# Research Note: The Resources of Fiction

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"I should have thought of it before, it's too late now." Italo Calvino, *The Petrol Pump* 

The opening sentence of Italo Calvino's 1974 story "The Petrol Pump" expresses a regret wearily familiar to 21st century energy-angst. Published in the backdraft of the 1973 global oil crisis, the ethical thrust of the tale is galvanised by a narrator reproaching himself for not fuelling his car when filling stations are closing. Initial indecision whether to make a dash for gas to enable a "necessary" car journey out of town mutates into anguished reflection on an inability to resist the systemic conditions of modern petrolia. The narrator's dismay at the discovery of his gasoline junkiedom is deepened by self-castigation for insufficient consideration to intensifying resource-pressure:

The gauge has been warning me for quite a while that the tank is in reserve. They have been warning us for quite a while that underground global reserves can't last more than twenty years or so. I've had plenty of time to think about it, as usual I've been irresponsible. (170)

Nonetheless, an open station is located and the tank duly filled. The tale ends with the vehicle exiting the forecourt, leaving the reader to consider the consequences of such conscientious inaction. For the present-day reader, the ironic emissions of Calvino's story linger: what to do, when the car has long bolted from the station? From an age of extended (yet always already depleting) "global reserves" this prediction is wayward at best; formed by familiar combinations of alacrity, wishful thinking and ingenuousness. In retrospect, as fossil-fuelled automobility discovers vast new markets across the globe, that "or so" stings the probability concerns of peak-oil with a waspish irony in its seemingly casual projection. In spite of Dr Hubbert and despite its fundamentally non-renewable "nature", petroleum has continued to find a means and a relatively undisturbed way.

From an environmental perspective, of course, the sentiments expressed above, disconcertingly remain salient. Calvino's slight narrative of the necessity of energy reflects, like only fiction can, on the fiction of energy's necessity. Like most politically

2

effective literature, "The Petrol Pump" utilises speculation and supposition in subtle yet provocative ways. The conflict between the imagined ecological and economic consequences of Calvino's narrator's sorry actions, for example, is underscored by the shifting pronouns in the above excerpt; emphasizing the extent to which the individual regards his nascent petro-conscience as both privately compromising and publicly ineffectual, and therefore somehow excusable. Here, in short, is a prescient example of the ingeniousness of the privatisations and privations of oil-based modernity, where the sheer pervasiveness of oil in contemporary social infrastructures works as hard as ever to create a general structure of feeling surrounding its *inevitable* use (and misuse). The focalization also exemplifies what is now recognized as the privatization of energy guilt, resting the primary burden of ecological response to the problems s/he sees as causing in the individual, in both their "choice" of energy consumption and their "green" ethical behaviour.<sup>1</sup>

Such irony should be instantly recognizable to contemporary scholars exploring correlations between culture and energy resources, from a perspective platformed by the ramifications the '73 oil shocks continue to provide for the world energy-system and its geopolitics. It is conveyed by the provocative sleight of that "as usual" in the above cited paragraph, and driven by the essential paradox imaginative scenarios of energy's limits continues to generate. These are accentuated within a post-peak, "ecologically modern" environment of "abundant" unconventional and "alternative" energy, amid technologically and geographically expanded resource frontiers.<sup>2</sup> It is an irony punctuated by the politics of an incipient environmental movement that backdropped "The Petrol Pump" in the early 1970s, a politics that remains crucial to interpretations of the present energy competitive world system. In 2013, export and demand for fossils continue to increase, despite widely verified evidentiary warnings that at least two-thirds of known carbon reserves must remain in the ground to control global warming (IEA Outlook). This, it is generally agreed, is simply not going to happen. Despite a high degree of "official" international consensus about this intensifying planetary process, implementation of radical de-carbonizing agendas has not generally transpired in the actions and policies of states and listed companies preoccupied by maintaining – and indeed increasing – supplies of oil, coal and gas. Duncan Clark and Mike-Berners Lee describe a stupefying duplicity enacted across

<sup>&</sup>lt;sup>1</sup> Of course, neo-sustainability arguments pressed into service by corporate and political agencies worldwide maintain that environmental "crisis" is a future-deferred event, however relative the dispute over its temporality and inevitability. A counterargument insists we are already experiencing that crisis in the present.

<sup>&</sup>lt;sup>2</sup> That "alternative" signifies "not oil, gas or coal" reveals the definitive dominance of fossils in the world energy matrix.

the globe, where "green" but "nervous" (41) governmental administrations, remain "more concerned about what they have to lose" (85) from carbon restriction proposals and continue to encourage and enable the extraction of fossil fuels, maintaining (and indeed accelerating) the century long upward trend of the carbon curve and initiating what has been termed the "carbon-bubble": where numerous monetary schemes and mechanisms, especially the stock market - perhaps the most threatening ecological system of our times - remain critically invested in fossil futures, to the likely detriment of a sustainable planetary future. Calvino's story, it appears, retains its sardonic bite.

Such a situation is characteristic of what Frederick Buell describes as the "exuberantcatastrophic" oil society we inhabit (291). The short-lived era where oil was almost universally celebrated as an emancipating, "good" substance has long receded. Whereas the appreciation of oil's benefits has not disappeared, it is perpetually haunted by degradation and disaster, forcing extensive contemplation of ways and means of moving beyond its threatening horizon. What, if any, is cultural theory's role here? Decrying the renowned energy expert Vaclav Smil's lament, in his 1994 book, Energy in World History, for what he regarded as a "huge conceptual gulf between energy and culture", Buell argues that "energy history is significantly entwined with cultural history", but in so doing notes "no effective response" has, to date, been made to try to bridge this gulf (274). The recent emergence of "Petroculture" as an increasingly prominent international sub-field of academic study and cultural practice bears promise the gap should and can be reduced. 4 Its aim: to claim a space for critical, literary and artistic engagements with what has largely been a geological, political-economic and corporate substance, measured and valued by petrodollars and combustion power rather than (or indeed alongside) aesthetic modes of representation, image and narrative. By asking questions about oil within the entire energy landscape, the burgeoning work now emerging in this field is helping to recast the fundamental orientation and relationship of cultural forms to a material life sustained and underpinned by hegemonic forms of energy extraction, production and consumption. It is still in an early enough theoretical phase to generate reflexive queries such as Andrew Pendakis's: "is there an aesthetics of oil or are its cultural manifestations too diverse and localized to be usefully generalized?" (8). The affirmative answer to this question relies, in part, on the way one elicits and frames the examples of what constitutes petrocultural production,

<sup>&</sup>lt;sup>3</sup> As Bill McKibben notes, in 2012 oil company assets and share values, as well as the financial futures system relied on approximately \$27 trillion priced unextracted carbon (2,795 gigatons) to be used eventually, much of it to be burnt.

<sup>&</sup>lt;sup>4</sup> See in particular the international research cluster at www.petrocultures.com. The inaugural conference took place in Edmonton, Alberta in September 2012.

of which more below. What *is* certain is that the alacrity of the concerns over energy and its constituent forms has endowed this field of study with a salient cultural relevance to be broadcast and more fully theorized.

## **Extracting Culture**

I want to propose in this inquisitorial essay that a significant area of "effective response" lies in attempts to energize interpretations of cultural production, specifically literary fiction. Fiction, in its various modes, genres, and histories, offers a significant (and relatively untapped) repository for the energy aware scholar to demonstrate how, through successive epochs, particularly embedded kinds of energy create a predominant (and oftentimes alternative) culture of being and imagining in the world; organizing and enabling a prevalent mode of living, thinking, moving, dwelling and working. In industrial modernity this has been largely reliant on the extraction of fossil fuels. The extent to which this energy regime has both fostered and been reliant upon a culture of extraction is of increasing interest. Yet what is recognized as extractive cultural production remains questionable. As I will point out later in this essay fictional awareness offers more than stories about energy types and systems. It establishes a means to contemplate - and possibly to deconstruct - energy capital's formidable representative skills, notably its narrativization of the "natural" necessity of oil to our functioning social systems. Oil's sophisticated signifying-systems have been central to maintaining its position as the fetishized ur-commodity of modern globalized capitalism. While we can easily identify the ways in which certain formal and thematic concerns ensure Calvino's succinct story's recuperation into the evolving subgenre of world petrofiction, we must also understand how this also a tale explicitly driven - like all storytelling - by the formalized essentialism of energy in culture and society in general, albeit in a variety of abstracted forms.

In establishing the character of the relation between the global regime of energy extraction and production, and its fictional abstractions, cultural theory has its work cut out. One way for it to begin is by considering how and why the ironic entanglements of ecological modernity can be simultaneously sustained and exposed by the fictions that circulate around energy, not only by the fanciful projections and stories created to reveal or counter energy crisis, but also in a reaffirmation of fiction's formal requirements and stylistic capabilities: its narrative energetics; its psycho-social dynamics; its requirements for causality, impetus and productivity in plot and character development and its chronotopic ability to straddle and traverse multiple times and spaces. Narrative requires power to become powerful. It can change speed, alter force, utilise digression, and in so doing proves a forum to reflect on matters of efficiency and the rationale for certain modes of energy and power. This is supplemented by fiction's degrees of reflexivity: its awareness of its speculative (and often antagonistic

and inverse) relationship to time and the Real. A five-page story of one man standing at a petrol pump contemplating his compulsive selfishness can thus stir examination of humanity's current entrapments within and exacerbation of the deleterious effects of the phenomenal opportunities afforded by oil and gas in the petro-privatised culture of late globalized capitalism. Along the way, it can find time to muse not only on the development of the service economy and its relation to flexible labour regimes, but also the nature of its connection to the birth, life, death and resurrection of all forms of organic life on a planet thousands of years before and after the relatively short and explosive oil-era. These are expertly hinged by a twin-engine irony generated by relative levels of short termism (the use of dramatic suspense) and longtermism (imagined, "off-page" inevitabilities), in addition to deliberate register shifts and genre switches. We ask: will the narrator be able to fill his car in time to make his journey? But we also ask: will that journey, made feasible by the undoubted liberating opportunities of petrolic life, exacerbate the seemingly intractable dread problems surrounding energy (ab)use in the contemporary world system? The story ensures we answer ves on both counts.

In the protagonist's fears for the running of his car (and thus his way of life) "The Petrol Pump" also reveals fiction's basic reliance on propulsive devices; elementary units of charge that power action, event and consciousness, calibrated by laws of narrative motion and impressions of kinetic and potential energy transference. (These need not necessarily involve constant or actual motion or much, if any, movement - think of Beckett's minimalism, or the generic predicates for entropy in Naturalist writing). Like the laws of thermodynamics, fiction relies on momentum and transference; absorbing and exuding, circulating, conserving and converting energy and resources, not only on the level of narrative, metaphor and content but also in formation, production, dissemination and reception. (Is it churlish to point out that you are, after all, reading this on once-oil or once-wood?) The question, however, of how the remarkable energy of fiction is inextricably connected to the (often entirely unremarked and unremarkable) energy in fiction – the stuff that makes things go and happen in literary worlds – goes mostly unstated. This despite the spectacular products and results of primary and secondary energy conversions being visible throughout literature's modern history: imagine, say, Anna Karenina, Things Fall Apart or One Hundred Years of Solitude without coal-powered locomotives! Contemplate Conrad's novels without wind or steam. Consider the sprawling fiction of twentieth century suburbia - relating psyches, bodies and worlds saturated in oil-based products - suddenly shorn of plastics, deprived of automobility or domestic electric power, bereft of pharmaceuticals, denied the cheap food supplies of prime-moved fertilizer!

Necessary if inconspicuous, forms of energy may have remained a latent feature of literary fiction had contemporary culture's promulgation of sustainability as a pre-

dominant and debatable concern not intensified. This has challenged literary criticism to take a deeper and sharper discerning of the physical and aesthetic forms and variants of energy resources, fuelling and powering actions, events, storylines and textual structures throughout the history of fiction (and by extension, throughout culture and material history more generally). Emergent modes of energy research and criticism seem to disavow assertions such as Smil's that "timeless artistic expressions show no correlation with levels or kinds of energy consumption" ("World History and Energy" 559). They reach instead for a "fuller analysis" sought by Edward Cassedy and Peter Grossman, involving "a sense of the social and philosophic context in which energy technology and resources are used, and a keen appreciation of what energy issues mean to the way we live and to the world we live in" (8). The questions asked in emergent modes of energy research and criticism are thus fundamental to the constitution, categories, methodologies and demographics of the literary field: does literature shape and shift in accordance with the dominant energy forms of the era it registers? Might it somehow play a role in reproducing (or, indeed, resisting) – perhaps inadvertently or unconsciously – a predominant energy culture? How does literature use energy and vice versa? Are literary modes – like social formations - brought about by developments in fuel or resource use to a far greater extent than we have previously considered? "What happens", as Patricia Yaeger asks, "if we sort texts according to the energy sources that made them possible . . . what happens if we re-chart literary periods and make energy sources a matter of urgency to literary criticism?" (306). Can we think, for example, of modernism outside an oil-electric context? Of Realism without steam or coal? Romanticism without wind or water?

To begin to answer these questions we have to become more adept at divining the specific fuel(s) literary modes run on. This does not necessarily entail following *only* work explicitly concerned with energy resources (though this might be a start!), despite the number of particular texts from world literature that can be considered "energy classics", such as Émile Zola's *Germinal* (coal, 1885), Fyodor Gladkov's *Energy* (hydroelectricity, 1932-38), Miguel Ángel Asturias's *Hombres de maíz* (1949) and *Banana Trilogy* (food, 1950-60), Henri Queffélec's *Combat contre l'invisible* (nuclear, 1969) or Gene Wolf's *Book of the New Sun* quartet (solar, 1980-83), Abdelrahman Munif's *Cities of Salt* quintet (oil, 1984-89), to name a few. To these (where, frustratingly, the topic and concept of energy remains rather incidental to established critical inquiry) we could add numerous others, in addition to myriad literary registrations of wood, wind, whale oil, paraffin, electricity, tidal water, biofuel, GM foods, etc.

Such work would be substantially supplemented by an interpretive strategy that considers ways literature can reveal energy's "hidden" ubiquity. A strongly developed strain of petrocultural theory focuses on the way in which the means and effects of oil are structurally occluded from its mass of consumers, making it less apparent as

an explicit object in social life and thus a specific topic in and for cultural production. For Peter Hitchcock, oil produces the most "violent" logic of all energy forms and in doing so militates against alternative imaginative forms of representation. Oil's powerful "symbolic order" works influentially to present an inviolable discourse as to its prerequisite role in real life, its "omnipresence" creating a sheen of dependency "that paradoxically has placed a significant bar on its cultural representation." In this view, oil's "real" fictive power is such that literary fiction cannot hope to articulate it in realistic terms:

In general, oil dependency is not just an economic attachment but appears as a kind of cognitive compulsion that mightily prohibits alternatives to its utility as a commodity and as an array of cultural signifiers. ... I view the problem as primarily dialectical in the broadest sense, rather than as one of cultural expression by itself. ("Oil in an American Imaginary" 81-82)

Considering appropriate means of culturally expressing oil's domain, the editors of a special oil-related issue of the journal Imaginations somewhat echo Hitchcock in viewing the problem as one of pervasive mystification. This is a result of the collusion of corporate secrecy and consumer repression typical of late capitalism, however "ecologically responsible" it declares itself:

the problem of visualization, of the proliferation of determinate, useful maps of our economic lives, is not specific to oil, but one politically structural to a system that is at once spectacularly consumerist and fully globalized on the level of production. However, it could be argued that oil is a uniquely occluded substance: not only does its exchange value engender an enormous corporate project of hiding, an explicit machinery of deception and spin, its pervasiveness, its presence, everywhere, perhaps singularly christens its position as "hidden in plain sight." (Wilson and Pendakis 5; gtn from Szeman and Whiteman 55)

There is room for counter-argument here that would note two basic points: 1) that such an "everywhere-felt-but-nowhere-seen" condition is geo-culturally uneven; symptomatic of the uneven international division of labour, regulation, and ownership of oil capital; 2) that we are in fact extremely aware of oil issues, most especially in the over-consuming Global North, where environmental membership and activism is relatively high and influential. As I and others such as Michael T. Walonen have argued, these points are somewhat qualified by a comparison of international petrofiction (and other cultural work, such as documentary photography) from the various spaces of the world oil-system, notably that registering the experiences of those living and working in those "concealed" or peripheral zones of extraction. Subject to varying regulation, oil's local presence and visibility is fairly explicit here and, some would argue, openly "taken" rather than "secreted" away. Nonetheless, in the general, world-systemic terms in which oil and climate must, ultimately be framed, the oil-occlusion argument is compelling. It maintains the peripheral geography of fossil-fuel extraction on land and water, combined with what Rob Nixon has called the "slow" or "invisible" violence of its atmospheric and environmental effects, has always effectively "offshored" features of its transacting, refining, transmission and emission across the "advanced" productive economies of the Global North in particular (2, my emphasis). In this sense oil perfectly illustrates ecologically challenged modernity's Janusface. What could be eulogized by the road-tripping narrator of Nabokov's *Lolita* as the "honest brightness of the gasoline paraphernalia" (153) of post-war America has darkened into a petro-reliant world persistently disturbed by what Buell describes as "a large portfolio of dread problems" (274). Despite these being increasingly difficult to ignore, Imre Szeman notes an obdurate "foundational gap" preventing public action on dirty energy's predilection for crisis, a gap created by:

the apparent epistemic inability or unwillingness to name our energy ontologies, one consequence of which is the yawning space between belief and action, knowledge and agency: we know where we stand with respect to energy, but we do nothing about it. ("Literature and Energy Futures" 324)

We might heed this as a challenge for cultural theorists to take up: how can achieving meaningful action over the problems (and opportunities) of oil entail *knowing* oil better? The overwhelming majority of climate scientists now acknowledge that solving the problem of human-caused climate change must place less emphasis over the exactitude of the science than its communication and awareness. Most certainly this involves rethinking how to discern and locate the cultural life of emissions and their representative properties within a larger social/energy matrix. But once we discern the 500MW reactor in the corner of the parlour or the derrick in the drawing room, what then?

To reiterate: if we are to realize that historical events, economic relations and political formations are created and sustained by energy resources available and accessible at any particular time, and that such events and formations in turn, create *and are in part reproduced* by a specific energy culture, then reframing fiction as a crucial cultural resource historically suffused with energy, in form and substance, might require an altogether bolder and more ambitious interpretive approach. This would not only insist upon the crucial significance of energy awareness as key to discerning fundamental relations between cultural structures, energy use and predominant modes of production, but also posit the daunting yet exciting assertion that *all* (or perhaps *any*) fictional work is a veritable reservoir for the energy-aware scholar. We might see this as following Said's theory of contrapuntal reading. If we all "live" an extractive

culture, regardless of our cognitive connections or geographic proximity to refineries, mineshafts and drill-zones, then our cultural production should reflect that, regardless of how abstract or distorted the projection. How this can be critically extracted and subsequently refined becomes the point of focus, meeting the challenge Hitchcock issues concerning energy's peculiar "cultural logic": how to interpret it as "a very mode of referentiality, a texture in the way stories get told." ("Oil in an American Imaginary 87)

In spite of legitimate concerns it may be unworkably elastic or over-determined, a "deep-energy" methodological perspective is, in fact, already underway in some subfields. Thermodynamic readings of the narrative and social concerns of the nineteenth and early twentieth century novel, for example, are well established. Electromagnetic expressions of force and speed, and a consciousness of newly mechanized motion, find their way into textual understanding of the technical and topical dynamics of the late realist novel and subsequent modernist movements from Vorticism to Futurism. Enda Duffy, writing on the importance of mass electrification to early twentiethcentury life and consciousness can legitimately claim that "the shock of modernism ... also relates to the shock of electric-shock therapy" (410). Where, then, are analogous pronouncements on later cultural moments and movements? Despite being stock full of fossil fuel's refinements, most fiction set in oil-gas-nuclear-renewables era modernity awaits similar energy-based elicitations. The accelerated mobility and intensified compressions of space and time enabled by carbon-driven capitalism, and petro-technology in particular, have altered the shape and geography of literary plot, not to mention the available global constituencies of character, custom and style, as they have massively altered global spatial, media and economic orders. Oil, like coal, clearly has form, but to what extent has this been fully recognized? How can we appropriately interpret its discretion, in order to connect it to the larger frameworks of energy I have discussed above?

As a newly recognized subfield, petrocultural criticism tentatively has sought to explore what Yaeger (summoning Macherey and Jameson) calls an "energy unconscious" (309). If, despite being up to our eyeballs "in oil", we fail to register the level of its insinuation across social and political life - and thus across the spectrum of aesthetic production, then the type of lesson presented in Calvino's story's remains environmentally critical. This is punctuated by the setting: the most repressed and forgiving arena in most of our regular dealings with petroleum is the gas station; a space of wilful forgetting, aided by ever-quickened transaction strategies. Its multiple consumption opportunities do not stand in the way of a hasty exit. Here, we come into our closest contact with the substance we rely upon most for transport and mo-

See for example the work of Tina Young Choi or Allen MacDuffie.

bility, yet everything is in place to keep it out of sight, to protect our bodies from its touch and smell – and keep our eco-conscience in abeyance.

From the gas station experience upwards the principal definition of the "cost" of oil has been domestically economic, a point that needs understood partly as a *cultural* phenomenon produced by a specific mode of neoliberal political economy. Neoliberalism is an oil system, ironically enabled and sustained by on-stream petro-revenues and dramatic falls in post 1970s barrel prices (from the early '80s switch to monetarism in Reaganism/Thatcherism, to the rise of the Oil and Gas Tsars of the post-communist Soviet Union) and heavily invested in both technological and commodity capacities with the fictive capital structures of electronic financial modelling systems. Finding the energy in cultural production, especially in a service-led context is partly imbricated in understanding the *social* and *economic* fictions of energy created, inhabited and reproduced within any petroculture, but particularly acute in the sphere of neoliberalism. These sediment and systematise prevalent conceptions of the necessity of various forms of exhaustible resource and work to maintain and often intensify the levels of investment placed upon them.

Part of the point in theorizing energy as cultural is, therefore, to expose and determine reasons for our acculturation to its hierarchy of material (and, increasingly, immaterial) forms and the manner in which they dictate fundamental aspects of social life and organization. If, as is often remarked, in an age of consumer sovereignty, we don't really think *enough* about how we expect and trust the lights to go on when we flick the switch, then how is this related to what Owen Logan calls a "supply-side aesthetic": the manner in which the consumer identity we inhabit reproduces the way we (fail to) perceive and portray our predominant energy infrastructures (105)? How we think conceptually of waste, expenditure, and remaining amounts has also, according to Logan, become "undialectical", a point exemplified by the tendency for developed oil societies to offshore or export or make limited ethical claims on the associated pollution and waste, excising it geographically or temporally, as a problem of elsewhere, of the future, or by governmentalizing ineffective recycling programmes. Clearly how we "consume" rather than "use" and, crucially, extract fossil fuels makes us act and think about it in an uncritical, deflective way. This is aided by the effective brand-management of the oil and gas corporate over the last twenty years or so. This suffered some relapse in the difficulties of BP, which, prior to the Deepwater Horizon

<sup>&</sup>lt;sup>6</sup> Duncan Clark, for example, argues that despite a fall in US emissions, partly due to shale gas fracking, a consequent increase in US coal exports have led to a rise in its carbon extraction and burning. His argument is that carbon measures should automatically be globally based, and on *extraction* rather than national emission rates ("The Rise and Rise").

disaster was oil's most PR-savvy representative, but has, like big oil generally, rediscovered its mojo. In all these scenarios, an energy imaginary beyond fiction underpins fossils as epitomizing a future of security, efficiency, and, even "sustainability." "Unconventional" fossil fuel is represented as technologically innovative and thus largely positive, a "solution" to projected needs. Cheap or thin oil and gas is, thus, heavily mediatized in favour of on-going enclosures and expanded realms of extraction, legitimizing extended regimes of fossil accumulation. In this scenario the very concept of modernity as founded upon and reliant on depletion-based resources is ignored for a holding-pattern vision of a bountiful future.

Oil's emancipatory role in habitual experience is repeatedly vaunted in this incorporating system of petro-acculturation: how could we live without it? This has often been presented more as overwhelming threat than earnest challenge, particularly by those interested in retaining oil's dominance, who consistently remind us of the deep spread of oil products - and their socio-economic benefits - across modern life. Mathew Huber also confirms this mixture of fatalism and faux-pragmatism as a logical form of "petro-privatism" consonant with neoliberalism, a political-economic ideology oil and gas companies have thrived within ("Refined Politics" 306). This is underscored by Peter Hitchcock's "Everything's Gone Green: The Environment of BP's Narrative", which argues "BP's desire to move 'beyond petroleum' means more rather than less oil exploitation (104). Hitchcock's penetrating account of how oil companies have attempted to environmentally modernize by utilizing the power of narrative in corporate rebranding exercises.<sup>7</sup> "Going Green" is perceived here as an exploitable extension to energy generation, rather than a replacement for (in)exhaustible carbon chasing. Perhaps only the petroleum industry could work so profitably to turn the perceived end of a crisis-bound substance as a crisis in itself, transformed into market opportunity.

# Petrofiction and Beyond

Aided by the subtending practices of culture-project sponsorship, oil's representative conversions of "polluting" energy into "productive" or "good" energy are a prime example of the challenge, but also the opportunity, facing dialectical interpretive responses. We might, on some level, expect the wide scale naturalisation of nonrenewable or "dirty" energy in carbon-anxious modernity to present a formidable

A number of cultural activist pressure groups campaign against the ingratiation of big oil in cultural institutions. In the UK, Platform London (www.http://platformlondon.org) and Art Not Oil (www.artnotoil.org.uk) have been increasingly prominent in their objections to oil sponsorship of the Tate Gallery, the 2012 Cultural Olympiad, the Royal Shakespeare Company and the Edinburgh Arts Festival, among many other cultural events.

blockage to "alternative" energy's cultural perception and representation, yet petrofiction's emergence as a truly "global" subgenre demonstrates literature's capacity to energise purviews; confronting and repositioning the potent social and economic signifiers "naturalising" energy and contemporary petrolic living in general. It has conjoined with powerful modes of anti-resource-colonialism and eco-criticism (the bass notes of petrofiction) in seeking to heighten our planetary energy consciousness.

Introducing a volume of reviews of petrotexts, Imre Szeman argues these works

highlight the important role played by oil in contemporary society and the importance, too, of narrative in shaping the ways we understand, respond to, and engage with our oil ontologies ... there is, finally, a move afoot to puzzle out the implications of our dependency, as much metaphysical as material, on a slippery substance that connects technological futures with prehistorical pasts in ways that cannot but be difficult to conceptualize. ("Introduction" 3)

Certainly, our time of environmental dread has brought the critical momentum to elicit the long and deep significance of various forms of energy to literature and vice versa. The identification of fiction concerning and concerned about energy – not only with its limits and secure supply but also with concomitant themes of exploration and (over)production, capacity and consumption, and subthemes of conversion, distribution, and commodification – has also grown, albeit incrementally, in the period since Calvino's story. An energetic form of criticism has also begun to construct a solid platform for the elaboration (and in many ways the re-categorisation) of a whole history of literature concerned with the history and future of the planet, amidst the geopolitical and biophysical machinations of global warming and the contemporary world carbon-nexus. The degree to which this work can exert traction on the established manner in which rising gas or domestic heating prices shake general volumes of energy indifference is interesting for students of the impact of cultural forms. Nevertheless, if, as Szeman and others emphasize, an energy awareness has finally begun to spread through the Arts, Humanities and cultural analysis generally, key questions arise: to what degree are conventional modes, not only of ecological literature ("the environmental novel", the "ecopoetic imagination", "ecocriticism") but of literature in general limited in both style, approach, and purview? Have they enough sources and resources to deal with the size and scale of the "urgency" Yaeger (see above) emphasizes? Finally, how and why is the *form* of our dependency a critical matter?

As the most recognizable strain of "energy art", petrofiction has its specific subconcentrations in exuberant (and damning) extraction narratives, local and transnational stories of oil's development and its dramatic transformation of space, place and lifestyle. To these we can add tales of corporate corruption and petro-despotism; spill

and disaster; the conflict between oil capital and labor and even the "drama" of barrel prices and fictive petro-capital enacted across international territories. But in what ways might the fiction of drill-bits, mineral rights and gushers relating the process of oil fail to reflect its wider material and ontological spread, as well as Hitchcock's "primary" dialectical form? Should not "petrofiction" be seen as much a fiction of "alternatives" or replacements to oil, both past and future, as it is about the supercommodity oil has become? Is not oil-based culture, by virtue of the (un)certainty of supply and ecological limits, (however much they may be continually shifting or postponed), always already a post-oil culture? Alternatives to oil dwell within and alongside oil culture, albeit in a rather spectral fashion, as absent presences demanding attention to their inevitable - or belated - appearance. Cultural production has configured these in various manifestations and interpretive manoeuvres, although by no means are alternative energy sources as explicitly acknowledged as oil. This is changing. As the prime energy form governing contemporary social forms drains away, we might expect new forms of resource fiction to become increasingly insistent. Whither hydrofiction? Windpoetics? Nuclear drama?

Petroleum culture is consistently haunted by its eventual depletion. A post-oil element is detectable in oil texts from the nineteenth century onwards, but since the 1960s a recognizable form of petrofiction has been driven primarily by depletionanxiety. Here, contemporary fears about resource-wars and climate collapse (among many others) are reprocessed in apocalyptic narratives of floods, population wipeout, continental starvation, solar exhaustion, and bioenvironmental degradation. Scratch the surface of most dystopian narratives and types of resource cataclysm appear.<sup>8</sup> Much of this work ponders the momentous eventuality of a world without large quantities of flowing oil – gasoline in particular. The zombified afterlife of petroleum in numerous post-apocalyptic, carbon-fretful narratives emphasizes how hard it is to let go. Constituencies remain hooked on its scant (and thus unevenly distributed) deposits. Think, for example, of the petro-desperation of the barbarian motorcyclists encircling the embattled renegade oil refinery in George Miller's film Mad Max 2 (1981), or the allure of the bitumen-shattered highway, navigated by a tattered oilcompany map in Cormac McCarthy's The Road (2006), or the corpses strewn around gas pumps in Justin Cronin's vampire-apocalypse novel, *The Twelve* (2012).

As post-oil culture mourns the passing of cheap and easy oil it speculates on the elevation of its potential alternatives. Oil is limited but not *totally* missing in novels

<sup>&</sup>lt;sup>8</sup> Conversely, no one seems to question the seemingly abundant (and presumably "clean") levels of post-fossil energy powering the vast spaceships and megacities of utopian fiction, especially the multiverse energy worlds of Space Opera. These can be safely consigned as "idealist" by petro-realists.

like Sarah Hall's *The Carhullan Army* (2007) or Paolo Bacigalupi's *The Wind-Up Girl* (2009), for example, but their respective relation of a neo-communalist, new-diggers England and a flooded future Bangkok exemplifies an emergent multi-resource novel. This renders a world of mixed old and emergent new fuel and energy "choices" created from necessity-bound relations of anticipated fossil depletion and generalised resource shortage. Concentrations of food, wind, hydro, dung, wood and muscle (animal and human) – natural and biogenetically engineered – show how a imagined future projection of *less* doesn't necessarily imply a scarcity of energy, but emphasizes its control and expenditure as a capitalised resource throughout the modernity it helps establish, yoked to the surplus logic of powerful interests, pressed into the service of capital and (neo)empire. Capacity becomes relative, as opposed to absolute. The persistence of uneven access and private distribution networks ensure that regardless of its non-polluting properties, wind or sprocket-borne power remains, rather like future-Bangkok's illegally burnt animal dung, a "shit" form of "filthy" energy when tied to forms of conflict, corruption and oppression.

Consciously or otherwise, it is significant that the fictions of future energy-scarce scenarios contain salient caution about an almost-post-carbon future of "alternatives" that does not necessarily herald a renewables utopia. In doing so they reveal the *nature* of any society as bound-up with a specific energy mode and particular system of social power. This opens up a vista towards the long view of energy's commodification within the capitalist world-system, where, regardless of its degrees of "cleanliness", it has always been tarnished by powerful systemic organization, controlling price, access, distribution, and consumption. The predominating spectre of supply-anxiety in late-capitalism has ensured that it is rare to see an imagined future where *less* energy is automatically "good". Though the logic and chronology of speculative fiction's energy scenarios may be future-set, its contemporary cognition is as energy-conscious challenge, via either allegorical interpretation or verisimilar credibility, as a world of the possible; a shape of things to come (or as they *are* for the billions of fuel-poor on the planet) under the irrepressible logic of contemporary petro-finance and on-going carbonisation. So much (or, perhaps, so *less*) for the future.

Undoubtedly, speculative fictions of future energy landscapes present uncomfortable contemporary questions. At the very least, in visions of a world with less oil, it offers glimmers of what transition might entail. A problem, however, may lie in potentially unexpected consequences of their progressive eco-cynical vision and generic familiarity; bolstering a fossil-politics opposite to what might be intended. "Look", an oil-company spokesperson can claim, "at the barbarous, chaotic world without oil"; the perfect riposte to any radical imagining of a non-polluting replacement. It could be argued that our preoccupations with scarcity have perpetuated a present situation where abundance remains desirable. The literary fiction of inevitable fossil depletion

nonetheless provides the means for its critics to confront the fictions – social, literary, geological - of on-going abundance we face in the present. Why is it, for example, that imaginary futures of less always seem to run – implicitly or explicitly – on the drama of "more"? Involving the objective of regaining or recovering maximal (usually "dirty") energy systems we critique as unworkable in the present? As I remarked above, the historical examples of most petrofiction reminds us that themes and issues as depletion anxiety are embedded within the enthusiastic pursuit of expanded extraction. A dialectical relation has always configured cultural, political and economic notions of energy's limits within patterns of development and desire generated by perceptions of its (real and imagined) limitlessness. In fact, the social fiction of unhindered and waste-free energy flow – always already a degraded notion in a systemic culture of non-renewables – unconsciously pervades most, if not all cultural production from the coal age onwards.

#### Oil Fantasies...

A point that cannot go unmentioned here: given the available extent of under-nuanced depictions and professions of oil's dispersed ubiquity, amid perpetual supply-anxiety animating environmentalists, governments, oil corporations and private consumers alike, petroculturalists perhaps haven't paid much attention to the constructive story where such a superlative mode of energy has been and remains a "necessary", essential and ameliorative force in modern human history. Looking back at "The Petrol Pump" now, from the century long and continuing "success" of oil, a question arises: has contemporary eco-culture's default setting of the condemnatory registering of "dirty" energy been one-dimensional? Has it not realised fully why hydrocarbons have been "celebrated", or adequately qualified their powerful attractions? To get beyond "dirtyoil" we have to better comprehend and distinguish its powerful, emancipatory attractions. <sup>9</sup> To reiterate: imagine a hospital without pharmaceuticals or plastics, a food supply without fertilizers. What would an oil-free utopia that would dispense with these look like?

<sup>&</sup>lt;sup>9</sup> This pertains, again, to reappraising cultural perceptions and the acculturation of particular energy forms. Consider, for example, a sport such as Formula One Racing, a pursuit I personally find objectionable on many grounds, not least its contribution of a massive carbon footprint. I recognize, however, its seductive, enthralling aspects: speed, danger, competition, design and technology – and how the copious and economic burning of fossil-energy contributes to these as appealing elements to a large amount of people. Does, therefore, the task of theorizing energy not require rethinking what constitutes and defines speed, force, power, competitiveness, etc.? And, following this, how automobility is socially organized, culturally generated, historically contextualized?

However oil's "usefulness" is perceived, it is clear that much of the culture-world is hooked on relating its devastating qualities at the expense of its evident material and infrastructural qualities. Can cultural and theoretical work help to evolve distinctive replacements for these? To this degree our criticism, like our technology and terminology, might not be sufficiently refined. But interpretively skilled cultural practitioners prove crucial – not solely in decoding and countering the signifying prowess of oil capital, but in framing the social and planetary "story" of oil and narrativizing alternative energy signatures and structures in a form and space outside orthodox or vested representations.

I have argued that in order to detect energy's cultural properties, fictional resources could be read more energetically. One way of managing this involves considering how to rethink why certain texts are deemed literally "about" oil, electricity, coal, etc., and others less so. Most fiction dealing explicitly with energy, whether as problematic or enabling force, typically involves a coming-to-energy-consciousness, often in the context of plots about energy rights or fuel discovery and resource deprivation. The "lightbulb" moment in Calvino's story occurs in the forecourt of a new type of "selfservice" filling station. In retrospect, it is instructive that its narrator's petro-anxiety is paralleled (and somewhat mitigated) by the enthralling promises of an incipient age of consumerism. This is packed into a moment of false consolation where he considers how it is that the burden of oil consumption and its excision fall on him as he performs – with all the consumer "choice" of an addict – the final labour of the energy company that profits from his purchase: pathetically, he "works" the pump and injects the hi-octane "poison" into his thirsted vehicle. He sublimates his shame and resentment by resorting to an overtly sexualised populist road-fantasy – the ultimate fiction of an oil-based cultural life. The genre morphing is deliberate, recalling Ryszard Kapuscinski's much cited statement, in his Shah of Shahs (1980) concerning the "illusion of a completely changed life" that the "anaesthetizing" effects of oil offers. "Oil" writes Kapuscinski, "is a fairy tale, and, like every fairy tale, is a bit of a lie" (35). This famous observation remains ever relevant, and inhabits Stefanie LeMenager's recently expressed concern, that if relations between cultural work and oil might enable a way to realise the transition to another energy order, they must confront the deeply embedded aesthetics of petroleum in our lifeworlds. A major part of this is "the larger emotional geography of automobility": the manner in which car culture reproduces an "affective context" manifest in the way we organize and navigate our material worlds, from our built environments to our work timetables, consumer goods, leisure choices, etc. "In brief", claims LeMenager, "we have to consider the consequences of loving sprawl" (60-61).

In its oblique registration of a post-supply-side ontology, "The Petrol Pump" is a rare example of a way to expand the established parameters of what we can define as

"petrofiction" in the way LeMenager describes. Some petro-stories are driven by reflection on what characters do not know (or indeed care) about the life and designs of oil: relating the corporate secrecy of oil companies, or occasionally questioning how (and from where) energy forms "magic" their way to engine or household. Tortured by his inability to overcome the ramifications of his fuelled-up hypocrisy, Calvino's narrator at least acknowledges the contradictions punctuating relations between energy, capital accumulation, and environmentalism in modern service culture. These relations an energy-conscious fiction and criticism might seek to further extrapolate and represent in all manner and modes of fiction where energy supply is either not recognized or simply taken for granted. There comes a time, however, when this ignorance is unsustainable:

All of a sudden I'm seized by a craving to get out of here; but to go where? I don't know, it doesn't matter; perhaps I just want to burn up what little energy is left and finish off the cycle. I've dug out a last thousand lire to siphon off one more shot of fuel. (174)

As the urge to leave the scene of the crime transmutes into a cathexis to Hollywood/ car ad fantasy, the story relies on its reader to see through a recognizably poor attempt to deflect guilt. This hollow agency - acknowledged by the protagonist -is ultimately intended to instil recognition of oil's duplicitous character, and very much aimed at the environmentally aware reader's (relative) ethical sensibility. Here, fiction's constructed ambivalence and advantageous access to consciousness and speculative scenario highlights duplicity in the romantic engineering of energy's illusions. Once we exit the shameful (fictional) realm of the forecourt – the intimate space of our oil encounter - are we who occupy the real free to forget "bad" energy and continue the mundane fantasy of its "special" effects across modern life? At a rhetorical stroke, fiction exposes the fictive life of oil. But how does it engineer a properly energized response? To imagine a world where oil use "doesn't matter" is to live literally in another world. Calvino's story wryly parodies the absurdity of desiring a limited, destructive resource, but doesn't know how or where to go without it. The ironic use of a carefree, cheap metaphor of driving off into the sunset self-reflexively exposes what Szeman has called the "fiction of surplus" that both literary and material life seem stuck within; unable to countenance a world of less or "easy" energy, despite impending lack ("Literature and Energy Futures" 323).

The fantasies of oil culture continue in part because, as I have noted, oil is fantastic. That it is often misrecognised (or indeed mis-used and abused) as such is part of the problem. The surplus imaginary continues in "environmentally-responsible" late capitalist culture, often in the earnest acknowledgement of the "problem" of energy. Mass-market fictions offer potential here, to consider an alternative energy-imaginary

even if only by revealing its dominant and residual forms. Hollywood, for example, enthusiastically embraces "dirty" energy's pay dirt. The greenwashed plots of recent fantasy blockbusters, from Avatar (2009) to Avengers Assemble (2012) to Batman: The Dark Night Rises (2012) revolve around the miraculous technological discovery of cheap, limitless but clean and "ecological" forms of energy. Such films present inevitable conflict over its production and acquisition by either state or private interests. They even query the dubious (super)heroic efforts required to realize them. The question of why a quantitative (or even free) replacement for "bad energy", offering similar power and capacity is required isn't really on the agenda. For why would mass entertainment forego the virtualised drama of crisis for a more philosophically nuanced approach to energy's value, or even offer a more revolutionary concept or utopian suggestion about an alternative system of use and distribution? The spectacle of flat environmentalism is now a preset-stance in the circulation of global cultural commodities, where a liberal-humanism in fiction can be espoused by corporate cultureproducers, who, regardless of the degree to which they see themselves as somewhat apart from the "bad" energy corporate remain heavily co-opted into the cultural and economic hegemonies of petrolife. "Less" can only appear dramatically sustainable for a finite amount of time within the actual world-system, where energy's cultural capital is remarkably aligned to culture's energy capital.

#### Conclusion: where's the alternative?

The consolidation of petroculture as a critical means of reconceptualising energy enables reflection on the usefulness of *all* kinds of fiction – from across genres and literary history – for pressing political questions and eco-philosophical reflection in an energy-challenged present. The subtext of Calvino's story questioned the supremacy of fossil fuel in the 1974 context where "is there any other choice?" was a legitimate but rather novel query. It returns in the warming era where unconventional energy, oil, coal and gas are resurgent, and large areas of the earth await pockmarking by new drilling projects. How does this cast the warnings and anxieties of depletion expressed in most petrofiction? Does not fracked gas or thin oil mark Calvino's piece as a product of an *outdated* era of high "peak" anxiety? Might the deferral of "peak" oil culture hinder the development of new subgenres in the literature of energy?

However we choose to meet these conundrums, late energy criticism must make it apparent that it can't all be about petrol. Literary history has a considerable stockpile of energetic potential. Fiction has circulated and conveyed resources of heat, light, relative speed, force and motion long before *Don Quixote* registered wind-power in 1605. From its rise to cultural prominence in modernity, the Novel is replete with moments where its great theme of transition reflects developments in energy and fuel provision. Consider, for example, the moment – recoverable in numerous novels – in

Giuseppe de Lampedusa's archetypally modern novel of tradition and revolution, The Leopard (1958) where the death of the aristocrat Don Fabrizio is framed by the phenomenal change Italy has experienced in his lifetime, a transition measured by the accelerated story shift from the age of horse-driven power to the jet engine. The Leopard's temporal narrative jolts characterise the co-existent elements of most energy transitions but critical readings of the novel's expressions of the intersections between historico-political progression, shifting political culture and transnational geography leave energy provision subsumed. In these and countless novels before and after the age of petroleum, energy makes history and it has form in so doing; but despite providing the engine-room of plot, story, and context, the aesthetics and opportunities created by fuel power are not sufficiently registered, surfacing only periodically, during times of high resource-angst. In an unprecedented time of permanent conflict over supply, availability and destructive toxicity this critical blindness is unsustainable. The corrective involves new angles of methodological perspective and conceptual debates that have begun in the petrocriticism noted above. It certainly means consistently unveiling the banalized acculturation to prodigious uses of "natural" non-renewable energy in growth-obsessed polities and economies. The task is truly formidable, given the intensifying spread of oil-based development across the globe.

The challenge is thus made to critics across the genres of fiction making, from literature to cinema: if all fiction is potentially energetic, valorizing energy use, then how do we kinetically assert our claims and configure our readings to make it more apparent? The bedrock of this question is not only formed by the simple fact that the formal conditions for all narrative – even the most minimalist or "slo-fiction" – require a degree of forward momentum for events, space, mobility and development: as a basic unit of charge, but also by recognizing that if literary form is always to some extent an abstraction of the social, then interpretive issues and critical formations of capacity, power and supply determine all worlds. This requires we stretch our definitions and reconsider historical sedimentations of genre and period. "Petrofiction" in this frame is certainly stories about platforms, drill-bits, combustible transport, deadly spills and exploration-rights. But it's also about the world a specific fuel creates and maintains; about the relation between the oblique and surface world of fuel; a world of electronic gadgets, imported goods and financial transactions reliant on oil consumption but abstracted from the backstage forms of its conversion, extraction, refining and delivery, from sequestered pipelines and petro-guerrillas to compromised forms of democracy.

How trite or redundant, then, in this view, is the claim that given the global cultural reach of an oil and gas dominated world energy system, all fiction is petro-fiction to various removes? That all fiction, pre and post-oil, can be measured by its relationship to the transformed aesthetic and material world that oil created and threatens to revolutionize again, by either its absence or its carbonizing essence? Is fuel *that* fundamental to culture and cultural production? If a future of eventual diminishment or unworkable or unwanted energy types is certain, and we resort to a world of reduced force, even one of post-prime moving, then work published prior to oil (or outside the carbon-complex) becomes re-energised by the examples it offers of a world constituted via alternative energy sources.

### LeMenager argues that

the petroleum infrastructure has become embodied memory and habitus for modern humans, insofar as everyday events such as driving or feeling the summer heat or asphalt on the soles of one's feet are incorporating practices...decoupling human corporeal memory from the infrastructures that have sustained it may be the primary challenge for ecological narrative in the service of human species survival beyond the twenty-first century. (26)

What would a non-hydrocarbon imaginary resemble, after humanity's experience of oil? Reading fiction in this light offers eco-chronological backflips. A bounty of refuelled scenes from metropolitan core to oil-deprived periphery of literary history offer a means to "re-couple" our pre-oil energy memories to consider their usefulness for a post-oil world. Reading pre-oil texts from a post-oil perspective becomes particularly instructive. Did people really walk "sixty miles each way" on errands and business, as Mr Earnshaw does in matter-of-fact fashion, near the beginning of Emily Brontë's Wuthering Heights (1847)? Will literature after oil become more pedestrian? Certainly post-automobilic narratives of on-foot struggle, such as The Road or Joshua Ferris's The Unnamed (2010) seem to suggest we re-attune ourselves to an embodied aesthetic with a rich literary history, from Rousseau to Baudelaire, Beckett and Sebald. Stendhal's famous aphorism from Le Rouge et Le Noir (1830), that "a novel is a mirror on a highway walked" – somewhat eclipsed by an age in which the mirror is more likely to reflect a highway burned up by an SUV - comes back into focus here. LeMenager speculates on what might be considered as a "post-petrol style", to challenge the autoerotic, affective concentrations of mass car culture, and asks if, in a world attracted to low growth and reduced output there might be an "erotics of post-sustainability" on a par close to the "affective intensity" oil living provides (61). An entire corpus of ambulatory fiction awaits this type of analysis, but it is wholly naïve to think of the end, however prolonged, of petroleum as automatically ushering in a new, "older" era of slower movement and localized distance. It might require, as Allan Stoekl has argued, a wholly refurbished theory of energy, involving a redefinition of its utility, necessity, and use-value, as well as its physical and philosophical "qualities", to challenge modernity's love of gasoline speed and combustion prowess; it's continual pursuit of maximum output and its captured definitions of energy efficiency and

economy. For Stoekl, "we have no choice but (miming Bataille) to elaborate a theory of excess in an era of radical shortage, a practice of human-powered velocity in an era of gas lines" (193). He insists this cannot involve a simple return to a romanticized past, as a "good duality" to carbon-made modernity, without recognising the importance of energy excess and burn as crucial – but non-polluting – features of human, bodily expenditure.

The extent to which such terms are placed within and against their understanding and operations in the closed global economy of petro-capitalist time and space, presently running out of gas, is crucial. For Stoekl, the solution is to fundamentally rethink animate power, joy and labor, within a radically re-localized spatiality:

The radical finitude of fossil fuel — the Nature that refuses to die, even when it gives itself up and runs out (and its running out is its reaffirmation of its singular autonomy) — is the opening of muscle expenditure, the squandering of excited organs. (202)

Such a view, in conjunction with the findings of modern bioenergetics, presents an interesting platform to reconsider the way we re-energize scenes from literary history. Think, for example, of Konstantin Levin's appreciation of a "sea of cheerful common human labor" scything crops in part 3 of Tolstoy's Anna Karenina (1877). In a novel where the development of steam-driven motive power engages with massive transformations in agro-class development, this renowned scene reminds us of the most primal and fundamental energy form: organic muscular exertion. But it also underlines the long connection between energy "production", resource ownership and labor exploitation. Similar attention to "alternative" energy sources in the anticipated future-without-oil present opportunities for historical re-reading. The giant log pile behind Mr Knightley as he converses with his eventual wife in Jane Austen's Emma might have long appeared incidental. Now, in petroleum's deferred wake, it denotes not only an age of wood but also the invested power and prestige in the ownership of stockpiles of energy throughout history. 10 Consider the transformative hydro-active power of a water wheel that runs the nail factory at the commencement of Stendhal's Le Rouge et Le Noir. These countless scenes become more than incidental or isolate scenes of the historical entanglement of fuel power, resource-based capitalism and the class control of extractive production: they become critical fuel for fiction's effective recuperation and recycling of the energy forms made peripheral by the oil age and the cultural forms associated with it. Calvino's narrator's day wasn't, after all, to be about fuel levels, but in the end, in order to move forward, it had to be. However we

Emma Woodhouse's name takes on a different hue in a biomass attentive reading!

22

interpret it, this has to be construed as a problem. If anything, "The Petrol Pump" reminds us that the warning light set in 1973 continues to blink. To properly energize culture in petromodernity's wake requires huge theoretical resolve to jumpstart the practical effort: nothing less than wholesale critical transformation and renewability.

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#### 24 GRAEME MACDONALD

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