

*Pynchon's Posthuman Temporalities**Pieter Vermeulen***Miracles in Geological Time**

Pynchon's 1984 essay "Is It O.K. to Be a Luddite?" is, on the face of it, a confident declaration of human exceptionalism. Published in the same year as Donna Haraway's "A Cyborg Manifesto," which rejects the rigid boundaries between technology, nature, and the human, the essay lingers on "the love/hate that grows up between humans and machinery."<sup>1</sup> Luddite rage against the machine, for Pynchon, testifies to an "abiding human hunger" for meaning that the modern disenchantment with nature forces us to wrestle from "amplified, multiplied, more than human opponents."<sup>2</sup> Only near its end does the essay anticipate the posthuman erosion of the borders between technology and human life: if the insistence on the miraculous used to be a placeholder for the human that "den[ies] to the machine at least some of its claims on us," in the coming computer age our machines may themselves become operators of the miraculous, as it seems "the deepest Luddite hope of miracle has now come to reside in the computer's ability to get the right data to those whom the data will do the most good."<sup>3</sup> It is here, Pynchon writes, that Luddites finally come to share common ground with a "cheerful army of technocrats."<sup>4</sup> If this seems to spell an end to Luddite resistance, Pynchon's use of the term "army" – followed by a reference to "a permanent power establishment of admirals, generals and corporate CEO's" – points to a residual violence besetting the coming entanglement of human life, nature, and technology.<sup>5</sup>

That entanglement has in the meantime received a name. In 2000 the Dutch atmospheric chemist Paul Crutzen adopted ecologist Eugene F. Stoermer's term "the Anthropocene" to name human life's irreversible impact on the chemical and climatological makeup of the planet. With the help of its technological and fossil-fuel-driven prostheses, human life has become a geological agent that warrants recognition as a geochronological unit in its own right.<sup>6</sup> Although the Anthropocene Working Group's 2016

recommendation for the official adoption of the term (as the successor of the Holocene) still – at the time of writing – awaits ratification by the International Commission on Stratigraphy, the term has in the last decade begun to serve as a catalyst for questions and anxieties about the impact of human action on the environment. The notion of the Anthropocene entails an altered understanding of *human life*, as an awareness of human impact on the planet – thanks, in no small part, to computational infrastructures that make that impact measurable and visible – becomes increasingly inescapable and the separation between the human and the nonhuman that the beginning of Pynchon's essay still upholds becomes increasingly untenable.<sup>7</sup> Indeed, the leakage between natural and human history means that human life now belongs “at once to differently-scaled histories of the planet, of life and species, and of human societies.”<sup>8</sup> The imaginative challenge, then, is “think[ing] of human agency over multiple and incommensurate scales at once.”<sup>9</sup>

These derangements of scale are particularly challenging for the traditionally human-scaled technology of the novel. Customarily tied to the scales of personal psychology and social life, the novel in the age of the Anthropocene engages differently scaled realities, while it also reflects on the entanglement of human life with nature and technology. The issue of scale surfaces in the (predominantly negative) critical reception of Pynchon's 2006 novel *Against the Day*, which singles out for special opprobrium the novel's sheer bulk (at over 1,000 pages) and its failure to present fully realized characters<sup>10</sup>: in the words of reviewer Tim Martin, the novel is “too big, too broad, too stuffed [. . .] to permit of a continuous conception of character.”<sup>11</sup> This chapter argues that it is precisely these two features that invite a reading of the novel as a work of Anthropocene fiction. Pynchon has always been “a writer of modernization, of its historical preconditions, aims, and limits,”<sup>12</sup> and one concern *Against the Day* shares with scholarly Anthropocene discourses is reimagining the (only ever imaginary) modern divorce between nature and society, between the human and the nonhuman.

This concern is reflected in the different dates that have been proposed for the beginning of the Anthropocene.<sup>13</sup> For Crutzen himself, “the advent of the Industrial Revolution around 1800 provides a logical start date for the new epoch”;<sup>14</sup> other proposals situate it in the early days of the European colonization of the world, or in the so-called Great Acceleration after World War II, when the human impact on the socioeconomic and biophysical spheres of the planet increased spectacularly.<sup>15</sup> These various accounts foreground different dimensions of modernity: capitalist industrialization,

colonization, and the nuclear capacity for self-destruction. These are all crucial thematic emphases in Pynchon's oeuvre, and *Against the Day* offers an Anthropocene update of that oeuvre's historiographic concerns. As we will see, this update foregrounds human life's entanglement with planetary forces (geological time), its orientation to its imminent undoing (disaster time), and its untranscendable implication in interlocking economic and physical materialities (untranscendable time).

### Geological Time: Planetary Frontiers

*Against the Day* engages a bewildering range of global historical developments in the period between the 1893 World's Columbian Exposition in Chicago and 1923; in this way, it nominates the turn of the twentieth century as a crucial threshold in the deep history of the intercourse between the human and the nonhuman. As *Against the Day* reminds us, the World's Fair was the occasion for the formulation of Frederick Jackson Turner's famous "Frontier Thesis." Turner's thesis, as summarized in the novel by Professor Vanderjuice, holds "that the Western frontier we all thought we knew from song and story was no longer on the map but gone, absorbed – a dead duck" (52). Situating the continuous confrontation with the frontier at the heart of American character, Turner's thesis on the closing of the frontier leaves the fate of that character in doubt: in Vanderjuice's words again, "[t]he frontier ends and disconnection begins" (53). The vast geological and thematic expanses of *Against the Day* are a record of that disunion; it presents the United States as a project that is no longer mainly organized by the horizontal pursuit of ever new territories (even if territorial expansion did not magically stop around 1900, of course), but that increasingly displaces its expansive drive in more erratic directions: *downward* (in the novel's concern with mining operations in Colorado or with the conquest of "Inner Asia"), *upward* (in the sustained interest in spirituality and the aerial narratives of the Chums of Chance), but also *inward* (toward an intensified capitalist exploitation of territories already conquered). Of course, such multidirectional movements have always characterized American (or indeed world) history; what changes around 1900 is that horizontal expansion is no longer the dominant streamlining historical force.

The novel connects these different vectors as part of an overarching dynamic: "the history of all this terrible continent," one character remarks, "was this same history of exile and migration, the white man moving in on the Indian, the eastern corporations moving in on the white man, and their

incursions with drills and dynamite into the deep seams of the sacred mountains, the sacred land” (928–29). These crisscrossing trajectories entangle human life with different nonhuman agencies – whether they are infrahuman geological forces or supernatural spiritual ones. When Frank Traverse, who succeeds his father Webb as the “Kieselguhr Kid,” an anarchist bomber, pauses to wonder “[w]hat was there to do out here but run and pursue? What else made sense? Stand still, under this vast of a sky?,” his response reflects how the closing of the frontier signals the increasing awareness of the human’s implication with geological forces: “Dry out, grow still as the brush, as a cactus, keep slowing down until entering some mineral condition . . .” (395). The point of *Against the Day*’s engagement with the Anthropocene is that the human condition is *already*, among other things, a mineral condition, and that the exhaustion of westward expansion makes that realization increasingly inescapable; rather than merely psychological or biological, it is always also geological.

The first chapters of *Against the Day* present the spectacle of an American continent almost fully saturated by railroads and electrical grids (just as it will later imagine Eurasia as a continental system connected by railroads “in steel proliferation across the World-Island” [567]); as territorial expansion is almost over, intensified exploitation is the one available option. When the Chums of Chance arrive in Chicago at the novel’s opening, they no longer see “the vast herds of cattle adrift in ever-changing cloudlike patterns across the Western plains” or indigenous populations but rather “unshaped freedom being rationalized into movement only in straight lines and at right angles and a progressive reduction of choices” (10). Later in the novel, this American condition will tentatively be reimagined as a planetary one.<sup>16</sup> The late nineteenth century world is what Rosalind Williams has called “an intensely humanized world,” in which “a vast, general expansion of human knowledge and power” informs “the realization that soon the entire globe would be mapped.”<sup>17</sup> After the “scramble for Africa” and the completion of the world map, the American closing of the frontier coincided with the more encompassing “closing of the world frontier.”<sup>18</sup> The aftermath of the closing of the American frontier is customarily described as a displacement of the frontier across the globe – through new American imperialisms, or through the American participation in World War I. Indeed, Turner’s original lecture announces as much, noting that “the American energy will continually demand a wider field for its exercise.”<sup>19</sup> Williams makes clear that such a global solution is illusory at best: the closing of the world frontier means “a turning point in history as human beings entered into a new relationship with the earth”<sup>20</sup> – an earth

that is no longer a supposedly infinite resource but a finite reserve that requires ever more violent and intrusive strategies to exploit.

One way to phrase this shift is to say that in *Against the Day*, fantasies of global expansion run up against processes of planetary disorientation. Recent criticism has not failed to read Pynchon as a postnational or global author, yet accounts of *Against the Day* as a “globe-spanning narrative”<sup>21</sup> and as “the most explicitly global of Pynchon’s texts”<sup>22</sup> if anything underestimate the capacious remit of a work that not only crosses the globe but also digs into the earth, “begin[s] colonizing the Sky” (*AD* 131), and, through its fantastic and spiritual conceits, robs the earth of its ontological robustness. If global ways of thinking allow for a sense of totality and cognitive control, the notion of the planetary underlines the insufficiency of all-too-human or all-too-horizontal ways of apprehending the world.<sup>23</sup> The planetary, that is, names a reality that can never be decisively conquered and escapes human imposition. When we return to Turner’s lecture, we see that he delivers human life to constellations of the human, nature, and the earth that are planetary rather than global. If his lecture is officially a strong statement of the impact of geology on human life (“civilization in America has followed the arteries made by geology”<sup>24</sup>), the saturation of the continent by human endeavor comes to affect the priority of geology: “[T]he wilderness has been interpenetrated by lines of civilization growing ever more numerous. It is like the steady growth of a complex nervous system for the originally simple, inert continent.”<sup>25</sup> The figure of a “complex nervous system” intimates a new reality of entangled lives, in which human life has become a geological and a natural force, just as geology has become an aspect of a life that is never simply human or natural.

*Against the Day* shows how expansion in a saturated world around 1900 takes the shape of encompassing conflict. When territorial expansion is no longer an option, the novel notes, “the modern State depend[s] for its survival on maintaining a condition of *permanent siege* – through the systematic encirclement of populations, the starvation of bodies and spirits” (19, italics in original). Take the example of the Chums of Chance: they begin their career as world-traveling balloonists with the end of the Paris Commune, only to end up as agents in “a world-wide, never-ending state of siege” (19). For all their dreamy naivety and childlike innocence – and despite their “dual citizenship in the realms of the quotidian and the ghostly” (256) – the novel makes it clear that they serve particular power interests; they operate as “a mysterious agency that seems to be (at least connected to) the US government”<sup>26</sup>; with their Russian counterpart, the

Tovarishchi Slutchainyi (*AD* 123), they participate in a power struggle as “the unwitting agent[s] of a new internationalism driven by energy-obsessed corporate interests.”<sup>27</sup> That they clearly belong to a different diegetic order than the other characters in the novel (Pynchon’s narrator intermittently refers the reader to other books in a series of Chums adventures) does not release them from their earthly bounds “into any realm of the counterfactual”; instead, they participate in an earthly life that has lost its status as a stable background for human action: the Chums make the earth visible as “[a]nother ‘surface,’ but an earthly one. Often to our regret, all too earthly” (*AD* 9).

The adventures of the Chums of Chance underline that the world of the novel is a fundamentally unstable one, as their initial carefree globetrotting as the “juvenile heroes of a World-Narrative” (1024) ultimately leaves them on “the counter-Earth, on it and of it, yet at the same time also on the Earth they had never, it seemed, left” (1021). Returning to Pynchon’s 1984 essay, this means that the “miracles” he then saw migrating from the human to the machine have now become a feature of the earth. The ineluctability of chance and unpredictability – in which “[t]he entire geopolitical matrix [...] acquire[s] a new, and dangerously unverifiable, set of coefficients” (229) – is reflected in one of the book’s signature refrains: the curious phrase “who, but” – as in “who should show up but Reef’s old New Orleans Anarchist bunkmate” (890) or “who should he catch sight of but a face out of the past” (1013) – which recurs over a hundred times throughout the novel. As Richard Hardack has noted, this refrain serves “to describe how characters perpetually run into one another across the globe in emphatically unbelievable fashion”<sup>28</sup>; it conveys a sense of synchronicity proper to a destabilized planet. The phrase also has the effect of (however briefly) keeping the identity of people suspended, and of having the encounter precede a clear identification; it registers the event of an encounter, and thus the fact of relatedness, before specifying an identity. Upon the closing of the frontier, it seems, human life is enmeshed in novel social and spatial relations that it is only beginning to name and recognize.

### **Disaster Time: Archiving the Earth**

The “who, but” structure creates a range of potentialities (there is an encounter, but with whom?) that it then forecloses by actualizing only one of the possibilities. This temporal logic is also reflected on a larger narrative level. The intermittent prolepses show that the novel’s omniscient narrator shares some of the characters’ (most notably the Trespassers’)

capacity to time travel, and they most often point forward to a coming cataclysm. The whole novel is situated as awaiting “the twilight of the European future” (543) and marked by “the sorrow of anticipation” (544). More often than not, this future doom is linked to World War I (whereas in contemporary life, it is most often linked to climate change), in which, readers are reminded, “Flanders will be the mass grave of History” (554). Equally remarkably, the novel’s evocation of “the mass-grave-to-be of Europe” (578) refuses to linger on the specifics of the World War, which is neither “narrative climax” nor “historical climacteric”<sup>29</sup>; it is only from the perspective of the Chums that the Great War is treated directly. Indeed, if there is such a thing as a central event, it is the 1908 Tunguska explosion, a freak incident (customarily attributed to a meteorite or a comet) on the Eastern Siberian Taiga that left massive destruction but no human casualties, and which in the novel “jolt[s] the axes of Creation, perhaps for good” (795). The novel puts forward the suggestion that the Tunguska incident, a “sudden catastrophic” release of energy “on a planetary scale” (781–82), is “the general war which Europe this summer and autumn would stand at the threshold of, collapsed into a single event” (797). The world war, in *Against the Day*, is not only a passage in human history but entangled with a geological and natural history of destruction. Global war, that is, is but one aspect of planetary instability.

The novel’s accumulation of characters, incidents, thoughts, songs, jokes, and calamities takes place in the shadow of an always imminent yet intractable disaster. Narrative theorist Mark Currie has underlined that literature’s famed power to make the past feel present also entails its opposite: by implying that the present relies for its meaning on a future revelation or undoing, narrative in a sense “depresentifies” the present.<sup>30</sup> Reading fiction, for Currie, trains readers in the awareness that the present is the object of a future memory and therefore never fully coincides with itself. If such a recognition is intensified through the modernist and postmodernist “ascendance of anachrony,”<sup>31</sup> *Against the Day*’s radical time warping, together with the unavailability of well-rounded characters to identify with, make the historical realities it evokes eerily insubstantial; the recurrent prolepses do not allow the reader to forget that the novel’s expansive present is overshadowed by “an always already existing future.”<sup>32</sup>

This striking emptiness goes together with the novel’s overcrowded and bulging feel. Currie notes that an awareness of the instability of the present informs an “archive fever” – a frenzied urge to record and preserve traces from the past.<sup>33</sup> Critics have characterized *Against the Day* as “a catalog of disasters”<sup>34</sup>; have analyzed the opening passage as “an encyclopedic rhetoric

composed from the major styles of the literary nineteenth century”<sup>35</sup>; categorized the novel as “a philippic, an inventory of all that is arrayed, in modern times, against the light”<sup>36</sup>; or as “a virtual library of [turn of the twentieth century] entertainment fiction.”<sup>37</sup> Paul K. Saint-Amour has linked this encyclopedic impulse – marked, he notes, less by a drive for order than by “internal contradictions, deviant styles, [and] a profound sense of arbitrariness and contingency,”<sup>38</sup> which accords with the literary eclecticism that characterizes Pynchon’s approach – to a “pre-traumatic stress syndrome” that emerges “in response to a potentially oncoming rather than an already realized catastrophe” (italics in original).<sup>39</sup> While Saint-Amour sees this encyclopedic drive as a hallmark of modernism, he also extends this notion to the postwar period and argues that notably *Gravity’s Rainbow* conveys a sense of what he calls “perpetual interwar”: “the real-time experience of remembering a past war while awaiting and theorizing a future one.”<sup>40</sup> *Against the Day*’s proleptic orientation to World War I, then, shows that the novel’s strange blend of archival overcrowding and experiential voiding is a measure of its occupation with the pervasive impact of planetary war.

*Against the Day*’s engagement with planetary wartime not only informs its archival drive, it also sets it apart from the genre customarily associated with war: the epic. Since Edward Mendelson’s double-barreled defense of *Gravity’s Rainbow*, it has been customary to link Pynchon’s work to the genre of the “encyclopedic narrative.” In his critique of Mendelson’s work, Saint-Amour notes that this use of the label erroneously elides the encyclopedic mode with epic form. For Saint-Amour, encyclopedic novels (from *Ulysses* to *Gravity’s Rainbow*) are in fact “counter-epics”: while they hint at the authority and inclusiveness of epic, they only do so to undermine the genre’s coherentist logic: they refuse “the bellicose holism of epic,” and they “understand the project of synoptic presentation as at once necessary and impossible.”<sup>41</sup> Encyclopedic works, in Saint-Amour’s new definition, are “a conflicted, self-disrupting project that welcomes formal instability, contradictoriness, or play” that, far from assuming the unbroken transmissibility of knowledge, erect “a bulwark against knowledge-loss.”<sup>42</sup> If epic is “congruent with the emergent discourse of total war,” which keeps a cognitive distance from the violence it describes and purports to control, the encyclopedic mode is more appropriate to a planetary wartime that cannot be confidently mapped or integrated.<sup>43</sup> This counter-epic approach is reflected in *Against the Day*’s peculiar omniscient narrator, whose radical free-indirect speech, far from controlling the world of the novel, is continuously infected by the tics and vocabularies of one character

only to abandon them for other tonalities and phrases when other characters come along.<sup>44</sup>

In a discussion about the literary mediation of geological temporalities in the pages of *Critical Inquiry*, Mark McGurl objects to Wai Chee Dimock's coinage "low epic" because, McGurl writes, the term cannot shake the genre's association with "the booming, war-mongering braggadocio" of the traditional epic.<sup>45</sup> Nor is the tragic tonality of Dimock's proposal quite adequate for literary works that factor in "scientific knowledge of the spatiotemporal vastness and numerousness of the nonhuman world."<sup>46</sup> Works in which nonhuman vastness "becomes visible as a formal, representational, and finally existential problem," McGurl argues, are better characterized as instances of "posthuman comedy."<sup>47</sup> As Krzysztof Piekarski and colleagues have noted, Pynchon has undermined tragic form throughout his career, and *Against the Day* is written in "a form that is both anarchic and nontragic."<sup>48</sup> *Against the Day's* willingness "to risk artistic ludicrousness in [its] representation of the inhumanly large and long"<sup>49</sup> is then a measure of its status as an Anthropocene novel – anti-epic, antitragic, antiwar, yet permeated by an encyclopedic anxiety over the imminence of a disaster that (like planetary war around 1900 or like climate change today) has already happened.

### **Untranscended Time: The Political Economy of Posthuman Life**

So far, I have analyzed *Against the Day* as a peculiar historical novel set around the turn of the twentieth century that, by twisting global tragedy into planetary comedy, shifts that turn beyond historical time to posthuman temporalities. Yet apart from contributing to the historiography of the Anthropocene, *Against the Day* also intervenes in the present time of its publication – a moment in which the ongoing erosion of the life world and the alteration of the climate have become objects of scientific knowledge and public concern; as Joshua Clover remarks, the novel presents "an ironic 1900 haunted always by 2006."<sup>50</sup> The Anthropocene present directly intrudes into the world of the novel, and this intrusion disables a reading of the novel as a straightforward allegory of contemporary life. It does so through the time-traveling Trespassers, who connect to the Chums through "visual conduits" (417) that have less to do with advanced science than with "some chance blundering upon a shortcut through unknown topographies of Time" (555). The Trespassers resemble nothing so much as the zombified inhabitants of the postcatastrophe worlds that are such

a ubiquitous part of the Anthropocene imagination: they appear as “resurrected bodies of all ages, dazed smiles and tangled bare limbs [. . .] who must somehow be fed, clothed, sheltered, and explained to, not to mention away” (413). Their leader (of sorts), Mr. Ace, describes them as “seekers of refuge from our present – your future – a time of worldwide famine, exhausted fuel supplies, terminal poverty – the end of the capitalistic experiment” (415).

It might be tempting to read this description of the Trespassers’ present as our future (rather than our present), and thus as a devastation we can still avoid. The problem here is that the warped temporality of the novel does not allow such consolation: the world around 1900 *is already* the future world, just as our Anthropocene present *is already* the Trespassers’ dystopian reality. The notion of the Anthropocene captures the realization that many processes of planetary disintegration are by now irrevocable, and that the question is not *whether* our species will abolish itself but rather *how* we will “learn to die in the Anthropocene” (to echo the title of a provocative book by Roy Scranton).<sup>51</sup> Notice how the Trespassers describe “the end of the capitalistic experiment”: “Once we came to understand the simple thermodynamic truth that Earth’s resources were limited, in fact soon to run out, the whole capitalist illusion fell to pieces” (415). The salient event is *not* resource depletion, but rather the knowledge that such depletion is inevitable. Once we know that (and we now do), *we are already dead*. *Against the Day*’s unsettling combination of emptiness and overcrowding and its destabilization of the relation between the human and its environments convey an awareness that as inhabitants of a climate changed world we are, strictly speaking, already the living dead.

This is not to say that there is not also a public discourse about a “good” Anthropocene. In their widely publicized “Ecomodernist Manifesto” from 2015, eighteen scientists express their belief that technological developments “might allow for a good, or even great, Anthropocene.”<sup>52</sup> By “[i]ntensifying” activities like “farming, energy extraction, forestry, and settlement,” human flourishing can increase while “decoupling” from environmental impact.<sup>53</sup> The ecomodernist ambition to harness technological development for “human prosperity” by delinking from nature denies the multifarious imbrications between the human, nature, and technology that the Anthropocene reveals<sup>54</sup>; it bespeaks less a critical posthumanism than the intensification of humanism that goes by the name of “transhumanism,” a movement that aims at “transcending the bonds of materiality and embodiment altogether.”<sup>55</sup> *Against such fantasies of transcendence, Against the Day* emphasizes how human life is implicated in different forms of

materiality – physical as well as economic – that it cannot transcend and that it is fated to deal with.

*Against the Day* toys with the temptation of an impactless and weightless humanization of the globe, which today often presents itself as a belief in the frictionless circulation of signs and data. The novel presents Nikola Tesla's plan to mobilize the planet as a "gigantic resonant circuit" in the production of "a 'World-System'" (33). Scarsdale Vibe, the novel's hyper-capitalist villain, does not oppose this technological pipe dream, but merely Tesla's business plan – his ambition to "produc[e] huge amounts of electrical power that anyone can tap into for free" (33). He opposes it through a "counter-transformer," a piece of equipment that will detect the Tesla rigs and then "broadcast something equal and opposite that'll nullify its effects" (34); his plan is, in other words, as deeply invested in the possibility of transcending materiality as is Tesla's. The Chums of Chance, at the same time, have to navigate not only the winds, but also "electromagnetic lines of force" (55). The "[d]aily skirmishes" they are fighting are "no longer for territory or commodities but for electromagnetic information" to grasp the "mysterious mathematical lattice-work" surrounding the earth (121). Significantly, the novel refers to "the high edge of the atmosphere" as "the next untamed frontier" (121) – a frontier of data and invisible forces only seemingly released from earthly friction. As in the example of Tesla, supposedly immaterial forces get entangled with material interests they cannot transcend.

Late in the novel, the character Yashmeen comes to accept her multiple interests in mathematics, anarchism, and sex as related attempts to transcend earthly consequence: "[A]ll had presented themselves as routes of escape from a world whose terms she could not accept," "as some kind of transcendence," as a "hope of passing beyond political forms to 'planetary oneness'" beyond "the frontiers and seas of Time" (942). For Yashmeen, as in the world of the novel more generally, there is no such transcendence. While techno-optimists and ecomodernists have celebrated the rise of ubiquitous computing and the proliferation of electronic media, critical scholarship has emphasized the inevitable geological impact of digital technologies. For all the rhetoric of immateriality and instantaneous delivery that surrounds them, digital technologies leave a considerable environmental footprint through their vast expenditure of (often unclean) energy as well as through the use of rare minerals and the proliferation of e-waste; Jussi Parikka has shown that "the purified industries of computing [are] secretly just as dirty as the industrial ancestors."<sup>56</sup> *Against the Day* consistently exposes what Sean Cubitt has called the "myth of immaterial

media,” as the novel foregrounds “the cultural difficulties that emerge from the separation of the dirty business of generation from the clean image of energy consumption.”<sup>57</sup> The novel pays ample attention to processes of mining and to the material resistance that the Chums experience on their underground travels. And there is the weird phenomenon of the *Interdikt*, a gas line installed across the Balkan peninsula that, even though it remains invisible, becomes a geological force that interferes with the contested and even terrorist politics on the peninsula (690). Designed to serve human interests, it becomes an agent in its own right: “It behaves as if it’s alive. Knows when someone’s coming and takes steps to protect itself” (952). Energy extraction, it seems, brings together human designs with geological forces in a way that dismantles ecomodernist geoengineering fantasies.

Dominant discourses of communication, information, data, and signs – a context in which Pynchon’s work has been extensively discussed, and which, as should be clear now, is intimately connected to the Anthropocene temporalities unleashed in *Against the Day* – tend to misrecognize material dimensions that resist human endeavors. Even the novel’s neatest example of resistance to the bounds of time and matter, time traveling, does not escape material decay and environmental impact. Together with Professor Vanderjuice, the Chums visit a junkyard of failed time machines – “broken, defective, scorched by catastrophic flares of misrouted energy, corroded often beyond recognition by unintended immersion in the terrible Flow over which they had been designed and built [. . .] to prevail” (409). Professor Renfrew’s compulsive documenting of the lives of “everyone who had ever crossed his path” relies on material infrastructures – just as Google’s capacious data archiving, for instance, requires vast disavowed expenditures of energy and rare earth materials: “The data by now filled several rooms he was obliged to rent for the purpose, as well as odd cabinets, closets, and steamer trunks” (495). The novel links Renfrew’s archive fever to the desire to map the world ever more intensively after the closing of the frontier: Renfrew aims to “gather enough information to reduce the staring white patch of the Unrecorded to something he could tolerate” (495). Here again, the thorough penetration of the planet by human life (which leads to an ever further reduction of “the Unrecorded”) fuels a manic drive to archive the traces of that process.

If Pynchon joins critical Anthropocene discourses in underlining the inevitable material dimensions of technological and cultural change, he yet manages to avoid another analytical limitation of many such critical discourses. Accounts that upscale human life to the level of the species

often obscure the socioeconomic differences through which planetary change affects different constituencies in unequal ways; indeed, constituencies that bear little responsibility for pollution and climate change tend to disproportionately suffer the fallout of the excessive consumption by others. *Against the Day* articulates the domains of geology and political economy through, among other things, the centrality of dynamite, which resonates throughout the novel as both an agent of resource extraction and a device for political terrorism used by the anarchists. The connection is also underlined in a passage where Frank Traverse (one of the characters assuring the thematic link between extraction and political activism) is shown a piece of argentaurum – the result of a process of transmutation that changes gold into silver (306). The problem is that in the age of the gold standard, the stability of gold is the linchpin of the US economy, and so “this stuff could *knock the Gold Standard right onto its glorified ass*” (306, italics in original). And because the United States are increasingly connected to “the Bank of England, and the British Empire, and Europe and all *those* empires, and everybody they lend money to – pretty soon it’s the whole world” (306–7, italics in original). In an age when the material properties of metals are no longer stable, the global economy is deeply affected too, as human-made systems are thoroughly enmeshed with non-human ones. In *Against the Day*, it is not just science and engineering that recalibrate human relations to the earth but also the mutations of capitalism.

### The Anthropocene's Posthuman Temporalities

*Against the Day's* major contribution to theories and historiographies of the Anthropocene is its circumstantial exploration of the slow turn of the twentieth century as a key threshold. The novel is a protracted investigation of the epochal shift from territorial expansion, which is almost exhausted after the closing of the world frontier, to an ever intensified exploitation and ever more intractable reorientations – to dimensions that, I have argued, are properly *planetary* rather than global. The implication of human life in planetary forces manifests as at least three kinds of posthuman temporalities. First, there is a *geological temporality* that explodes the firm distinction between human and nature and that distributes agency across the planet – across rocks, volcanoes, computers, and humans – and extends human timescales. Second, there is the *disaster temporality* that positions life in the shadow of its imminent undoing, a sense that the intermittent prolepses in *Against the Day* make inescapable for the reader.

A third emphasis underlines that human life's implication with economic and physical materialities is *untranscendable* and a transhuman future unavailable. These three temporal modes are reflected most visibly in such features as the novel's engagement with scale, its temporal organization, and its sustained insistence on material agents and its concomitant bracketing of the psychological and the social as the privileged milieus of human action. Cumulatively, these formal elements – which, as I have shown, resonate with many of the novel's thematic concerns – qualify *Against the Day* as a work of Anthropocene fiction – a work that, in Chakrabarty's words, sees the task to “think of human agency over multiple and incommensurate scales at once” as a formal, rather than merely a thematic, challenge.<sup>58</sup>

Does this constellation of temporalities mean that *Against the Day*'s rescaled and rematerialized human is merely heading for an inevitable collapse? In the 1984 essay, Pynchon observed a crisis in “the Luddite sensibility” when the sense of miracle moves from the human to the machine: “With the proper deployment of budget and computer time, we will cure cancer, save ourselves from nuclear extinction, grow food for everybody, detoxify the results of industrial greed gone berserk – realize all the wistful pipe dreams of our days.”<sup>59</sup> *Against the Day* shows that these pipe dreams were not very different from those of the slow turn of the twentieth century. Yet the main difference between the 1984 essay and the 2006 novel might well be that the latter shows that budgets and computer time are *never* properly deployed, and that there is always a material glitch destabilizing the cybernetic dream of frictionless communication and returning life to the earth. Pynchon's 1984 prediction comes with a proviso: “[I]f the logistics can be worked out, miracles may yet be possible.”<sup>60</sup> *Against the Day* is a massive, messy, and meandering demonstration of Pynchon's later conviction that the logistics can never be worked out. Which, for better or worse, means there will be no miracle. Which means that we will need a nonmiraculous intervention to forge a future for the human in an irrevocably posthuman world.

### Notes

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