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Energy geographies in/of the Anthropocene: Where now?

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Abstract

The Anthropocene has thrown at us a challenge of balancing urgency and justice. Urgency brought about by myriad environmental crises, most prominently being climate change, and justice that any adequate response to these crises needs to be rooted in. This is a dilemma because we need pathways for urgent action on climate mitigation and energy transitions while centring the slow and considered work that historical and contemporary justice questions demand. This is because while the Anthropocene calls humans to unite, its impacts have been, are, and will be, felt differently. The Anthropocene narrative's framing of a universal humanity connects to a long and dangerous history of what is human and what qualifies as humanity, a history of colonising, racializing, and dehumanising black, brown, and indigenous bodies around the world. We need narratives of the Anthropocene that confirm the importance of decolonising political, economic, and scientific institutions, not to deny urgency, but to foster a more political Anthropocene that creates space for new narratives of justice. The question then, that this paper initiates, is: How to progress anti–and de-colonial thought for energy geographies within a somewhat colonising discourse of urgency in/of the Anthropocene? To think of energy geographies of/in the Anthropocene, one that explicitly embeds within itself justice, this paper outlines three areas of work. First, the paper proposes a need to

engage with and learn from energy histories other than those from the Euro-American contexts. Second, it urges more focus on the question of difference. Third, the paper proposes a deeper engagement with critical race theory and postcolonial/decolonial theories to investigate questions of justice. These proposals are provocations to open energy geographies to a wider range of questions, approaches, and concerns.

KEYWORDS
Anthropocene, critical race theory, decolonisation, energy geography, justice, postcolonial theory, urgency

1 | INTRODUCTION: THE ANTHROPOCENE

Scientists tell us that we live in a new epoch or age: Anthropocene, the age of humans (Lewis & Maslin, 2015; Steffen et al., 2011; Waters et al., 2014). Castree (2015, p. 302) explains that no matter what actions we take now to make amends, "Homo sapiens–most especially those in the West–have already altered the planet's future through their past (post-1800) and present actions". All humans are now involved in geography–Earth-Writing–by "writing themselves into Earth history" (Castree, 2015, p. 302).

Dipesh Chakrabarty (2012) brings to fore two images of human beings that illustrate the dilemma of the Anthropocene–humans as a political force and as a geological force. As political beings, we seek justice, as (supposedly) right-bearing citizens, while knowing that full justice is unachievable. Therefore, we continue to engage in survival politics. We can also understand this survival politics as politics of/for justice. As a geological force, humans, that is, *all humans* emerge as a collective author of actions that have resulted in myriad environmental challenges, most prominently the climate crisis. These two seemingly incompatible images of human beings proposed by Chakrabarty open a dilemma of justice versus urgency. One forces us to think of difference and the other prompts us to think of a universal human agency. This realisation of human agency has brought a certain sense of shared universal urgency that calls for swift "preventive action" (Baucom & Omelsky, 2017; Simon, 2017, p. 241) and techno-managerial control (Simpson, 2020), for example, for climate change mitigation and rapid energy transitions. This is a dilemma because urgency, while not fully misplaced, risks compromising due course, discussion, and justice.

For energy geographers, the dilemma of urgency versus justice manifests as a need to find pathways for urgent actions on climate change mitigation and energy transitions while centring historical and contemporary justice questions. This is not to argue that energy geographies have not engaged with the question of justice rooted in difference. Geographers have indeed established a very fruitful body of work on energy justice (Feenstra & Özerol, 2021; Jenkins et al., 2016; Yenneti & Day, 2015). Yet, more work is needed to provide "a necessary vocabulary to analyze intersecting and historical forms of injustices as well as methods to evaluate the consequences of multiple forms of oppression in a relational manner" (Cannon & Chu, 2021, p. 8), especially under pressure from a universalising discourse of Anthropocene urgency. Thinking through this dilemma might help set a firmer footing in justice to face an ever-strengthening discourse of urgency rooted in the universal-human image. This paper sketches some future areas of work in energy geographies within the Anthropocene discourse.

The overwhelming 'one humanity' narrative of the Anthropocene is premised on and leads to three things. First, it talks of a universal history of the Earth that is premised on implicating 'humans', all humans (Yusoff, 2018b). This needs to be nuanced and 'othered' histories brought into the conversation. Second, the universal has long ignored

and decimated difference and a discussion of justice premised on difference. Third, this idea of the universal is embedded in and centres European epistemology and knowledge systems (Davis & Todd, 2017). These three points are important not only to understand and assign historical responsibilities but also to find just pathways for future collective actions. To think of a more political Anthropocene, one that explicitly embeds within itself justice rooted in difference, this paper outlines three areas of work. First, the paper proposes a need to engage with and learn from energy histories other than those from the Euro-American contexts (Section 3). Second, it asks for more focus on questions of difference (Section 4). Third, the paper proposes a deeper engagement with critical race theory and postcolonial/decolonial theories to investigate questions of justice (Section 5).

2 | ANTHROPOCENE URGENCY

This section briefly explores the emergence of climate emergency and urgency and how an Anthropocene-driven 'one humanity' narrative shapes 'our' responsibility. Castree (2015, p. 302) explicates that three interrelated ideas–the Anthropocene, planetary boundaries, and tipping points–suggest, "Humans are entering *Terra incognita*", a realm of the unknown. These have come to solidify the idea of an emergency that demands urgency from humans. For example Rockström et al. (2009), proposes nine planetary limits or boundaries inside which humans can operate in a 'safe operating space' created by Holocene conditions. The planetary boundaries depicted in green and red colours, overlaid on an image of the Earth, along with the use of phrases like "safe operating space", bring a sense of alarm and evoke an idea of urgency and emergency–a red flashing alarm (D'Souza, 2018, p. 4). This sense of alarm is also visible in constructs like doughnut economics that take inspiration from planetary boundaries (Raworth, 2017). The sense of urgency is not misplaced. There is enough scientific evidence to warn that we are either very close to or have gone beyond the climate tipping point (IPCC, 2019; Lenton et al., 2019). In addition, shared global phenomena like climate change require some form of common and coordinated action.

However, the risk posed by the urgency discourse is elevated because humans as a geological force is the main argument behind the dominant and widely accepted framing of the Anthropocene in a Eurocentric academy (Todd, 2015). This dominant framing of an "abstract universal Anthropos" is problematic in many ways, not least for the "racial and colonial logics" embedded in it (Davis et al., 2019, p. 3). An Anthropocene debate centring the 'universal' risks de-historicising responsibilities for climate change, environmental degradation and energy transitions, and framing them as post-political (Daggett, 2020; Swyngedouw, 2019). A post-political condition is one in which power and politics are "written out of the mainstream…account of environmental transformation" and one of two explanations are promoted: (1) we are all in this together, equally; and (2) this is a result of abstract forces like capitalism which serve as "teleological 'black-box." (Ranganathan & Doshi, 2018, p. 2). These risk the exclusion of an explicit politics of justice.

Therefore, it is worth asking if a sense of 'global' emergency writ large risks heralding a post-political Anthropocene, one that demands falling in line, putting questions of difference, justice, rights, and responsibilities aside: uniting by putting (our) difference(s) aside. This is because while the Anthropocene calls us to unite, its impacts are, and will be, felt differently (Jazeel, 2019). As Kathryn Yusoff (2018a) reminds us, geology, and by implication, geography and the Anthropocene are deeply embedded with a history of racialisation, racial discrimination and colonisation (see also, Saldanha, 2020; Tolia-Kelly, 2016). If we are to politically, or even discursively, understand, experience and respond as a geological force, such response needs to be built by ethically centring subaltern groups who have borne the brunt of historical injustices upon which the Anthropocene is premised and who will bear the gravest impacts of the Anthropocene (Davis & Todd, 2017; Jazeel, 2019; Yusoff, 2018a). As Madden (2019) considers, all spaces increasingly reflect a concern for and impacts of the climate emergency. This is being overlaid on other socio-cultural and economic crises, so that "the climate crisis is also itself constitutively shaped by other…problems, processes, and hierarchies" (Madden, 2019, p. 2). Evidence of this is manifesting in new neoliberal projects around smart grids and cities and eco-gentrification, and geo-engineering (Rice et al., 2019; Simpson, 2020). In addition, the urgency debate and

the need to unify under an Anthropocene narrative "further delegitimize alternate forms of cultural knowledge and embodied practices and, in so doing, reproduce and reinforce injustices" (Schmidt et al., 2016, p. 196; Todd, 2015).

Driven by a postcolonial sensibility that "provincializes Europe" (Chakrabarty, 2008) and forces us to think through heterogeneity, we can see that the challenge in front of us is: how do we work with the disjunctive images of humans together? The question in front of energy geographers (as indeed for all geographers) then is–how to think of justice rooted in difference when thinking of universal human agency. How might we think of energy geographies that are for a more political, rather than a post-political Anthropocene?

Energy geographies have been spoken of as 'border lands'–where a range of diverse ideas are brought together (Baka & Vaishnava, 2020). These borderlands hold a "western bias" that is further reinforced by the dominance of Eurocentric epistemology represented by a predominance of Marxist political economy, Poststructuralism (primarily Governmentality and Actor Network Theory based), Landscapes, and Energy justice, with a notable lack of, among others, indigenous knowledge (Baka & Vaishnava, 2020, p. 3). The borderlands that is energy geographies need to stretch wider and pull together a broader range of approaches. A more political Anthropocene invites an engagement with a wider range of issues and approaches.

3 | DECOLONISING IN/OF THE ANTHROPOCENE

While the normative discourse on the Anthropocene risks depoliticization, it is crucial to remember that "to stress that the Anthropocene is a master-narrative should not detract from the suggestion that it is *a narrative*" (Jazeel, 2019, p. 227) (emphasis added). Indeed decolonial, indigenous and critical race scholars have presented multiple narratives for the origin story of the Anthropocene (Davis & Todd, 2017; Yusoff, 2018a). However, as post-colonial and decolonial scholars have pointed out, an overwhelming urgency politics "prioritizes a few interlocutors and their specific registers of space and time" (Gergan, 2017, p. 496). This often means the question of how to manage the urgency–justice dilemma itself is not debated on an equal playing field. Political, economic, and scientific institutions emphasise and amplify dominant and universalist narratives compared to subaltern narratives of justice.

What is important then is that we use the Anthropocene narrative to confirm the importance of decolonising political, economic, and scientific institutions, not to deny urgency, but to create space for new narratives on the dilemma to be considered. Indeed, urgency and justice are not incompatible by default (for example, Derickson (2018, p. 432) points out that the Anthropocene "signals the urgency" for the task of urban politics and justice). Conceptual approaches like postcolonial theory, open doors for other(ed) narratives, narratives that are not incompatible by default. Following Jazeel (2019, p. 227), rather than a recolonization of knowledge, a closure, we could work with the idea of Anthropocene to create an opening for decolonising our knowledge systems, and to work toward a "multiepistemic literacy" (Jazeel (2019, p. 227) referring to Sundberg (2014)). It is in this spirit that this paper engages with the Anthropocene for energy geographies. It looks for a more political Anthropocene; one that tackles the urgency of collective action, while keeping a politics of justice at its centre. This question of justice in the era of urgency might help build a wider alliance of responsibility, one that a politics of the Anthropocene demands while keeping a firm footing in the politics of intra-human justice, one that a politics of Anthropocene cannot (and cannot be allowed to) avoid.

How do we bring together these two ideas–one that calls for abstract universal unity and the other for the refusal of universalism and uniformity? Thinking with Donna Haraway (2015, p. 160) we could say that "our job is to make the Anthropocene as short/thin as possible and to cultivate with each other in every way imaginable epochs to come that can replenish refuge". However, until that happens, how do we progress anti–and de-colonial thought within a somewhat colonising discourse of urgency in/of the Anthropocene? The next sections outline three areas of work that could further enrich energy geographies in/of the Anthropocene. The first focuses on the question of Other(ed) histories that challenge and nuance the universal history of the Anthropocene premised on implicating all humans but also help think just future pathways. The second raises the question of justice premised on difference that the

universal has long ignored, and decimated. The third urges a decentring of Eurocentric epistemology and engagement with Othered conceptual vantage points.

4 | A QUESTION OF HISTORY

Working with Silvia Wynter's arguments, Yusoff (2018a) has very persuasively shown how racialisation and racial injustices are central to the idea of the Anthropocene. Yusoff (2018a) explains that the historical uses and abuses of energy, whether physical energy or fossil energy, are premised on colonisation and racial exploitation, whether of enslaved black and indigenous Americans or indentured South Asians. As Myles Lennon (2017, p. 24) argues, "the first industrial-scale energy infrastructure was the Trans-Atlantic Slave Trade–the foundational apparatus in the de-mattering of black lives". They explain that American plantations, a machine for the conversion of solar energy into surplus value could not have existed "without a violent symbolic order that distinguished between the human race (white people) and savages (Native people)" (Lennon, 2017, p. 24).

Malini Ranganathan (2019, p. 4), referring to Lowe (2015), provides a useful reminder that as slavery 'ended', "the figure of the Chinese and Indian "coolie"…emerged in the British Empire", the supposedly 'free' agents that signalled a "liberal empire's ostensibly benevolent and enlightened transition". Chinese and Black labour physical energy were central to the construction and operation of North American railroads (Cowen, 2020; Ranganathan, 2019). The operation of steam-powered, fossil-fuelled mechanical energy of railways was thereby premised on the exploitation of racialized physical energy.

The patterns of extraction of bodily energy and the extraction of bodily energy to excavate fossil energy or to facilitate technologies premised on fossil energy continue in the contemporary transitions to renewable energy. Lennon (2017, p. 23) reminds us that while in the West, the perceived ability of decentralised renewable energy to dismantle fossil fuel establishments that are premised on racialized discrimination is being celebrated, a closer investigation of the global solar industry reveals labour, health and environmental violations in production facilities and assembly lines in the global South. Therefore, while renewable energies might help upend racialized infrastructures in particular parts of the world, such upending will be premised on the exploitation of people and communities of colour in other parts of the world (Mulvaney, 2013, 2019).

Focusing on the question of history can take us to alternate understandings of the Anthropocene and the central role of (fossil) energy. Electrification histories of North America and Europe have been influential in energy geographies (Hughes, 1993; Nye, 1990, 2010). However, such histories of electrification of parts of the global South are few or only just beginning to emerge (for example, Coleman, 2009; Kale, 2014; Montaño, 2021; Sarkar, 2015). As a result, the histories of electrification around the Atlantic circulate as 'global' histories. Giving a counterpoint to such 'global' histories, Elizabeth Chatterjee (2019, p. 17) urges us to look at an "electricity-focused history in Asia" for instructive insights into the Anthropocene. Chatterjee (2019, p. 17) explains that "Asian histories of electrification" do not neatly fit into the schema that focuses on capitalism and imperialism as explanatory variables for the climate crisis and the Anthropocene. In Chatterjee's (2019, p.17) words:

> Outside its Euro-American heartlands, colonialism shaped a new awareness of the world-historical significance of fossil fuels, but the spread of fossil technologies did not automatically follow. Electrification in particular was uneven, locally mediated, and belated. For the tentacular expansion of electricity across the population and into ever more arenas of social life, most of the world had to wait for the postcolonial period.

The post-colonial state, with a need to prove its legitimacy, bind a diverse territory into one nation-state, and rapidly catch up with the West, positioned itself as a guarantor of energy provision. Referring to this double move of "state intervention and decommodification" as "fossil developmentalism" Chatterjee (2019, p. 18), argues that rather

than an overwhelming focus on finding the solution to climate change in anti-capitalism, "the new moral economy of fossil developmentalism", alerts us that "the inclusive promise of fossil consumption goes much deeper, penetrating virtually every aspect of contemporary life and its politics". Indeed, even as in India, state policies push electricity into the realm of private resources, citizens continue to imagine and claim electricity as a public good, and the state as the guarantor of this good (Kumar, 2022). Chatterjee (2019) warns that it might be difficult to decouple our lifeworlds from our deep desire for cheap energy. This developmentalism and desire for modernity (Chakrabarty, 2018) have repeatedly manifested as electoral demands (and promises), articulated in India as BSP: *Bijli* (electricity), *Sadak* (road), *Pani* (water)–cornerstones for modern life. Equally, in a heterogeneous country like India, with complex histories of colonisation and caste oppression, politicians barter promises of *izzat* (honour) and securing of minority rights for electoral support, while side-lining the provision of modernity through BSP (Kumar, 2015). Witsoe (2011, p. 84, quoting Sivaramakrishnan & Agrawal, 2003) explains this centring of 'social justice' as "regional modernity" rather than a side-lining or ignoring of modernity. For energy geographies to get to grips with these complex histories of energy and modernity, an interrogation of fossil cultures and energy cultures in emerging economies and post-colonial contexts is crucial. These alternate modernities and energy cultures might open new ways of thinking through the Anthropocene and new pathways out of it (Kumar et al., 2021). Concurrently, parochializing Western claims of universal energy histories, as Daggett (2020, pp. 7–10) argues, is necessary to assign responsibilities for/in the Anthropocene and to "imagine alternative energy pathways" that are "adequately just and radical".

5 | A QUESTION OF DIFFERENCE

The question of difference is not new to energy geographies (Ahlborg, 2018; Walker & Day, 2012). As Lakhanpal (2019, p. 59) explains, "energy geographies are not pre-ordained but a product of social and political processes and have wide ranging implications". Cross (2019) reminds us that energy interventions change not only technologies, but also the social relationships in a community, and how people experience the world around them. There is a growing recognition that gender diversity[1] and class positions are key to designing energy interventions and their outcomes (for example, Ahlborg, 2018; Baruah, 2015; Lahiri-Dutt, 2012, 2019; Osunmuyiwa & Ahlborg, 2019; Petrova & Simcock, 2019).

However, questions of race, caste and indigeneity have received less attention. This is slowly changing. For example, prying open the fossil-human energy nexus, Lennon's (2017, p.24) work argues the racialised nature of "the industrial-scale extraction of energy", historically from the enslaved and contemporarily from people of colour whether in global North or South. Williams (2018, pp. 242–43) provides an example from South Africa where "historically, the state managed the power of labour in the mining sector through a racialised labour regime, which proved extraordinarily effective not only in engineering racialised division in the economy but also in underpinning apartheid's racialised 'democracy' in which whites had a monopoly of power". Although democracy was in place in name, "apartheid engendered a narrow and racialised democracy that excluded the black majority, including energy workers, from power in both the economy and polity" (Williams, 2018, pp. 242–43). This racialised de-democratisation and disempowerment of coal workers is very different from the links between democracy and fossil fuel that the widely cited work on Carbon Democracy by Timothy Mitchell (2009) explains.

Similarly, thinking through the question of caste, Balls and Fischer (2019, p. 472) report how private companies in India choose people with the "right caste and social position" to manage and maintain microgrids in villages (see also, Sharma, 2020; Singh et al., 2017). Kumar (2018, 2021) and Kumar and Shaw (2020) discuss how caste-based social, cultural, and economic histories mediate access to energy and the benefits of energy projects in Indian villages. On the question of indigeneity in India, Lakhanpal (2019, p. 59) challenges the normative idea of renewable energy being always good showing that "by affecting the access to development for Adivasi communities, renewable energy development can further marginalize and exacerbate the living conditions of already disadvantaged groups".

Questions of indigeneity are much more complicated and demand a careful, long term, grounded and ethnographic engagement in post-colonial contexts like India. As Gergan (2020, p. 2) explains, "many Indian anthropologists believe indigeneity does not apply here since the entire country was colonized". But in the Indian context indigeneity needs to be understood as "self-contained communities whose culture and knowledge systems were subsumed under dominant nationalist historiographies and Hindu caste hierarchies following British expulsion" (Gergan, 2020, p. 2). This helps pry open the claims of equity and development made by a post-colonial state to show how a "racializing, imperialistic state power", both expands and fractures through the development of energy infrastructure (Gergan (2020, p. 9); see also Kikon 2020; McDuie-Ra & Kikon, 2016).

Thinking through difference also reveals solidarity of/in difference. Looking at the instances of protests by local indigenous Embera communities to secure electricity for Afro-descendant communities in Choco, Colombia, even though the Embera did not want electricity for themselves, García and Farrell (2019, p. 249) find solidarity built on "a range of separate and shared histories (e.g. Spanish colonialism, a centralist Colombian State, peasant and social conflicts, racism and marginalization) that both bind together and differentiate them". This makes the energy infrastructure at hand "a postcolonial political venue, where symbolic and material relations can be mobilized through resistance and refusal" (García & Farrell, 2019, p. 249). For energy geographers, understanding energy infrastructures from this point of view then opens up different ways of "using space, infrastructure, and technology to achieve political voice" (García & Farrell, 2019, p. 249).

The questions of history and difference in a 'shared' problem of climate change alert us to what Monyei et al. (2018, p. 68) explain as an "influence of 'western reality' on the energy narrative" of developing countries. By 'western narrative', they mean particular imaginaries of what 'appropriate' and 'adequate' energy have come to mean for researchers and practitioners in the global North and how these imaginaries and meanings permeate into (often through advocacy from countries in the North) energy policies and discourses in the global South. They argue that the fact that many global North countries continue emitting greenhouse gas emissions while indulging in "the wholesale promotion of renewables can be a perverse approach and an act of "energy bullying", without consciousness of what it means to have energy sufficiency and energy mobility"[2] (Monyei et al., 2018, p. 68). This brings questions of democracy, participation, and distributional justice, together with the risk of a universal Anthropocene (past and future) narrative. These have been inadequately understood and conceptualised from a global South perspective.

6 | A QUESTION OF EPISTEMOLOGY

Finally, there is a question of epistemology for 'where now' of energy geographies in/of the Anthropocene. Ranganathan and Bratman (2019, p. 7) call for a radical scholarship that confronts "racism and environmental harm together" and recognises that climate justice is "not just about climate". This applies to energy geographies. In the same vein, thinking of energy justice that is not 'just about energy', I outline two 'vantage points' for the future energy geographies. These are meant as examples to foster new thinking and open energy geographies to a plethora of 'Othered' vantage points.

6.1 | Critical race theory

Yusoff (2020) reminds us of the inherent role of 'energy' in a racialised organisation of the world. The self-definition of a European subjectivity as value(able) happened against the "fossil nature (indigeneity) and fossil energy (the enslaved)" (Yusoff, 2020, p. 2). As Ranganathan and Bratman (2019, p. 8) argue, "What is at stake here is reclaiming what it means to be human". We can return here to the earlier discussion on the 'universal man', who was a mirror image of the 'European man'. An outcome then was/is that "non-white others have been rendered primitive or even sub-human through processes of colonial exploitation, capitalism, and patriarchy" (Ranganathan & Bratman, 2019, p. 8). This

racial nature of a world shaped by energy and the racialisation inherent in the flows of energy, transit spaces of electricity wires, and disposition around gas and oil flows demand an engagement with critical race theory. Illustrating the contemporary and everyday "violence within energy systems" Luke and Heynen (2020, p. 619) remind us of "individuals struggling to pay their energy bills, those poisoned by breathing and drinking petrochemical contaminates, the lives lost through disasters that climate change exacerbates, and in the time expended rebuilding after storms."

Yusoff's (2020) concept of inhumanities is useful here. It "refers to the classificatory systems and natural philosophies of thought that are desubjectifying (targeting particular populations into things, property, or properties of energy) and structurally subjugating (to black and brown life in the afterlives of slavery and imperialism)" (Yusoff, 2020, p. 5). An outcome of this was to see blackness "as a source of energy" that was to (re)produce "whiteness and settler futurity" (Yusoff, 2020, p. 5). Of course, the 'source of energy' could not be left uncontrolled and therefore slavery and carceral systems emerged to 'channel' such energy. In a productive conversation for energy geographies and critical race theory, Yusoff (2020, p. 5) calls for analytics of "kinship between the extraction of bodies and the extraction of Earth" to bring together questions of "genocide and ecocide" embedded in colonial and neo-colonial projects.

A Critical Race Theory engaged analysis also opens hope for the future. For example, drawing on Clyde Woods and Ruth Wilson Gilmore, Luke and Heynen (2020, p. 610) see community solar policy making in New Orleans "within the abolitionist politics that have come before, beginning with the demands for reparations". Renewable energy then becomes a hopeful vehicle for social justice. For Luke and Heynen (2020, p. 610) the engagement with renewable energy is not just about redistributive justice rather more about reparative politics which "requires innovation to ensure community control including inclusive finance, democratic restructuring of utilities, unionization of the solar energy workforce, and addressing environmental injustice in communities that bear the brunt of the energy system's toxic practices".

Similarly, Ranganathan and Bratman (2019) find clear overlaps between housing and climate justice facilitated by a need for low carbon transitions. While better housing for everyone can reduce energy demand and carbon emissions, simply changing housing stocks risks gentrification of more deprived neighbourhoods (Rice et al., 2019). Ranganathan and Bratman (2019, p. 8) therefore argue that the coming together of Black Lives Matter and environmental activism "suggests that antiracist humanism is paramount to contemporary environmental justice movements". Therefore, looking toward Paul Gilroy, Ranganathan and Bratman (2019, p. 8) remind us that a "reparative humanism"—a humanism that speaks to and redresses the experience of antiblackness—can build a more refined political ecology against the flattening ontologies given by the Anthropocene frame." This reparative humanism is one way to counter the dominant techno-economic narrative of the Anthropocene and to re-politicise the discourse.

Drawing from such radical thinking, energy geographies could see "community-engaged" policies as the key to tackling inequalities (Luke & Heynen, 2020, p. 614). This community-engaged and embedded policy work might be, Luke and Heynen (2020, p. 614) remind us through Gilmore's words, "the new theory. Policy is to politics what method is to research". It provides a blueprint of the future possibilities for a politics of justice.

6.2 | Postcolonial and decolonial theories

Bringing together a decolonial and critical race analysis, Murrey and Jackson (2020) raise the risk of localwashing of extractive energy narratives in Central Africa. Localwashing here is embedded in the longer-term histories of colonial interventions and extractions that are/were premised on "racialized rhetoric of "local" suffering, "local" consultation, and "local" culpability in oil as development" (Murrey & Jackson, 2020, p. 917). Drawing from the case of Chad–Cameroon Oil Pipeline, Murrey and Jackson (2020, p. 924) very importantly remind us that "localwashing [also] acts as a means through which flexian elite influence public responses in ways amenable to extraction, dismiss antiextractive critics as nonlocal, and deflect blame in racialized scalar politics."

However, postcolonial and decolonial theories also open doors to the subaltern as agents of change. Although not a study of energy, Chatterjee's (2004) work opens up the question of informality which energy geographers have

not engaged with much (but see, Balls, 2020; Harrington & Wambugu, 2021; Kumar, 2021; Petrova, 2017). Perhaps this is due to the 'risky' nature of sources, carriers and markets of energy and various formal codes and processes that govern them. While a wider political economy and transitions work might be embedded in this formal set-up, geographers are very aware that informality plays a key role in managing and maintaining everyday life around the world (Butcher, 2021; Kamete, 2013; Roy, 2005; Thieme, 2018). Chatterjee (2004, p. 57) recounts "stories from Indian cities where electric companies, faced with the persistent theft of electricity and the legal difficulty of recognizing illegal squatters as legitimate individual consumers, have negotiated collective rental arrangements with entire squatter settlements" represented and billed through self-organised collectives or welfare associations. Similarly, Appadurai (2001) discusses how subaltern citizen-subjects often take matters of 'legitimacy' and 'legibility' into their own hands in an attempt to 'claim' basic services like electricity, sanitation, and water from the state. These 'informal' extensions of energy services through paralegal arrangements are premised on 'state responsibilities', even as electricity in India moves further into the realm of a private commodity (Kumar, 2022). What might happen to these 'informal' ways of accessing and extending 'state responsibilities' in an increasingly neoliberalised and privatised energy assemblage is an important question for future enquiry.

The notion of community and community energy is rapidly gaining purchase in energy geographies (Creamer et al., 2019). Inspired by a postcolonial sensibility Kumar and Taylor Aiken (2021, p. 19) find an "ontological narrowness" in the Euro-American (perhaps more appropriately, Anglophone) notions of community motivating community energy research and practice. Rather than working with a liberal notion of community, where groups of people come together to invest, manage, and maintain energy projects (community-as-contract), driven by empirical findings from India and Scotland, Kumar and Taylor Aiken (2021) bring together an analysis that looks at the coming together of 'pre-modern' structures with modern motivations of equal rights and individual autonomy. Community then emerges as "fluid bonds of solidarity that align and realign differently around different purposes" (Kumar & Taylor Aiken, 2021, p. 2). As the idea of community energy gains more traction, energy geographers need to critically investigate the idea of community itself because "autonomy and representation are being claimed on behalf not only of individuals but of communities" by both the subaltern and elites (Chatterjee, 2011, p. 206).

This co-option of 'the local' and collusion with 'the elite' is a risk that is all too real for scholars. Murrey and Jackson (2020, p. 936) ask for "serious considerations of the roles of scholars in authoring governance plans and reports as well as their roles as critical interlocutors for the control of physical space in service of extractive projects". All too often, social scientists provide 'clean and ironed out' narratives of 'the local'. These clean narratives provide a clear way forward for agents of extraction (Murray and Jackson narrate the roles of representatives of ExxonMobil and the World Bank) to integrate "the local into the structures of the project" (Murrey & Jackson, 2020, p. 936). Indeed Satgar (2018, p. 60) provides a good reminder that most climate change solutions embrace techno-utopian, marketized ideas of carbon trading, sinks and geo-engineering, in effect submerging the UN climate negotiations within the "logic of imperial ecocide". Murrey and Jackson (2020, p. 936) ask for academia to itself be more reflective (study its own role) and effective (embrace more messiness) and pose serious questions for the future of energy geographies:

> How does social science scholarship render the local clean, passive, coherent, or receptive for extraction's legitimizing narratives? Fundamentally, how do academics account for their roles in promoting localwashing, and how are they and other elite held accountable for their roles? Are they acting to contribute to the production of knowledge or are they, like other elite, complicit in mobilizing racialized logics of localwashing?"

7 | CONCLUSIONS

This article has situated some future areas of work in energy geographies within the Anthropocene debate. Chakrabarty's two images of humans–humans as a geological force seeking urgent unified action and humans as a fractured political force seeking further justice–summarise the dilemmas for (energy) geographies of/in the Anthropocene. How do we engage with the disjunctive images of humans together to work for justice rooted in difference when thinking of universal human agency? This is a dilemma because we need pathways for urgent action on climate change mitigation and energy transitions while centring the slow and considered work that historical and contemporary justice questions demand.

At the heart of this dilemma is the framing of the 'human' or one humanity that taps into a long history of what is human and what qualifies as humanity, emerging from European Enlightenment thought. The work of these ideas in racializing and dehumanising black, brown, and indigenous bodies around the world has been widely discussed (Chakrabarty, 2008; Gergan et al., 2020; Wynter, 2007). The Anthropocene with its universalising tendencies and emphasis on the urgency of unified action risks enhancing those racializing tendencies. In addition, de Souza et al. (2018, p. 93) point out European epistemology's self-professed universalism that is "unconstrained by any geocultural and geopolitical orientations" which promotes "a system of research that is to a great extent the result of the previous imperialist gnoseological procedure of geographically labelling non-European cultures". There are good reasons to sidestep a Eurocentric epistemology in many cases and look to ways of 'thinking energy' from Other(ed) vantage points, many of which will enrich energy geographies through new critical energy. To think about energy geographies of/in a more political Anthropocene this paper has outlined some 'Othered' conceptual areas and vantage points for future engagement.

To route the Anthropocene via justice, the overwhelming 'one humanity' narrative needs three correctives. First, the Anthropocene talks of a universal history of the Earth that is premised on implicating all humans. This article proposes a need to excavate and learn from Other(ed) energy histories–those not embedded in the Euro-American contexts. Second, the universal has long ignored and decimated difference and a discussion of justice premised on difference. The paper urges more focus on the question of difference, beyond gender and class, and towards race, caste, indigeneity, and intersectionality. Third, the idea of universal humanity is embedded in and centres European epistemology and knowledge systems. The paper proposes that epistemological vantage points of critical race theory and postcolonial/decolonial theories might bring to the fore urgent and less investigated questions of justice. These three proposals are provocations to open energy geographies to a wider range of questions, approaches, and concerns, only some of which this paper has covered.

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CONFLICT OF INTEREST

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ENDNOTES

[1] See also Gender, Energy and Space webinar series run by RGS Energy Geographies Research Group in 2021–22: https://www.energygeographies.org/energy-gender-space-announcing-our-2021-22-webinar-programme-with-the-gender-and-feminist-geogr

[2] For a productive debate around the concept of energy bullying see Boamah, 2020; Monyei et al., 2018, 2019; Todd et al., 2019.

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