Chapter 9

Between Ecotopia and Ecotage: Polar Media

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“I have reached these Lands but nearly
From an ultimate dim Thule –
From a wild weird clime that lieth, sublime,
Out of Space – out of Time.”
– Edgar Allan Poe, *Dreamland*

“Everyone has an Antarctic.”
– Thomas Pynchon, *V*

Polar media, as a title, does not lay claim to a discovery. Rather, its titular claim is to situate representations of the Arctic and Antarctic as a topic in media history. To this day, the attraction of South Pole and North Pole remains one of heroic detection: certainly they have been discovered, certainly they have inspired myth, literature, science, and art – but nonetheless the polar regions remain inaccessible, unrepresentable, dark, devoid of contrast … there to be found and rediscovered. This is especially true for the kind of art history that hews to the patterns of the detective novel, reconstructing from traces a grammar of objects and authorship; but it applies equally to film and media art in the age of eco-tourism, where discovery remains the motive, following snow-blown trails into nothingness, even and especially after the preceding discoverers had imprinted the landscape with their names and deaths. How else would we explain the recent resurgence of polar regions, from children’s fare like the book, movie and videogame *The Golden Compass* (2007) to art-house cinema like Werner Herzog’s antarctic paean, *Encounters at the End of the World* (2008), not to mention countless nature documentaries and extreme travelogues on Discovery and BBC and similar television channels? Moreover, much of this recent popularity digs deeply into the history of polar exploration. In 2002, for instance, New Zealand TV produced a DVD on Ralph Vaughan Williams’s *Sinfonia Antarctica*, itself a film score for *Scott of the Antarctic* (1948); earlier, Sir Peter Maxwell Davies was commissioned by the British Antarctic Survey to write his 8th symphony to mark the 50th anniversary of Vaughan Williams’s *Sinfonia Antarctica*. This structure is neatly summarized in *Winnie the Pooh*, where Christopher Robin sets out to lead a polar expedition of his animals. When Pooh asks him why, he responds blithely that the Pole simply is something that one discovers, by way of dangerous places. This definition motivates them to line up and march merrily, until Roo falls into a brook. Rabbit has the idea to block the brook downstream with something, and Pooh is posted across from Roo’s mother, Kanga. Together they hold a stick,

or pole, over the water that Roo can grab onto, and having saved the little one, they declare their stick the "North Pole" and return home victoriously (Milne 1926, ch. 8). Much in the same way, outlining research trajectories on polar media recovers traces from oblivion; like most armchair adventures, it amounts to the act of exposing your pen to the frozen history of polar media, to retrieve nothing more or less than a few stories to be retold.

Recent fiction tries to account for the fascination the polar regions still exert on the popular imagination. Set in the very near future of various dire consequences of global warming, Kim Stanley Robinson's novel *Antarctica* proceeds from the idea that renewal of the international Antarctic Treaty has stalled with the discovery of gas and oil (Robinson 1998). The continent of science becomes a battleground for extraction crews, scientists, guides leading small groups of extreme tourists in the footsteps of pioneering polar expeditions, eco-warriors, and a band of Antarctic "ferals" attempting to live there year-round in man-made caves. A US Senate staffer for a green California politician is sent down to the American base at McMurdo in order to investigate environmental sabotage, hijackings and political wranglings. His visit entangles him in a range of skirmishes between multinational corporations and countries with an official presence in Antarctica and secretive swarms of radical environmentalists and would-be aborigines who wish to defend and preserve the last pure wilderness for scientific research and minimal ecological consequences. "Utopia can be conceived as a possibility – a space within language, a set of principles, or the product of technological development – but it cannot be separated from questions of place, or more accurately, questions of *no place*," as Atkinson states: "Negation is a feature of the word's etymology, and utopia's inaccessibility is central to Thomas More's foundational text *Utopia*" (Atkinson 2007 and More 1964). "Utopian space is an imaginary enclave within real social space," as Jameson argues, "and its possibility is dependent on the momentary formation of a kind of eddy or self-contained backwater". Since NASA has been funding a multi-year research project known as the "Arctic Mars Analog Svalbard Expedition" in the high arctic (NASA 2003), it is hardly surprising that Robinson's polar imagination is also owed to some previous training: in his novel *Red Mars*, selection of finalists for the Mars Colony takes place in the Dry Valleys of Antarctica, while in the sequel *The Martians*, Wright Valley in Antarctica is used to prepare people for duty on Mars (Robinson 1993 and Robinson 1999). Having won several Hugo and Nebula awards for his science fiction, in his novel *Antarctica* Robinson again turns to the southern-most continent on our own planet as the best approximation of his favoured setting on Mars. Although Jameson addresses Kim Stanley Robinson's work almost exclusively through his Mars trilogy, it nonetheless holds true for *Antarctica* – being an offshoot of the Mars novels – that "[t]his pocket of stasis with in the ferment and rushing forces of social change may be thought of as a kind of enclave within which Utopian fantasy can operate," as Jameson argues" (Jameson 2005, 15). Robinson's fiction is pivotally concerned with social justice and ecological sustainability, and his *Antarctica* serves up the traditional utopian notion of a realm separate from our everyday reality "back in the world". As Robinson writes of the "utopia for primitives and scientists, which is to say everybody" in *Red Mars:* "When we first arrived, and for twenty years after

that, Mars was like Antarctica but even purer" (Robinson 1993, 309–10). Indeed, the Mars novels also feature the "appearance of a feral community of intentionally primitive hunters" (Jameson 2005, 17–18 and 408). Robinson's literary efforts have been labelled social science fiction – a phrase used to describe a subgenre of science fiction that concerns itself much less with technology and space-opera than with speculations about human society.

But before we jump to the conclusion that Antarctica merely serves as just other inhuman setting for utopian science fiction, it is important to note that Robinson's *Antarctica* self-consciously reconstitutes a library of polar media in its 650 pages; at one point or another, many of Robinson's set pieces recall and reassemble famous scenes from the history of polar exploration, and his main characters – whether cynical mountaineer or naïve "extreme tourist," wizened Feng Shui master or weary Washington insider, eccentric scientist or class-warring handyman – are given to reciting titbits about polar explorers, fact or fiction. Thus the opening scene of Robinson's *Antarctica* has one of the protagonists reflect upon automatic GPS navigation as the high-tech ennui that encapsulates one experience of the utopian continent of science: "Like operating a freight elevator that no one ever used, or being stuck in a movie theater showing a dim print of *Scott of the Antarctic* on a continuous loop. There was not even any weather" (Robinson 1998, 5). This is no mere post-modern ploy, it is arguably a characteristic of polar media in general: this traceless territory can be traversed only by way of repetition. For while the traces of previous expeditions may not be preserved in Arctic and Antarctic ice, they certainly can be found in the archive, in the library; thus one may say that the perennially renewed *tabula rasa* of the polar regions and the palimpsest of cultural memory traces are mutually supplemental. Indeed Antarctic fiction goes back to before the publication of *Mundus Alter et Idem* in 1605 by Bishop Joseph Hall under the name of Mercurio Brittanico. One counter-example, a novel denying global warming and vilifying ecological activism, is Michael Crichton's *State of Fear*, a thriller about a high-tech group called the Environmental Liberation Front and partially set in Antarctica near Mount Terror (Crichton 2004). In *Tom Swift and His Atomic Earth Blaster* (Appleton 1954), the protagonist leads an expedition to the South Pole to mine iron at the centre of the Earth, while *The Business* (Banks 1999) is a thriller about the only non-governmental organization to own a base in Antarctica; other polar eco-thrillers likewise stage environmentalists battling industrial mining prospectors on the Antarctic Ross Ice Shelf (Follett 1978; Charbonneau 1991). "As polar expeditions attempt to fill in the last blank spaces of cartography by reaching the only territories left on the globe without any traces of human life and history," Menke succinctly observes, they inevitably play on "the topos of an original emptiness without a trace" (Menke 2000, 545; see Menke 2001). We can read in Pytheas and Pliny that travel in the margins of the known world, and being carried off into the unknown for nine days by a storm, was no mere speculation for ancient seafarers: their descriptions of nights becoming shorter in the high north are hardly fantasy or speculation. The Western canon is replete with intertextual and metapoetical references that span from Homer to Petrarch, from the Book of Job to Dante's *Inferno*, from Coleridge's *Ancient Mariner* to Poe's *Pym*, and from Melville's *Moby Dick* to T.S. Eliot's *Wasteland*. While

travelling on ice, Frankenstein's monster reads Milton's *Paradise Lost,* which also provides a motto to Shelley's book; Borges rewrote the last trip of Ulysses, Verne refictionalized Poe's frame narrative around Arthur Gordon Pym, and Nabokov dramatized the last days of Robert F. Scott's failed expedition in his verse play, *The Pole*. In Pynchon's first novel *V*, Godolphin tells about his lone journey to the South Pole in winter 1898: "Only by the merest happenstance did he escape the private logic of that ice world" (Pynchon 1963). Extending this network into recent decades, Nadolny's *Discovery of Slowness* and Ransmayr's *Terrors of Ice and Darkness* juxtapose the diaries and memoirs of polar explorers with their own metafictional narratives (Nadolny 1987, Ransmayr 1991; see Burroughs 1918). In addition, many publications on polar exploration are amply illustrated, as the drawings that accompany Edward Adrian Wilson's *South Pole Odyssey* demonstrate (Wilson 1982). This trend continues, as for instance in a recent book interspersing the author's ten dozen photographs and her narrative about travel on a Russian icebreaker with excerpts from the journal of Fridtjof Nansen who traversed the area a century earlier (Brown 2005; see Johnson 2005). As Oceanwide Expeditions advertise their bi-polar eco-tourism: "Footprints disappear, memories last a lifetime" (Oceanwide Expeditions 2007).

Polar media are literally and metaphorically about exposure: the dual claims to discovery of the North Pole by Cook and Peary are each cast in doubt due to the shadows they cast in their "North Pole" photographs, which gave away that they were not in fact taken at latitude 90 (Casati 2003, 93–94). Owing to this ironic luck of history, each subsequent exploration remains possible, since no unique discovery had once and for all disclosed and documented the pure retreat that is the pole. The idea of an untouched, unseen, unexposed purity must be preserved and protected from the expeditions motivated by it, and thus polar media exhibit the structure of permanent deferral that is dear both to the scientific mind and to the storyteller. A renewed claim to the North Pole, staked by Russia after a submarine crossing, made news recently:

> Russian Foreign Minister Sergey Lavrov explained the flag-planting with a precedent vividly etched in the modern imagination. "Whenever explorers reach some sort of point that no one else has explored, they plant a flag," he said. "That's how it was on the moon, by the way." (Associated Press 2007)

Here we also recognize what polar expeditions share with climbing to the summits of the highest mountains: the whole point of going is to return home with bragging rights. Unlike science fiction about visits to (or from) another planet, achieving true North or South is merely the arrival at an abstract location, a singular point undifferentiated from its surroundings. (Lovecraft in "At the Mountains of Madness" locates an entire two-million-year-old Antarctic megalopolis at an altitude of 23,570 feet. This nexus is of course a hallmark of science fiction going back at least to Kurd Lasswitz's *On Two Planets* – compare Lovecraft (1936) and Lasswitz (1897).) Despite Robinson's fantasy of sovereign Antarcts colonizing the continent of science to protect it against exploitations, most polar visitors

would not dream of forgetting to return home. The same logic applies to landing on the Moon: a "broken intention" is always already implied in the enterprise, just as the triumph of Amundsen and Scott is activated only by a safe return with visual proof. (Blumenberg 1997, 324).

When it comes to visual mediations of the polar regions, the snow-blown tracelessness of these extremes is never really coming into focus – thus literalizing an infinite gliding of intertextual metaphors on a glacial surface. During the endless summer where daylight permeates the last frozen crevice, ice and snow reflect and refract the glare to such an extent that contours are hard to make out, while the entire area sinks into an almost interminable darkness for the other half of the year. Another obstacle to the visual is readily illustrated when Robinson's novel follows into gales and white-out conditions the three extreme tourists who seek to retrace the 1911 walk on Cape Crozier by Wilson, Bowers, and Cherry-Garrard, famously known as "The Worst Journey in the World" (Cherry-Garrard 1923; see Robinson 1998, 14 and 245). Thus to study polar media would also necessitate the detailed articulation of an epoch of calculation and visualization, from mapping and Mercator projections to naval navigation technology, from radar screens and satellites to global fibre-optic networks serving a live feed from the polar regions. In Robinson's novel, that angle is personified in Ta Shu, a wizened Asian man travelling in Antarctica to serve his feng shui commentary and haiku poetry to a live "fibervideo" audience, who are presumed to enhance or distort his signal, when available, with after-effects on the receiving end:

> [P]eople were trying various computer enhancements to render the images crystalline or kaleidoscoped or van Goghed or Rembrandted, whatever. No doubt many of Ta Shu's audience would be surfing these effects, trying a little of everything. Antarctica as Cézanne or Seurat or Maxfield Parrish, with Ta Shu's voice-over narration. (Robinson 1998, 103)

Despite this ironic contortion of the way imagery of the Antarctic is consumed "back in the world," it is the foremost strength of this novel to contour the beauty, and the terror, of a polar landscape, which Robinson observed with a grant from the National Science Foundation.

Indeed, Antarctica figures prominently in what is one of the most commonly recognised, most widely distributed, and the most often reproduced images ever: that of Planet Earth, taken by the astronauts of Apollo 17 on 7 December 1972.

> When you get 250,000 miles from earth and look back the earth is really beautiful. You can see the roundness, you can see from the snow cap of the North Pole to the ice caps of the South Pole. You can see across continents. You look for the strings that are holding this earth up and you look for the fulcrum and it doesn't exist. (Cernan 1973)

In the original photo, the south polar ice cap appears on top, and the north was at the bottom of the photo because of the orientation in which the astronauts were travelling; Stewart Brand had been lobbying NASA since 1966 to release a photograph of the entire Earth.

The 1995 film *Apollo 13* (dir. Ron Howard) still shows that same Apollo 17 photograph of Earth countless times – but every time Tom Hanks look out the window, he sees Antarctica: evidently the planet does not rotate in Hollywood … To date, Cernan is the last person to walk on the moon. American minimalist composer Terry Riley was commissioned by the Kronos Quartet and Bertram Ulrich, curator of the NASA Art Program, to use audio tapes of cosmic phenomena recorded by the University of Iowa Physics Department, and also made use of a very similar quote from the first astronaut to walk on the moon, Neil Armstrong: "You see from pole to pole and across oceans and continents. You can watch it turn, and there's no strings holding it up. And it's moving in a blackness that is almost beyond conception" (Riley 2002). As art takes advantage of new ways to access and visualize and utilize information beyond the traditional optics of reflection, long associated with linear perspective, and types of refraction associated with aerial perspective, it grapples with the fictions and facts that characterize the representations of science. This holds for both polar regions, as demonstrated by recent media art works such as this one, by Andrea Polli:

> A measuring system in the ice of the North Pole is projected onto a circle and accompanied by a synthetic bass sound that slowly increases in volume. Cracks appear in the ice, water gushes out; puddles are formed. The measuring system goes haywire and threatens to sink in the water like a foundering ship. The ice can then be seen again, a measuring system, a rod; the sound swells to an unbearable level, strong gusts of wind cause the rod to land in the puddles of water, a red light glides over the ice creating the impression of desert sand in front of a blue horizon: Fata morgana, clouds, and then the ice appears again. (Volkart 2007, 167)

This description of a 45-minute audiovisual installation points to a polar juxtaposition of extreme nature and high technology: media artist Andrea Polli works with meteorological data, using software that turns them into sound, which she installs in combination with ephemera such as prints, sketches, or books, and with interactive video. Her audiovisual installation *"N."* (2005), a collaboration with British sound artist John Gilmore, examines the isolation and environmental extremes of the North Pole in real time. Using information from the National Oceanic and Atmospheric Administration (NOAA), it stitches time-lapse photography from a polar webcam together with a sonification via software. Inevitably, darkness or whiteout conditions occlude the real-time feed in Polli's "N." – nonetheless enabling the end-point, the far north, to envelop the audience in an ecological conscience. "Withdrawing the data from scientific methodology and making them atmospherically and emotionally graspable," as one critic puts it, Polli presents an interesting twist on the landscape tradition in art (Volkart 2007, 169). This kind of aesthetic intervention would need to be discussed in its relation to the work, for instance, of Agnes Denes, Robert Smithson, Joseph Beuys, or Michael Heitzer, as art seeks to respond to environmental concerns from recycling and deforestation to water pollution and the extinction of species. A historical and theoretical understanding of landscape (arguably a category that begins with Petrarch)

would mobilize a historical comprehension of polar media, from Sir Edwin Landseer's Victorian painting "Man Proposes, God Disposes" (1877) to the live feed from scientific weather stations in the twenty-first century, or from Connie Samaras's cycle of photographs of the intersection of technology and nature that is Antarctica (titled VALIS in honour of Philip K Dick's *Vast Active Living Intelligence System)*, to a CD-ROM project of views along *Antarctica's First Highway* issued by the Center for Land Use Interpretation in Los Angeles – a three-mile dirt road from Robert F. Scott's "discovery hut," past airport and seaport through McMurdo's industrial waste to New Zealand's Scott Base (Pringle 1991). Highlighting the vastness of a difficult territory, it also illustrates the effect of the amassing of technology at the fringes of the inhospitable "continent of science," the inevitable pollution that is the flipside of making a stretch of Antarctica accessible, and visible, where photography, aerial imagery, and even the live webcam will sooner or later be blinded by a lack of visual contrast that belies the conceptual chasm that connects each pole, along the imaginary global axis, with its counterpart. To study polar media means to engage with an extreme Enlightenment *sans reserve*, to grapple not just with visual but also with conceptual white-out conditions: risking the hubris of seeking, and showing, a remoteness and inaccessibility that is inhuman. Only the sun does not see any shadows.

It is important to note that landscape, as a concept and something to behold, is not simply nature untouched: it is not the opposite of technology and its traces. As the history of polar media tilts from adventurous seafaring explorations of the darkest unknown towards geological surveys and multi-national scientific experiments, by the same token it transitions from oral traditions to high technology. Robison even marks Antarctica as the scientific utopia as such: "This continent is run by scientists, and mostly for their own benefit" (Robinson 1998, 347). This shift towards the "beaker utopia" of technoscience is commonly alleged to have impoverished our individual experience: a characteristic of what modern thought, as a departure from bourgeois interiority, identifies as *tabula rasa* – the modernist gesture of "erasing all traces," as Benjamin quoted Brecht (Benjamin 1977). Instead of richly layered myths and interlacing stories of survival and adventure, we get measurements and extrapolations, prognoses and doomsday scenarios. The resulting difference isthat between a historic milestone like *Nanook of the North* (1922) and a blockbuster like *The Day after Tomorrow* (2004), or that between Disney's remake of a Japanese film under the title *8 Below* (2006) and the documents on a meteorite discovery upon which the original was based. Just as the International Polar Year (2007–8) and preceding efforts rely on a massive deployment of equipment, the history of the metaphorical field of polar media is accessible only via an abundance of intertextual traces in myths and stories. Yet technoscience also fully partakes of the strands of mythical and imaginary attractions to the polar region. As Benjamin pointed out, the return of superstitions is not a proper revival, but a "galvanization" that masks the poverty of experience. To study polar media is to delineate trajectories of evidentiary material left behind by centuries of polar imaginings. Perhaps popular movies such as *March of the Penguins* (2005) or *Polar Express* (2004) might be read differently from the vantage point of such a cursory overview of the history of representing the Arctic and Antarctic: from ancient

mythology to the drawings and reports of surviving explorers, from early photographs to the International Polar Year sponsoring artists and writers, from early film such as George Melies's *Conquest of the Pole* (1912) to recent movies like *Alien vs Predator* (2005), the polar regions hold a particular fascination. This mythological tradition fashions polar expeditions into metatextual metaphors: in this manner, attempts to lay claim to the last remaining territory on the globe become legible as grasping for the primary, the untouched, an original unmarked emptiness. Tracing the outlines of the unknown, illuminating the previously unexposed, this cartography of areas without any traces of human life and history seeks to shed light on the differences and connections between the Arctic and the Antarctic. It is in this sense that we may read Robinson's take on Amundsen – which, almost as an aside, manages to invert a cliché about science fiction: "all his life he had been a man of the North," but when Cook and Peary claimed the North Pole, this cast his desire in a different light – "not a hunger for place, but for position. A concentration on time rather than space; a desire to write one's name on history, rather than to occupy a place on Earth" (Robinson 1998, 316–17). For the invisible tilted axis seems to promise going off world.

One trajectory of what one ought to be able to excavate as the historical logic of polar media indicates a shift, in the nineteenth century, from a pronounced emphasis on race to a growing concern with environmental factors, with weather, and with the global meteorological consequences of melting polar ice caps in the course of the twentieth and into the twenty-first century. Indeed, one might claim that the complex racial tensions that used to be found in nearly every canonical text more recently yield to climate consciousness and global politics. While there are some Inuit and Scandinavians in the few crowd scenes, Robinson's *Antarctica* all but ignores racial differences in the Antarctic setting, and triangulates the core of the novel not around the competing love interests of the underpaid grunt, the elitist aide, and the misunderstood mountaineer – three tall, white North Americans – but around the landscape itself. Like most polar representations, it also inherits themes of alienation and heroic quests from the outcast, the Flying Dutchman of Romantic opera, the old man and the sea, the restless wanderer of countless stories – here personified in a mysterious older Asian man given to haiku poetry and live telecommunication, a Russian drifter, and a goofy journeyman philosopher supporting his love for the forbidding continent by manual labour wherever it is needed. It is to the author's credit that he does not use them to cover over the meteorological, environmental, inhuman dangers that are less readily accommodated within the framework of a story, a movie, or a work of art (Robinson 1998, 103). Indeed, to find Robinson's *Antarctica* not entirely free from the racist heritage of our polar imagination is to say no more than that it labours to inherit our polar imaginary. Racist conspiracy theories organized around inchoate ideas of purity culminate where the pole, elsewhere imagined as vortex, void, or whirlpool, becomes a tunnel into a different realm: the geographical prize here turns into a spiritual prize.

In the nineteenth century, Antarctica figured as a southern counterpart to the *Ultima Thule* of occult and racist fantasies about the north; where the imaginary line that would be the Earth's axis exits or enters, John Cleves Symmes posited a hole, or rather a tunnel.

"I declare the earth is hollow and habitable within," Symmes wrote, arguing of the entire globe "that it is open at the poles" (Symmes 1878, Sparks 1820, McBride 1826). This theory was astonishingly popular: there is at least one extant monument to Symmes theory of concentric spheres connected along circumpolar circular openings; located in Hamilton, Ohio, "its inscriptions defaced almost to the point of illegibility," it stands about five feet high and shows a hollow sphere carried by a four-sided shaft (Gardner 1957It illustrates what Symmes had proposed in a circular sent out on 10 April 1818 from St. Louis to many institutions in the United States and Europe. Asking for the patronage of, among others, Alexander Von Humbolt, he called for an expedition of "one hundred brave companions, well equipped to start from Siberia, in the fall season, with reindeer and sledges, on the ice of the frozen sea; I engage we find a warm and rich land, stocked with thrifty vegetables and animals, if not men, on reaching one degree northward of latitude 82; we will return in the succeeding spring" (Peck 1909). Finding *Symzonia,* the land of perfect whiteness and "abode of a race perfect in its kind" was held out in *Harper's* to be a great motivation for Antarctic exploration (Madden 1882). The hypothesis was astonishingly long-lived: Charles Willing Beale's *The Secret of the Earth* has two brothers fly through the hollow earth on their homemade airship – they enter through the North Pole and exit from the South Pole. Similarly, in James Fenimore Cooper's *The Monikins*, a British aristocrat learns that when the Earth exploded at the Pole, the result was an open sea and a steamy climate (Beale 1899, Emerson 1984, Cooper 1835). And Jules Verne's imagination situates an active volcano on the then as yet unmapped space around the North Pole, thus driving his polar explorer Hatteras mad with frustration at being unable to set foot on the exact spot; "Verne's balloons, sea- and airships, trains and automobiles are, properly speaking, devices that enable temporal and psychic transformation of his characters in parallel with their spatial movements" (Harpold 2005, Serres 1968). As late as 1873, the *Atlantic Monthly* could still argue the feasibility of Symmes's theory; only the Amundsen and Scott expeditions would finally lay it to rest (Clark 1873). Nonetheless, in Rudy Rucker's *The Hollow Earth: The Narrative of Mason Algiers Reynolds of Virginia*, Edgar Allan Poe and companions fall into the hollow earth after the south polar regions collapse (Rucker 1990; see McCaughrean 2005).

Indeed, Edgar Allan Poe was greatly fascinated with the hollow Earth idea of Symmes, and may have projected onto his global fantasy the tensions between North and South in the United States. Furthermore, Poe ends the travel narrative of Pym with a fictive editor's framing note that associates the white-out of the South Pole with the black cavern of the inverted Eden he calls Tsalal, along with speculations on black-on-white scribbles that, he hints, denote shade and darkness in esoteric languages. Beyond the model of *Gulliver's Travels* or similar fare, darkness here is interpolated with and dissolved in snow and ice, reminiscent of the allegorical complications of the whiteness of Melville's whale or of the albatross in so many stories. At this intersection of the trajectories of race and ecology we also find *Frankenstein* – where the hubris of creating life meets its double by in Walton's desire to "satiate my curiosity with the sight of a part of the world never before visited." As Shelley wrote, "What may not be expected in a country of eternal light? I may there discover

the wondrous power which attracts the needle and may regulate a thousand celestial observations that require only this voyage to render their seeming eccentricities consistent forever" (Shelley 1963, 1). Yet viewers of James Whale's classic horror films realize that this landscape is by the same token one of eternal darkness, where proximity to one source of magnetism occludes the opposite, balancing pole.

A new media artwork that reflects on the peculiar fantasy of the pole as a seductive gravity well opening into the unknown is Ed Osborn's *Vortex* (2006). Osborn had already produced *Flyover* (2002), working with a sequence of aerial reconnaissance photographs produced in the early sixties to map the Antarctic continent, and the *Antarctic Images Project* for the 2002 Art & Industry Urban Arts Biennial, in Christchurch, New Zealand, both as part of a series about Antarctica he calls *Anemomania*. His gravity well, *Vortex,* is an interactive sound installation that amplifies the motion of a small metal ball circling closer and closer around the hole at the bottom, representing the disorienting magnetic maelstrom that fertilized Poe's as well as Verne's polar imagination. As Osborn also points out, the metaphor was taken up in Stephen Pyne's description of Antarctica as an information sink – absorbing all sorts of speculative ideas about the polar region without reflecting them back. Osborn's mechanical rendering of the vortex metaphor tracks the ball with a camera while the sound renders the pull of the opening in the gravity well as what one might perceive as aural vertigo: and the more visitors surround the installation, the thicker the sound-mix to present a stronger gravitational force. Here, the force of the magnetic pole is visualized, but also enacted in the spatial register through acoustic means – as does another Antarctic new media artwork: Joe Winter's kinetic sound sculpture, *One Ship Encounters a Series of Notable Exceptions* (2006), sends a ship to explore the South Pole, navigating pack ice and being struck by heavy weather and lightning before discovering a "tropical island" in the Antarctic. Winter suspends a loop of magnetic audio tape in a transparent armature to produce three-dimensional line drawings that sound out as well as trace the imaginary polar exploration. And even Pynchon evokes the hollow earth theory with the fantasy of "a barbaric and unknown race, employed by God knows whom, are even now blasting the Antarctic ice with dynamite, preparing to enter a subterranean network of natural tunnels, a network whose existence is known only to the inhabitants of Vheissu, the Royal Geographic Society in London, Herr Godolphin, and the spies of Florence" (Pynchon 1963, 207). In yoking together exploration of natural resources with the chtonic fantasies that predate the industrial age, Pynchon layers his *V* not only with Victoria and Vesuvius, but with another potential meaning of Vheissu, which might taste to a Germanic tongue of *Verheissung* or promised land: "'Having explored the volcanoes of their own region,' she went on, 'certain natives of the Vheissu district were the first to become available of these tunnels, which lace the earth's interior." A few pages later, Godolphin even claims that he let the world believe that he had not made it to the Pole, and thus "had thrown away a sure knighthood, rejected glory for the first time in my career" in the name of the discovery of the secret of Vheissu. For there, standing "in the dead center of the carousel," he hoped, "at one of the only two motionless places on this gyrating world, I might have peace to solve Vheissu's riddle" (Pynchon 1963, 216).

Referring only obliquely to Symmes's remarkable "hollow Earth" theory, Robinson still echoes the influential nineteenth century idea of a warm, liveable space beneath the ice cap in his novel, where scientists use lasers and abandoned generators to create vast underground caves, waterslides and hot tubs, fruit and vegetables growing in artificially lit ice caves, and even a sculpture garden. (Robinson 1998, Robinson 280, 287, 291f.) "Ecotage" is what they call their undermining the exploitation of natural resources in Antarctica; the Antarctic Treaty and its possible circumvention are a common topic in representations of the region. And the utopian vision of the "ecotage" movement in this book is to establish a sustainable human presence under the ice, attractive enough for one of the protagonists, Val the tour guide, to abandon her unhappy existence in a macho profession and join the matriarchy of "the ferals" – who to X appear "like aliens" even though he, too, decides to build himself an ecologically correct abode on Antarctica while continuing to work for the National Science Foundation. Or as one of the scientists in Robinson's novel argues, "First it was capitalism versus socialism, and then capitalism versus democracy, and now science is the only thing left! And science itself is part of the battlefield, and can be corrupted. But in essence, in my heart as a scientist, I say to you that this is a utopian project" (Robinson 1998, 615 and 349). While emphasizing the care of our ecosystem, Robinson's science fiction also requires its readers to complicate the predictable topos of scientific hubris and of the techno-scientific attitude – the coldness of purported objectivity that Nietzsche already observed in the ascetic attitude of science, the merely descriptive mirror, in his time:

> One observes a sad, stern, but resolute glance – an eye that looks far, the way a lonely Arctic explorer looks far (so as not to look within, perhaps? so as not to look back?…) Here is snow; life has grown silent; the last crows whose cries are audible here are called "wherefore?," "in vain!," "*nada!*" – here nothing will grow or prosper any longer. (Nietzsche 1989, 157)

In the midst of industrial society, military tradition institutes what one might call a "cold culture" (Lethen 2002, 11). In encouraging the hibernation of ego as the supposed guarantor of coherence, balance and continuity, "cool conduct" enables the quick adaptation to rapidly changing situations, mastering the quick transformations and discontinuities of motion needed by the military. Faithful to another axiom of science fiction, namely that overcoming gravity equals overcoming the grave, Kim Stanley Robinson brings back the zeppelin. Despite some references to polar crossings in planes, for the most part flight is described as relatively primitive, as technically stopped right after World War II. Other vehicles, from dog sleds and ski to manned and unmanned ground vehicles, are described in his novel only in sepulchral tones, and again the history of Antarctic exploration delivers plenty of grisly frozen remains of failed transport. A curiously low-tech utopia of going native in Antarctica is made possible by blimps: going forward by going back. And this may indeed be the strange loop inscribed in the continent of science: in the all-out science fiction effort to conquer the uninhabitable regions of the globe (and to exploit their natural resources),

we still remain stuck in high modernity, forever between two World Wars (Voormans 1999). "Verne's balloons, sea- and airships, trains and automobiles are, properly speaking, devices that enable temporal and psychic transformation of his characters in parallel with their spatial movements" (Harpold 2005, 28–29). In arctic just as in extraterrestrial conditions, lifting one's visor is risking death by exposure, which means human contact is almost impossible. Thus "if crisis arrives to force you to live out the deepest scripts in you," Robinson explicitly evokes the military ethos, and its related formations in the British public school and international boy scout ethos, as behavioural modifications that make Antarctic travel possible and survivable (Robinson 1998, 199). This redeployment of military experience was certainly what pushed polar explorations in historical phases; for millions, the war was the site where human behaviour was shaped and transformed under the pressure of mortal danger. This heritage is not merely one of the British Empire: Adolf Loos, Paul Klee, Paul Scheerbart seized this idea of a new beginning; the cool persona was also celebrated and even adopted by artists such as Otto Dix, casting a merciless gaze back from the canvas, or George Grosz celebrating his own "pack-ice character," or Gottfried Benn proclaiming the necessity of putting moral criteria "on ice" so that one's perception may be precise (Lethen 2002, 104–5). Brecht portrayed military virtue, "born in the tank," as the ability to discharge one's duty and react quickly. Jünger's construction of the worker melds the cool persona with the iron figure of the soldier in an amalgamation that regards industrial workers as metalized bodies (Lethen 2002, 134). Max Weber proposed defiant disenchantment as intellectual style, taking its cues from the Nietzschean polar explorer: "No summer's bloom lies ahead of us, but rather a polar night of icy darkness and hardness, no matter which group may triumph externally now" (Lethen 2002, 43). Our global heritage of two all-out efforts in war and science, namely the two World Wars, is clearly inscribed as science fiction mainstay, and it may suffice to indicate, if only by way of an aside, that a lot of science fiction set in Antarctica remains stuck on Nazi flying saucers. In the *Amazing Adventures of Kavalier & Clay* (Chabon 2000), Joe Kavalier joins the Navy in December 1941, is stationed as radioman at Kelvinator Station in Antarctica, and monitors the Germans in Queen Maud Land. A German World War II connection is also perpetuated in potboilers by Clive Cussler, including *Atlantis Found* (Cussler 1999), *Shock Wave* (Cussler 1996), *Treasure* (Cussler 1988), and *Valhalla Rising* (Cussler 2001). But I have to refrain from going into the entire library of science fiction that sees the Nazis escape to the South Pole: esoteric Hitlerism and Nazi occultism in the Antarctic will certainly be worth an entire essay of its own. (Compare Baker 2000 and Godwin 1996, as well as Dietrich 1998, Farren 2002, or Henrick 1994). In Robinson's *Antarctica*, that association (from allusions to Antarctic novels with Nazi characters to stump-speech condemnations of the global status quo as "Götterdämmerung Capitalism" to the naming of one protagonist, the Valkyrie as tour guide) sits somewhat uneasily with the subplots of a Feng Shui expert delivering a live feed from the Antarctic, where X always marks the good spot.

However, in a different sense, Robinson's protagonist Wade Norton provides for his roving senator a navigational aid, a "true south" that allows the politician to reorient his efforts and,

leveraging information from Antarctica, regain influence in Washington. To gauge the effect of the imagery of polar magnetism, one also ought to note that the concept of the abstract descriptive model of the force field in physics exerts great influence on epistemological discussion: as a force field which can structure the chaotic masses (iron filings) in the same direction, it opened up the possibility of an analogous assumption of energies operating on the social level, in the formation of structured communities or types. In this sense, Jünger recalls Marx's *Critique of Political Economy* as he interprets society: "It is a general light into which all other colors are dipped, which alters them in their specificity" (Lethen 2002, 167). This tendency shows what Jameson calls the "properly utopian structure as a kind of world reduction in which not merely breathable atmosphere but custom, human relationships, and finally political choices are pared down to the essentials" (Jameson 2005, 410). The image of the force field that energizes mass coherence is based on energetic tension between two opposed poles. North and South Pole are certainly associated with their own unyielding, incomprehensible, inhuman power: here, there are no days or nights, no directions in the sky, a year can be rounded in a few steps. However, the popular imagination also invests polar regions with unmanageable influences on human nature – for where a magnetic compass no longer aids navigation and orientation, it seems the "moral compass" also fails: the news and travel reports of explorers, scientists, and tourists are filled with anecdotal evidence of violence, crimes, and uncontrollable behaviour. A characteristic example is the almost random murder Buster Keaton commits in *Frozen North* (1922), where he emerges from a subway in the middle of nowhere under a sign that says "North Pole – 3 Miles South." This silent short is notable also for its intertextual reference to other silent film stars and their mannerisms, something that is hard to trace after familiarity with the trailblazers of early cinema has waned; in this way, it parallels what can be observed in the darkly intertextual allusions in Poe's *Narrative of Arthur Gordon Pym.* A recent IMAX film, *Shackleton's Antarctic Adventure*, combines re-enactments with Shackleton's film from 1919. A British surveying team portrays Shackleton's crew; a Super 16 crew shot footage for a Nova documentary alongside the IMAX crew, both going on a book of photographs (*The Endurance: Shackleton's Legendary Antarctic Expedition* by Caroline Alexander) to bring the experience of Antarctica to people in the safety and warmth of the IMAX theatre, where the audience can forget the inconvenient fact that science and aesthetics hew to radically opposite traditions regarding the construction of truths.

In this sense, polar media mobilize ancient myth via the uneasy repression of the recent past. The "galvanization" that Benjamin observed derives its current from the tensions between the polar imaginings, and the concomitant current of images mirrors the most ancient fantasies about distance and visibility, darkness and light, reflection and refraction. McLuhan, of course, held that "electricity points the way to an extension of the process of consciousness itself, on a world scale, and without any verbalization whatsoever" (McLuhan 1964, 83). On the other hand, the verbalization of the polar regions in myth, story, literature has not stopped with the progressive discovery and mastery of polar regions by technoscience, nor have the polar regions ceased to hold a particular attraction for artistic

as well as popular imagination. Robinson punctuates the Antarctic setting with time-zone-wrenching phone calls from the globe-trotting senator at all hours, and the only true peril he leads his protagonists into is not exposure to the weather but the unexpected sabotage of GPS and phone connections – of course, the first connection to be re-established is a Pentagon satellite (Robinson 1998, 449). Along the same lines, it is hardly surprising that the very lack of contrast that makes the polar regions so hard to depict has led to a proliferation of images, still or moving, that enter daily into the maelstrom of a global imaginary:

> The new media are the leviathan state's electric fins. Even in extreme situations – in the air bubble of a submarine on the ocean floor, in the cockpit of a crashing fighter plane – the electric media remain connected to the all-encompassing network, with which the individual can break contact only at the threat of being extinguished. (Lethen 2002, 167)

The redeployment at the turn of the twenty-first century is not one of military personnel, as many of the earlier seafaring explorations were (particularly for the English Navy after the Napoleonic Wars), but of rather one of industrial resources, whereby the very remoteness, the lasting darkness, of Arctic and Antarctic is pictured, broadcast, webcast; whereby former Soviet icebreakers that became unsupportable on dwindling budgets are turned over to private enterprise as lucrative tourist vessels venturing into extreme regions. The US National Academy of Sciences asserts that "Polar regions play key roles in understanding impacts of ever-changing space weather on technologies for modern communication and power distribution" (US Committee to the International Polar Year, 2007–2008 2008). Howard Hughes's obsession with the Cold War thriller *Ice Station Zebra* (1968) looms large here, a film by John Sturges based on Alastair McLean's novel of the same title, as it revolves around satellite espionage: "The Russians put our camera made by our German scientists and your film made by your German scientists into their satellite made by their German scientists." Indeed, US Department of Defense objections to Paddy Chayefsky's screenplay delayed the start of production for several years. (Compare McLean (1963) and, switching poles once again, Barrett (1965), which has an American spacecraft carrying a secret weapon crash land in Antarctica, and a British Intelligence officer is sent to retrieve the weapon.) Another important cinematic reference is *The Secret Land* (1948), a documentary on the secretive "Operation High Jump" US Navy expedition led by Admiral Byrd that was the first non-war-related film to win a Documentary Oscar. The Byrd expedition also revived hollow Earth fantasies: see, for instance, Raymond W. Bernard's, *The Hollow Earth: The Greatest Geographical Discovery in History Made by Admiral Richard E. Byrd in the Mysterious Land beyond the Poles – the True Origin of the Flying Saucers* (Bernard 1964). Another novel sends its protagonist five millennia back in time, where he meets the Antarkans (Binder 1939); as commentators note, it is unusual for pre–World War II stories to mention atomic bombs – presumably the US government ignored this science fiction so that the Manhattan Project could continue in secrecy. Away from the conspiracy theories, ready illustrations of this type of vested interest in polar regions range from the Distant Early Warning System, a

series of Cold War–era radar installations that Canada allowed the US to build in the Arctic Circle in the 1950s, all the way to contemporary defense contractors retreating to the frozen wasteland of the Antarctic for weapons testing.

A cursory appreciation of the popular imaginary of polar media, incorporated in Robinson's *Antarctica* by way of a post-modern pastiche of South Pole reports and imaginings, also requires parsing what is carried in films like *The Thing from Another World* (1951) and its remake, *The Thing* (1982). Like adventure tourism to the North and South Poles, they illustrate what Robinson's novel denotes as the purest form of escapism: "most people who came to Antarctica to do something hard came precisely because it was so much easier than staying at home and facing whatever they had to face there" (Robinson 1998, 325). Howard Hawk's *The Thing from Another World* exposes scientists and soldiers to a destructive magnetic field after a recent meteor fell into the Arctic near an American early warning installation. At the site of the impact, they discover a flying saucer, which is destroyed in the attempt to recover it. But they manage to thaw out the alien pilot, and although some scientists initially argue for the preservation of alien life, the military eventually manages to destroy the Thing after it goes on a rampage. As with most Cold War horror films, the implied moral is simplistic and xenophobic. Three decades later, John Carpenter's remake of *The Thing* switches the polarity, not only by transferring the setting from the DEW Line near the North Pole to the Antarctic, but also by having only the Thing survive, substituting despair and paranoia for the jingoistic stance of the McCarthy era. (Only a few years after John Carpenter's film, the Antarctic ice released the bodies of three members of a 1845 polar expedition led by Sir John Franklin.) Coming after the Korean and Vietnam War experiences, his film illustrates the impossibility of victory by exploiting a collective fear of a beast within man, marking the Antarctic as a profoundly alien space (compare Leane 2005 and Campbell 1980). Here the Thing is a shape-shifter, first encountering the scientists investigating the fate of their Norwegian colleagues as a dog. We may do well to remember this twist on the companion animal and emergency protein source for polar explorers – a chilly twist on how science maintains a tenuous hold on the inhospitable terrain. (Indeed, Landseer's painting already stages the futility of human effort in the face of the destructive forces of nature, when he uncompromisingly shows polar bears tearing up the remnants of Sir John Franklin's expedition to find a North-West Passage in 1845.) For while the "DEW line" was eventually replaced by satellites, there are at least 28 nations that maintain a regular human presence in the Antarctic, and dog patrols or dog-sled expeditions are the norm around the Arctic circle wherever politics and science are in play (Lee 2006). By the same token, cool conduct led to rising temperatures. You may feel it on your cheeks: climate change, if not shame. 2004 was the fourth hottest year ever recorded, and the past decade was the warmest since measurements began in 1861. Global surface temperature increased by more than 0.6 degrees C in the past century. The rate of change for the period since 1976 is roughly three times that for the past hundred years as a whole. As Robinson's novel quietly insists, these facts will lead to much starker images than any floods movies may regale us with. Consulting the *RealClimate* webshite, browsing data compiled by the

World Meteorological Organization, or consulting NASA reports, it becomes plain that the ice changes around earth's frozen caps, and that sea levels are rising (Arctic Council 2004). UNESCO urges us to consider species extinction, referring to its universal declaration on cultural diversity. This concern for life on the planet should not merely extend to husky heroics, melodrama displaced upon the sacrifice or consumption of man's best friend, or to capturing the humanoid waddling of penguins. Where Coleridge and Poe personified the pole as an animal-lover, inhuman yet selectively protecting life, Robinson's final pages leave us with a decidedly more ambiguous vision – what emerges on the horizon after a synesthetic staging of Sibelius at sunrise performed by a "thawing orchestra" could be skuas, could be blimps. The sheer scale of the polar regions fuses landscape and technological sublime in our mediatic imagination, until it becomes clear that in a world of global positioning and technological constitution of vision and imagination, we can know these forbidding regions only through technology while yet defining them by an absence of technology – out of space, out of time.

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