

Draft copy accepted for publication

Do not cite or circulate without the explicit permission of the author

<CN>CHAPTER ELEVEN

<CT>Cultural Memory Studies in the Epoch of the Anthropocene

<CA>*Richard Crownshaw*

<FL>In a seminal essay of 2009, Dipesh Chakrabarty hypothesizes the reconceptualization of historical thinking in the Anthropocene, the relatively new geological epoch marked by anthropogenic climate change. The essential definition of the Anthropocene, Chakrabarty argues, lies in its determination of humans as possessing geological force or agency (200–1, 206–7). That agency can be dated to the inception of the Industrial Revolution but has had the greatest impact since the second half of the twentieth century. It is from the eighteenth century that humanity’s interaction with nature has been superseded by the actualization of humanity as a force of nature (207), particularly when the consumption of renewable sources of fuel (wood) gave way to the large-scale use of fossil fuels (coal from the 1750s, oil and gas from the twentieth century).

The increase in carbon dioxide emissions through the burning of fossil fuels and its effect of global warming, which has left a geological record—as shown by polar ice core samples that date from the mid to late eighteenth century—has prompted Paul J. Crutzen (2002) and Eugene F. Stoermer (with Crutzen 2000) to signal the end of the previous geological epoch, the Holocene, the warmer period of ten to twelve millennia that succeeded the ice age of the Pleistocene. Crutzen and Stoermer have identified the Anthropocene, as succeeding the

Holocene, to designate a new era of anthropogenic climate change, the geological evidence for which dates back to James Watts's invention of the steam engine in 1784 (Chakrabarty 208–10).

The notion of the Anthropocene has gained remarkable traction across the academic disciplines in the last few years. Taking a geological turn, the humanities, and more specifically literary and cultural studies, has begun to explore, scrutinize, assess, and theorize the limits and possibilities of representing and conceptualizing life in the Anthropocene. The humanities has been taking stock of the cultural and theoretical resources available to understand the catastrophic conditions that render that life (be it human or nonhuman) and its environments precarious, if not unsustainable and devastated, through the effects of climate change; energy insecurities; the potential and realization of species extinction; unprecedented levels of pollution, waste, and toxicity; and the social disintegration brought about by the depletion of resources.

In the face of the Anthropocene, the humanities has found itself theoretically depleted, given the cognitive and representational challenges issued by these unfolding and interrelated catastrophes. As we shall see, it is the scale and materiality of these catastrophic environmental processes that demand of cultural memory studies a truly transdisciplinary approach, informed by, for example, the study of geology as much as by cultural understanding.

So, in keeping with this volume's collective exploration of the transcultural, transmedial, and, particularly, transdisciplinary dynamics of cultural memory, this chapter explores what role cultural memory studies might play in that geological turn and how it might be recalibrated in relation to the Anthropocene. It does this by examining the cultural memories staged by the American novelist James Howard Kunstler. Kunstler's trilogy of novels—*World Made by Hand* (2008), *The Witch of Hebron* (2010), and *A History of the Future* (2014)—envisages a post-oil world (America) brought on by a disastrous war in the Middle East fought to secure American

oil supplies, the consequent detonation of nuclear devices on the American homeland by “jihadist” terrorists, and the resulting collapse of existing economic, social, and political structures.

What emerges is something akin to a vision of nineteenth-century frontier life, with the racial warfare, indentured labor, states of authoritarianism both benign and criminal, healthcare, daily violence, life expectancy, and gender politics characteristic of that period. Still, this story world is imagined as a pastoral vision of environmental stewardship, artisanal industry, and mostly local patterns of production, consumption, and exchange. Different social configurations and ways of life to those organized by petroculturalism are suggested, different relations to resources considered, and different resources and forms of energy used. Kunstler’s novels identify a history of geopolitical, socioeconomic, and cultural causes that explain the conditions experienced by his protagonists—in terms of a world without oil—and imply a wider, ecological context that implicates the history of the United States’ fossil-fueled modernity in extreme climatic events (flood and hurricane) that have devastated coastal parts of the United States in this novel.

That the relationship between petroculturalism and climate change remains implicit and unarticulated—in fact, these environmental catastrophes occur at the margins of the plot and have no structural significance or effect on the narrative—is obviously problematic and something to which this chapter will return. Kunstler’s future anterior dramatizes an etiology of the conditions that are imagined in the future but that are unfolding in the present of this literature’s production and consumption; in this way, it suggests a cultural memory of the Anthropocene. The problematic nature of this cultural memory is useful to this enquiry, as it illuminates the conceptual challenges of representing and remembering the Anthropocene.

The theorization of cultural memory studies has of late taken a transcultural (Bond and Rapson; Crownshaw), transnational (De Cesari and Rigney), multidirectional (Rothberg, *Multidirectional Memory*), postcolonial (Craps, *Postcolonial Witnessing*), and global (Assmann and Conrad; Levy and Sznajder) turn, but, as Tom Cohen points out, the scales of “mourning theory” (as he terms it), are still calibrated to a humanist logic. For Cohen, cultural memory studies is preoccupied with the defense of human “cultures, affects, bodies and others” through their reconstruction in representations of the past (15).

This is a defense mounted, in Judith Butler’s use of the future anterior, to frame lives from their beginnings as “grievable” and so “sustained by that regard” but, in anticipation of their potential precariousness, recognized as lives and so subject to grievability and testimony (15). In sum, the “apprehension of grievability precedes and makes possible the apprehension of precarious life . . . [that is,] living, exposed to non-life from the start” (15). For Cohen, these humanist grounds of remembrance and its theorization secure “political” and “epistemological” “homelands”: political in the sense that human habitats, domains, or territories are remembered and thereby delimited; epistemological in the sense of our modes of cognition that cannot think beyond these delimitations. Failing to think ecologically, to apprehend the imbrication of human and nonhuman (or more-than-human) worlds, means, for Cohen, deferring addressing “biospheric collapse, mass extinction events, or the implications of resource wars and ‘population’ culling” (15–17).

More specifically, a reconfigured cultural memory studies is needed in the face of radical changes in atmospheric, hydrospheric, lithospheric, and biospheric conditions brought about by climate change that reveal the interconnectedness of human and more-than-human worlds through their mutual devastation. The remembrance of environmental catastrophe cannot then be

enclosed by just human experience (humans as victims and perpetrators of, for example, anthropogenic climate change); instead, cultural memory studies must account for the wider, ecological dimensions of human actions. In fact, the very idea of an anthropogenic, catastrophic environmental event—its “eventness”—needs to be rethought, given the ways such events unfold unevenly across time and space, their slowly violent effects often dislocated temporally and spatially from their causes. This is particularly complicated in the example of climate change, the feedback loops of which turn effects into causes of further climatic transformation, and with atmospheric thresholds crossed and tipping points met those transformations can be dramatic, sudden, not necessarily predictable or gradual.

More generally, in the “slow” (to use Rob Nixon’s term) as well as fast violence of environmental catastrophe, human activity sets in motion a chain of action that exceeds human control and in which the environment itself is lent a catastrophic agency. Jane Bennett’s “vibrant materialism” is useful here in its identification of “the capacity of things . . . to act as quasi agents or forces with trajectories, propensities, or tendencies of their own,” which means that the “locus of agency is always a human-nonhuman working group,” an ad hoc “assemblage,” and that causality is more “emergent than efficient, more fractal than linear” (ix, viii, viii, xvii, 3, 9, 23–24, 30, 33, 37).

Therefore, cultural memory studies must resist grounding the memory of environmental damage or devastation, delimiting the degraded as a discrete, lost, and static object to be reconstituted and restored through remembrance. Rather, cultural memory studies must track emergent causalities, ad hoc assemblages of agentive matter, and mutating patterns of change in predictable and unpredictable, calculable and incalculable ways. Thinking expansively across space and time, matter and life—and the multiscalar referents of climate change—calls for a

“derangement,” as Timothy Clark might put it, of the scales of cognition, remembrance and representation, for which the “humanist enclosures” (Cohen 17–18, 21) of cultural memory studies are ill equipped.

Having said that, the innovations and potential reach of a globalized cultural memory studies to date should not be overlooked, particularly in relation to global capitalism. Cohen complains that the exclusive preoccupation of “mourning theory” (and critical theory in general) with human precariousness was intensified by the economic crisis of 2008. The remembrance of the precariousness of life lived under capitalist regimes of inequity meant that, for cultural memory studies, the planetary scales and dynamics of capitalism stood in for an ecology of the imbrication of the human and more-than-human world. Again, this served to construct “political” and “epistemological” “homelands” while overlooking other forms and realms of dispossession as well as the precarious ecological contexts that enable those “homelands” in the first place (Cohen 15–16).

Despite the validity of this posthumanist critique and its illumination of the imbrication of human and more-than-human worlds, cultural memory studies still needs to account for the human subject’s interpellation by economic regimes (that is, capitalist ideologies) as well as the wider ecological implications of that hegemony; it needs, in other words, to address the humanist *and* posthumanist enclosures of memory. Conversely, Cohen decries the diremption of the humanist and the posthumanist in his identification of the need for critical theory in general and mourning theory in particular to resist the temptation to construct climate change as theory’s other: an “ethical attention to otherness relies on a metaphoric of the home[land] . . . that can only play on the borders of the bounded” and cannot intimate a radically unbounded and ungrounded way of thinking; the apprehension of difference ends up reifying and regrounding

the homeland (24).

To move beyond naming “climate change” as other from the confines of that homeland necessitates an ungrounded (not-at-home) “asubjectal” perspective from which is uttered an equally ungrounded “ephemeral non-phase ‘climate change’” (Cohen 24). How the asubjective is achieved remains open to question but, in theory, it would foreclose the investigation of humanity’s gathering of geological force and agency through its hegemonic economic activities—the very fundament of the Anthropocene. It is by looking to the innovations of globalized cultural memory and trauma studies that the empirical groundwork for bridging the humanist *and* posthumanist can be found.

Take, for example, Stef Craps’ consideration of the temporality of traumatic experience—not in terms of the belated registration of the event itself but rather in terms of its duration. To contextualize that duration, Craps scrutinizes the ways that dominant conceptions of the traumatic have marginalized the experiences of “non-Western or minority cultures” through the universalization of Western models of trauma at the expense of a transcultural recognition of trauma and grievable life (“Beyond Eurocentrism” 50).

Key to widening the concept of trauma is moving beyond the narrow definitions of Post-Traumatic Stress Disorder as propagated by the American Psychiatric Association through the *Diagnostic and Statistical Manual of Mental Disorders* and disseminated in the wider culture, originating in a “sudden, unexpected, catastrophic event,” a “devastating blow” or “acute stab that breaks the protective shield of the psyche.” Not only does such an approach to trauma pathologize the victim rather than attend to the cultural, social, and historical structures that caused victimization in the first place, it overlooks the normative, quotidian, and structural forms, effects, and affectiveness of oppression (Craps, “Beyond Eurocentrism” 49–50). Put

otherwise, such a Western understanding of trauma privileges European genocide, particularly the Holocaust, in its various forms, over non-European genocide and the genocidal over other, slower, structural forms of violence and oppression experienced in colonial and postcolonial scenarios.

Similarly, Michael Rothberg has also questioned the trauma paradigm, seeking an interpretive flexibility to relate trauma to “*other* disruptive social forces” and to think of the trauma category as “*necessary but not sufficient*” in addressing forms of violence trauma theory has historically overlooked (“Beyond Tancred and Clorinda” xiii; emphasis in original). Its interpretive remit widened by a more accommodating dialogue with a range of disciplines, trauma studies would be better equipped to recognize “structural,” quotidian violence endured in the institutions and systems of global capitalism, in which, for example, a “sociological” understanding of life under capitalism might be complemented by trauma studies’ understanding of “psychic effects of systematic exploitation” and trauma studies’ “event-based models” of violence modified by sociology’s attentions to the structures of violence (xiv–xv).

Revealed, those structures enable the mapping of global capitalism’s “uneven” and simultaneous distribution of “experiences of trauma and wellbeing” and thereby of the ways in which the beneficiaries of that distribution are implicated in violence (Rothberg, “Beyond Tancred and Clorinda” xv).

Rothberg’s structural understanding of the “implicated subject” informs his theoretical gestures toward the “slow violence” (Nixon) of environmental catastrophe generated by global capitalism, or what might be called Anthropocene trauma. In seeking, then, a model of trauma that can encompass the distribution of environmentally mediated causes and effects of trauma across space and time, Rothberg looks to the ways in which implicated subjects can be the

perpetrators of slow violence as, for example, agents of climate change and its effects on the global South but also potential victims, as climate change belatedly threatens the developed, industrialized world from which it originated (“Beyond Tancred and Clorinda” xv). In short, Rothberg arrives where Chakrabarty’s argument departs: the conceptual and theoretical frameworks needed to think about capitalism in relation to the Anthropocene.

Chakrabarty asks how a critical analysis of global capitalism—a system inextricable from the epoch of the Anthropocene and an epoch in which environmental catastrophe accentuates the inequalities of that system—might address the causes and effects of the Anthropocene (211–12). More precisely, how might a capitalist-inflected Anthropocene be historicized? As Chakrabarty puts it:

<EXT>The problematic of globalization allows us to read climate change only as a crisis of capitalist management. While there is no denying that climate change has profoundly to do with the history of capital, a critique that is only a critique of capital is not sufficient for addressing questions relating to human history once the crisis of climate change has been acknowledged and the Anthropocene has begun to loom on the horizon of our present. (212)

<FL>The Anthropocene designates an entanglement of human and natural history that, along with the critical climate conditions it explains, will outlive the current phase of global capitalism and its subsequent modulations or variations (212). A deeper sense of history (one that extends beyond humanity’s chronicling of itself) allows the differentiation of the Anthropocene from the warming of the climate during the Holocene, the preceding epoch, and so the identification of the

threshold for conditions under which human life flourishes—conditions that, of course, predate capitalism and industrialization.

A deeper sense of history also identifies the conditions under which life becomes precarious in the past, in the present, and in the future (Chakrabarty 213, 217). Put otherwise, a deeper sense of history allows the consequences of climate change to be mapped: the “ensuing crisis for humans is not understandable unless one works out the consequences of that warming” (213). While existing critiques of global capitalism can historicize scenarios of lived economic precarity (inequitable life), they do not, argues Chakrabarty, have the temporal reach to think about the survival of life *per se*; they are not calibrated to think in terms of the duration (or not) of the human species (213). The Anthropocene necessitates thinking together “the planetary and the global; deep and recorded histories; species thinking and critiques of capital” (213).

That is not to say that humanity is homogenized, essentialized, or universalized by species thinking. Rather, species thinking can be characterized as the (our) species’ historical self-consciousness as a (differentiated) species and our self-consciousness of our species’ place in a wider and deeper planetary history and possible future—a sense of “a shared catastrophe that we have all fallen into” (Chakrabarty 214–16, 218). In this schema, “species” becomes “a placeholder for an emergent, new universal history of humans that flashes up in the moment of the danger that is climate change.” “Species thinking” produces not a dialectical arrangement for understanding all of history, akin to the teleologies of capitalism, but “a figure of the universal that escapes our capacity to experience” and understand the world in all its “particularities” (Chakrabarty 221–22).

So, while Cohen problematizes what he perceives as cultural memory studies’ failure to grasp the multiscalar, nonlinear trajectories of environmental catastrophe, cultural memory

studies' proclivities for apprehending the Anthropocene as other, and, in general, critical theory's reconstitution of the ecological solely in economic terms, I propose that it is cultural memory studies' global turn and corresponding reconceptualization of trauma that has laid the groundwork for the recognition of the implication of subjectivity in the Anthropocene. This is an "implicatedness" that is correspondent with Chakrabarty's call to think "simultaneously on both registers, to mix together the immiscible chronologies of capital and species history" (221–22).

What forms might cultural memory take if it is to think backward and forward in time with Chakrabarty and expansively across spatial, let alone social and cultural, boundaries not respected by the planetary systems of critical environmental change? Ursula Heise might suggest the "eco-cosmopolitan" literary narrative of risk as a form that can register, and indeed remember, "species" and "capital" as they unfold unevenly and ecologically across time and space. Heise finds in deterritorialized and mobile globalized culture the capacity to represent "how political, economic, technological, social, cultural, and ecological networks shape daily routines" and local experiences—in other words, how a sense (and the actuality) of place is mediated by a sense (and the actuality) of the "planetary."

In this deterritorialization lies the potential for an "environmental ethics" and an "ecological consciousness." Put otherwise, this is a matter of scale, the cognition of which enables a "more nuanced understanding of how both local cultural and ecological systems are imbricated in global ones," informing an "environmentally orientated cosmopolitanism," an "eco-cosmopolitanism" (Heise 55, 59). In exploring what cultural forms enable communities to see their relation to a planetary community, Heise focuses on the potential of literary narratives to convey an eco-cosmopolitanism through literature's engagement with the perception and actuality of risk. To be more precise, it is the risk of environmental catastrophe, although

differentially distributed across the planet, always culturally mediated and experienced in different ways and to different degrees, that registers a shared potential precariousness of living in the Anthropocene.

That risk is always mediated and is underlined by the financialization of the risk of environmental catastrophe through, for example, the emergent derivatives market in climate futures, which, Ben Dibley and Brett Neilson have argued, has contributed to an affective form of governance, the formation of political subjectivities, and the securitization of sovereign territory. Subjectivity and territory are secured through the orchestration of risk—that is, risk mediated by its culturally specific perception, its calculability, and its incalculability. Under this affective regime, or “actuarial imaginary,” those individuals, communities, corporations, and states that perceive themselves at risk, and that are financially enabled, can preempt and financially survive catastrophe while participating in and maintaining the fossil-fueled economy structurally responsible for the catastrophes that befell them in the first place. The intended effect of financialization is to stave off social discontent, political instability, and economic collapse by insuring against and profiting from the environmental future—the realities of global economic and financial apartheid notwithstanding. As Dibley and Neilson put it, the “actuarial imaginary . . . effects . . . not only the prevention of the trauma of the unmediated future, but of the trauma of a future that does not have its resolution in protection and profit” (152).

Given the financialization of risk, its mediation of Anthropocene trauma, and its securitization of homelands, it is unsurprising to find the literary narrative of risk implicated in a financialized thinking of species and capital. Indeed, the literary narrative of risk demonstrates the proximity of the future anterior to financial speculation, complicit in and illuminating the ways risk is mediated. The narrativization of risk can draw on the cultural power of generic

templates to render “intelligible and meaningful” environmental information in disruptive or reifying ways (Heise 138). As this chapter argues, Kunstler’s *World Made by Hand* (2008), exemplifying the trilogy of which it is a part, demonstrates the ways that narrativization of risk adheres to the generic template of the pastoral, which in the context of a catastrophic, post-oil future finds a political and economic solution to the predicament it narrates in—as Heise might put it—a detoxifying return to the premodern (122)—or, at least, that is its intention.

Set in the near future, *World Made by Hand* is located in New York state after nuclear devices, detonated in Washington and Los Angeles in an act of “jihad,” have contributed to the collapse of the American economy and its ability to participate in global trade, after war in the “Holy Land” has failed to secure oil resources for the United States, after the collapse of federal and state government, and where governance and social order either takes the form of benign plantocracy, Puritan-like religious community, mafias presiding over local resources and infrastructures (like landfills or river ports), or, at best, local town democracies.

Without fossil fuels, computers, digital technology, and automobility, industry, technology, and production are characteristically nineteenth century (but practiced locally rather than on the scale of the Industrial Revolution), with a few working remnants of the twentieth and twenty-first centuries (the occasional, stray electrical current and radio signal) and with trade, transport, and information exchange more regional than national. Little is known of the nation and almost nothing of the outside world. Globalization is a thing of the past. Although the narrative is set in a post-oil and now virtually zero-emission America, the climatic legacies of fossil fuel use are still felt. When national news does filter through from time to time, it is of the devastation of coastal regions due to floods and hurricanes.

Essentially, the plot of this novel centers on local power struggles, and moral integrity,

community spirit, social and cultural tolerance, hard work, and technical ingenuity generally determine who survives and prospers, and who does not, in this post-oil world. The novel's moral economy does not detract from the violence of the world depicted, where the exercise of law and order resembles that of a frontier town of the American West. Nor does the novel shy away from the human costs of the transition from an oil-based world to the conditions of this "long emergency" (Kunstler, *The Long Emergency*) following the oil war in which the withdrawal of resources, technologies, and infrastructures and therefore of the securities of civic life was felt most poignantly in lethal epidemics.

Nonetheless, the reversion to what might be described as a settler society is inflected by a pastoralism, even if Kunstler claims that his imagination of post-oil society is not wishful thinking and not a utopian corrective to petrocapiatalism (*The Long Emergency*). That pastoral idealism is found in the moral economy already mentioned in which good local government means the sustainable and equitable distribution of local resources, in which industry, production, and trade benefit the common good (even if some sections of society, such as the local plantocracy and religious community, are not democratically organized), where the act of labor for oneself or others (in exchange for goods, services, sustenance, or accommodation) is never alienating, and where consumption (of mostly locally produced and prepared food in ordinary or celebratory circumstances) is relished and described with mouthwatering relish.

As Heise might put it, in the fictional world of Kunstler's novel (and the trilogy of which it is a part), the local is an effect of the global, even if the wider world, its human and more-than-human forces, are seen as a disruption to the sense of place cherished by the novel and often consigned to the past as the narrator remembers a historical, globalized world. The narrative of risk in this case registers both the ecological and the economic—"capital" and "species"—in the

intertwining of disasters and in the cognitive and cultural difficulties of thinking and representing both at the same time. Even if not sufficiently comprehensive and articulate, the narration of risk in the case of Kunstler's novel captures the difficulties of tracing the causal connections across space and time between human industrial and economic activity and its environmental effects, the difficulties of predicting where, when, and to what degree environmental damage will manifest itself in systemic ways (across global systems) and through cumulative, local environmental degradation (Heise 152, 158–59).

In its staging of an anterior future, a past that will have taken place by the time of the novel's present, Kunstler's work demonstrates the difficulties of remembering the Anthropocene—a difficulty brought about by a melancholic attachment to a capitalist world fueled by oil. The lives of most of the characters in this book span the era of fossil fuels and the post-oil age. This means that the local and regional landscape is palimpsestic, as its inhabitants are able to project onto it personal losses of loved ones and livelihoods but also industrial and economic histories that date from the birth of the republic to the late twentieth century.

Overgrown and reclaimed by nature—if not recycled by humans—roads, bridges, abandoned houses, factories, municipal buildings, and more recently built malls, shops, and offices are potential sites for the aestheticization of the ruins of modernity—despite the narrator's prefatory comments about his disdain for romancing ruins (*World Made by Hand* 11)—an aestheticization that threatens to subsume the history of a fossil-fueled era, the legacies of which are currently being lived. This passage offers an example:

<EXT>Waterford began its existence as the gateway to the Erie Canal system, the first stretch of which was built to bypass several waterfalls on the Mohawk River.

But the locks there no longer functioned because they were rebuilt and enlarged in the early twentieth century to open and close on electric power. Now there was no way to operate them. They were too big for human or animal power ... By and by, we crossed an old commercial highway strip with its complement of dead gigantic discount stores, strip malls, and defunct burger barns. The buildings were all in various stages of disassembly as materials of value were stripped from them—copper pipes and wires, aluminum sashes, windowpanes, steel girders, and cement blocks. The parking lots seemed especially desolate with nothing in them but mulleins and sumacs poking through the cracked pavements.

At Waterford, the bridge connected two bluffs about a hundred feet above the surface of the Mohawk River. It was one of those engineering marvels from the early twentieth century that could never be replaced now, any more than the Coliseum in Rome could be rebuilt by the most talented subjects of Frederick Barbarossa. (137–38)

<FL> While the ugly remains of the late twentieth-century suburban sprawl metonymically and metaphorically figure socio-economic collapse, the monumental remains of the earlier architecture of industrial capitalism aesthetically transcend their implication in an equally fossil-fueled modernity. Elsewhere the ruins of the industrial landscape are subsumed by an unfolding natural history, as in the description of “the railroad tracks along the Battenkill”:

<EXT>On the steel bridge where the track crosses the river a half mile outside town, I stopped for a while to watch the river. . . . I watched an osprey rise off the stream with a good twelve-inch trout in his talons. When he was gone with his prize, plenty more trout were finning in the feeding lanes in the shadow of the bridges, trusses and girders. (238)

It is the narrator-protagonist of Kunstler's novel who historicizes *and* aestheticizes the landscape, who sketches out the geopolitical context of America's economic and political collapse, who marvels at the excesses of his previous corporate lifestyle and its auto- and aeromobility, and who teaches those too young to remember the concept of fuel (*World Made by Hand* 22–23, 244–45, 247–48). However, aside from its aestheticizing tendencies or potential, this historical consciousness is haunted by more than just personal losses suffered during the long emergency—the death of his wife and daughter. The embodied memories of “living oil,” as Stephanie LeMenager might put it, or of a resourced culture, seem equally haunting and disquieting.

At one point, the protagonist “hit the power button on the old stereo. In doing it, I was conscious of putting something behind me: the expectation that things would ever be normal again. There was a kind of relief in it. I also turned off the electric lights so they wouldn't come on and scare anybody again” (Kunstler, *World Made by Hand* 196). Such actions point to the embodied practices of consumption as well as the apparent mourning of that life. However, the alarming possibility of the return of electrical light also intimates an affective if not cognitive reaction to the possible return of the old fossil-fueled regime. A related scene suggests the unconscious manifestation of that anxiety:

<EXT>I was sitting in a comfortable padded chair gliding swiftly over the landscape in a way that felt supernatural yet oddly familiar. I did not feel any wind in my face, despite the speed, which was much faster than anything I was accustomed to. I was deeply at ease in my wonderful traveling chair and thrilled by the motion. Familiar sights whizzed by: the Larmon farm on the Battenville Road, Holyrood's cider mill, the old railroad overpass outside the village of Shushan, pastures and cornfields, hills, hollows, and houses I had known for years. In the dream, I came to realize that I was moving inside some kind of protective envelope, not just sitting in a wonderful chair. Then, a dashboard resolved before me with its round glowing gauges, and then the steering wheel. . . . I am driving a car! It had been so many years since I had done that! It was a dream-memory of something that now seemed hardly different from the magic carpets of my childhood storybooks. But then the speed picked up alarmingly and I was no longer at ease. I careened around curves in the road just missing gigantic trees. I couldn't remember what to do with my feet. I had lost control. (19)

Ostensibly, this is all rather obvious: a literal and figurative dream image of the out-of-control and catastrophic petroculture that explains the present condition. Although perhaps more rhetorical, it provides no more historical information than the narrator's usual historicizing purview. The pleasure derived from the sensation of driving perhaps indicates a melancholic attachment to a fossil-fueled life of which he is not normally conscious, and such a reading might be supported by his failure to reflect further on the dream and its contradictions to his

archaeological object lessons in fossil-fueled modernity, the concept of fuel, and the geopolitics of the Anthropocene.

The precarious trajectory of automobility continues in a bizarre scene of automobile suicide in *World Made by Hand*. Traveling to Albany in a rescue party to retrieve some local men who, trading there, were falsely imprisoned by the mafia who control the river port city, the narrator's party's journey is interrupted by the startling sight of an automobile, the elderly driver of which has refused to adjust to the new reality. Proclaiming the virtues of the automobile age and berating a now nonexistent state for failing to maintain the decaying roads, he is a mobile anachronism. But this is also his swan song: trundling through the party and onward, his car leaves what is left of the road and crashes as the driver shoots himself while behind the wheel. Astonished, the narrator witnesses, albeit in condensed form, what had remained on the verge of consciousness. For all his astonishment, the narrator finds the incident disturbing, even if (or because) he does not recognize what he has in common with the old man.

This “petromelancholia”, as LeMenager would describe it, is not the narrator's alone. As he makes explicit in his nonfiction (*The Long Emergency*), Kunstler finds in localism an appropriate spatial reconfiguration for living without (or with less reliance on) fossil fuels. In the world of his novels, energy is derived mainly from the muscle power of humans and animals, from burning wood, occasionally from wind and water power, and very occasionally from biofuels. Productivity is mainly agricultural, taking place on large farms and plantations—large only by nineteenth-century standards—and small holdings, and where technical it is artisanal in scale. The purchase and exchange of surplus goods and labor mostly take place within the limits of community, but regional trade is possible (dependent on waterways and what is left of the roads). Kunstler, I argue, provides us with a new geography of post-oil energy consumption, but

at work is what we can call a geographical uncanny.

Productivity in the post-oil world begins at home, and Kunstler's novels are replete with pleasing descriptions of orderly self-sufficiency taking place in sturdy and resilient small-town homes built in the nineteenth century (as opposed to the now ruined, serially produced dwellings of suburbia). Here old materials are recycled, and new artefacts are fashioned using traditional methods and rediscovered technologies. Such industrious households are well provisioned by food grown and reared at home or bought and bartered for locally. Those who succeed in Kunstler's world are, in effect, the producers of their own lives, and these lives are very much powered by human labor.

It is these novels' fetishization of localized acts of human labor, the energy produced by that labor, and the things crafted by that labor—in the absence of modern technology, industry, and mass production—that screens the long history of the fossil-fueled and energized society, which, disavowed by pastoralism, has not been sufficiently mourned. More precisely, such a fetish disavows the sheer amount of energy production and consumption upon which precatastrophe America relied and in which Kunstler's energized subjects were implicated (Nikiforuk). Kunstler's petromelancholic premediation of the environmental future means that his literary speculations about the future are still all too governed by something akin to an actuarial imaginary—that he is, in effect, speculating on the futures market of the postapocalyptic imaginary and that the ecological has inadvertently collapsed into the economic.

Demonstrating the challenges faced by cultural memory studies in its exploration of the future anterior, the limits of Kunstler's attempts to think beyond oil are still useful, because as well as foregrounding economic, affective mediations, they also return us to the problem of scale and the difficulties of imagining deep history and planetary space, capital *and* species. In recent

literary criticism, the turn to a geological time scheme has enabled the long histories of environments to be indexed and the effects of human activities, which have futures beyond the parameters of national historiography, to be imagined. However, as Mark McGurl has recently commented, this scaling up of the literary imagination can risk rendering the operations of culture meaningless if framed within a “vaulting largeness” that becomes absolutely indifferent to the idea and actuality of nations that have now become, relatively speaking, insignificant.

What is more, the “deep time” into which the nation is plunged threatens to become irrelevant to national understanding. The framing of environmental futures needs to stage a “negotiation” between “expansion and contraction” to give both ends of the scale meaning and form in relation to each other (McGurl 540). Even if life in the post-oil world of Kunstler’s novel is precarious, and populations are contracting, social organization is regressive, technology hardly modern, and nonhuman life ascendant, sometimes predatory and reclaiming of human spaces, the novel only gestures toward such a larger temporal scheme. Nonetheless, as McGurl might argue, the literary imagination can only think beyond the homeland in a meaningful way if that homeland remains in its purview. Grounded in petromelancholia, Kunstler’s novel at least stages a recognizable departure for the deep time of the Anthropocene.

<FL>**Rick Crownshaw** is a Senior Lecturer in the Department of English and Comparative Literature at Goldsmiths, University of London. He is the author of *The Afterlife of Holocaust Memory in Contemporary Literature and Culture* (Palgrave Macmillan, 2010), the editor of *Transcultural Memory* (Routledge, 2014), and a coeditor of *The Future of Memory* (Berghahn, 2010; paperback, 2014). He is currently working on a monograph, *American Fictions of the Anthropocene*, which focuses on the potential of cultural memory and trauma studies for

representing climate change, alongside narratives of extinction, the resourcing of war, American petrocultures and post-oil imaginaries, and climate change communication and cognition.

<A>Works Cited

- Assmann, Aleida, and Sebastian Conrad, eds. *Memory in a Global Age: Discourses, Practices and Trajectories*. Basingstoke: Palgrave Macmillan, 2012.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press, 2010.
- Bond, Lucy, and Jessica Rapson, eds. *The Transcultural Turn: Interrogating Memory between and beyond Borders*. Berlin: De Gruyter, 2014.
- Butler, Judith. *Frames of War: When Is Life Grievable?* London: Verso, 2009.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry* 35.2 (2009): 197–222.
- Clark, Timothy. "Derangements of Scale." *Telemorphosis: Theory in the Era of Climate Change, Vol. 1*. Ed. Tom Cohen. Ann Arbor, University of Michigan Library: Open Humanities Press, 2012. 147-62
- Cohen, Tom. "Introduction: Murmurations—'Climate Change' and the Defacement of Theory." *Telemorphosis: Theory in the Era of Climate Change, Vol. 1*. Ed. Tom Cohen. Ann Arbor, University of Michigan Library: Open Humanities Press, 2012. 13–42.
- Craps, Stef. "Beyond Eurocentrism: Trauma Theory in the Global Age." *The Future of Trauma Theory: Contemporary Literary Criticism*. Ed. Gert Buelens, Sam Durrant, and Robert Eaglestone. London: Routledge, 2013. 45–61.
- . *Postcolonial Witnessing: Trauma out of Bounds*. Basingstoke: Palgrave Macmillan, 2013.

- Crownshaw, Rick, ed. *Transcultural Memory*. London: Routledge, 2014.
- Crutzen, Paul and Eugene Stoermer. "The Anthropocene." *Global Change Newsletter* 41.1 (2000): 17–18.
- Crutzen, Paul. "The Geology of Mankind." *Nature* 23 (2002).
<http://www.nature.com/nature/journal/v415/n6867/full/415023a.html>
- De Cesari, Chiara, and Ann Rigney. *Transnational Memory: Circulation, Articulation, Scales*. Berlin: De Gruyter, 2014.
- Dibley, Ben, and Brett Neilson. "Climate Crisis and the Actuarial Imaginary." *New Formations* 69 (2010): 144–59.
- Heise, Ursula K. *Sense of Place and Sense of Planet: The Environmental Imagination of the Planet*. Oxford: Oxford University Press, 2008.
- Kunstler, James Howard. *The Long Emergency*. New York: Atlantic Monthly Press, 2005.
- . *World Made by Hand*. New York: Atlantic Monthly Press, 2008.
- . *The Witch of Hebron*. New York: Atlantic Monthly Press, 2010.
- . *A History of the Future*. New York: Atlantic Monthly Press, 2014.
- LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century*. Oxford: Oxford University Press, 2014.
- Levy, Daniel, and Natan Sznaider. *The Holocaust and Memory in the Global Age*. Philadelphia: Temple University Press, 2005.
- McGurl, Mark. "The Posthuman Comedy." *Critical Inquiry* 38.3 (2012): 533–53.
- Nikiforuk, Andrew. *The Energy of Slaves: Oil and the New Servitude*. Vancouver: Greystone Books, 2012.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge: Harvard

University Press, 2011.

Rothberg, Michael. "Beyond Tancred and Clorinda: Trauma Studies for Implicated Subjects."

The Future of Trauma Theory: Contemporary Literary Criticism. Ed. Gert Buelens, Sam

Durrant, and Robert Eaglestone. London: Routledge, 2013. xi–xvii.

———. *Multidirectional Memory: Remembering the Holocaust in the Age of Decolonization*.

Stanford: Stanford University Press, 2009.