(ISSN: 2582-5526) www.thevoiceofcreativeresearch.com

The Voice of Creative Research

Vol. 7 & Issue 1 (January 2025)

https://doi.org/10.53032/tvcr/2025.v7n1.14

RESEARCH ARTICLE

A Fragile World: Pandemics, Climate Change, and Bio-Threats in Sarah Moss's Novels

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Abstract:
Some observers have delineated the coronavirus pandemic as an 'Anthropocene disease', thereby focusing attention to its connection with its new ecological era that is distinguished by the considerable pressure human activities are wielding on ecosystems and the consequences on society and environment. Techno-specific management of the living world precisely the underlying cause of deterioration of eco-systems and living conditions that created Anthropocene in the first place. Since environmental disasters and pandemics are largely man-made, the ultimate goal of eco-criticism may well be to decentralize humans, to attend what is suppressed and silenced in the Anthropocene epoch. *Cold Earth* (2009) and *The Fell* (2021) by Sarah Moss are complex novels dealing with the human nature and behaviour in the context of a calamity generated by a sudden and unknown disease. In other words, Moss's fiction contributes to a poetics of the archive understood as a way to record and reimburse for the human loss and ecological apocalypse. The presence of a deadly zoonotic diseases (bio-engineered virus) has once again raised questions of how human invasion on animal species, both in supposedly wild species and the very tamed ones of industrial agriculture, threatens a global civilization (disruption of both human and natural systems). The relevance of reading these novels, when the entire humanity faced a terrible viral pandemic is obvious and helpful. The present paper aims to explore Sarah Moss's novels from a combined eco-critical

perspective emphasizing the interrelatedness of humanity, bio-engineered virus and surrounding environment. The main research questions of this study are: Why pandemic is considered as an Anthropocene disease? How does bio- engineered virus affect the environment as a whole? Justifying the eco-critical approach towards pandemic. Another aspect that this paper will touch is the matrix of mind and matter due to the difficulties they face during pandemics and the importance of emotion management in these extreme conditions. For the proposed analysis the following methods will be used: close reading, eco-criticism, Narratology.

Keywords: Pandemic, Anthropocene, Eco-criticism, Bio-engineered virus, Sarah Moss, Cold Earth, The Fell, zoonotic diseases, apocalypse, techno-specific management

Introduction:

Pandemics, though devastating, have been integral to shaping the human story. Pandemic literature provides a mirror to societal fears and hopes, acting as both a historical record and a source of solace. As humanity continues to face new health crises, literature remains a powerful tool to understand, endure, and grow through shared experiences. The Anthropocene, a proposed geological epoch, reflects the unprecedented influence of human activities on Earth's ecosystems, geology, and climate. Alongside environmental changes, a new category of health conditions Anthropocene diseases has emerged. These diseases are a stark reminder of the intricate and fragile connection between human health and the environment. Anthropocene diseases encompass a range of health conditions directly or indirectly caused by human-induced environmental changes. Unlike traditional diseases that often stem from isolated pathogens or genetic predispositions, these conditions are systemic, rooted in broader anthropogenic disruptions such as industrialization, urbanization, pollution, and climate change.

Key Drivers of Anthropocene Diseases

Climate Change:

Rising temperatures, extreme weather events, and shifting ecosystems are creating ideal conditions for the proliferation of vector-borne diseases such as malaria, dengue, and Zika virus. Heatwaves and droughts exacerbate cardiovascular and respiratory illnesses, while food and water insecurity lead to malnutrition and gastrointestinal diseases.

Pollution:

Air Pollution: Industrial emissions, vehicle exhaust, and deforestation contribute to respiratory disorders like asthma and chronic obstructive pulmonary disease (COPD).

Water and Soil Contamination: Agricultural runoff, plastic waste, and heavy metals in water supplies are linked to diseases such as cancer, neurological disorders, and endocrine disruption.

Loss of Biodiversity:

As ecosystems are destroyed, the natural checks and balances that control zoonotic diseases break down. Pathogens like the SARS-CoV-2 virus, which causes COVID-19, are

increasingly spilling over from animals to humans, fuelled by deforestation, wildlife trade, and agricultural encroachment.

Urbanization and Lifestyle Changes:

The global shift to urban living has introduced challenges such as overcrowding, poor sanitation, and rising mental health disorders like depression and anxiety.

Sedentary lifestyles, fast food consumption, and increased screen time contribute to obesity, diabetes, and cardiovascular diseases.

Globalization and Antimicrobial Resistance (AMR):

The overuse of antibiotics in healthcare and agriculture has led to resistant pathogens, creating "superbugs" that are increasingly difficult to treat. Global trade and travel exacerbate the rapid spread of these resistant diseases.

Pandemics are often described as "Anthropocene diseases" because they reflect the deep and widespread influence of human activities on the natural world and society. The Anthropocene, the current geological epoch dominated by human impact, has brought significant environmental, social, and economic changes that contribute to the emergence and spread of infectious diseases.

One of the primary factors linking pandemics to the Anthropocene is human-induced environmental change. Deforestation, habitat destruction, and biodiversity loss have altered ecosystems, forcing wildlife into closer contact with human populations. This increased interaction creates opportunities for zoonotic diseases those transmitted from animals to humans to spill over. Biodiversity loss disrupts ecological balances, often allowing disease-carrying species like rodents and mosquitoes to thrive. Climate change, another hallmark of the Anthropocene, further exacerbates the issue by altering weather patterns, expanding the range of disease vectors, and increasing the likelihood of outbreaks. Urbanization and population growth are also key contributors. Rapid urban development leads to densely populated areas, creating conditions ideal for the rapid spread of diseases. High population density, combined with increased mobility through migration and travel, facilitates the transformation of local outbreaks into global pandemics. Globalization, another defining feature of the Anthropocene, amplifies this effect. The interconnected nature of modern trade, travel, and communication allows pathogens to cross borders quickly, turning isolated health crises into worldwide emergencies. Agricultural practices in the Anthropocene further enhance the risk of pandemics. Industrial farming often crowds large numbers of animals into confined spaces, providing breeding grounds for pathogens to mutate and jump species. The global wildlife trade, driven by human demand for exotic animals, also increases the likelihood of zoonotic transmission. These practices, coupled with the overuse of antibiotics in agriculture, have contributed to the rise of drug-resistant pathogens, complicating efforts to manage infectious diseases. Social and technological factors also play a role. Inequalities in access to healthcare and sanitation mean that pandemics disproportionately affect vulnerable populations, particularly in less developed regions. Cultural practices, such as mass gatherings or inadequate hygiene, can further accelerate disease spread. The Anthropocene's technological advancements, while enabling rapid responses to outbreaks, also highlight disparities in

resource distribution and healthcare access. Moreover, pandemics themselves act as feedback loops within the Anthropocene. While they are consequences of human activities, they also exacerbate existing challenges such as economic inequality and environmental degradation. The widespread use of disposable personal protective equipment (PPE) during pandemics, for instance, contributes to pollution, creating additional ecological pressures.

In summary, pandemics are considered Anthropocene diseases because they emerge at the intersection of human activity and natural systems. The defining characteristics of the Anthropocene environmental destruction, urbanization, globalization, and social inequalities create the conditions for pandemics to arise and amplify their impact. Understanding pandemics in this context highlights the urgent need for holistic approaches that integrate public health, environmental sustainability, and global cooperation to prevent and mitigate future outbreaks.

Bioengineered viruses have the potential to affect the surrounding environment and society in profound and multifaceted ways, raising significant concerns for public health, ecosystems, and global stability. These effects can manifest across biological, ecological, social, and geopolitical dimensions, impacting both natural systems and human communities. From a biological perspective, bioengineered viruses could lead to unprecedented public health challenges. Unlike naturally occurring viruses, bioengineered ones may be designed to have enhanced transmissibility, increased virulence, or resistance to existing treatments, making them harder to contain and combat. If released intentionally or accidentally they could trigger outbreaks with devastating mortality rates, overwhelm healthcare systems, and create global health crises. The unpredictable nature of how such viruses might interact with other pathogens in the environment adds another layer of uncertainty, potentially giving rise to new, unforeseen health risks.

Ecologically, bioengineered viruses could disrupt natural ecosystems by affecting wildlife populations and the balance of species. If engineered viruses target specific animals or plants, they could lead to population declines or extinctions, destabilizing food chains and ecosystems. For example, if a virus is designed to attack a pest species but inadvertently affects non-target organisms, it could have cascading effects on biodiversity and ecosystem services such as pollination or nutrient cycling. Additionally, the interaction of bioengineered viruses with naturally occurring pathogens might result in the emergence of hybrid strains, complicating containment and mitigation efforts.

On a societal level, the release of a bioengineered virus could lead to widespread panic, economic disruption, and social unrest. The fear of contagion could cause mass migrations, disruptions to trade and supply chains, and a breakdown of public trust in institutions. Economies reliant on tourism, trade, or agriculture might suffer severe losses, especially if bioengineered viruses target crops or livestock. The psychological toll on communities, including fear, anxiety, and stigma, could further strain social cohesion and resilience.

Geopolitically, bioengineered viruses raise ethical and security concerns. They could be weaponized in acts of bioterrorism or warfare, creating new threats to international peace and stability. The deliberate or accidental release of such viruses might lead to accusations, mistrust,

and conflicts between nations. Regulatory gaps and differing standards for biotechnology across countries could complicate global efforts to prevent misuse, making the development and deployment of bioengineered viruses a contentious issue. Finally, bioengineered viruses highlight the complex relationship between human innovation and ethical responsibility. While advances in synthetic biology offer promising opportunities for medical and scientific breakthroughs, they also come with risks that demand robust oversight and regulation. Without proper safeguards, bioengineering could unintentionally harm the very systems it aims to benefit. Bioengineered viruses have the potential to impact the surrounding environment and society on multiple levels, from disrupting ecosystems to endangering public health and global security. Their effects underscore the need for stringent ethical standards, international cooperation, and comprehensive risk assessment in the development and application of biotechnology. By addressing these challenges proactively, humanity can harness the benefits of bioengineering while minimizing its risks.

Sarah Moss's novels *Cold Earth* and *The Fell* provide a profound exploration of the intersections between pandemics, the Anthropocene, and eco-critical concerns, making them highly relevant for examining the crises of our time. These narratives delve into how human activity has reshaped ecosystems and exacerbated vulnerabilities to pandemics, while also reflecting on the psychological and societal implications of such crises. Through her detailed storytelling, Moss critiques humanity's impact on the environment and raises critical questions about the consequences of living in an era shaped by human dominance over nature.

In *Cold Earth*, Moss crafts a narrative centered on a group of archaeologists working in Greenland, whose isolation coincides with the outbreak of a global pandemic. This dual focus on the Arctic wilderness and the unseen pandemic emphasizes the fragile balance between humans and their environment. The harsh, unyielding landscape of Greenland symbolizes the resilience of nature, standing in stark contrast to the collapse of human systems elsewhere. The novel highlights the Anthropocene's paradox: while humans have reshaped the planet to an unprecedented degree, they remain vulnerable to its forces. The pandemic in *Cold Earth* reflects the ecological disruptions caused by deforestation, habitat destruction, and climate change hallmarks of the Anthropocene. These disruptions facilitate zoonotic diseases, showcasing how humanity's encroachment into natural habitats sets the stage for global health crises. Moss uses this backdrop to question the sustainability of our current trajectory, hinting that the Anthropocene may mark both the pinnacle of human influence and the beginning of our undoing.

In *The Fell*, Moss turns her focus to the psychological and social dimensions of a pandemic, capturing the lived experience of individuals during the COVID-19 crisis. The novel follows Kate, a woman breaking quarantine to find solace in the natural landscape, and those who are affected by her actions. Through this microcosmic lens, Moss examines the broader implications of isolation, fear, and human dependency on nature. The novel is deeply rooted in the Anthropocene, with its exploration of how pandemics reflect humanity's strained relationship with the environment. The Anthropocene's hallmarks urbanization, globalization, and environmental degradation are implicitly critiqued as factors that exacerbate the spread of

disease and amplify its societal impact. Kate's yearning for the outdoors during lockdown underscores the essential connection between humans and nature, while also exposing how modern lifestyles have distanced us from the ecosystems we depend on.

Although Moss does not directly address bio-engineered viruses in her work, the eco-critical themes in both novels resonate with concerns about the risks of human manipulation of natural systems. Bio-engineered viruses, as potential products of human innovation, exemplify the Anthropocene's tendency to blur the line between progress and peril. In an eco-critical context, these viruses represent the unintended consequences of humanity's hubris in attempting to dominate and reshape nature. Moss's portrayal of pandemics as Anthropocene phenomena invites reflection on the ethical and ecological implications of bioengineering, including its potential to disrupt ecosystems and exacerbate inequalities. For instance, the global inequalities and systemic vulnerabilities exposed in her narratives echo real-world fears about how bio-engineered pathogens could disproportionately harm marginalized communities or destabilize fragile ecosystems. Both novels also critique the socio-political structures that shape human responses to pandemics. In *Cold Earth*, the group's isolation from the wider world mirrors the fragmented global response to ecological crises. The novel suggests that the Anthropocene is not only about environmental transformation but also about the social and political systems that fail to adapt to these changes. In *The Fell*, Moss expands on this critique by examining how individual and collective actions intersect during a crisis. Kate's decision to leave her house during quarantine reflects the tension between personal autonomy and societal responsibility, a dynamic that is central to managing both pandemics and broader Anthropocene challenges.

Moss's eco-critical exploration of pandemics and the Anthropocene underscores the interconnectedness of human and ecological systems. By highlighting the fragility of these systems, her work urges readers to reconsider their relationship with the natural world. The pandemics in *Cold Earth* and *The Fell* are not merely biological events but ecological and ethical crises, emblematic of the Anthropocene's broader disruptions. Through her nuanced storytelling, Moss advocates for a more reflective and responsible approach to living in harmony with the planet, emphasizing the need for global cooperation, environmental stewardship, and a deeper understanding of the consequences of human actions. *Cold Earth* and *The Fell* by Sarah Moss provide a layered and nuanced eco-critical perspective on pandemics, the Anthropocene, and the ethical dilemmas posed by humanity's influence on the natural world. By intertwining personal narratives with broader ecological themes, Moss critiques the unsustainable practices of modernity while also exploring the potential for resilience and renewal. Her work serves as both a warning and a call to action, urging readers to confront the challenges of the Anthropocene and strive for a more equitable and sustainable future.

In *The Fell*, Moss captures the psychological strain of living through a pandemic, particularly the isolation, fear, and anxiety it creates. Set during the COVID-19 crisis, the novel examines how prolonged lockdowns and quarantine measures disrupt routines, fray social connections, and intensify feelings of loneliness and despair. The protagonist, Kate,

experiences a profound yearning to escape confinement and reconnect with the natural world, reflecting the restorative role of nature in mental health. Her struggles highlight how the Anthropocene, characterized by urbanization and ecological disconnection, has amplified the psychological effects of pandemics. The novel underscores the idea that restricted access to outdoor spaces during crises exacerbates feelings of entrapment, leaving individuals more vulnerable to mental health challenges.

Similarly, *Cold Earth* explores the psychological impact of isolation and fear in the context of a global pandemic. The archaeologists in Greenland, separated from the rest of the world, grapple with the dual burdens of physical isolation and the uncertainty of the pandemic's progression. Their anxiety about the unknown and the pervasive sense of helplessness mirror the broader mental health effects of pandemics on society. Moss skilfully captures the emotional toll of being disconnected from loved ones and the wider community, a theme that resonates deeply in the Anthropocene, where globalization and technological advancement often lead to fragmented social relationships.

The Anthropocene itself compounds these mental health challenges by fostering a sense of ecological grief and climate anxiety. As individuals witness the degradation of the environment and the increasing frequency of crises like pandemics, they may experience feelings of powerlessness, guilt, and despair. Moss's work reflects this eco-critical dimension, showing how awareness of humanity's role in ecological disruption can weigh heavily on the psyche. In both novels, characters grapple with existential questions about the sustainability of human actions and their consequences for future generations, reflecting the growing prevalence of mental health conditions linked to environmental concerns.

Additionally, the concept of bio-engineered viruses, though not directly addressed in Moss's novels, ties into the broader theme of Anthropocene-induced mental health challenges. The fear of human-made pathogens adds another layer of psychological stress, as it represents the unintended consequences of technological hubris and the potential for catastrophic failure. This anxiety reflects the broader eco-critical concern about humanity's manipulation of nature and its unpredictable repercussions. To add, the mental health effects of pandemics, the Anthropocene, and bio-engineered viruses in *Cold Earth and The Fell* emphasize the profound psychological toll of living in an age marked by ecological disruption and uncertainty. Sarah Moss captures the emotional and mental strain of isolation, fear, and ecological grief, while also highlighting the healing potential of reconnecting with nature. Her work underscores the need for compassion, resilience, and systemic change to address the mental health challenges associated with the Anthropocene, advocating for a more balanced and sustainable relationship between humanity and the environment.

Conclusion:

In conclusion, Sarah Moss's *Cold Earth* and *The Fell* offer insightful and thought-provoking explorations of pandemics, the Anthropocene, and humanity's complex relationship with the natural world. Through an eco-critical lens, these novels highlight how human activities ranging from environmental exploitation to technological advancements have reshaped ecosystems, increasing the likelihood of pandemics and other crises. Moss's

narratives underscore the interconnectedness of ecological and societal systems, revealing the vulnerabilities and inequities that pandemics expose. By weaving themes of isolation, ecological disruption, and human resilience, Moss critiques the Anthropocene's unsustainable trajectory and calls attention to the ethical dilemmas posed by humanity's impact on the planet. Although her works do not explicitly address bio-engineered viruses, their eco-critical undertones resonate with broader concerns about the unintended consequences of human intervention in nature, emphasizing the need for caution, responsibility, and collaboration in addressing global challenges. Ultimately, Moss's novels serve as a mirror to our contemporary moment, encouraging readers to reflect on the environmental and societal consequences of living in the Anthropocene. They advocate for a reimagining of humanity's place within the natural world, one that prioritizes sustainability, equity, and a deeper understanding of the delicate balance between human progress and ecological integrity. Her work is a powerful reminder that the crises of the Anthropocene, whether pandemics or environmental degradation, demand holistic and compassionate responses for a more sustainable future.

References

Moss, Sarah. *The Fell*. Picador, 2021.
--. *Cold Earth*. Granta, 2009.
Wanjari, Smita. *Pandemic Literature: A Critique from Plague to COVID-19*. Dattsons, 2021.