

THE PROGRESS OF THIS STORM

Nature and Society in a Warming World



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Introduction: Theory for the Warming Condition

NEVER IN THE HEAT OF THE MOMENT

Is there any time left in this world? In an essay published in *New Left Review* in 2015, Fredric Jameson restated his thirty-year-old diagnosis of postmodernity as the ‘predominance of space over time’.¹ We continue to live on a stage where there is nothing but the present. Past and future alike have dissolved into a perpetual now, leaving us imprisoned in a moment without links backwards or forwards: only the dimension of space extends in all directions, across the seamless surface of a globalised world, in which everyone is connected to everyone else through uncountable threads – but time has ceased flowing. Or, as Jameson originally put it in *Postmodernism, or, The Cultural Logic of Late Capitalism*: ‘We now inhabit the synchronic rather than the diachronic, and I think it is at least empirically arguable that our daily life, our psychic experience, our cultural languages, are today dominated by categories of space rather than by categories of time, as in the preceding period of high modernism.’² This shift of dimensions, more than anything else, marks the onset of postmodernity: and here we are, still.

The diagnosis hinges on the eradication of nature. Jameson’s argument runs something like this: in the modern era, vast fields of old nature remained spread out between the bustling new centres of factory and market. A short drive would take the modernist back to the rural village where she was born; ancient ways of life dotted every horizon, the modern mode speeding up within a landscape tied to the natural and immemorial. It was this contrast that made the modernists *feel* the movement of time – from the old to the new, towards the future – that so fundamentally structured their culture. Now the foil is gone. Peasants, lords, artisans, costermongers have vanished from sight and, along with them, ‘nature has been triumphantly blotted out’.³ In place of villages, there are suburbs; no

matter how far the postmodernist drives, she will encounter inhabitants of the same cultural present, watching the same programmes or – to update the analysis – posting pictures on the same networks. The new is the only game in town, and by the same token it loses its meaning and lustre, and instead of moving onwards we seem to be forever stuck in the automated marketplace of the monotonously novel. Postmodernity, then, ‘is what you have when the modernization process is complete and nature is gone for good’; without ‘the idea of nature and the natural as some ultimate content or referent’ there can be no sense of time, and we are stranded in the mega-city where glass surfaces mirror each other, where images and simulacra rule over night and day, where the free play of masks and roles goes on and on without any real, material substance.⁴

But towards this city a storm is on the move.

The condition of Jameson’s postmodernity is recognisable in life in New York City as depicted in Ben Lerner’s fine novel *10:04*. Fabrication and semblance seem to govern the protagonist’s every step. He is working to forge a correspondence with renowned authors. A friend asks him to become the father of her child, but not through sexual intercourse; instead he embarks on a laborious process of watching porn flicks, masturbating and handing over his semen to artificial insemination. His head spins from a twenty-four-hour installation called *The Clock*, a montage of clips from thousands of movies integrated in a rolling sequence, so that a scene of lightning staged at 10:04 in *Back to the Future* is replayed at exactly that moment in the real time of the audience, and so on throughout night and day, performing ‘the ultimate collapse of fictional time into real time’.⁵

Lerner’s New York, however, is under siege. The novel begins with the approach of ‘an unusually large cyclonic system’ and ends with the cataclysmic landfall of another. ‘Houses up and down the coast had been obliterated, flooded, soon a neighborhood in Queens would burn. Emergency workers were fishing out the bodies of those who had drowned during the surge; who knew how many of the homeless had perished?’ A point of irrefutable reality pierces the narrative. It submerges the protagonist in a flow of very palpable time: he looks back on ‘six years of these walks on a warming planet’. When Union Square turns ‘heavy with water in its gas phase, a tropical humidity that wasn’t native to New York, an ominous medium’, ordinary time is shut down, the air ‘like defeated time itself falling from the sky’.⁶ The protagonist sinks into obsession with temporality, as he ruminates over what he believes to be the source of all these storms: climate change.

Recent efforts in ‘event attribution’ corroborate the belief. Every particular

storm is the unique outcome of a chaotic mix of weather components, but global warming alters the baseline where these are formed. ‘The climate is changing: we have a new normal’, one team of researchers submits: ‘The environment in which all weather events occur is not what it used to be. All storms, without exception, are different.’ Thus superstorm Sandy, which knocked out large parts of New York in October 2012, rode forth on sea levels elevated by some 19 centimetres; high sea surface temperatures sent extraordinary amounts of water vapour into the air as ammunition for the clouds.⁷ Similar factors beefed up supertyphoon Haiyan – the strongest recorded storm ever to strike land, up to that point – as it ripped through the Philippines in November 2013, killing more than 6,000 people and leaving bodies bobbing on the sea for weeks.⁸ ‘No single event can be attributed to climate change’, runs a popular media refrain, but a spurt of observation and modelling is now confirming the common intuition that all of this extreme weather would not have happened without it. Individual incidents may very well be pinned on the rise in temperatures, with a scientific accuracy improving by the year. Already when the earth had warmed as little as 0.85°C, three out of four recordings of extreme heat on land could be derived from the general trend, and as temperatures continue to climb, it will claim an even larger share of the causation.⁹ The experience is becoming well-nigh universal: a majority of the human population has been exposed to abnormally warm weather over the past decade.¹⁰ Such man-made weather, however, is never made in the present.

Global warming is a result of actions in the past. Every molecule of CO₂ above the pre-industrial level resides in the atmosphere because humans have burnt trees and other plants and, preponderantly, fossil fuels over the course of time. In the beginning, the carbon in coal, oil and natural gas was locked into the crust of the earth; then at some point, those reserves were located and exploited and the fuels delivered to fireplaces, whence the carbon was released as CO₂. At any given moment, the excess of heat in the earth system is the sum of all those historical fires, of the cumulative emissions, the pulses of CO₂ stacked on top of each other: the storm of climate change draws its force from countless acts of combustion over, to be exact, the past two centuries. *We can never be in the heat of the moment, only in the heat of this ongoing past.* Insofar as extreme weather is shaped by basal warming, it is the legacy of what people have done, the latest leakage from a malign capsule – indeed, the air is heavy with time.¹¹

When Walter Benjamin roamed the cities of interwar Europe, he jotted down a signpost for further investigation: ‘On the double meaning of the term *temps* in

French': *temps* as in weather and time.¹² Most likely, the semantic overlap is rooted in the primordial experience of the seasonal cycle drawing the calendar of labour, the olden days when sun, cloud, rain and snow set the rhythm of hunting, sowing, reaping and all sorts of other activities. Then came an era when (some) people lived as though insulated from the weather – 'our seasons', Jameson notes, 'are of the post-natural and post-astronomical television and media variety' – but slowly or suddenly, the connotation is reinserting itself in everyday life.¹³ This time, however, the weather presents anything but a reliable clock. It tends to upset schedules and routines by dint of the weight it carries from the past. The tempest has a twisted, multiplex temporality, as registered by Lerner's protagonist, who compulsively reports days of 'unseasonable warmth' when walking down October streets:

The unusual heat felt summery, but the light was distinctly autumnal, and the confusion of seasons was reflected in the clothing around them: some people were dressed in T-shirts and shorts, while others wore winter coats. It reminded him of a double exposed photograph or a matting effect in film: two temporalities collapsed into a single image.¹⁴

Even more apposite might be his sensation of 'having travelled back in time, or of distinct times being overlaid, temporalities interleaved', for every impact of climate change is, by physical definition, a communication with a human past.¹⁵

But the links do not only run backwards. The shadow of anthropogenic CO₂ covers the foreseeable and extends into the unfathomable future. A team of the most prominent scientists working on this particular aspect point out that 2100, the year where most scenarios and projections abruptly end – there will be this or that much sea level rise until 2100, this or that much extreme heat – has no real terminal status. The widespread usage of the benchmark is an accident of computer technology, early models having been unable to carry scientists any further. Graspable and convenient, it creates, the team argues, the illusion that the future now in the balance is a relatively short one, a headache for the twenty-first century, when in fact the bulk of the rise in temperature and practically all sea level rise produced by any given amount of cumulative emissions will hang on – if it is left to the earth system to work out the consequences – for at least the next 10,000 years, the seas potentially peaking at a level around 50 metres higher than today. Much of this can still be avoided. That possibility supercharges our moment with time. 'The next few decades', the team concludes, 'offer a brief window of opportunity to minimize large-scale and potentially catastrophic climate change that will extend longer than the entire history of human civilization thus far.'¹⁶ An eternity is determined now.

For every year that total decarbonisation of the world economy is postponed – not to speak of every year when emissions are stable or increasing – the shadow of committed warming extends further into the future.¹⁷ For every such year, more impacts become unavoidable. There have already been many years of that kind. Hence, a string of scientific papers coming out in 2014 and 2015 indicated that the main section of the West Antarctic ice sheet has been pushed over its tipping point and is destined to undergo irreversible meltdown, while, even more spectacularly, an equally large glacier on the eastern part of that continent – long believed to be safe from warming – may likewise be sliding towards the sea.¹⁸ ‘Whatever we do now’, popular magazine *New Scientist* announced, probably with some exaggeration, ‘the seas will rise at least 5 metres’.¹⁹ The motion of glaciers being proverbially slow, the scientific consensus has long held that it would take several millennia for a sea level rise of such a scale to materialise, but one of the most sensational papers in recent years contends that ice equivalent to ‘several meters’ could, in the worst-case scenario, plunge into the oceans *already this century*, much of it during the lifetimes of plenty of young people now in streets near shorelines.²⁰ With all of these figures, constantly revised and updated, scientists seek to represent the assault from some past curse or ancestral sin ever more difficult to escape. Lerner’s protagonist imagines the city soon underwater.²¹

Some history, then, is back: the panic that climate change so easily induces is really a panic in the face of history, our reaction when it dawns on us what they – those who once lit the fossil fires, spread them and still keep them burning – have done to us and our children. Sometimes that history makes a lunge at the present. In December 2015, at the conclusion of COP 21 in Paris, the leaders of 195 nations declared with much fanfare that they would limit the temperature increase to ‘well below 2°C above pre-industrial levels’ and ‘pursue efforts’ to stop it at 1.5°C.²² That year was the first to reach the landmark of 1°C.²³ Hardly had the leaders stopped cheering and congratulating themselves on their achievement and flown home from Paris before the warming took a sudden leap: in February 2016, the average temperature on earth stood at an estimated 1.5°C above pre-industrial levels – exactly where it should not be, according to the pledge of two months earlier.²⁴ Scientists were left scrambling for superlatives to convey the bizarre weather. In the northernmost Arctic, anomalies of 6°C were detected, adding to the impression that the climate system was careening deep into the heat COP 21 had vowed to forestall.²⁵

Come July 2016, *Nature* published a paper claiming to demonstrate that both

Paris targets were likely beyond reach. Some of the heat generated by an excess of CO₂ in the atmosphere is drawn down by the oceans and stored in their depths for several decades before being released into the air, and because of this time lag, the full realisation of the warming commensurate to any CO₂ concentration is deferred. With current levels – even if no more CO₂ were ever to be emitted – the planet is already doomed ‘to a mean warming over land greater than 1.5°C’ and quite possibly ‘greater than 2.0°C’, according to this particular study.²⁶ Come November, December and the first anniversary of the Paris agreement, temperatures in the Arctic were no longer 1.5 or 2 or 6 but a dizzying 20 degrees hotter than normal.²⁷ 2016 ended as yet another hottest year on record, on average 1.3°C above pre-industrial levels in one estimate, 1.1°C in another.²⁸ Clearly, the world was already brushing the threshold set up one year earlier in Paris. Now, none of these developments were in any way the products of *what happened immediately after COP 21*. The stunning heat records of 2016 were not due to emissions made in the meantime, but the delayed detonation of fuels burnt much earlier. If the Paris pledges were so quickly ground to dust, as it seems at the moment of this writing, it was indeed the past that overtook the present, in a manner that seems rather like the new normal; by the time this book is printed, these records will in all likelihood be obsolete, and so on.

More storms, then, are to be expected. On the cover of E. Ann Kaplan’s thoughtful study *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction*, a red-haired woman stares at a large cyclonic system rolling in from the horizon. Before turning to the flood of apocalyptic films inundating screens in recent years, Kaplan tells the story of how she herself was caught up in Hurricane Sandy and at one point, as she tried to return to her apartment by climbing dark stairs, suffered a panic attack. The experience led her to develop the syndrome of ‘pretrauma’ – not the usual post-traumatic stress disorder, in which people suffer past wounds, but rather ‘fear of a future terrifying event of a similar kind’. Our culture as a whole, Kaplan suggests, is now developing pretrauma. With more and more film, television, literature, journalism inflected by the creeping insight that catastrophic climate change is approaching, consumers of popular culture make up ‘a pretraumatized population, living with a sense of an uncertain future and an unreliable natural environment’. In the film from which the cover shot is taken, the protagonist has a series of nightmares and violent hallucinations about monster storms, descends into a spiral of angst and lashes out at his friends: “‘There’s a storm coming and not one of you is prepared for it.’” If this growing genre is obsessed with the future, it is only, Kaplan argues, on the basis of an ‘awareness of a traumatic past’ that has stacked

the deck against the time to come.²⁹ That past, about which nothing can by definition be done, is the source of the future storm.

Now contrast this with Jameson's diagnosis of postmodernity as a condition of synchronic space devoid of time and nature. There is no synchronicity in climate change. Now more than ever, we inhabit the diachronic, the discordant, the inchoate: the fossil fuels hundreds of millions of years old, the mass combustion developed over the past two centuries, the extreme weather this has already generated, the journey towards a future that will be infinitely more extreme – unless something is done *now* – the tail of present emissions stretching into the distance ... History has sprung alive, through a nature that has done likewise. We are only in the very early stages, but already our daily life, our psychic experience, our cultural responses, even our politics show signs of being sucked back by planetary forces into the hole of time, the present dissolving into past and future alike. Postmodernity seems to be visited by its antithesis: a condition of time and nature conquering ever more space. Call it *the warming condition*.

SOME TASKS FOR THEORY

The history circling back in the warming condition is not of the buoyant modernist kind, not a bristling flow of events linked by purpose and direction, anything but a bandwagon to jump on: rather it is frozen. Nor is the nature now returning of the intact variety Jameson finds in the interstices of modernity: rather it appears to be melting. Yet history and nature they seem to be, and society looks like it is beginning to reel under them. The warming condition is still, however, far from constituting a total 'cultural logic' in Jameson's sense. Indeed, climate fiction (or cli-fi) in film and literature notwithstanding, one might argue that most culture still *ignores* the facts of global warming and that *denial* is the real hallmark of the present, stretching from the quotidian suppression of the knowledge of what is going on, across the topographies of social life up to the man who won the United States presidential election in November 2016, just as Arctic temperatures went completely off the charts. As for politics in advanced capitalist countries, climate change is utterly overshadowed by issues of immigration and the nation. We shall save some words on that order of priorities for later. As for the panoply of cultural expressions, it would be a tough assignment to show that the changing climate is profoundly altering the way we write, communicate, build, plan, view, imagine as Jameson holds that postmodernity did. Nor does the latter explode like a bubble the moment it comes into contact with the rising temperatures – to the

contrary, it is proving very resilient and inflatable indeed.

The age of the omnipresent screen can, of course, be seen as the highest stage of postmodernity, an ever-expanding house of mirrors in which illuminated surfaces reflect each other, free of any outside, shadow, memory or long-term expectation. Permanent connectivity enacts ‘the final capitalist mirage of post-history’, Jonathan Crary writes in his searing *24/7: Late Capitalism and the Ends of Sleep*: it is the consummation of a homogeneous present, a space where the past has been erased and everything can be accessed on demand, in an instant. Not only does it negate natural rhythms, such as the need for sleep; it also offers a cloister away from the new *temps*. ‘The more one identifies with the insubstantial electronic surrogates for the physical self, the more one seems to conjure an exemption from the biocide underway everywhere on the planet.’³⁰ The more one withdraws into the virtual cocoon, the more one detaches from things taking place in nature. If this assessment is correct, and if the technologies of electronic immersion continue to advance, which seems a certainty, then the postmodern condition is still eminently capable of protecting and even expanding its territory.

It is hard not to interpret the plague that descended on the Western world in the summer of 2016 as a case in point. There were moments when one could not have an evening stroll through a park without feeling that nearly everyone roamed around – faces expressionless, eyes glued to phones – chasing some target that only existed in the virtual realm. How many walks on this warming planet were now conducted in the quest for Pokémon, including in New York and other cities threatened by rising seas? Rarely had the condition of digital life – a sphere without time or nature – invaded so much public space, even kicking off marches, stampedes, gatherings and other forms of collective pseudo-action for the joy of being in the world while not being there. In a dense, suitably bleak riff on Theodor Adorno titled ‘Media Moralia: Reflections on Damaged Environments and Digital Life’, Andrew McMurry stipulates that ‘the new media ecology roars in to fill the void left as old nature exits’. Lending new meaning to ‘sleepwalking’, the postmodern condition has sunk more deeply than ever into the mind *in step with* the warming. ‘The external world’, the one where that warming takes place, McMurry continues, ‘is now obscure, mostly irrelevant, and, when sensed at all, sensed remotely’: between it and us, digital media stand as impenetrable ‘veils’.³¹ Or, in the words of Kate Tempest: ‘Staring into the screen so / we don’t have to see the planet die.’³²

But if the postmodern condition in its digital stage can wrap people up in mental clothing that protects them from contact with the biocide, it is locked in

struggle with a formidable enemy. For the warming condition has a whole set of biogeochemical and physical laws on its side. They ensure that its incursions will become deeper and more frequent over time; by force of the nature of the process, climate change has an inbuilt tendency to worsen and swamp pretty much everything else. How many will play augmented reality games on a planet that is 6°C warmer? Moreover, denial, particularly in its suppressive and obsessive forms, is a negative confirmation. It suggests that the thing is there, everywhere, only just below the surface, a distressing presence in the collective subconscious – perhaps global warming is, to use another term of Jameson's, a political unconscious that already pervades culture. Perhaps its intolerable implications are in themselves so many incentives to flee into something like augmented reality. Be that as it may – and we shall return to the phenomenon of denial – when climate change seeps into consciousness, it brings with it a realisation that *more and worse is coming*. Truly at the cutting edge, the warming condition is directed towards the future, like the woman on the cover of *Climate Trauma*. It will make itself felt. If postmodernity is a malaise of amnesia and displacement – as though time and nature had in fact disappeared – we might think of the warming condition as a *realisation*, in the dual sense of the term, of a more fundamental illness or wrongness in the world.

Three pathways are competing to be that realisation. 1.) Business as usual continues to run amok, the 1.5°C as well as the 2°C targets are missed, temperatures rise towards 3, 4, 6 degrees of warming within this century, and the material foundations for human civilisation crumble one after another. 2.) The fossil economy is knocked down, preferably within a few decades, warming slows down and then ceases, and civilisation proceeds apace. 3.) There is geoengineering. Intermediate and mixed paths are conceivable – particularly combinations of 2 and 3, or 1 and 3 – but the enormous forces unleashed into the earth system and the long postponement of genuine mitigation now rule out a smooth ride to renewed climate stability. The space for moderate outcomes and half-measures has receded. In the event that path 2 is pursued with maximum global determination and the worst scenarios safely averted, the transformations – technological, economic, political, surely also cultural – will have to be on such a scale as to seal the victory of climate over pretty much the rest of human life, at least for some time, until its destabilisation becomes a memory. Such is the logic of Naomi Klein's theorem 'this changes everything', whatever course it takes.

Needless to say, global warming is only one facet of the biocide, but among the many ongoing processes of environmental crisis, it has a special inner

propulsion and potential for generalised destruction. With its dependence on the past and future directionality, its temporal logic contradicts hyper-spatial postmodernity head on. It represents history and nature falling down on society; it clouds the horizon. A theory for the present should home in on it as an unfolding tendency and learn how to track this storm. It ought to probe the emerging condition and the basic parameters for acting within it: what, for a start, is this nature that is now returning? Does it still deserve that name? Is it not so mixed up with society as to disqualify the very notion? If it is indeed nature, how has it ended up in this terrifying shape? Who or what has whipped up this storm system – the forces of matter, or of humanity, or some agent fusing or straddling the two? By what route does history move into something once thought to be so timeless as the climate of the entire planet?

Great blender and trespasser, climate change sweeps back and forth between the two regions traditionally referred to as ‘nature’ and ‘society’. As it happens, contemporary theory is intensely preoccupied with precisely that escalating interpenetration and churns out books, articles, special issues, conferences, all sorts of scholarly conversations on some critical general questions: whatever is this thing called nature? How does it relate to society? Who are the genuinely powerful players in the drama that weaves the two together; how do humans attach to material objects; are technologies or relations running the show; what constitutes an ecological crisis; what can we ever know about any of all this? Here we find various forms of constructionism, actor-network theory, new materialism, posthumanism, the metabolic rift, capitalism as world-ecology and a host of other conceptual apparatuses, all trying to come to grips with the imbroglio between the social and the natural. Can any of them provide a map of the path the storm is taking? This essay sets out to scrutinise some of the theories circulating at the nature/society junction in the light of climate change.

Now, theory does not seem like the most exigent business in a rapidly warming world. There is that itching feeling that the only meaningful thing to do now is to let go of everything else and physically cut off fossil fuel combustion, deflate the tyres, block the runways, lay siege to the platforms, invade the mines. Indeed, the only salubrious thing about the election of Donald Trump is that it dispels the last lingering illusions that anything else than organised collective militant resistance has at least a fighting chance of pushing the world anywhere else than head first, at maximum speed, into cataclysmic climate change. All has already been said; now is the time for confrontation. This essay presents no arguments for restraining such impulses. It is, however, written in the belief that some theories can make the situation clearer while others might muddy it.

Action remains best served by conceptual maps that mark out the colliding forces with some accuracy, not by blurry charts and foggy thinking, of which there is, as we shall see, no shortage. Theory can be part of the problem. If everything is up for re-evaluation in a warming world, this must apply to it as well: theory too is called to account, required to demonstrate its relevance and declare its contributions, even if some of its producers and consumers would never consider joining some direct action against fossil fuels.

The present essay does not invent this trial; as we shall see, the theories under scrutiny are moving towards agreement on the climate issue as their shared litmus test, the concrete question each must answer to prove its worth.³³ Some more specific criteria could then be set up. An adequate theory should be able to grasp the problem as *historical*, as it has arisen through change over time – the birth and perpetual expansion of the fossil economy – and causes change over time on earth. It should make sense of the very act of digging up fossil fuels and setting them on fire. Even if the theory is formulated from within the capitalist heartlands, it should, not the least importantly, take heed of the circumstance that global warming makes early landfall in places where the modernisation process has not been completed. People who lack the most basic amenities, who cannot afford to take up residence inside any house of mirrors, who continue to subsist on the kind of nature that Jameson found blotted out from the American cities of the 1980s stand first in the firing line. Most of the bodies fished out from the rising seas belong to them.

A place like New York City can bounce back from a storm and switch on its screens again, but the warming condition is hard to shake off in the Philippines. Hence the much-reported results from a survey by the Pew Research Center in 2015: 79 percent of the inhabitants of Burkina Faso claimed to be ‘very concerned’ about climate change, compared to only 42 percent of the Japanese, who were far more afraid (72 percent) of the Islamic State.³⁴ Burkina Faso is being wrecked by climate change *in this moment*, storms of dust and sand – known locally as ‘the red winds’ – burying what crops remain on land parched from ever more erratic rain.³⁵ The pattern of greater concern in developing countries is persistent. GDP correlates negatively with the feeling: to a far higher degree than their conspecifics in the US or UK, people in countries like Brazil and Bangladesh tend to view the problem as *very serious*, although the unease is surely domestically stratified as well.³⁶ As a double realisation, the warming condition arrives first among masses possessing no significant property, primarily in the peripheries of the capitalist world-economy. It is an old truth that the human condition is expressed in its most concentrated, ominous form among

such masses: hence any theorisation should have its antennas directed towards them. An event like Hurricane Sandy is so significant because it sends the signal home.

What, then, can theory for the warming condition inspire, other than despair? Put differently: if both the 1.5°C and 2°C guardrails turn out to have been breached, should we conclude that the storm is raging uncontrollably and that we might just as well start playing the fiddle? No. We should conclude, first of all, that building a new coal-fired power plant, or continuing to operate an old one, or drilling for oil, or expanding an airport, or planning for a highway is now irrational violence. The case can be made that large-scale fossil fuel combustion has always constituted violence, as it inflicts harm on other people and species, and that it has been plainly irrational since the wide diffusion of the basics of climate science, but surely it reaches a new level of demented aggression when temperatures have increased by 1.5°C or a sea level rise of several metres has been locked into the earth system. If the resistance against fossil fuels has been feeble up to that point, it ought to become ferocious after it: *even after all this, you still go on*. The fight is to minimise the losses and maximise the prospects for survival. What, more concretely, can it achieve? We shall offer only some very brief and provisional reflections on this question towards the end. For now, we shall begin from the premise that any theory for the warming condition should have the struggle to stabilise climate – with the demolition of the fossil economy the necessary first step – as its practical, if only ideal, point of reference. It should clear up space for action and resistance.

DISCOVERING COAL ON LABUAN

But to theorise this present, we need a picture of the sort of past that is weighing on it.

In the second quarter of the nineteenth century, the British Empire deployed steamboats to extend its control over territories and accelerate its appropriation of resources from around the world. They required coal. Agents of the imperial machine – officers, engineers, merchants – were instructed to keep their eyes open for coal seams wherever they set foot, such as on Borneo, where a missionary happened upon some outcroppings in 1837. His discovery touched off a rush for the black gold on that far-flung island, positioned right on the highway between India and China, potentially a perfect fuel depot for the steamboats now frequenting their shores. The most exciting reserves were located on a small island called Labuan. Off the northern tip of Borneo, a most suitable port of call, Labuan was covered by luxuriant tropical forests, and right

in their midst, thick veins of coal protruded.³⁷

The lieutenant in the Royal Navy leading the expedition later reconstructed the scene in a lithograph. It shows two puny white men pointing at a seam of coal standing out between high trees and a stream of water. The man in the right corner is dressed in the uniform of a Royal Navy officer: he represents the military power by which the Empire has landed in this jungle. With a wondrously erect posture, his eyes turned towards the officer, the other man gesticulates wildly and enthusiastically at the finding; most likely, he envisions the coal as a source of fortune, a material his business can extract and sell to steamboats, not the least those operated by the Navy.³⁸ The scene exudes excitement, a sense of mastery and proprietary right. It registers the moment when foreign shores are integrated into the fossil economy – a distinctly British invention, most simply defined as an economy of self-sustaining growth predicated on the growing consumption of fossil fuels and therefore generating a sustained growth in CO₂ emissions.³⁹ The coal of Labuan had never before been connected to any such pursuits. The native population knew about it, but had left most of it untouched: only with the arrival of the British was the coal hauled into a circuit that expanded by setting it on fire.



First the fuel was in the ground, still and unstirred; then someone came to the scene and, eyeing profit and power, commenced its exploitation. In this regard, the lithograph provides an *Urbild* of the fossil economy. It is, if you will, a picture of the Fall (and downwards like a fall, into a shaft the ground, is the fundamental movement of that economy). The uncountable repetitions of the same act over the past two centuries form the defeated time now pouring down

from the sky. How can we apprehend that process?