Foreshadowing Biopolitical Fallouts: The 1970 Bhola Cyclone in Literature

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Abstract

The 1970 Bhola Cyclone, referred to as the deadliest tropical cyclone on record, triggered a crisis that precipitated the Bangladesh Liberation War of 1971. This article explores how select literary narratives, namely, Sorayya Khan's *Noor* (2003), Arif Anwar's *The Storm* (2018), Amitav Ghosh's *Gun Island* (2019) and *The Vortex* (2022) by Scott Carney and Jason Miklian, depict the cataclysmic devastation wrought by the cyclone, a natural disaster grotesquely compounded by institutional inertia and calloused human indifference. Drawing from Doreen Massey's space-time concepts, Joni Adamson's vernacular landscapes and a postcolonial socio-environmental lens encompassing Rob Nixon's environmentalism of the poor, the analysis lays bare how the imposition of official landscapes onto vernacular ones exacerbated the cyclone's devastation and fueled erstwhile East Pakistan's desire for independence. These literary depictions serve as ominous harbingers by underscoring how climate crises disproportionately impact marginalized populations. Mapping the transformative arc from cyclonic cataclysm to the ensuing struggle for liberation, this study issues an urgent call to confront climate vulnerabilities and subvert hegemonic environmental narratives that marginalize vernacular landscapes and their inhabitants.

Keywords: Bhola Cyclone, Climate Crisis, Liberation War, Biopolitics, Climate Justice

Introduction: Historical Context

Geography has long been a dynamic and influential force in the deltaic expanse of Bangladesh. Human affairs are continually molded by its shifting channels rather than serving as a passive backdrop. As Willem van Schendel observes, "time and again natural forces have acted as protagonists in [Bangladesh's] history, upsetting social arrangements and toppling rulers."[1] From as early as the fifth century BCE, urban centres sprang up along rivers; their fortunes were invariably tied to each river's whims. Tamralipti, "once the chief trade emporium of the wide area between China and Alexandria," declined in the eighth century CE when deltaic silt choked its harbour.[2] Lakhnauti-Gaur, the Sena dynasty's twelfth-century capital and later one of South Asia's largest cities, dazzled visitors in 1521 with broad, busy streets and tiled courtyards; yet every westward shift of the Ganges isolated its port, spawned malarial swamps, and in 1575, precipitated a final epidemic that ended its prosperity:

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[1] Willem van Schendel, *A History of Bangladesh* (Cambridge: Cambridge University Press, 2009), p. 9.

[2] Steven G. Darian, *The Ganges in Myth and History* (Honolulu: The University Press of Hawaii, 1978), p. 138.

> During its heyday (early 1200s to 1575), Gaur was settled and abandoned several times, depending on the Ganges moving westwards and back again. When the river moved away, it was not only an economic disaster (even though feeder canals were made, ships could no longer reach the port), but also a health disaster, as swamps formed and malaria and other fevers broke out. In 1575 a severe epidemic sounded the death-knell for Gaur: the river had moved away once more and this time a combination of political instability and problems in trade with South-east Asia sealed its fate.[3]

The patterns in the rise and decline of the Bengal region's riverine cities depict the temporal framework offered by Fernand Braudel (1902-1985), a French historian. In the first volume of *The Mediterranean and the Mediterranean World in the Age of Philip II*, Braudel distinguishes between three interrelated 'planes' of time: *la longue durée*, *l'histoire sociale*, and *l'histoire événementielle*. *La longue durée* refers to "a history of constant repetition, ever-recurring cycles", a history "whose passage is almost imperceptible." *L'histoire sociale*, or the 'social history', is "the history of groups and groupings" and it has "slow but perceptible rhythms" while *l'histoire événementielle* is a realm of "the history of events", "[a] history of brief, rapid, nervous fluctuations."[4] Braudel's framework is especially useful for understanding the region's riverine past. Cities like Tamralipti and Lakhnauti-Gaur rose to power and later declined not because of singular events, but because of slow changes in the river systems. These gradual shifts exemplify Braudel's 'almost imperceptible' movement of history.

Bengal's *longue durée* was ruptured twice in the twentieth century by political partitions: first the British-carved Partition of Bengal in 1905 (later annulled) and then the 1947 division of the Indian subcontinent.[5] These disruptions redrew its maps while shattering centuries-old regional networks. It imposed new power structures on Bengal's eastern flank. In the newly created East Pakistan, this legacy of rupture quickly manifested in conflict. Within a year of independence, the Pakistani government's language decree, which insisted that Urdu alone be Pakistan's national tongue, provoked widespread Bengali protest. Dhirendranath Datta (1866-1971), a Hindu parliamentarian from East Pakistan, advocated for the recognition of Bangla. Despite Bangla being the language of 63.76% of the population of Pakistan,[6] Prime Minister Liaquat Ali Khan (1895-1951) dismissed Datta's appeal and framed it as an attempt "to create a rift between the people of Pakistan."[7] The eventual success of the Language Movement in securing Bangla's recognition as a state language alongside Urdu, in 1956, did little to alleviate systemic marginalization. Bengali identity remained under threat. It was exacerbated by economic disparities and underrepresentation in government and military positions:

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[3] Schendel, *A History of Bangladesh*, p. 21.

[4] Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II, vol. I* (Great Britain: Harper & Row, 1972), pp. 20-21.

[5] The 1947 Partition cleaved British India into two sovereign states: India and Pakistan. Pakistan itself consisted of two noncontiguous regions, West Pakistan and East Bengal (designated East Pakistan in 1955). These regions were separated by approximately 1,600 kilometres of Indian territory.

[6] "Language Movement", *Banglapedia: National Encyclopedia of Bangladesh*. At: https://web.archive.org/web/20160307033428/http://en.banglapedia.org/index.php?title=Language_Movement.

[7] M. Waheeduzzaman Manik, "Shaheed Dhirendranath Datta: Making of the Bengali Language Movement", *The Daily Star*, February 20 (2014). At: https://www.thedailystar.net/shaheed-dhirendranath-dutta-12254.

> While East Bengal, with a population of 75 million (as against West Pakistan's 45 million) demanded more funds for education and health, more industries and river control schemes, allocations from Pakistan were woefully inadequate. . . . East Bengal became poorer, West Pakistan richer. East Bengal earned much more foreign exchange through its jute, and yet most of it was spent for the western wing's development. Of the total foreign aid received by Pakistan, 80 per cent was spent in West Pakistan. Representation in Central government employment was a meagre 15 per cent for the Bengalees. In the armed forces they were barely 10 per cent.[8]

Socio-political marginalization reached a critical juncture in 1966 when Sheikh Mujibur Rahman, leader of East Pakistan's major political party (Awami League), formalized the Six-Point Programme. He thereby channeled decades of systemic neglect into an organized, mass movement for regional autonomy. This process exemplifies Braudel's notion of *l'histoire sociale*, in which collective grievances and emergent solidarities unfold gradually before erupting into transformative political action.

In 1970, a natural disaster laid bare the vulnerabilities of East Pakistan. The Bhola Cyclone had wind speeds of 140 mph and a storm surge of over 20 feet. The cyclone inundated 25% of the region. It claimed 250,000 to 500,000 lives and destroyed 65% of the fishing industry.[9] West Pakistan's slow and inadequate response after the disaster amplified existing grievances and transformed a natural disaster into a biopolitical crisis. Despite relief efforts pouring in from foreign nations, the central government remained largely unresponsive. This "languid and lackadaisical" response fueled widespread resentment.[10] The catastrophe contributed to the landslide victory of Awami League, a major political party in East Pakistan, in the 1970 elections, where they "won 160 of the 162 seats in East Pakistan."[11] The electorate's overwhelming mandate for self-governance and survival set the stage for East Pakistan's eventual secession in 1971. Here, as in Braudel's *l'histoire événementielle*, a singular event shattered the status quo and propelled a nation toward irreversible change.

Against this backdrop, this study examines literary narratives that explore the intersections of environmental disasters and political marginalization. Texts such as Sorayya Khan's *Noor* (2003), Arif Anwar's *The Storm* (2018), Amitav Ghosh's *Gun Island* (2019), and *The Vortex* (2022) by Scott Carney and Jason Miklian depict the exacerbation of local vulnerabilities in light of hegemonic environmental narratives. These narratives ignite movements of resistance and foreshadow the disproportionate effects of climate crises on marginalized communities. The study challenges the conventional historiography that, as socio-environmental historian Iftekhar Iqbal observes, often relegates the environment to a static "'geographical background' – a fixed ecological bow from which the arrows of all kinds

[8] Nitish Sengupta, *Land of Two Rivers: A History of Bengal from the Mahabharata to Mujib* (New Delhi: Penguin Books, 2011), p. 503.
[9] Kerry Emmanuel, *Divine Wind: The History and Science of Hurricanes* (New York: Oxford University Press, 2005), pp. 223-224.
[10] Srinath Raghavan, *1971: A Global History of the Creation of Bangladesh* (Massachusetts: Harvard University Press, 2013), p. 32.
[11] Raghavan, *1971: A Global History of the Creation of Bangladesh*, p. 34.

of history take flight, the ecology itself remaining ontologically static."[12] This study instead posits that environmental factors, particularly when filtered through socio-political and biopolitical lenses, are dynamic forces that shape political and cultural trajectories in regions susceptible to climate vulnerabilities.

Theoretical Framework: Doreen Massey's Relational Conception of Space and Time

In *Grundrisse* (1939), Karl Marx asserts that capital "must on one side strive to tear down every spatial barrier to intercourse, i.e. to exchange, and conquer the whole earth for its market", while simultaneously striving "on the other side to annihilate this space with time, i.e. to reduce to a minimum the time spent in motion from one place to another."[13] In essence, as markets extend, capital simultaneously demands ever faster circulation and seeks to compress space-time to the utmost. However, Marx's model overlooks the uneven play these pressures put on the ground. Building on and problematizing Marx's overlooked dimension, Doreen Massey (1944-2016), an influential British social scientist and geographer, argues that such 'time-space compression' is never uniform but "needs differentiating socially": "how people are placed within 'time-space compression' are complicated and extremely varied." In effect, Massey is critical of the notion of 'time-space compression' as it represents capital's attempts to erase the sense of the local and masks the dynamic social ways through which places remain "meeting places."[14] Thus, Massey critiques this 'time-space compression' as a monolithic, capital-driven process.

Massey analyses the romanticised longing for a unified and stable community. She highlights the persistence of an "(idealized) notion of an era when places were (supposedly) inhabited by coherent and homogeneous communities." Her critique of this ideal rests on the argument that "'place' and 'community' have only rarely been coterminous." She argues that such nostalgia is not merely benign but often underpins "defensive and reactionary responses – certain forms of nationalism, sentimentalized recovering of sanitized 'heritages', and outright antagonism to newcomers and 'outsiders.'" As a result of such defensive responses, the very act of seeking a 'sense of place' "has come to be seen by some as necessarily reactionary."[15] Massey's intervention, then, lies in both dismantling the illusion of spatial coherence and acknowledging the emotional and political weight these imaginaries carry, especially during periods of fragmentation and uncertainty.

Massey reconceptualises 'place' not as a fixed, bound entity but as a site of ongoing social relations which are constituted through interactions that are dynamic and contested. In doing so, she challenges essentialist notions of place as stable, internally unified, or culturally homogeneous. Rather than being defined by singular or timeless identities, places are shaped by multiple, often conflicting processes: "places do not have single, unique 'identities'; they are full of internal conflicts" and "[i]f places can be conceptualized in terms of the social interactions which they tie together, then … these interactions themselves … are processes"

[12] Iftekhar Iqbal, *The Bengal Delta: Ecology, State and Social Change, 1840-1943* (Britain: Palgrave Macmillan, 2010), p. 6.
[13] Karl Marx, *Grundrisse* (London: Penguin Books, 1993), p. 539.
[14] Doreen Massey, *Space, Place, and Gender* (Minneapolis: University of Minnesota Press, 1998), p. 148-154.
[15] Massey, *Space, Place, and Gender*, pp. 146-7.

rather than static enclosures. Boundaries, in her view, are not inherent features of place but analytical tools; they are methodological conveniences rather than ontological necessities. This relational understanding opens the way for what she terms "a global sense of the local, a global sense of place."[16] It recognises that every place is embedded within wider networks and shaped by the intersecting trajectories of people, cultures, and histories.

Massey mobilises the concept of 'time-space compression' as a critical lens for political analysis. She foregrounds the uneven distribution of mobility and access by arguing that if 'time-space compression' is understood as "more socially formed, socially evaluative and differentiated", then it opens up "the possibility of developing a politics of mobility and access." Mobility, and crucially, a control over it, is not neutral, it reflects and reinforces power the mobility and control of some groups can actively weaken other people. Differential mobility can weaken the leverage of the already weak."[17] In this way, the accelerated spatial flows enabled by transnational capital often exacerbate existing inequalities, leaving the least mobile further disempowered. For Massey, this politics of movement cannot be separated from the spatial foundations of history itself: "the spatial is integral to the production of history, and thus to the possibility of politics, just as the temporal is to geography."[18] Challenging any "notion of uniform time" that treats places as coherent or self-contained, she calls instead for conjunctural thinking: "a shuttling back and forth between different temporal frames or scales to capture the distinctive character of processes which appear to inhabit the "same" moment in time."[19] Space, in this framework, is not a passive container but, as Massey puts it, "social relations 'stretched out'," i.e., a layered, contested field of interactions.[20] Attending to this relational spatiality allows for more nuanced readings of both literature and disaster, which reveals how geography, politics, and cultural memory are inseparably entangled.

Joni Adamson's vernacular landscapes

Drawing on the foundational distinctions of the cultural geographer John Brinckerhoff Jackson (1909-1996), Joni Adamson (b. 1958), the American literary and cultural theorist, outlines a powerful framework in which landscapes emerge not only through geography, but also through systems of power, belonging, and exclusion. Jackson distinguishes between the vernacular landscape, which is shaped organically by communities through local needs, customs, and environments, and the official landscape, which is imposed from above by institutions, states, or corporations. As he explains "underneath those symbols of permanent political power there lay a vernacular landscape—or rather thousands of small and impoverished vernacular landscapes, organizing and using spaces in their traditional way and living in communities governed by custom, held together by personal relationships."[21] Adamson extends this spatial distinction into the realm of biopolitics. She argues that the official landscape is not merely

[16] Massey, *Space, Place, and Gender*, pp. 155-156.
[17] Massey, *Space, Place, and Gender*, p. 150.
[18] Massey, *Space, Place, and Gender*, p. 269.
[19] Quoted in Doreen Massey, *For Space* (London: SAGE Publications, 2005), p. 141.
[20] Massey, *Space, Place, and Gender*, p. 2.
[21] John Brinckerhoff Jackson, *Discovering the Vernacular Landscape* (New Haven: Yale University Press, 1984), p. 150.

administrative or symbolic, but structured to extract and exploit. It represents "a metonymy for the social and institutional power that grants state and corporate entities the authority to remove, extract, develop, and pave over the vernacular landscape." This imposition often carries the implicit expectation that educated elites must separate local concerns from universal knowledge; it reinforces a hierarchy in which the vernacular is dismissed as anecdotal, emotional, or irrelevant:

> For centuries, students entering the official landscape of Euro-American higher learning have been taught to become citizens of a world city of ideas and books; to renounce, minimize, or ignore their citizenship in their own families, cultures, and vernacular landscapes; to value the universal; and to embrace an aesthetic that supposedly transcends time and place.[22]

In contrast, the vernacular landscape is a lived and intimate geography. It is a world animated by memory, community, and cultural rhythms:

> The vernacular landscape is a folk landscape in which people are attuned to the contours of home and place; it is a living, breathing landscape where geological features [...] are alive with meaning and significance, where people, whether they live in rural or urban areas, can tell you the names of their neighbors and the names of the trees, where they have a sense of the rhythms of local culture.[23]

Such landscapes are not static or nostalgic, but dynamic spaces of relation and knowledge. These lands are the geographies that hold deep significance for those who inhabit them.

Adamson's work demonstrates that these two landscapes often collide in institutional settings. She recounts the experience of a Black student whose attempt to connect Phyllis Wheatley's poetry to her own lived experience was dismissed by a professor, who insisted that "students will root their discussions in theory and forms of literature, not descend into the realm of the personal experience or the local landscape."[24] Understanding the interaction between these spatial regimes, one asserting dominance, the other negotiating resistance, is crucial to challenging structures of dispossession and envisioning more inclusive ways of knowing. The vernacular, in this context, is not only a site of cultural intimacy but also a ground for political struggle and narrative resistance. Through this lens, Adamson foregrounds local knowledge, collective memory, and lived geographies that dominant institutional frameworks often render invisible. As she notes, "struggling for alternative visions of the world, then, requires a knowledge not only of the vernacular landscape but of the official one as well."[25] Engaging both, rather than privileging one over the other, becomes essential to reimagining relationships between power, place, and pedagogy.

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[22] Joni Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism: The Middle Place* (Tucson: The University of Arizona Press, 2001), p. 91.
[23] Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism*, p. 90.
[24] Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism*, p. 95.
[25] Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism*, p. 111.

Rob Nixon's Environmentalism of the Poor

Rob Nixon (b. 1954), a South African environmental neoliberalism critic, coined the term 'environmentalism of the poor' to describe grassroot resistance when official powers impose exploitative regimes upon locally rooted geographies. He observes:

> In the global resource wars, the environmentalism of the poor is frequently triggered when an official landscape is forcibly imposed on a vernacular one. A vernacular landscape is shaped by the affective, historically textured maps that communities have devised over generations, maps replete with names and routes, maps alive to significant ecological and surface geological features.

Official landscapes, by contrast, are bureaucratic and extraction-driven. It treats territory as an inert resource to be developed, paved over, or appropriated without regard for local life.[26] Under such pressures, impoverished communities face multifaceted threats that encompass both immediate crises, such as land expropriation and water contamination, as well as insidious, long-term processes like soil erosion and resource depletion. As Nixon observes, they experience environmental peril not as an abstraction but as "a set of inhabited risks, some imminent, others obscurely long term."[27] These conditions give rise to 'resource rebels' whose activism transcends single-issue frameworks and instead intertwines economic survival and ecological stewardship. Their struggle, thus, embodies a dual focus on urgent protection and long-term resilience.

In many states endowed with abundant mineral or petroleum resources, the structures of the government become skewed toward extraction, which undermines the social bonds that sustain civic life. Rather than being invested in public infrastructure or social welfare, windfalls from resource exploitation are siphoned off to enrich a narrow elite. This dynamic not only entrenches a widening class divide (what Nixon terms "vertical inequality") but also produces stark regional disparities ("horizontal inequality") between resource enclaves and the broader populace. In such contexts, the violence of extraction assumes both an immediate and a protracted form: pipelines and mines displace communities and devastate ecosystems, while repressive state apparatuses secure corporate interests through coercion and often lethal force. Nixon compellingly characterises this phenomenon as follows:

> There are of course exceptions to these tendencies, but in resource-cursed societies, though less immediately spectacular than a missile strike, is often more devastating in the long term, bringing in its wake environmental wreckage, territorial dispossession, political repression, and massacres by state forces doing double duty as security forces for unanswerable petroleum transnationals or mineral cartels.[28]

[26] Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Massachusetts: Harvard University Press, 2011), p. 17.
[27] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 4.
[28] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 70.

Nixon situates these dynamics within his broader concept of 'slow violence'. Slow violence reframes environmental harm as an incremental, often invisible, process that unfolds over time and erodes the foundations of community well-being long before it erupts into overt conflict. In resource-cursed regions, the gradual advance of desertification, deforestation, and water contamination compounds food insecurity and undermines livelihoods. These daily hardships—walking miles for firewood, fearing hunger, and lacking potable water—are intensified by state or corporate repression, which then creates a volatile mix of structural neglect and coercion. Nixon argues that this convergence of everyday deprivation and direct force can trigger sudden outbreaks of resistance, as pent-up despair gives way to collective action. He captures this dual temporality thus:

> Such quotidian terrors haunt the lives of hundreds of millions immiserated, abandoned, and humiliated by authoritarian rule and by a purportedly postcolonial new-world order. Under such circumstances, slow violence (often coupled with direct repression) can ignite tensions, creating flashpoints of desperation and explosive rage.

The Green Belt Movement in Kenya, founded by the Kenyan environmental activist Wangarĩ Maathai, exemplifies environmentalism of the poor by linking reforestation to distributive justice and community security. Maathai's approach forged broad-based alliances against authoritarian rule. She insists that sustainable environmental stewardship must restore "a sense of security among ordinary people so they do not feel so marginalized and so terrorized by the state."[29] Mohamed Nasheed (b. 1967), President of the Republic of the Maldives from 2008 to 2012, dramatized the paradox of climate vulnerability with his 2009 underwater cabinet meeting. By convening ministers under the ocean's surface, Nasheed subverted the trope of "brown immigrants threatening to "swamp" the neoliberal fortresses of the still predominantly white rich." He instead presented "poor brown people confronting the threat of having their national territory swamped as a result of a 200-year experiment in hydrocarbon-fueled capitalism whose historic beneficiaries have been disproportionately rich and white." This striking tableau crystallises the core injustices of climate change: while high-consumption countries reap the benefits of fossil-fuel economies, low-emission nations like the Maldives face existential peril as their lands risk disappearing beneath the ocean. Moreover, Nasheed's gesture anticipates the broader trajectory of climate refugees. As Nixon observes, the inequities between historic emitters and vulnerable communities will only deepen: "today's imperiled islanders" may soon be forced to flee, their desperation compounding pressures on wealthier societies whose own inaction has precipitated the crisis.[30] Nixon's environmentalism of the poor shows that effective ecological politics must combine attention to local landscapes shaped by communal memory and practice with a critical challenge to the extractive policies of state and corporate actors.

[29] Quoted in Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 149.
[30] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 266.

Cyclonic Biopolitics in Literature: Reimagining Landscape and Memory in Sorayya Khan's *Noor*

Sorayya Khan's *Noor* explores memory, trauma, and suppressed histories through the lives of Sajida, Ali, and Noor. The personal histories of these characters are shaped by the devastating Bhola Cyclone. The novel's spatial and temporal layering resists linear historiography, and in doing so, it articulates a postcolonial ecofeminist response to environmental and political violence. The narrative's formal structure, its descriptions of landscape, and its thematic focus on silence and repression all invite a reading through the intersecting frameworks of Massey's space-time relationality, Adamson's vernacular and official landscapes, and Nixon's environmentalism of the poor.

Massey's conception of space as not "some absolute independent dimension, but [one] constructed out of social relations"[31] finds potent articulation in *Noor*, particularly through the novel's treatment of memory and landscape. The narrative juxtaposes 1990s Islamabad with submerged, repressed memories of 1970 East Pakistan. It creates a compressed temporal and spatial continuum. This relational space-time is most vividly embodied through the drawings made by Sajida's daughter, Noor. Her drawings serve as an expression of the epistemological ruptures. They are "windows into another world, far away and distant, which might have ceased to exist without Noor."[32] Her drawings collapse conventional boundaries between past and present, landscape and memory. They neither offer causality nor closure and align with Ananya Jahanara Kabir's formulation of the 'lyric impulse':

> I would argue, therefore, for the coexistence, and dialectic relationship, between two basic impulses: one, which we may term, the 'narrative impulse', which moves forward in time, and the other, then, the 'lyric impulse', which lingers over moments and demands that we linger with it.[33]

Sajida's sensory memory of East Pakistan registers as a vernacular landscape alive with communal resonance: "In the land of East Pakistan, as much water as earth, Sajida liked to climb the only hill and watch the water recede … it was not possible to distinguish the sound of the wind from the noise of the sea."[34] The terrain, for Sajida, is the one where residents know 'the names of their neighbors and the names of the trees'. During her pregnancy, these memories intensify into vividly imagined dreams:

> Surrendering to deep sleep, Sajida's dreams grew more vivid than they had ever been. She pictured the landscape of East Pakistan—Bangladesh now—and her long-ago childhood in greens, each different from the last: rice paddies, banana leaves, palm trees, limes, sails of fishing boats.[35]

[31] Massey, *Space, Place, and Gender*, p. 2.
[32] Sorayya Khan, *Noor* (Penguin Books, 2004), p. 117.
[33] Ananya Jahanara Kabir, *Partitions Post-Amnesias: 1947, 1971 and Modern South Asia* (New Delhi: Women Unlimited, 2013), p. 19.
[34] Khan, *Noor*, p. 85.
[35] Khan, *Noor*, p. 6.

Noor's art, therefore, reconnects Sajida to the intimate topography of her vernacular home and forms an affective map that is reanimated in colour and form. This intimacy with landscape stands in stark contrast to the abstraction and erasure enacted by the official gaze. Ali, a Pakistani army officer, represents the apparatus of state power: he is a bearer of the official landscape. While he recalls East Pakistan as "beautiful. Lush and green the way West Pakistan never was,"[36] his view is an aestheticised pre-disaster memory, one untroubled by the devastation that followed. Noor's drawings reveal the intertwined environmental and social traumas the native people have endured. Her depiction of a "grotesquely bloated" buffalo submerged in the "brown-black of the mud after the cyclone"[37] serves as an ekphrastic indictment of environmental violence. These images do not merely illustrate ruin; they remember what official narratives suppress. Adamson argues that official interventions systematically displace local landscapes by extracting resources, restructuring land use, and erasing vernacular spatial practices.[38] In *Noor*, the vernacular persists not through official archives but through art and memory. Sajida's vision of Noor's blue crayon becomes a sensorial portal:

> Sajida saw that Noor's blue was movement … Sajida could almost see ripples of water running away from the edge of a beach. She could feel the sweltering days and hear the grind of her father's fishing boat against the sand banks in the Bay of Bengal as it pushed on land. More than anything else, she could make out fishing nets swimming and bending below the blue of Noor's crayons.[39]

These visual fragments are saturated with sound, colour, and movement. They reclaim a landscape which is otherwise rendered illegible by the official landscape.

The ecological and political devastation wrought by the Bhola Cyclone aligns with Rob Nixon's 'slow violence'. The novel describes East Pakistan as "always and forever unlucky in the mouth of the Bay of Bengal."[40] It captures both the geographical precarity and the postcolonial abandonment of the region. The environmental trauma does not reside solely in the moment of the cyclone; it lingers, resurfaces, and mutates across generations. Sajida's trauma is evident in her refusal to forgive the forces of nature:

> It had been one thing to lose her family as a child, with the culprit—water, God, destiny—so much greater, so much bigger and so completely beyond her reach … she had not had the audacity to forgive God and His elements.[41]

Nixon warns that such unacknowledged suffering can spark "flashpoints of desperation and explosive rage."[42] In *Noor*, the cyclone's aftermath endures not only in battered bodies and devastated landscapes but also in silences and in drawings that insist on being remembered.

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[36] Khan, *Noor*, p. 93.
[37] Khan, *Noor*, p. 88.
[38] Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism: The Middle Place*, p. 90.
[39] Khan, *Noor*, p. 31.
[40] Khan, *Noor*, p. 94.
[41] Khan, *Noor*, p. 109.
[42] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 149.

Sajida's lifelong refrain to Ali—"*You saw me. You found me. You took me.*"[43]—instantiates a singular, cause-and-effect perspective in which trauma is contained and contained by closure. By contrast, *Noor* rejects this linear logic. The novel instead unfolds through nonnarrative interludes, where Noor's drawings form an alternative arc that "does not provide closure or answers."[44] The drawings challenge dominant historiographies and extend an invitation to linger and to remember landscapes overwritten by official silence. Through this interplay of memory, space, and representation, the novel reclaims the vernacular landscape as both archive and agent. It reorients the reader's understanding of environmental trauma through the intertwined lenses of spatial justice, ecological memory, and postcolonial reckoning.

Interwoven Histories and Temporalities in Arif Anwar's *The Storm*

Arif Anwar's *The Storm* is a multi-generational narrative that effectively interweaves personal stories with historical events, primarily focusing on the devastating Bhola Cyclone. It traces the lives of Honufa, Jamir, Rahim and Zahira in 1970s Chittagong, Claire and Ichiro in wartime Burma, and Shahryar and his daughter Anna in Washington, D.C. in 2004. The novel employs a non-linear structure. Characters such as Honufa, educated by the zamindar Rahim, and Claire, an English nurse in Burma, embody the turbulent social and political currents that precede the storm. Through these interlocking narratives, Anwar depicts the inseparability of personal and historical trajectories. As the novel oscillates between Washington, D.C. in 2004 and pre-cyclone East Pakistan, it mirrors the temporal and spatial disruptions caused by the cyclone itself. Anwar's depiction exemplifies Massey's concept of 'time-space compression', in which "the geographical stretching-out of social relations" collapses distances and intertwines personal and political trajectories.[45] Shahryar's quest to reconcile his birth and adoptive families in 2004 is a journey that underscores the deep anchor of present identities in past upheavals. The cyclone, therefore, is not just a historical backdrop but a force that actively shapes the characters' identities and their understanding of home and belonging.

Massey's 'time-space compression' unravels the novel's temporal layering. The villagers heed the spectral Boatman as a portent of impending disaster:

> Across a quarter century, thrice has a lone boatman been seen sailing under black sails on the bay, always headed south, his back facing those standing on the beach or on the craggy green hills beyond. Each time he has appeared, a great storm has followed.[46]

Thus, the boatman's apparition is a vernacular rhythm attuned to ecological precursors beyond the official warning systems. At the same time, geopolitical tensions marked by fraught relations between India and Pakistan shaped the cyclone's impact:

> Indian ships had warning that Tropical Storm Nora was developing into a typhoon and headed to the coast of East Pakistan—as Bangladesh was called back then. But the

[43] Khan, *Noor*, p. 176.
[44] Kabir, *Partitions Post-Amnesias: 1947, 1971 and Modern South Asia*, p. 98.
[45] Massey, *Space, Place, and Gender*, p. 147.
[46] Arif Anwar, *The Storm: A Novel* (Canada: HarperCollins, 2018), p. 7.

> relationship between India and Pakistan was so bad that the warnings were not passed on, or maybe they were and ignored.[47]

By juxtaposing the Boatman's warning, which is an inherited, community-based omen, with the geopolitical failure to relay typhoon alerts from India to East Pakistan, these scenes collapse local and global scales. In the span of a single image and its political aftermath, the novel compresses centuries of maritime lore and modern statecraft into an instantaneous, high-stakes moment. This convergence strengthens Massey's insight that space and time are co-constituted.

In the opening scene, Honufa, the biological mother of the protagonist Shahryar, prepares for the impending storm. The novel's portrayal of the Bhola Cyclone and its devastating impact on East Pakistan's Chittagong district vividly captures Joni Adamson's concept of vernacular landscapes. It depicts how local communities are deeply attuned to their environment. The absence of modern warning systems in the novel highlights the villagers' reliance on traditional knowledge and intuition. It reflects a landscape that is 'alive with meaning and significance' for its inhabitants. Although Honufa "swivels her head from east to west to south, the cardinal directions from which a storm might approach", she perceives no visual warning of an impending storm. However, the village's activity on the shoreline serves as an unspoken alarm:

> At an hour in which the beach should be barren, it instead boils with activity. The entire village is gathered here—the gray sand churned to peaks and troughs by more than a hundred feet. Men and women, sinewy—dark from the sun—pull in boats and tie them with sturdy knots to the trees, drag back and fold nets. Children carry back fish caught in cylindrical traps. Through it all, contributions are made as needed, the bright lines of sex, age and size erased for the occasion.[48]

This intimate terrain contrasts sharply with West Pakistan's removable, extractive gaze. After the cyclone, "with hundreds of thousands of corpses and livestock rotting in the sun", West Pakistan "took slow, grudging relief measures. They even turned down assistance from India, which [the people] could have used badly."[49] Here, the official landscape's neglect drives a wedge between institutional authority and vernacular resilience.

Rob Nixon's slow violence mires the cyclone's enduring legacy. The staggering aftermath is not a singular moment of destruction but a lingering crisis of decay and abandonment. The West Pakistani government's indifference becomes a form of structural violence, which compounds environmental loss with political betrayal. In *The Storm*, this dual violence propels East Pakistan toward independence and reveals that ecological disasters and liberation movements are bound together in the slow burn of history.

[47] Anwar, *The Storm*, p. 162.
[48] Anwar, *The Storm*, p. 5.
[49] Anwar, *The Storm*, p. 141.

Climate, Migration, and Memory in Amitav Ghosh's *Gun Island*

Amitav Ghosh (b. 1956), a leading voice in postcolonial literature, continues his engagement with environmental crises and displacement in *Gun Island*, anchoring the novel in the historical moment of the 1970 Bhola Cyclone, particularly on the Indian side. He describes the cyclone as "the greatest natural disaster of the twentieth century" with "three hundred thousand lives lost", thereby drawing attention to the political negligence that intensified its aftermath ("West Pakistan's laggardly response") and helped catalyse the Bangladesh Liberation War. The Sundarbans, a tidal mangrove ecosystem at the confluence of the Ganga, Brahmaputra, and Meghna rivers, becomes the novel's ecological and symbolic epicenter. This precarious landscape functions as a microcosm for the uneven burdens of climate change, particularly on the economically marginalised. Through Nilima's eyewitness account of "hamlets obliterated", "corpses floating", and a rising influx of "refugees from East Pakistan", Ghosh foregrounds both environmental devastation and its entanglement with displacement.[50]

Massey's concept of time-space compression is vital to understanding the novel's temporal and spatial layering. By tracing the Bhola Cyclone's long afterlife through contemporary migration and ecological collapse, Ghosh collapses historical distance into a continuous geography of crisis. Space, as Massey argues, is relational; it is not fixed but shaped by intersecting trajectories. In *Gun Island*, the cyclone remains not a contained past event but a persistent force threading through landscapes, borders, and lives.

Adamson's distinction between vernacular and official landscapes is vividly realised in Ghosh's Sundarbans. Horen Naskar, "who had witnessed the devastation with his own eyes", embodies vernacular expertise through his mastery of tidal rhythms, mangrove channels, and shifting sandbanks. He confirms Adamson's claim that folk landscapes possess profound local significance. Under Horen's guidance, Nilima's relief boat negotiates the Raimangal River's hazardous currents: "Horen's account prompted Nilima to assemble a team of volunteers to collect and distribute emergency supplies. With Horen at the helm of a hired boat, Nilima and her team had ferried supplies to some of the villages near the coast."[51] These waters are officially ignored not for lack of capacity but because of institutional indifference and neglect. Here, Ghosh honours vernacular resilience even as he reveals the failures of state and corporate actors to foresee or mitigate disaster.

Nixon's theories of slow violence and environmentalism of the poor further deepen the novel's critique of ecological injustice. In the Sundarbans, climate change manifests as an 'inhabited risk' where "incremental assaults of climate change compounded by deforestation" and daily uncertainties of "not knowing where tonight's meal will come from" define everyday life.[52] Ghosh's portrayal of refugee flows, of villagers crossing borders to escape both political upheaval and environmental ruin, echoes Nixon's argument that impoverished communities face overlapping crises. For them, a cyclone is neither an abstract event nor an isolated occurrence, but the inevitable culmination of long-term neglect, marginalisation, and resource extraction:

[50] Amitav Ghosh, *Gun Island: A Novel* (Penguin Random House, 2019), p. 13-14.
[51] Ghosh, *Gun Island*, p. 14.
[52] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 149.

> On each outing they saw horrific sights: hamlets obliterated by the storm surge; islands where every tree had been stripped of its leaves; corpses floating in the water, half eaten by animals; villages that had lost most of their inhabitants. The situation was aggravated by a steady flow of refugees from East Pakistan. For several months people had been coming across the border, into India, in order to escape the political turmoil on the other side; now the flow turned into a flood, bringing many more hungry mouths into a region that was already desperately short of food.[53]

By integrating Massey's relational space-time, Adamson's vernacular landscapes, and Nixon's environmentalism of the poor, *Gun Island* transforms climate change from a distant phenomenon into a lived reality. Ghosh's meticulous historicization of the Bhola Cyclone, his evocation of the Sundarbans' intimate lifeworlds, and his elevation of marginal voices collectively demand that responses to environmental crisis bridge global policy and local agency so that it can honour both the trajectories of displacement and the enduring rhythms of place.

Bureaucratic Indifference and Vernacular Expertise in *The Vortex* by Scott Carney and Jason Miklian

The devastation caused by the 1970 Bhola Cyclone in East Pakistan forms the heart of *The Vortex: A True Story of Climate Disaster, War and Liberation* by Scott Carney and Jason Miklian. This book intertwines personal accounts from survivors, political leaders, combatants, aid workers, and a meteorologist. It paints a comprehensive picture of the cyclone's profound effects. The multifaceted narrative highlights the convergence of environmental justice, spatial theory, and political power dynamics. It ranges from Hafiz Uddin Ahmad, a football player from East Pakistan who plays for Pakistan's national team, to Candy Rohde, one of the expatriate housewives who founded the grassroots relief group HELP. Doreen Massey's concept of time-space compression reveals the stark contrast between elite mobility and local immobility in these accounts. The ordeal of Mohammad Hai, a resident of Manpura Island in East Pakistan, epitomises the confusion and isolation endured by countless villagers in the cyclone's wake. Living "as much a slave to the weather as to his own lack of social mobility", Hai first encountered the storm's forewarning not through official channels but in the distraught cries of animals and the inexplicable persistence of unusual wind patterns. When the radio broadcast repeated the cryptic alert "Red 4, Red 4" without explanation, Hai and his family, like many across the delta, were left to decipher its significance alone. Unaware that this signal represented the highest level of danger under Gordon Dunn's National Hurricane Center scale, they assumed "4 was certainly better than 10" and remained in their sturdy homes to brace for a manageable gale.[54] The cyclone's sudden fury shattered these assumptions in mere seconds. Gales of unparalleled strength gave way to an eerie calm, only to be replaced by a deluge that submerged Hai's home and most of Manpura: "Debris and dead bodies floated past. The ocean stretched as far as he could see. The only real structure he could make out was the top ten feet

[53] Ghosh, *Gun Island*, p. 14.
[54] Scott Carney and Jason Miklian, *The Vortex: A True Story of History's Deadliest Storm, An Unspeakable War, and Liberation* (Canada: Ecco, 2022), p. 61-63.

or so of the three-story Manpura High School."[55] In the ensuing days, Hai buried nearly 180 neighbours in his front yard. The scale of loss was staggering: by Hai's calculation, "more than forty thousand of Manpura's fifty thousand residents were dead." Forced to scavenge for "tree roots and raw snake, coconut rinds and bark", survivors confronted environmental collapse not as an abstract phenomenon but as immediate, embodied deprivation.[56] Hai's experience resonates with Rob Nixon's slow violence, wherein the cumulative effects of environmental degradation and institutional neglect inflict protracted harm. The 'inhabited risks' of contaminated wells, decimated crops, and rotting corpses were inseparable from the political failure to communicate clear warnings or mount a timely relief effort. Moreover, Hai's story foregrounds Joni Adamson's vernacular landscape: his intimate understanding of local weather patterns, tidal flows, and rituals offered the only viable survival strategies in the face of governmental abandonment. His efforts to bury the dead and secure food for the living demonstrate the resilience embedded in everyday knowledge, even as that knowledge proved insufficient against the magnitude of disaster.

In stark contrast to the villagers' plight, President Yahya Khan surveyed the devastation from the relative safety of his helicopter, "downing the entire six-pack in the hour they circled over Manpura"[57] before instructing that "a few dozen dead bodies" be dragged to the landing zone for his inspection.[58] This spectacle of aerial oversight encapsulates Massey's insights on differential mobility: while Yahya could traverse vast distances at will and even indulge in inebriated observation, Hai and his community remained geographically and informationally marooned. Massey warns that such imbalances in movement and control serve to "weaken the leverage of the already weak", which renders the most vulnerable unable to advocate for their own cause.[59] Yahya's refusal to declare a national emergency or meet relief officials on the ground further exemplifies Adamson's official landscape, a removed, extraction-oriented regime that "paves over the living landscape" without regard for local lives.[60] By ordering bodies collected for his photo opportunity rather than resources directed to the living, the president's actions reveal a bureaucratic callousness that mirrors the broader neglect underpinning West Pakistan's response. Adamson's distinction between vernacular and official landscapes materialises in the clash between the expatriate-led Hatiya Emergency Lifesaving Project (HELP) and the Pakistan Army's formal relief apparatus. Candy and Marty, expatriate housewives who founded HELP, negotiated with army officers who "commandeered a warehouse in Hatiya and filled it to the two-story roof with rice and kerosene" yet refused to distribute a single grain, which reveals an extraction-oriented official landscape indifferent to local needs.[61] In contrast, HELP's small band of volunteers navigates tidal channels and remote villages with the precision of Horen Naskar by drawing on intimate, community-based knowledge. Adamson contends that such folk landscapes remain 'alive with meaning and

[55] Carney and Miklian, *The Vortex*, p. 76.
[56] Carney and Miklian, *The Vortex*, p. 85.
[57] Carney and Miklian, *The Vortex*, p. 95.
[58] Carney and Miklian, *The Vortex*, p. 112.
[59] Massey, *Space, Place, and Gender*, p. 150.
[60] Adamson, *American Indian Literature, Environmental Justice, and Ecocriticism*, p. 123.
[61] Carney and Miklian, *The Vortex*, p. 121.

significance' for their inhabitants that allows grassroots actors to fill the void left by institutional neglect.

The cyclone's immediate destruction also gives way to protracted suffering: survivors scavenging tree roots and raw snakes, desperate for any sustenance. These are what Nixon terms 'inhabited risks' where ecological collapse and political marginalisation intersect. Staffed by expatriates and Bengalis alike, Candy's HELP becomes a de facto 'resource rebel' network as impoverished survivors can "seldom afford to be single-issue activists"; their struggle for food is always inseparable from broader demands for justice.[62] Moreover, the contrasting responses of Yahya Khan and Sheikh Mujibur Rahman epitomize the divide between a detached official landscape and vernacular solidarity. Yahya surveyed the devastation from his helicopter and lingered at "a closed-door biryani feast a few hundred yards from the relief site",[63] whereas Mujib "filled an Awami League boat with rice sacks, fuel cans, and clothes and set out south to the delta": he acted where state power had failed.[64] Through these intersecting accounts, *The Vortex* depicts that natural disasters serve as crucibles in which spatial justice, local agency, and sustained struggle converge.

Conclusion

The Bhola Cyclone of 1970 emerges from these literary and theoretical engagements not simply as a meteorological catastrophe but as a crucible in which environmental forces, political power, and cultural memory coalesce. Across *Noor*, *The Storm*, *Gun Island*, and *The Vortex*, the cyclone functions both as catalyst and as mirror. It precipitates mass displacement, political upheaval, and liberation, while reflecting the biopolitical dynamics that governed whose lives would be spared, neglected, or deemed expendable.

Massey's notion of time-space compression depicts how these texts collapse geographical and historical distances. The cyclone's aftermath ripples from isolated delta islands into diasporic recollections, global relief efforts, and international discourse, even as it reverberates through village rituals and military overflights. Yet, the very compression that binds local tragedies to global consciousness also warns against subsuming the singular textures of place under a homogenised narrative of connectivity. Adamson's distinction between vernacular and official landscapes highlights the divide between community-rooted geographies and state-imposed infrastructures. Folk landscapes, shaped by intimate ecological knowledge and seen in the navigation of tidal channels as well as the decoding of omens, repeatedly reclaim spaces that bureaucratic apparatuses had rendered invisible. At the same time, the interplay of grassroots insight and institutional expertise reveals their mutual constitution and challenges any simplistic opposition. Nixon's environmentalism of the poor reframes cyclone-driven devastation as lived 'inhabited risks' rather than abstract calamities. From Mohammad Hai's desperate efforts to bury the dead and forage for food, to expatriate-led relief operations stepping into bureaucratic voids, these narratives show how long-term neglect

[62] Nixon, *Slow Violence and the Environmentalism of the Poor*, p. 4.
[63] Carney and Miklian, *The Vortex*, p. 121.
[64] Carney and Miklian, *The Vortex*, p. 107.

and resource extraction compound immediate disaster. They also prompt closer attention to the diverse strategies of resistance that arise within marginalised communities under layered crises.

Together, these frameworks demonstrate that the Bhola Cyclone was profoundly political: its human toll is shaped as much by institutional failures and biopolitical neglect as by wind and water. Nevertheless, each lens bears limitations: time-space compression may obscure local specificity;[65] the vernacular-official divide can underplay hybrid knowledge;[66] and environmentalism of the poor risks flattening internal community complexities.[67] Fully understanding the cyclone's enduring legacy thus, demands an integrative approach, one that remains attentive to spatial justice, ecological memory, and postcolonial accountability in an increasingly interconnected world.

[65] Bob Jessop, Neil Brenner, and Martin Jones, "Theorizing Sociospatial Relations", *Environment and Planning D: Society and Space*, vol. 26, no. 3 (2008), pp. 389-401.
[66] Arturo Escobar, "Difference and Conflict in the Struggle Over Natural Resources: A political ecology framework", *Development*, vol. 49 (2006), pp. 6-13.
[67] Mary Louise Pratt, *Planetary Longings* (Durham: Duke University Press), 2022.