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'for terror of the deadness beyond': Arctic Environments and Inhuman Ecologies in Michelle Paver's *Dark Matter*¹

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Abstract



In this essay I examine Michelle Paver's 2010 novel *Dark Matter*, a ghost story, for how her use of the gothic and horror contributes to undermining pastoral and romantic fantasies about the Arctic. Drawing on the history of whale, walrus, and seal hunting in Svalbard, the site of the novel's 1937 scientific expedition, and my own experience there, I look at the tension Paver creates between the beauty of the Svalbard environment and its long history as a location for human violence against nonhuman animals. I suggest that, through the figure of the *gengångner*, or "one who walks again," and the built environment and relics in Svalbard, Paver works to transmit both the violence of harvesting marine mammals and the violence men perpetrate against each other in the name of resource extraction. In this essay I engage in dialogue with recent environmental humanities work on ecophobia, dark ecologies, and the ecocritical uses of fear, and argue for the consideration of the ghost story, a genre little studied by ecocritics. Through highlighting the novel's focus on violence linked to extractive practices, I suggest, finally, that *Dark Matter* performs two important functions: it records past inhuman ecologies and it opens out onto a reading of contemporary Arctic geopolitics.

Keywords: Arctic, ecophobia, ghost story, gothic, resource extraction, violence.

Resumen

Este ensayo analiza cómo el uso de narrativas góticas y de terror en la novela de Michelle Paver *Dark Matter* (*La materia oscura*, 2010), un cuento de fantasmas, debilita las fantasías bucólicas y románticas del Ártico. Recurriendo a la historia de la caza de ballenas, morsas y focas en Svalbard, el emplazamiento de la expedición científica de 1937 de la novela, así como mi propia experiencia allí, analizo la tensión creada por Paver entre la belleza del medio ambiente de Svalbard y su larga historia como lugar de violencia humana contra animales no-humanos. Sugiero que, a través de la figura del *gengångner*, o "el que anda otra vez," las reliquias y el medio ambiente construido de Svalbard, Paver intenta transmitir tanto la violencia de la cosecha y comercio de mamíferos marinos como la que perpetúan los hombres contra sí mismos en nombre de la extracción de recursos. En este ensayo entro en diálogo con el trabajo reciente de las humanidades medioambientales sobre la ecofobia, las ecologías oscuras, y el uso del miedo en la ecocrítica, y propongo el estudio del cuento de fantasmas, un género que ha recibido poca atención de los ecocríticos. Al destacar el foco de la novela sobre la violencia relacionada con las prácticas de extracción, sugiero, finalmente, que *Dark Matter*, tiene dos funciones importantes: graba ecologías inhumanas del pasado y abre una lectura de la geopolítica del Ártico contemporánea.

Palabras clave: Ártico, ecofobia, historia de fantasmas, gótico, la extracción de recursos, la violencia.

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I first experienced the high northern latitudes in the summer of 2013, on an 11-day commercial cruise in the Norwegian archipelago of Svalbard, located between 74° and 81° north latitude and 10° and 35° east longitude.² During the cruise we circumnavigated the two largest islands of Svalbard—Spitsbergen and Nordaustlandet—and made stops at the islands of Edgeøya, Barentsøya, and Kvitøya. Entangled personal and professional reasons catalyzed my travel to Svalbard: a mild obsession with nineteenth- and early-twentieth-century polar exploration and the journals, narratives, novels, and poems that result from or reimagine those expeditions and scholarly research on climate change and literature and visual art. During the trip I found myself oscillating between two different positions. On one hand I experienced tremendous aesthetic pleasure, reveling in the scenery and the sight of Arctic flora, birds, and mammals in their natural habitat. On the other, my environmental humanities training tempered my aesthetic delight. That is, in addition to being amazed at the synchronized movement of a pack of Atlantic walrus in the water or the deliberate way a polar bear travels through the pack ice, my experience of these and other events was tinged with a melancholy awareness about the impacts of climate change on Arctic environments. Likewise, while marveling at the enormity of the Bråsvellbreen ice sheet edge, I was reminded of the history of tourism in the region and of how my experience of the region was framed by conventional landscape and pictorial traditions: the pastoral, picturesque, and sublime. And finally, although it often felt as if our ship was remote, my experience of isolation from the world was undercut by the knowledge that the cruise industry around Svalbard is carefully managed; ships coordinate their schedules to avoid being in the same place at the same time, thereby preserving a wilderness fantasy for passengers.³

Magdalenefjorden, located on the northwest coast of Spitsbergen, and a typical stop for cruise ships since the advent of tourism in Svalbard in the late nineteenth century, produced my most intense moment of cognitive dissonance.⁴ Magdalenefjorden stuns the senses. Dark mountains flank Waggonwaybreen, a tidewater glacier at the fjord's head, and depending on atmospheric conditions, the fjord's water turns various shades of green, turquoise, grey, or blue. For me, however, Magdalenefjorden's beauty is complicated by its history as a site of resource extraction and death. Trinityhamna, a

² Prior to the Svalbard Treaty of 1925, the name Spitsbergen was commonly used to refer to the archipelago. In this essay I follow contemporary usage, even when anachronistic, employing the name Svalbard to refer to the entire archipelago and Spitsbergen to refer to its largest island.

³ Preserving the fantasy of remoteness is not the only reason for tight control over cruise itineraries. Weather, ice, safety, and moorage conditions dictate where ships can anchor and onshore excursions can occur. Concerns about the environmental impact of tourism, a well-regulated industry in Svalbard, also play a role. See the Svalbard Environmental Protection Act ("Act"), passed in 2002 and updated in 2012, for its mandates regarding the protection of flora, fauna, and cultural remains. For additional information on the responsibilities of tour operators in Svalbard see "Guidelines." Our ship's crew and expedition staff were incredibly sensitive to the Association of Arctic Expedition Cruise Operators (AECO) environmental and safety regulations.

⁴ Polar exploration laid the groundwork for leisure travel to the far north. By the early nineteenth century, as John M. Snyder notes, a "very few curious and intrepid persons" had traveled north as the first Arctic tourists (15). On tourism in Svalbard see also Conway *No Man's Land*, Laing, Reill, and Viken and Jørgensen.

harbor on the southern side of the fjord, and the small promontory that shelters it, Gravneset (Grave Headland), served as a whaling station in the seventeenth century, one node among many that supported and reproduced a program of synchronous and serial slaughter that lasted from the early seventeenth century through the early twentieth century.⁵

Bloodletting marks the very discovery of Svalbard. While searching for a northern route from Holland to China in 1596, Dutch explorer Willem Barentsz and his crew made the first confirmed discovery of the archipelago now known as Svalbard. They sighted the southernmost island of the archipelago on 9 June, killing a polar bear there and naming the island Bjørnøya (Bear Island) after this event.⁶ Within a decade of Svalbard's discovery, natural resource exploitation was underway. The hunting of Atlantic walrus in Svalbard began in 1604, on Bjørnøya, and continued through the end of the nineteenth century, effectively decimating the population.⁷ Whaling in Svalbard began in earnest in 1611, and recent archaeological field research along the western coast of Spitsbergen has unearthed an extensive network of whaling stations (Hacquebord 171). The most famous of these stations was located on the southeastern cape of the island of Amsterdamøya (off the northwestern tip of Spitsbergen). First occupied in 1614, the Dutch established the whaling station of Smeerenburg (Blubber Town) there in 1617. At Smeerenburg and other land-based whaling stations (including Gravneset in Magdalenafjord), whales were harpooned near or inside the fjord and flensed on land, where tryworks (blubber ovens) were used to render the blubber into oil. However, as whale populations close to land were depleted, the hunt moved offshore, making onshore tryworks obsolete. Although short-lived as rendering stations, Smeerenburg and Gravneset also functioned as storage stations for whale products, until improvements in offshore whaling technologies superseded even that role. Gravneset, famously, was also used to inter human corpses. The whaling cemetery there, one of the largest in Svalbard, comprises approximately 130 graves dating from the early seventeenth to the late eighteenth century. Today the Gravneset burial mound and

⁵ I borrow the phrase serial slaughter from Kjell-G. Kjær, who uses it to describe successive waves of hunting conducted between 1859 and 1909 by the sealing industry of northern Norway. Using data from customs' returns and ships' logs, he describes this period as one "in which one species was replaced by another in a sequence indicative of serial slaughter to the point of overharvesting. The 'bust' which followed the gory pools of each bloody 'boom' drove owners and skippers to seek new hunting grounds" (1). To characterize the longer period of walrus, whale, and seal hunting, and onshore trapping, which runs from the early seventeenth to the early twentieth century, however, I expand Kjær's formulation to the phrase "synchronous and serial slaughter," which better describes the simultaneity and extent of hunting and trapping practices.

⁶ Sailing to the north, Barentsz and his crew eventually discovered more land, characterized by sharp peaks that engendered the name they bestowed: Spitsbergen (Pointed Mountains). They explored the western coast of Spitsbergen, visiting the locations now known as Raudfjorden, Magdalenefjorden, Prins Karls Forland, Isfjorden, and Bellsund. See De Veer (74-85) and Conway (*No Man's Land* 11-19) for more details on the discovery of the Svalbard archipelago. For the first published chart with part of the coast of Spitsbergen included, see *Deliniatio cartæ trium navigationum etc.*, which was drawn by Willem Barentsz, engraved by Baptista van Deutecum, and published, in 1598, by Cornelis Claesz.

⁷ According to Louwrens Hacquebord, by 1870 the Atlantic walrus population had been completely eliminated from Svalbard (171). Though the number of walrus killed is difficult to estimate, he puts the total at approximately 25,000 (176). On the walrus hunt see also Conway (*No Man's Land* 20-37), Gjertz and Wiig, Greville, and Richards (574-616).

remains of the tryworks are a popular tourist destination.⁸

I open with this brief travel narrative, tempered by a short history of walrus and whale hunting in Svalbard, because the tension between beauty and horror that suffused my experience at Magdalenenfjord also animates Michele Paver's novel *Dark Matter* (2010), the subject of this essay. Set in 1937 in Svalbard, the novel centers on Londoner Jack Miller, who joins a scientific expedition to Gruhuken, a fictional promontory in the northeastern part of Spitsbergen. In her author's note, Paver carefully distinguishes her fictional setting from Gråhuken (254), a location made famous by the overwintering of Christiane Ritter, which she details in *A Woman in the Polar Night* (1955). In my reading, the importance of Paver's Gruhuken derives not from possible confusion with Gråhuken, but rather from its location of relative proximity to the historical whaling sites of Smeerenburg and Gravneset. I elaborate this idea below. For Jack the expedition represents an escape from an ordinary life marked by failure, poverty, feminized work, and an urban environment he finds stifling. Although he knows little about the Arctic, Jack positions Svalbard, mistakenly, it turns out, as a pastoral space for adventure. He believes that in the remote wilderness of Spitsbergen he will have the chance to "breathe with both lungs" and "to see clearly for the first time in years. Right through to the heart of things" (41). Paver's novel is a ghost story, so what "the heart of things" turns out to be terrifies Jack. Accidents and illness befall the other expedition members, and, left alone at a remote research station, Jack is menaced by something he cannot identify, something dark, malevolent, and inhuman. This nameless *gengånger*, or "one who walks again" (204), is the victim of unspeakable acts of torture and murder, acts linked to the staking of land claims and mining. It ultimately drives Jack from Gruhuken and kills another expedition member, Gus, the object of Jack's affection.⁹

In *Dark Matter*, Paver employs the far northern natures of Svalbard as a site for troubling mid-twentieth-century British discourses about the Arctic. In other words, she uses conventions of the ghost story, the gothic, and horror to produce a dark aesthetics of the Arctic; question the traditions of polar exploration and its narratives; interrogate interwar models of British masculinity; examine the physical and psychological responses of humans to a remote and unforgiving environment; probe the boundaries of what counts as material or immaterial; and investigate themes such as place memory, darkness, possession, control, concealment, violence, the unspeakable, and the porous

⁸ For additional information on Smeerenburg and Gravneset, see Conway (*No Man's Land* 124-38), "Cruise," and "Polar." On whaling history and practice see Hacquebord, Hoare, Mowat, Richards (574-616), Sanger, and Wheeler (171-204). As with the walrus hunt, whaling activity around Svalbard annihilated the whale population. Although seventeenth-century catch records are irregular, scholars have estimated that approximately 15,000 whales were killed between 1610-1699. From 1699-1800, a period during which catch records were annually recorded, 86,644 whales were killed and harvested from the Greenland Sea. Taking into account the statistic that approximately twenty percent of whales hit by harpoons were lost, Hacquebord estimates the total number of whales killed at 122,000 (177). Today the Svalbard-Barents Sea (Spitsbergen) Bowhead whale subpopulation is listed as critically endangered ("*Balaena*").

⁹ For reasons that are unclear, Paver uses the Danish word *gengånger* rather than the Norwegian *gjengånger*. Thanks to the anonymous reader who offered this clarification. To remain consistent with the novel, I retain Paver's usage of the Danish.

boundaries between the rational and the irrational.¹⁰ In what follows I first focus on how Paver takes up discourses of Arctic beauty, sublimity, and emptiness in the men's reactions to their natural and built environments. I then argue that the built environment at Gruhuken, which Paver invests with a grotesque, eerie, and persistent liveliness, and the presence of the *gengångner* index particular forms of violence that have underwritten resource extraction in and around Svalbard since hunting began there in the early seventeenth century.

These networks of violence, which include both the harvesting of marine mammals and conflict between men that is linked to resource extraction, coalesce in the novel into more than just an inhumane system characterized by death. Were Paver primarily concerned with mapping the inhumane qualities of marine mammal harvesting she could look to historical records such as ships' records and logs or seventeenth-, eighteenth-, and nineteenth-century Arctic travel narratives, many of which contain detailed scenes of the danger and bloodiness of the hunt.¹¹ However, the addition of the *gengångner*, the strange enfoldings of time wherein violence from the past persists into and haunts the novel's present, and Paver's linking of violence against marine animals with violence against men, points to her concern with both discrete and terrible incidents of violence and the structural violence that underlies and bolsters resource extraction. While the term inhumane partially describes Paver's terrain, the more capacious phrase inhuman ecologies, a neologism I have not seen used elsewhere in the environmental humanities, better describes her concerns. This phrase evokes a Latourian framework in which the human and nonhuman assemble into a network. It coheres the structural violence of resource extraction with the technologies that make it possible (men, ships, hooks, knives, guns, tryworks, trade networks) and highlights the confusion of natural, unnatural, and supernatural that animates the novel. In other words, in addition to energizing the intended slippage between inhumane and inhuman, the phrase inhuman ecologies invokes and echoes the novel's materialization of the undead. I suggest, finally, that through its focus on conflict and violence linked to resource extraction and on material and immaterial persistence, a motif that alludes to persistence in the atmosphere of the greenhouse gases that contribute to climate change, *Dark Matter* performs two important functions: it records past inhuman ecologies and it opens out onto a reading of contemporary Arctic geopolitics.

The ghost story, gothic, and horror each have long and sometimes overlapping literary histories, literary strategies, and critical traditions. An extended discussion of these concepts is not my aim. However, since Paver declares her generic allegiance by subtitling her novel *A Ghost Story* and using gothic and horror as subsidiary modes, I here briefly sketch the understanding of the ghost story that informs my reading of *Dark Matter*.¹² In *A History of the Modern British Ghost Story*, Simon Hay characterizes the

¹⁰ For texts that discuss the Arctic discourses Paver tropes see, for instance Bloom, Hill, Loomis, and Spufford.

¹¹ See, for instance, Barrow, Brown, Conway *Early*, Laing, Lamont, Leslie, and Scoresby.

¹² For other novels that combine Arctic settings with the gothic and horror see, for instance, Mary Shelley's *Frankenstein* (1818), Marcel Theroux's *Far North* (2010), and Dan Simmons's *The Terror* (2007). *The Terror* reimagines the last days of Sir John Franklin's 1845 expedition. As in *Dark Matter*, something

ghost story as a form “concerned with suffering, with historical catastrophe and the problems of remembering and mourning it” and a “mode of making narratively accessible historical events that remain in some fundamental sense inaccessible” (4). Hay’s approach to the ghost story, though it foregrounds the centrality of trauma to the genre, cautions against privileging a psychoanalytic framework. Rather, with Roger Luckhurst, who argues against a generalized “spectral turn” in critical theory that follows the publication of Jacques Derrida’s *Specters of Marx* (“Contemporary”), Hay proposes a historicized and politicized methodology. He suggests we read ghost stories as “engaged in a project of teaching us how to think about [...] the social forces that make up our everyday reality” (22). I align with Luckhurst and Hay in my approach to *Dark Matter*. For, even as Paver explores psychological realms, for instance in the challenge the *gengångner* presents to rational understanding and in the shattering of Jack’s sense of subjectivity during and after his encounters with the *gengångner*, she equally emphasizes what Luckhurst calls “the demand of [the ghost’s] specific symptomology and its specific locale” (“Contemporary” 542).

Although scholars in the environmental humanities have not yet turned much attention to ghost stories, the following trends in recent scholarship suggest the timeliness of focusing on this genre: work that argues for the importance of considering non-realist and genre fiction (Philips, Trexler, Trexler and Johns-Putra), that examines ecophobia (see below), that features the excavation of dark ecologies (Morton “Dark” and *Ecological*, Thacker “Black” and *Dust*), that investigates the ecogothic as a mode (Hillard, Smith and Hughes), and that aims to articulate the ecocritical potential of fear (Mackenzie and Posthumus and Taylor). Of these trends, the concept of ecophobia has generated the most robust debate among ecocritics. Below I sketch my investment in ecophobia, but readers interested in the entire debate should consult Simon Estok’s essays “Theorizing” (the debate’s opening salvo), “Narrativizing,” “Ecophobia,” and “Ecocriticism,” and his book *Ecocriticism and Shakespeare: Reading Ecophobia*; S. K. Robisch’s essay “Woodshed,” a direct response to “Theorizing”; essays by Greg Garrard (“Ecocriticism”) and Louisa Mackenzie and Stephanie Posthumus (“Reading”), which contextualize and assess what Garrard terms the “Estok-Robisch controversy” (46); and essays by Matthew Taylor (“Fear”) and Tom Hillard (“Deep” and “Salem”), which critically examine and refine how we might understand and use the concept of ecophobia.

Estok defines ecophobia broadly and in a variety of ways: as an “irrational and groundless hatred of the natural world (“Theorizing” 208, *Ecocriticism* 4); as a generalized “fear of nature’s perceived or imagined unpredictability (*Ecocriticism* 13); as a fear of the loss of human agency when confronted with nature (“Ecocriticism” 4); as a spectrum condition linked to, for instance, racism, speciesism, and sexism (“Ecophobia”

supernatural menaces the humans. However, for one protagonist in *The Terror*, the outcome of this encounter with the supernatural has a positive valence. For an assessment of *The Terror*, see Leavenworth. For discussions of gothic as mode, which is how I use the term here, see, for example, Hendershot (1-2), Hogle (73-75), Luckhurst “Gothic,” and Townshend (xxxviii-xli). My take on horror, derived from Eugene Thacker’s work, is described in more detail below.

74); and as a range of material practices through which humans try to exert control over nature (*Ecocriticism* 6-7). He also uses the term to designate the myriad ways that “prejudice against the broader category of nature” (“Theorizing” 206) underwrites our relationships to and suffuses our representations of the natural world. In keeping with the assessments of Garrard and Mackenzie and Posthumus, I see both limitations and merits to how Estok conceptualizes ecophobia.¹³ What I want to do with the concept here is activate its productive potential by pursuing a “theoretically informed historicist” (*Ecocriticism* 12) mode of ecocriticism that highlights “the cultural, intellectual, and environmental history of a given text” (“Theorizing” 211) in order to unpack the specific “ways that narratives carry ecophobia” (“Narrativizing” 157). That is, I use the concept of ecophobia “tactically,” as Mackenzie and Posthumus suggest (761), to examine what particular fear-based encounters in *Dark Matter* reveal about how humans encounter the nonhuman and the inhuman.

Paver, who went to Svalbard during both summer and winter seasons to research her novel, weaves familiar Arctic tropes in *Dark Matter*. By setting the novel after World War I, Paver selects a period when exploring remote places and gathering scientific knowledge is not overshadowed by war as a vehicle for the display of British masculinity and exercise of imperial power. The premise of the novel, a scientific expedition to “study High Arctic biology, geology, and ice dynamics” and gather meteorological information (8), echoes expeditions to Svalbard conducted by Oxford University in the 1920s and 1930s. It also evokes a long history of British polar exploration and the imperial, scientific, and cultural ideologies that underwrote and were reinforced by those expeditions. The persevering, stoic, self-sacrificing hero is the primary trope Paver borrows from British traditions of polar exploration. This model of masculinity attaches to British polar expeditions such as Sir John Franklin’s 1819-1822 expedition, Sir Ernest Shackleton’s 1914-1916 *Endurance* expedition, and Robert Falcon 1910-1913 British Antarctic (*Terra Nova*) Expedition, as well as to the narratives they engender.¹⁴ Before they head north, and at the beginning of their time in the Arctic, the attitudes evinced by Jack and his fellow expedition members—Gus, Algie, Teddy, and Hugo—reproduce typical early-twentieth-century British, romantic, masculinist, scientific, and aesthetic ways of thinking about the Arctic. For them, it primarily represents an escape, an adventure, a sublime alien environment, a site over which to gain scientific mastery, and a personal proving ground. For Jack, who is keenly aware of his lower class status relative to the others, the trip takes on additional resonance; having failed to finish his physics degree, he aims to redeem himself in the realm of science and thereby improve

¹³ See, for instance, Garrard’s critique that the capacious way Estok defines ecophobia might exist in an “inverse relationship” to “real interpretive torque” (47) and Mackenzie and Posthumus’s point that when Estok thinks ecophobia together with other forms of oppression he too often sees convergence where divergence might prove a better framework (760-761).

¹⁴ In the question and answer section in the back of my edition of the novel, Paver notes that details of the expedition in *Dark Matter* are based on the 1935-6 Oxford University Arctic Expedition to Nordaustlandet (“Dark” 12). For reports on this expedition see Balfour, et al; Glen “North”; Glen “Continued.” For details on earlier Oxford University expeditions to Svalbard see Cox, et al; Frazer; Frazer, et al; Glen *Young*; Glen, et al; and Gorton. For accounts of British polar expeditions and their role in the national imaginary see Bloom (1-14, 111-135), Hill (1-67), and Spufford.

his future job prospects. Right from the outset, however, Paver employs foreshadowing to make it clear the men's expectations will go unfulfilled. The novel opens with a letter Algie sends to a doctor writing a monograph on "phobic disorders." Without going into detail, Algie declares something terrible, and real, took place at Gruhuken. Paver's foreshadowing continues apace: on his way home after meeting the others for the first time, Jack sees a corpse being pulled from the Thames. Ultimately, only four of the five men leave for Svalbard, only three make it to Gruhuken, they gather very limited scientific data, one expedition member is killed, and the two who survive their ordeal are permanently scarred by the experience.

When the men arrive in the Arctic, their responses to the environment focus on its simultaneous beauty and strangeness. For instance, in the Barents Sea, their ship encounters drift ice, which Jack describes thus: "It was eerie, peering through the fog at the sea turned white. Huge, jagged floes like pieces of an enormous jigsaw, dotted with pools of meltwater, intensely blue. I hadn't expected it to be so beautiful" (33-34). When the fog lifts and the men get their first glimpse of Gruhuken, the language is rapturous. "Dazzling snow-capped mountains enclosed a wide bay dotted with icebergs." The water, "still as glass," reflected the peaks. And at the western end of the bay, "shining pavements of pewter rock sloped down to the sea, and a stream glinted." Behind the beach the "greenish-grey slopes" contrast with the "harsh white glitter of the ice cap." In addition to the spectacular scenery, Jack is taken by the quality of light and the purity and clarity of the air. The entire place seems, at that instance, "like heaven" (52). At these and other moments of description, Paver deploys the conventions of the spectacle and the sublime, playing up the Arctic environment's immensity of scale, unnatural clarity of light, and intensity of color, and evoking romantic paintings such as Frederic Edwin Church's *The Icebergs* (1861) or Caspar David Friedrich's *The Sea of Ice* (1823-24).¹⁵ However, what is most interesting about these descriptions is the way they disrupt conventionally romantic Arctic descriptive practices through the inclusion of gothic brushstrokes. That is, in her descriptions Paver includes details that fracture the beauty of the scene: "something [that] slid through the water and under the ice" (37), "cliffs the color of dried blood" (52), dwarf willows "scarlet, like splashes of blood" (89), northern lights "utterly indifferent to what lies beneath" (96). These gothic gestures augur the emergence of the *gengångner* and remind the reader of the novel's genre: ghost story, not adventure narrative.

Paver reiterates the motif of barely hidden disquiet in the way Jack's assumptions about the emptiness of the Arctic are eroded. Sailing along the coast of Spitsbergen, he muses that the Arctic is not, as he had anticipated, a pristine or empty land.¹⁶ Rather, he

¹⁵ On the Arctic sublime see Loomis. For a broader discussion of the Arctic and visual culture see Potter. For a cross-cultural examination of how the Far North is conceived in a range of literary and visual texts, see Davidson.

¹⁶ In the United States context, proponents of oil and gas exploration, who want to open the Arctic National Wildlife Refuge (ANWR) in Alaska to resource extraction, repeatedly characterize the Arctic as a frozen wasteland. See, for instance, Banerjee, and debates about ANWR in the *Congressional Record* from 18 March, 19 March, and 9 May 2003. Cheryll Glotfelty uses the phrase "place bashing" to describe rhetoric that discursively constructs a place as malign, empty, and/or a wasteland.

notes its fullness. The environment teems with life—birds, foxes, walruses, seals, reindeer, polar bears (39-41)—and is littered with relics. While the appearance of wildlife energizes him, he is disturbed by the human relics, which corrode his sense of himself as a pioneering adventurer entering untouched territory. The relics at Gruhuken include a claim sign, “roughly painted in Swedish,” the ruins of a mine, “a tangle of wire and gaffs and some large rusty knives,” a bear post, and an old trapper’s cabin, “crouched among the boulders in a blizzard of bones” (55). While the others seem unaffected by these traces of past human activity, a perception Jack later discovers was erroneous, as the novel progresses they increasingly disturb Jack. The gothic undertone present in the descriptions of the environment also marks the descriptions of the relics. When Jack ventures inside the old cabin to investigate its fitness as a doghouse, it smells like death (64) and he experiences “a wild plummeting of the spirits (65). The bear post, which delights Algie, who wants to test its use as a tool for luring bears, unsettles Jack. Made of driftwood “bleached silver, except for a few charred patches, and some darker blotches which must be blubber stains,” to him the post seems unearthly. When he impulsively touches it, the bear post feels “smooth and unpleasantly cold” (70). Jack calls it “a killing post” (70), though he does not know until later the extent of killing the post enables. In the pile of bones surrounding the hut, Jack and Gus find the “big, man-like frames of bears” and seal skeletons with “short limbs and long toes that look unsettlingly like human hands” (63). The suture of human and nonhuman animals here functions both as a moment that foregrounds evolutionary homologies and one that, by suggesting the ease with which violence perpetrated against nonhuman animals might also be turned against humans, portends the death of the *gengångner*.

Each facet of the built environment in *Dark Matter*—the claim signs and other remains of defunct mines, the trapper’s hut the expedition members dismantle so they can build their own cabin on the site it occupies, the converted sealing ship that conveys the expedition to Gruhuken, the rusty knives on the beach, the pile of bones surrounding the cabin, and the bear post—performs a role in mapping the kinds of violence done in the name of resource extraction. Gruhuken and its relics, that is, comprise a palimpsest of environmental traumas small and large. The old trapper’s hut evokes the long history of subsistence hunting and trapping on Svalbard. In the conflict between the presence of the old trapper and the mining syndicate that finds coal at Gruhuken, backdates its claim, and kills the old trapper because he refuses to leave, Paver scripts both the overtaking of subsistence living by industrializing capitalism and the ruthlessness of men’s lawless encounters when resources are at stake.¹⁷ Although the new cabin built by the expedition members is not imbricated in historical violence like the rest of the built environment, their razing of the old cabin enacts its own violence by effacing part of the site’s history. And their construction of the new cabin instantiates a different mode of possessiveness of the region, an attempt at mastery through scientific instruments that presages both the geopolitical importance of the region during the Cold War and

¹⁷ For historical accounts of mining in Svalbard see Brown and Dole.

contemporary attempts to use new technologies to exploit previously inaccessible resources.

Taken together, the sealing ship, the rusty knives, and the pile of bones are metonyms for one capitalist endeavor in Svalbard, the harvesting of animal life. The ship functions as an especially potent figure for materializing this harvesting. Unlike ships' logs or customs' records, which denote death through rational, mathematical, disembodied means, the ship itself registers death viscerally and intimately, for it is infused with the smell of sealing. Jack's cabin, which is "only slightly bigger than a coffin," "stinks of seal blubber" (25). The "rancid, oily smell has soaked into the woodwork" of the entire ship and has adulterated the taste of the water (25-26). The way Paver activates a specific material quality of wood—the porosity that makes it responsive to humidity and temperature and allows it to capture, retain, and release odor and texture—underlines its role as an example of what Jane Bennett calls vibrant matter: "the capacity of things—edibles, commodities, storms, metals—not only to impede or block the will of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own" (viii). The dissolution of "binaries of life/matter, human/animal, will/determination, and organic/inorganic" (x) at work in how Bennett conceptualizes vibrant matter is clearly operative in the relationship of Jack to the ship, its woodwork, and the water he consumes. Contrary to the usual ways capitalism works to elide its rendering of and dependence on animal life (Shukin), the details of smell and taste Paver highlights here inscribe an inescapable sensory reminder of the ship's role in a network of slaughter. Through the strange synesthetic conflation of drinking water that tastes like the smell of seal blubber, Jack incorporates, though he cannot metabolize, the violence of marine mammal deaths.

The bear post, a tool trappers use to lure bears close to their cabins so they can kill them for food and for their skin, for subsistence and for trade, is the only remainder of the trapper's hut the men leave intact. It is imbricated in the networks of harvesting detailed above and further overdetermined by two additional roles. One, the bear post functions as a location for examining how the novel dramatizes ecophobia and its consequences. This role becomes clear when considering Algie's fascination with the bear post, which is a metonym for his embrace of killing for sport, and his use of it to display what he has killed. In a move that disturbs Jack, Algie strings a fulmar he shot to the bear post. The wind catches its one free wing, making the dead fulmar flap in "a parody of flight" (85) and turning it into a grotesque flag, one that commemorates this bloody conquest of a particular animal and recalls all genocide engendered by colonialist activity. Paver underlines Algie's attitudes toward nonhuman animals in two other scenes. In one he starts to skin a seal, realizes it is still alive, and then waits to kill it until he has finished the skinning (98-99). In the other, he attempts to render the expedition's dogs more compliant by pulling some of their teeth (100-101). Algie's treatment of the fulmar, seal, and dogs, all of which exist for him as objects of control, exemplifies a mode of ecophobia in which a desire to exercise power and control is linked with the "looting and plundering of animal and nonanimal resources" (Estok, "Theorizing" 208). And while Algie's propensity for killing animals predates his arrival in Svalbard, the novel

suggests that the destabilizing effects of the Arctic environment contribute to his treatment of the fulmar, seal, and dogs. Paver juxtaposes the attitudes of Algie and Jack not only in relation to the bear post or to questions of cowardice and commitment to the expedition's goals, but also in relation to their treatment of the dogs. Although initially indifferent to them, Jack intervenes to stop Algie from pulling Isaac's teeth, an action that cements their bond. Paver scripts Jack's affection for Isaac as both a counterbalance to Algie's ecophobia and as some measure of protection against the *gengångner*, but she ultimately posits the structural violence that produces the *gengångner's* existence as more powerful than any interpersonal or cross-species bond. Two, in a gothic twist on the novel's theme of transmission and its particular concern with ways scientific data and emotion get communicated or blocked, the bear post, and Gruhuken more generally, operate as repositories of place memory, vehicles for transmitting the horror of past events. When Bjørvik, a trapper who lives in an isolated cabin twenty miles from Gruhuken, visits Jack, he elliptically reveals some hearsay details about the old trapper's death (199-204). But it is not until the end of the novel, when Jack has a nightmare, that he comes to know the truth, for he experiences the terror of the trapper as he is chained to the bear post, attacked with flensing knives, soaked in paraffin, and set alight (223-25). In accumulating this second function, the bear post materializes not only human violence against nonhumans, but also the violence men perpetrate against each other "when they know they won't be found out" (225, emphasis original).

Like the ship, the bear post represents an important locus for mapping Gruhuken's inhuman ecologies. However, while the ship exists only as a node in the rational, material world, the bear post, together with the *gengångner*, the darkness of the Arctic winter, and Jack's isolation, cohere into a supernatural web of horror that is both immaterial and material. In the first of three proposed meditations on horror, *In the Dust of This Planet: Horror of Philosophy Vol 1.*, Eugene Thacker defines horror not as fear, but rather as a confrontation with the unthinkability of the world (1-2). More specifically, Thacker defines horror in terms of limits and constraints, as the "moments in which thinking enigmatically confronts the horizon of its own possibility" (2). This horror, writes Thacker, can be uttered only "via a non-philosophical language" (2). Thacker goes on to theorize horror vis-à-vis three forms of relationship between humans and the world. The "world-for-us" is an anthropocentric one in which we interpret the world in our terms, even when it "resists, or ignores our attempts to mold it into the world-for-us" (4). We fashion the "world-for-us" from the material world, or "world-in-itself." As Thacker notes, scientific inquiry is a primary tool for shifting the "world-in-itself" to "world-for-us" (5). Thacker's third form of human-world relationship is the "world-without-us," a "spectral and speculative" "subtraction of the human" that enables us to conceptualize the "world-in-itself" (5). These three human-world modes enable Thacker to further refine his definition of horror. Rather than privileging anthropocentric human fear, he posits horror "as being about the limits of the human as it confronts" the world-without-us (8). Thacker argues that genre horror, which deploys "a whole bestiary of impossible life forms" (8), plays a central role in exposing and critiquing our

assumptions that the world exists for us. Paver's *gengångner* is one such impossible life form.

In a convention common to the best works of horror, neither Jack, nor the reader, can clearly apprehend the *gengångner*. When he first sees it from afar, on the day of first dark, Jack initially mistakes it for one of the ship's crew. However, as it turns to face him and Jack gets a fleeting glimpse, all he sees is a "dark figure" with odd physical characteristics; his hands are at his sides, one shoulder is higher than the other, and his head is strangely tilted to the side (83). The *gengångner* does not reappear in physical form until two months later, when the sun disappears for the winter. This time Jack gets a better look. The *gengångner* has hauled out from the sea. Despite its wetness, "the stillness was absolute. No sound of droplets pattering on snow." The figure stands and faces Jack; silhouetted by the last "crimson glow" of the sunset fading "like embers growing cold" (105-6), it is "dark, dark against the sea." When Jack sees its "wet round head" he knows immediately that "it wasn't a trapper from a nearby camp, or a polar mirage, or that hoary excuse, 'a trick of the light.' [...] I knew what it was. I knew, with some ancient part of me, that it wasn't alive" (106). Jack's instinctive reaction to the *gengångner* registers in a shift of pronouns from the masculine to the neutral. His first description of the figure employs "he," while this one employs "it." At other moments in the novel the *gengångner* menaces Jack via non-visual means; it engenders bad dreams, it walks on the boardwalk around the cabin, it opens the door to the doghouse and drives away the expedition's pack of huskies. Whether it is physically present or not, Jack can feel it waiting and watching, sending its "intense, unwavering, malign" will toward him. He characterizes the *gengångner* as "belonging to the dark beyond humanity. It was rage without end. A black tide drowning" (176).

Jack's encounters with the *gengångner* represent the primary way Paver animates a tension between the rational and the irrational, the empirical and the ineffable, the natural and the supernatural. Following Thacker, the *gengångner* is an impossible life form for conveying the limits of knowledge. The horror it spectralizes materializes our disavowal of the violence we know underwrites life and its reproduction. And although Thacker delinks fear from horror in order to focus on a nonanthropocentric mode for horror, there is, I think, something important to be gained by examining the contours of the fear the *gengångner* produces. As the novel progresses, Jack is increasingly unable to dismiss the thing as merely an immaterial echo of the past. The *gengångner*, in concert with the harshness of the Arctic winter and Jack's isolation, comes to interfere not only with the scientific aims of the expedition, and by extension the project of mastering the Arctic environment through knowledge, but also with his sense of subjectivity. Paver scripts Jack's deterioration through his periodic failure to recognize his reflections in the mirror or window, the dysfunction and failure of the technologies used for gathering scientific data, the dissolution of his daily routine, his temporal disorientation, and the increasingly deranged handwriting in his journal. In other words, the natural, built, nonhuman, and inhuman elements of Jack's environment cohere into what Matthew Taylor, writing about Edgar Allen Poe, fear, and ecology calls a "field against which discrete selves disappear" (364). Taylor, who draws upon and critiques Estok's

theorization of ecophobia, examines how “some forms of ecophilia—from late-eighteenth-century romanticism to early-twenty-first-century posthumanism—represent not a solution to ecophobia, or even a real difference, but rather an extension of the same problem under a different name” (354). In other words, Taylor argues that the same reiteration of “humanist boundaries that would separate us from the world” (362) is operative across some forms of ecophilia and ecophobia. In contrast to this separation, Taylor employs the work of Edgar Allen Poe to argue for a very particular kind of ecocritically-oriented fear, fear that foregrounds its suspension in a vulnerability that “recognizes the self’s integration into its environment without the ability to overcome it, that takes ecological systematicity and the attendant loss of individual subjectivity literally, thereby precluding reactionary, destructive attempts at mastery.” Furthermore, Taylor writes, such comportment would refrain from “reinscribing a defensive dualism between one’s self and one’s context.” Instead, this type of fear “would be the inhabitation of a radically uncertain openness to the world” (362). While Paver’s novel submits Jack to an experience of radically uncertain openness to the world and to forms of historical violence in Svalbard, ultimately Jack cannot fully inhabit the kind of suspension Taylor sees in Poe’s work; in fact, he barely survives the inhuman ecologies of Gruhuken.

The heart of things as made perceptible to Jack in the far north is experience he cannot slough. It affects him physically and emotionally; he loses a foot to frostbite, is plagued by persistent nightmares, seeks treatment in a sanitarium, and, finally, moves to Jamaica, where he works as a botanist at a research station. And although Jack notes the many differences between the ecosystems and climates of Svalbard and Jamaica, he also remains acutely aware that the two regions are connected: the sea in Jamaica is “nothing like Gruhuken [...] But it’s the same sea” (251). Here Paver explicitly ties together two distant regions, Jamaica and Svalbard, through the medium of water. And although she does not make this move in the novel, given the connection it scripts between the warm waters of Jamaica and the cold waters of Svalbard, it is interesting to note that global ocean circulation does, over long time scales, literally connect these two regions. Caribbean and Gulf Stream currents feed into the North Atlantic current, which eventually branches off into the Norwegian Atlantic Current and then the West Spitsbergen Current (WSC), which tempers the climate of the southern and western sides of Spitsbergen. Implicitly, by setting the final scene in a Jamaica subject to British colonial rule, and assigning Jack the work of collecting specimens for the Botanical Gardens, Paver echoes historical forms of harvesting, particularly whaling, in which the British engaged in Svalbard in the early modern period.

The late-1930s setting of *Dark Matter* predates sustained scientific study of the causes and effects of climate change, which means Paver’s characters undertake their meteorological, geological, and glaciological data-gathering as part of a general project of scientific mastery, not within the context of larger climatological or paleoclimatological studies like those being conducted today in both the Arctic and Antarctic. However, reading the novel in 2013, at the end of a summer in which the extent of Arctic sea ice was again well below average, made me acutely aware of the resonance between

the contemporary moment and the novel.¹⁸ Svalbard is the only area in the Arctic without an indigenous population, which means discussions about climate change and its effects on the archipelago and its waters focus primarily on impacts to nonhuman animals and their ecosystems, the extent to which glaciers are receding and ice sheets melting, and the wisdom of pursuing resources made newly accessible by climate change. The Norwegian oil industry currently exploits an offshore zone that extends from “under 60° North to well above the Arctic Circle” (Emmerson 245). However, fields in both the North and Norwegian seas are declining in productivity and, although new technology can extend the lifespan of these areas, without opening new areas to exploration, production will continue to taper. The area the industry wants to open, the northern part of the Norwegian Continental Shelf, juts much further into the Arctic than the industry's current extent, potentially encompassing Svalbard.¹⁹ Although the resources sought by the contemporary oil and gas industry are different than those pursued in *Dark Matter*, Paver's suggestion that violence, whether to the surface of the earth, to nonhuman animals, or to humans, is an inherent, if often ignored, element of resource extraction, should give the reader pause. To ignore this violence is to risk its continual reappearance, its haunting of the future.

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¹⁸ For regularly updated data and analysis regarding Arctic sea ice see “Arctic.” See also “Sea.”

¹⁹ Emmerson 250. See Emmerson (245-259) for a more detailed discussion of the Norwegian oil and gas industries and their plans for development and Gauthier, et al (1176-1177) for maps that estimate the amount of undiscovered oil and gas in the Arctic. See also the Norwegian government's plan for managing development in the Barents Sea (“Integrated”).

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