

## Exhausted Ecologies: Depleting Energy and the Capitalocene in Susanne Bier's *Serena* (2014)

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**ABSTRACT:** *This article examines Susanne Bier's *Serena* (2014) through the frameworks of the Capitalocene and the energy humanities to argue that the film reimagines extraction as a pervasive regime of exhaustion. Set within the timber industry of Depression-era North Carolina, Bier depicts the Smoky Mountains as a "commodity frontier" where forests, laboring bodies, reproductive capacities, and affective relations are subjected to a common logic of depletion. The article demonstrates how the film traces the circulation and exhaustion of ecological and human energies through capitalist accumulation. Rather than presenting deforestation as an isolated environmental crisis, Bier reveals extraction as a world-making process that reorganizes landscapes, labor, intimacy, and social reproduction around expendability. The film's visual emphasis on repetitive labor, bodily injury, environmental degradation, and emotional collapse, constructs exhaustion as a shared atmospheric condition linking human and nonhuman life. Ultimately, the article argues that Bier critiques extractive capitalism by exposing the exhausted forms of life it produces, revealing that the violence of the Capitalocene resides not only in environmental devastation, but also in the gradual depletion of the material and affective conditions necessary for sustaining life.*

**Keywords:** Capitalocene, extraction, commodity frontiers, exhaustion, transcorporeality

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Extraction is often understood as the material removal of natural resources from the earth, or what some scholars refer to as “the extensive exploitation in subsurface environment” (Williams et al. 4). Such an understanding of the subsurface geological materials and extraction economies “mining” them often features iconic “big holes and greedy men” in the colonized world, as Elizabeth Miller terms it, citing “the global project of industrial extraction” as it redefined not just the geological integrity of the planet but the narrative forms accounting for this entanglement of the human, nonhuman, and the geological (Miller 2-3). Debashree Mukherjee inaugurates these debates in the cinematic medium when she returns to Yash Raj’s film *Kaala Patthar* (1979), a disaster film that focuses on the depleting lives of colliers who work in a coal mine. Mukherjee’s key intervention, in the cinematic register, is the “simultaneous co-depletion of minerals and human” (52) by foregrounding cinema’s unique capacity to frame the profilmic subject in all its vivacity and depletion. Drawing on Kathryn Yusoff, Mukherjee argues that cinema’s contribution to energy humanities would be to offer a non-binary account of the extraction ecologies informed by a critical uptake of the co-constitution of the human and the nonhuman as geologic subjects (53). By gesturing to the exhaustion of this vital non-binary site of the geologic subject, Mukherjee affords a reading of exhaustion as “sentimental extraction” that informs aesthetic imaginaries through ideological substrates of governance (54). These extractive ecologies, Mukherjee argues, participate in the marshalling of affects and sentiments, stabilizing aesthetic categories like exhaustive melodramas that “extract” both emotions and energy reservoirs. In what follows, we shift this focus from the subsurface extraction and exhaustion of the geologic subject to the surface realities of timber as a key fossil fuel in the Depression Era US economy to further Mukherjee’s account of sentimental extraction.

To this end, we analyze Susanne Bier’s film *Serena* (2014), as a case study outlining exhaustive ecologies that foreground co-depletion of the human, the nonhuman, and the environmental. Adapted from Ron Rash’s novel of the same name, *Serena* (2014) is set in the Smoky Mountains of North Carolina against the backdrop of the beginning of The Great Depression in 1929. The narrative revolves around Serena (Jennifer Lawrence), a mysterious young woman, who marries an established timber baron, George Pemberton (Bradley Cooper), from the Smoky Mountain area. Pemberton, along with his business partner Mr. Buchanan (David Dencik), runs one of the few successful businesses in Depression-era North Carolina, where cheap labor is abundant due to the shrinking job opportunities and the ongoing recession. Pemberton’s flourishing timber empire remains the driving force of the narrative, which is fueled by every

falling of a tree and every injured and dead laborer working at the site of timber extraction. Although the narrative employs a dark Macbethian tragedy on the surface where murder becomes the anchoring agent of the plot, the film remains noticeably devoted to its representation of the surroundings, pertaining to the act of deforestation and the laboring conditions of the timber extraction site. The materiality of the world of the Smoky Mountains is foregrounded in the film through the characters' constant engagement with their environment that Bier foregrounds through her cinematography.

In Bier's *Serena* (2014), extraction operates as a complex structure of industrial and governance practices that reorganize landscapes, bodies, labor, and affective life around continuous depletion. Set against the timber industry of Depression-era North Carolina, the film illustrates this broadened understanding of extraction as an atmospheric logic of exhaustion by illustrating how the logics of extractive capitalism create a world where everything - forests, bodies, reproductive capacities, emotional attachments, and social relationships to name a few - is subject to a common logic of depletion and exploitative use value. It reveals extraction as a totalizing structure that reorganizes the conditions of life itself, inaugurating life worlds in steady states of decline, exhaustion, and extenuation rather than health and growth. While the film focuses on logging/industrial development, its primary emphasis is on how extractive capitalism creates a world organized around exhaustion. In other words, while the film can be seen as a representation of the ecological impacts of capitalist development (i.e. deforestation), it presents those impacts as part of a larger system of exhaustion. As such, extraction in Bier's narrative world is an affective quality that pervades daily life, transforming the experience of time, emotion, and bodies through exhaustion and precariousness. The paper argues that Bier portrays extraction as a form of world-making that generates an ecology of exhaustion. Instead of seeing ecological violence as either an external environmental disaster or a human-nature conflict, Bier shows how the violence of extraction collapses the distinction between social and ecological life by spreading violence throughout human and nonhuman worlds. That is to say, the film shows how the destruction of forestland corresponds with the loss of intimacy, the decline of reproductive futurism, the degradation of corporeal stability, and the degeneration of emotional life. Therefore, while extraction in the film certainly occurs through environmental destruction, it also occurs through a general depletion process of the material and affective means necessary for sustaining life. The film, therefore, offers an insight into the distorted logic of capitalist progress which, in the wake of its avowedly forward march, leaves a trail of exhausted, and depleted world. Through its portrayal of exhaustion as a shared social and ecological condition, Bier demonstrates how capitalism converts environments,

bodies, and emotional capabilities into consumable commodities in the commodity frontier.

Bier depicts a regime of extraction that organizes entire lifeworlds through fields of weariness, fatigue, and psychic depletion. The film uses images of felling trees, wounded laborers, and congested spaces to depict exhaustion as disseminated in the environment and its subjects instead of being limited to a single register. It is the repetitive scenes of labor and the claustrophobic forest landscape that foreground the extraction timescales which generate an atmosphere of felt depletion. The physical and psychological breakdown of the titular character of Serena is also the reflected of the violence of the extractive world around her. It shows how the capitalist destruction moves through landscapes, laboring bodies, and human intimacy leading to an all-encompassing collapse. We argue that Bier represents this collapse to show how extraction reconfigures lives through producing exhausted forms. The film shows that the violence of extraction resides not merely in what capitalism destroys but in exhausted forms of existence it generates and normalizes. By placing ecological catastrophe within the interconnected realms of affectivity/embodiments/social reproduction, Bier views ecological catastrophes less as singular event than continuous atmospheric states of depleted life under capitalism.

Bier establishes this extractive world from the film's introductory sequence. The opening shot takes place at dawn with a slow pan over the Smoky Mountains. A prolonged view of Pemberton's cabin, located deep within the forest, follows. Instead of representing the forest as an untainted and pristine wilderness, Bier frames it as a space already shaped by human occupation and economic use by the abrupt juxtaposition of the panoramic view of the Smoky Mountains with a close-up of the steel barrel of Pemberton's rifle. The rifle foreshadows the industrial processes that will come to dominate the narrative while representing both forms of generative energy: the energy potential of the forest and the energy derived from human labor who have worked through manufacturing processes to transform raw materials into products. By showing the gun and the forest in tandem, Bier illustrates that the film will explore the flow of energy through systems mediating humans and their environments. Before the logging operation is ever shown, the film visually aligns the forest with technologies of control and appropriation, or what we have earlier termed as governance. This logic is reinforced in the subsequent shot of Pemberton aiming at the panther. Bier could easily have used a point-of-view (POV) shot to allow the viewer to identify with Pemberton's hunting experience. However, Bier does not provide a POV shot to emphasize Pemberton's isolation as a hunter. As such, rather than being able to see himself immersed in the woods, Pemberton is viewed as a foreign object, someone exerting control over the landscape rather than 'being' in and with it.

While viewing the forest as an adversary or prey may seem far-fetched, this representation is the evidence of Bier's emphasis on non-human objects being experienced as threat, prey, and resource, simultaneously. The lack of a POV shot allows viewers to recognize the inequality that exists between the human subjects and environmental objects. Rather than seeing Pemberton as being surrounded by the woods, he is depicted as operating on utilizing the landscape for purposes of conquest and consumption. The land is therefore seen as having inherent value based solely upon what it can produce, or yield for capitalist energy needs.

The opening sequence simultaneously foreshadows the affective consequences of appropriation. As extraction reorganizes the landscape around productivity and control, it also transforms the very atmosphere through which life is experienced. What initially appears as a seemingly abundant environment gradually becomes a space saturated with precarity and attrition. Environmental crises, therefore, are registered not only through visible ecological destruction, but also through changes in the lived atmosphere of everyday life. As Graig Uhlin states, "Environmental crisis registers as an atmospheric shift where a restorative or life-sustaining atmosphere turns suffocating and draining" (282). Such atmospheric transformations make exhaustion perceptible as a shared ecological and affective condition rather than merely an individual experience of fatigue. The growing body of scholarship on the environment focuses on exhaustion as the defining condition of contemporary life. Anna Katherina Schaffner goes as far as calling the present times a "weary zeitgeist" and rhetorically questions if ours is the most exhausted age in the history of mankind. This exhaustion, set in motion by the extractive practices of industrial and postindustrial logic of governance, is difficult to "quantify scientifically" and is, therefore, often understood as an affective state that straddles the material realities and subjective experiences. For Schaffner, exhaustion's belatedness is something that makes it a fertile concept for reading the "final stages of epochs and empires" (5), an advanced decadent stage that signals the hollowing out, or decline and fall of the material and emotional worlds. Citing the Latin *exhaurire* as its etymological root, Schaffner literally translates exhaustion as *ex* - (out) and *haurire* - (to draw) and defines it as "to draw off or out, to consume or empty something in its entirety...to drain (a person, kingdom, etc.) of strength or resources, or (a soil) of nutrient ingredients" (7). In this sense, exhaustion becomes a limited concept that signifies "vampiric depletion" of the non-renewable resources that transform a previously healthy and well-functioning "person, object, system, or terrain" in a dysfunctional state (7). Exhaustion thus marks a threshold in the laws of thermodynamics where "parasitic external forces" drain a functional system of its native energy to leave it as wasted or emptied out. In Bier's narrative, capitalist exploitation of the energy reservoirs through Pemberton serves as this

parasitic force wreaking havoc on the human, nonhuman, and geologic integrity of a system which, at the start of the narrative, is well-functioning and vital.

Jason W. Moore describes these energy reservoirs as the “commodity frontier,” a distinguishing feature of capitalist expansion that incorporates new landscapes, forms of labor, and sources of energy into circuits of accumulation. Rather than referring simply to a geographical border, the commodity frontier denotes a historically produced zone where forests, soils, minerals, water, and human labor are rendered ‘cheap’ so that capital can overcome its ecological and economic limits through continual expansion. According to Moore, the commodity frontiers urged several practices of organizing labor and new systems of credit, foreshadowing many of the aspects of future capitalist and trade practices (1). The advent of commodity frontiers in America saw “the relentless geographical expansion of forest product and shipbuilding frontiers, which were bound up with the increasingly vast fleets of herring, cod, and whaling vessels” (Moore and Patel 22). Moore and Patel emphasize that the main cause behind the vast expansion of commodity frontiers was the cheapening of nature and work, and the relentless sense of crisis posing a threat to the energy sources. Hence, the underlying condition for the perpetuation and maintenance of the commodity frontiers proved to be the cheapening of energy sources, including the laboring bodies of the slaves and the natural resources. Commodity frontiers are the borders between the two sides of the world: the side that is untouched by capitalist exploitation, and the other side, which is governed by the principle of profit-making. Therefore, commodity frontiers inhabit the precarity and the danger that come with the specificity of their space: a border that is exposed and inviting. The Smoky Mountains in Bier emerge as a commodity frontier whose forests, laborers, animals, and material resources are valued primarily for their productive capacity. Bier’s persistent attention to the continual conversion of forest into timber demonstrates that the landscape has already been incorporated into the extractive circuits of capital. The frontier, therefore, is not merely the geographical setting of the film, but the economic and ecological conditions that make its world and its ecology of exhaustion possible.

In the film, Bier is concerned with what keeps the Smoky Mountains’ frontier in place. We see extraction portrayed over and over again as more than the taking of timber; it is shown as the way energy is put to work and spent, moving through the forests, the industrial technology, the systems of production and the bodies of those who labor. One might think of energy in the humanities as something you can measure or a physical force, but here it is the material capacity for human toil and ecological function alike. It is not a question of machines, workers and forests as distinct things so much as a matter of how energy is transferred and changed between them. Jennifer Wenzel, similarly, argues that resource history

must be understood alongside the exploitation of cheap labor-power and the “interwoven histories” of different forms of energy use. She proposes a study based on “intersectionality” of multiple disciplines “to consider how multiple resources and resource frontiers intersect and overlap with one another, or how cotton, for example, became a different kind of commodity in a plantation economy driven by the muscular energy of slave labor” (386). Bier’s timber economy is no different: it is as much a function of the embodied labor that makes logging pay off as it is of the land itself. Capital’s taking of wood is of a piece with its taking of human vitality, which is why the ecological crisis at hand is not just about deforestation. It is capital’s wider logic of appropriation at work, making surplus value out of both the worker and the natural world. In this sense, extraction is less a discrete event than a metabolic process of capitalist accumulation, turning all manner of energy into productive value. The running down of the timber is tied up with the wearing out of the men, the fraying of personal ties and reproductive life; it is a reordering of the conditions of existence in the human and nonhuman world.

This broader logic of depletion situates the economy of the Smoky Mountains within the Capitalocene. Jason W. Moore defines the Capitalocene as “the historical era shaped by relations privileging the endless accumulation of capital” (173), in which environmental crisis emerges through systems of accumulation that transform both nature and human labor into expendable resources. Bier, through *Serena*, mobilizes precisely this logic of extraction and accumulation. The relentless clearing of forests parallels the exploitation of laboring bodies and the erosion of emotional and reproductive life, suggesting that capitalism operates through simultaneous consumption of ecological and human energies. Patricia Yaeger describes this as “the energy unconscious” or “energy anxiety” (306), since it identifies the unseen forces behind which extraction generates both material devastation and affective distress. In Bier’s narrative, that energy unconscious is visible in the constant threat of overlogging, the repeated mention of eventual deforestation, and Pemberton’s desire to expand into Brazil in search of new timber frontiers. The anxiety surrounding exhausted resources is not separate from the violence of the narrative; it is what drives the narrative’s murders, betrayals, and failures of intimacy. The film, therefore, makes “energy anxiety” legible as both an ecological and psychic condition, one that reveals extraction as a system sustained by fear of depletion even while it produces depletion everywhere it moves.

If depletion constitutes the underlying logic of extractive capitalism, exhaustion is the condition through which that logic becomes visible. Bier translates the expandability of ecological and human energies into attritional forms of existence, revealing fatigue as an atmospheric condition that permeates the film’s

ecology. Exhaustion, therefore, functions as the experiential register of extraction, making perceptible the otherwise invisible transfer of energy from forests and workers into capitalist production. It is through the organization of timber extraction that Bier most clearly visualizes this ecology of exhaustion. Timber extraction in the film is portrayed as the primary mechanism for organizing landscapes, bodies, and social structures towards exhaustion. Throughout much of the film, the forest and loggers are visualized via the use of high-angle shots, which depict the loggers and other laborers as smaller than the surrounding forest, rendering them dispensable and therefore subject to an economy of replacement. These types of shots are critical because they illustrate the forest as a legitimate area of capitalist depletion, and as such, both the forest and workers are placed at risk of being exhausted by the drive for profit. Moore's argument that capital produces "global spaces of appropriation" (71) helps clarify how the film links resource frontiers to social relations organized around dispossession and exhaustion. Marx's account of accumulation as the multiplication of the proletariat then illuminates how labor-power itself must be continually reproduced, absorbed, and re-incorporated into capital's expansion:

The reproduction of labor power, which must incessantly be re-incorporated into capital as its means of valorization [capital's self-expansion], which cannot get free from capital, and whose enslavement to capital is only concealed by the variety of individual capitalists to whom it sells itself, forms, in fact, a[n] [essential] factor in the reproduction of capital itself. Accumulation of capital is therefore multiplication of the proletariat.

(Marx 382)

Bier dramatizes this process by showing that the same system that feeds on timber also feeds on the workers who cut it, making exhaustion the shared condition of both ecological and human life.

The ecology of exhaustion that Bier constructs is therefore also an ecology of shared vulnerability. When the trees fall due to unsafe and/or unstable working conditions, the violence to the landscape is directly related to the violence done to laboring bodies. The lack of adequate protective gear makes the laborer's body as disposable as the timber they harvest. The destruction of trees has an ecologically destructive impact as well as a corporally destructive impact on laboring bodies. Destruction of trees can be understood as an extractive process that destroys the life source of the forest, while simultaneously placing humans at risk of injury and death. Extraction thus becomes an experiential form of world-making that produces harm across multiple forms of embodiment. This violence is clear in the repeated depictions of snake bites in the film. Here, we find the environment literally responding negatively to human presence and

disruption to the ecosystem. Snakes symbolize deforestation as toxic, and suggest that when there is ecological damage, it will ultimately return to hurt those who work within damaged ecosystems. Bier provides us with a vision of the Smoky Mountains as a transcorporeal space in which human/nonhuman bodies are bound together through shared exposure/injury/depletion. In this way, extraction in Bier is a persistent atmospheric state that spreads exhaustion throughout all aspects of land and labor.

Stacy Alaimo's concept of corporeality offers a useful supporting framework for reading the intertwined degradation of bodies and environments in Bier. In *Bodily Natures: Science, Environment, and the Material Self*, Alaimo argues that the human body cannot be understood as separate from its environment, because both exist within the networks of continuous material exchange. From this perspective, environmental destruction simultaneously becomes bodily destruction, since the body remains permeable to the social and ecological conditions surrounding it. In a discussion on the healthcare system of the twentieth century industrial worker, Alaimo highlights how Meridel Le Sueur insisted on the close enmeshing of the laborer and the landscape they work in, she saw both these categories as interchangeable "within a matrix of capitalist critique and utopian desire" where workers cannot be separated from the land, especially in rural America where the land and the laborer both become markers of "value and vitality" (33). This interconnectedness is particularly visible in Bier, where laboring bodies and the exploited landscape mirror one another through shared processes of depletion and commodification. The film repeatedly collapses the distinction between natural resources and human life, presenting both as forms of extractable value within capitalist production.

Bier depicts a transcorporeal relationship between the trees that provide timber and the laboring bodies that create cheap labor power. Both forms of life are made precarious/exposed/depleted in this extractive world. Depletion here does not exist solely as material loss; rather, it creates what Glenn Albrecht describes as "psychoterratic emotions" (91) or negative affective states created by environmental decline. Psychoterratic emotions are illustrated throughout the film through both deterioration of the timber site and through the atmosphere of the film itself, where the extraction camp eventually becomes a space of alienation and death. A once-productive forest is, therefore, depicted in a field of violence and the interpersonal relationships within it; between Pemberton/Buchanan, and between Pemberton/Serena, are strained depicting that ecological depletion and emotional breakdowns are structurally co-constitutive.

In other words, Bier provides a bleak portrayal of what happens when extractive expansion occurs across frontiers of commodity exchange. Expanding

commodity trade results in rapid depletion rather than increases in productivity; as soon as landscapes become restructured so as to optimize the exhaustion of cheap nature and cheap labor. The timber frontier then becomes a clearly exhausted ecosystem where ecologies are nothing more than useful for accumulation. Instead of interpreting this as an allegory about “gendered” natures vs women, Bier demonstrates how extractive capitalism produces larger fields of bodily and ecological destruction. Capital continually utilizes its resources, labor, and energies to consume them to maintain its exhaustion. This logic is most clear in terms of the differences between Rachel (Ana Ularu) and Serena. Both are representations of different yet similar ways that bodies are exhausted by the frontier. Rachel represents the laboring body that is necessary for frontiers to operate; she works, gives birth to Pemberton’s child, and continues to exhaust herself with her labors despite carrying life-giving reproductive capacity within her body. She thus serves as an example of how frontiers depend on producing and reproducing labor power under precarious circumstances. Serena, however, represents a more physical form of depletion. Even though Serena’s pregnancy seemed to reinforce the frontiers’ productive capabilities at first, her eventual loss of her unborn baby and sterility signify a dramatic decline in reproductive futures. Like Rachel’s body, Serena’s body is another site where violence of frontiers is registered as part of an overall depiction of depleted lives due to extractive capitalism.

Serena’s eventual suicide intensifies the logic presented earlier by demonstrating how exhaustion can be both physical and existentially based. She represents a total breakdown of the emotional and social world that capitalism had already destroyed by means of removing all of these components of life (intimacy, motherhood, etc.) from the equation. Serena’s death signifies that there is no longer any possible form of life on the frontier. Thus, her suicide is the last step in a process that depletes all options for a viable future. Similarly, Pemberton’s death at the hands of the panther serves to close the film with a direct return to the source of the frontier’s violence. The panther that was initially hunted by him became the agent of his demise, illustrating that a relationship with nature that is purely exploitative is inherently unsustainable and will lead to one’s downfall. Thus, the frontier’s ultimate irony is demonstrated in that while the same land upon which the forest has been cut down and logged becomes the location of a man who has used the forest to sustain his masculine identity, he meets his end there. The deaths of both Serena and Pemberton demonstrate that the frontier does not merely serve as a mechanism to create wealth or power; it also creates ruin. Consequently, exhaustion emerges as a terminal state of extractive capitalism.

In the film, the transcorporeality of humans and nonhumans demonstrates the ways in which energy is created, distributed, and eventually exhausted throughout the film's world. Through this exhaustion, we see that the timber frontier is maintained through exploitation of cheap nature and cheap labor. Both of these elements become expendable in the pursuit of accumulating greater profits. The film illustrates that deforestation and the depletion of laboring bodies, emotional lives, and future reproduction are all connected. Therefore, in addition to extracting natural resources from the earth, extraction also organizes every aspect of the environment into a model of decay, harm, and devastation. The ending scene of Bier further develops this concept of collapse. Serena's suicide is carried out in a manner consistent with this theme, by burning her cabin. Her act of self-annihilation signifies the completion of this destructive cycle by bringing internalized violence to bear against her own body. As such, her death signifies the complete failure of the frontier to provide a context for successful mastery and prosperity. The film's concluding scenes are particularly effective in illustrating this collapse to the viewer because they illustrate this collapse to include the surrounding landscape. The smoke produced from Serena's burning cabin is depicted merging with the haze and twilight of the Smoky Mountain range, creating a foggy, polluted atmosphere. Consequently, the film visually depicts the landscape itself as being nothing short of dead and dying. It is therefore evident that the remnants of extractive history are inscribed onto the air, and in particular onto the remaining trees within the landscape. Bier illustrates the Capitalocene as a historical regime of extraction that reduces land, labor, and affect to tools for reducing each other. Its conclusion makes clear that the violence of extraction resides not only in what capitalism destroys, but also in the exhausted forms of life it produces along the way.

### **Works Cited**

- Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Indiana University Press, 2010.
- Albrecht, Glenn. *Earth Emotions: New Words for a New World*. Cornell University Press, 2019.
- Bier, Susanne, director. *Serena*. Performances by Bradley Cooper and Jennifer Lawrence, Amazon Prime, 2014.
- Joseph, Sabrina. *Commodity Frontiers and Global Capitalist Expansion: Social, Ecological and Political Implications from the Nineteenth Century to the Present Day*. Palgrave Macmillan, 2019.
- Marx, Karl. *Capital: A Critique of Political Economy*. Volume 1. Penguin Classics, 1990.
- Moore, Jason W. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. PM Press, 2016.
- . *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. Verso, 2015.
- , and Raj Patel. *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*. University of California Press, 2018.
- . "Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation, and Industrialization." *Review*, vol. 23, no. 3, 2000, pp. 409–433.
- Potter, Lucy. "Postcolonial Resources, Pedagogical Resistance: An Energy-Driven Interview with Professor Jennifer Wenzel." *Journal of Postcolonial Writing*, vol. 53, no. 3, 2017, pp. 380–392. doi:10.1080/17449855.2017.1340863.
- Yaeger, Patricia. "Editor's Column: Literature in the Ages of Wood, Tallow, Coal, Whale Oil, Gasoline, Atomic Power, and Other Energy Sources." *PMLA*, vol. 126, no. 2, 2011, pp. 305–326. doi:10.1632/pmla.2011.126.2.305.
- Miller, Elizabeth Carolyn. *Extraction ecologies and the literature of the long exhaustion*. Princeton University Press, 2021.

- Mukherjee, Debashree. "Energy and Exhaustion in a Coal Melodrama: Kaala Patthar (1979)." *Ecocinema Theory and Practice 2*. Routledge, 2022. 52-69.
- Schaffner, Anna K. *Exhaustion: A history*. Columbia University Press, 2016.
- Uhlen, Graig. "Feeling Depleted: Ecocinema and the Atmospherics of Affect." *Affective Ecocriticism: Emotion, Embodiment, Environment*, edited by Kyle Bladow and Jennifer Ladino, University of Nebraska Press, 2018, pp. 279–295.
- Williams, M., J. A. Zalasiewicz, C. N. Waters, and E. Landing. "Is the Fossil Record of Complex Animal Behaviour a Stratigraphical Analogue for the Anthropocene?" *A Stratigraphical Basis for the Anthropocene*. Ed. C. N. Waters et al. London: Geological Society, 2013. 143–48.