutionalised responses to it in agrarian settings? How does this affect processes of social differentiation, trajectories of accumulation and in turn agrarian politics?
- What political logics and strategies can together act to ‘erode capitalism’ and so the causes of climate change? How can these be central to agrarian struggles now and in the future? How might these operate in contexts of ‘authoritarian populism’ and what progressive, emancipatory coalitions and alliances can be forged?

In sum we ask: can we envision a sufficiently anti-capitalist, trans-environmental and agrarian approach to confront climate change in rural settings, and what would this look like in practice? This essay has offered a few pointers for grappling with this core

question, with some heuristic frameworks drawn from diverse sources that pose questions and help structure thinking and potential action. These are not intended to be a definitive or prescriptive guide to future work, but merely a provocation to encourage it.

In concluding, we encourage contributions to this *JPS* Forum that speak to the competing perspectives mapped out in this essay, as well as new questions and themes that emerge from the essay and indeed challenge it. Contributions will involve new empirical material, with different conceptual starting points and diverse methodologies focusing on agrarian and rural settings anywhere in the world, as well as more global, international reflections. Connecting concerns around climate change and critical agrarian studies, and so deepening debates around agrarian struggles, is long overdue, and this essay is an invitation to others to contribute to the debate.

Acknowledgements

We would like to thank the three external reviewers for their constructive and helpful comments, as well as Paula Bownas for her excellent copyediting assistance.

Disclosure statement

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

Funding

Borras' and Scoones' work on this paper has received support from the European Research Council through Advanced Grants, No. 834006 and No. 740342.

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