Oil Futures

“The rising cost of a barrel of oil (at record levels as of mid-March 2008) is now the basis of a drama played out daily in the forefront of our consciousness, pushed there by innumerable news stories as well as by the shock of heating prices and cost of a tank of gas.”

By Imre Szeman

With the spike in the price of the primary fuel for so many of the operations basic to contemporary life comes a jump in the price of everything else. Food, for example, is often trucked or flown thousands of miles from field or factory to store shelves, which means that it will constitute an ever higher proportion of our daily expenses in conjunction with the ballooning cost of oil. Even the cheaper alternatives that some of us might adopt in order to step out of the oil economy are increasing in price: like food and oil, bicycles originate elsewhere, as does the rubber in their tires and the alloys in their frames—materials that also have petrochemicals in their very makeup.

Beyond the question of cost there are other very real and justified anxieties. We know that our constantly increasing demand for and use of oil is having a destructive effect on our fragile environment. We are also fearful of the implications of the eventual disappearance of oil: the massive infrastructure of what we might call "oil capitalism" that has developed around it will (for better and for worse) clearly soon be in peril.

In the face of the daily deluge of news about oil and its possible futures, the left end of the political spectrum has offered little more than moral hectoring to use less oil or none at all, a position that tacitly accepts liberal individualism and consumerism as the sole factors able to drive social change. Of course it would be better if we all drove less, or if governments insisted on higher fuel standards for all vehicles, but it's clear that those small changes cannot be the solution to the problem of the energy needs of a human polity expected to grow to nine billion by mid-century. The left has seemed to resist thinking too deeply about the larger consequences of the petro-economy and what, if anything, will come after its decline. What might a serious left position on oil capitalism—and its aftermath—look like? As a way of moving toward an answer to this question, we need to look at the three dominant social narratives concerning oil's futures today: strategic realism, techno-utopianism, and eco-apocalypse.

Strategic realism views contemporary geopolitical maneuvering as the inevitable outcome of competition for access to goods and resources: chief amongst these being access to oil. As Daniel Yergin notes, oil arrived on the geopolitical stage when, at the outset of World War I, Winston Churchill, First Lord of the Admiralty, decided to power Britain's navy by oil from Persia as opposed to coal from Wales—a shift designed to improve the speed of the navy, but at the expense of national energy security (69–79). This founding equation between oil and military power has been in force ever since. The political character of the Middle East in particular has been shaped throughout the past century by the military and political struggle of Britain, France, the United States, and other powers to secure access to a commodity essential to the smooth operation of their economies (Harvey 177–209). The discourse of strategic realism derives from a strict Realpolitik in matters of energy. Those who subscribe to it—and it is a discourse employed widely by government and the media alike—suspend or minimize concerns about the cumulative environmental disaster of oil and focus instead on the international tensions that will inevitably arise as countries pursue their individual energy security in an era of scarcity. What is of prime concern in strategic-realist thought is to keep economies floating in oil; at its heart is the blunt expectation that nations will protect themselves from energy disruptions by any means necessary. These means can and do take multiple forms, including economic agreements between states, the recent, largely quixotic, attempts to create energy independence by promoting the use of alternative fuels, and, of course, military intervention intended to shore up existing "power interdependencies" (Smith 188)—which, due to the US invasion of Iraq, is now erroneously, and in defiance of the facts, held to be the prime mode through which access to oil is secured. What ties these various approaches together is an element so obvious that it might appear hardly worth mentioning: strategic realism is a discourse that makes nation-states the central actors in the drama of the looming disaster of oil, actors who can and do engage in often brutal geopolitical calculations in order to secure their economic stability. While we have repeatedly been told that markets take little note of borders today, oil is clearly an exception to the rule. Its political value as a globally traded commodity is such that it apparently cannot be permitted to slosh autonomously through the markets. The state must intervene to ensure its orderly flow in the right direction.

This kind of strategic calculation conforms neatly with right-wing discourses that adopt a "might-is-right" approach to the defense of homeland, but the thinking it represents is not limited to the right. There are also liberal and left versions of strategic realism. In Blood for Oil?, for instance, Michael Klare explores the consequences of US dependence on foreign oil, drawing attention to the huge sums of money that are spent

annually to keep access to oil open. He writes that "ultimately, the cost of oil will be measured in blood: the blood of American soldiers who die in combat, and the blood of many other casualties of oil-related violence" (183). For Klare, the proposed solution is for Americans to "adopt a new attitude toward petroleum—a conscious decision to place basic values and the good of the country ahead of immediate personal convenience" (182). The reality—a dangerous surge in energy use, in circumstances in which oil is disappearing—isn't at issue; rather, what Klare's analysis offers is a potentially less violent and more stable way of managing geopolitical realities: Americans are to be transformed into Europeans in terms of their individual energy usage. The nation remains the central actor, and the misfit between supply and demand for oil needs to be seriously considered only so that existing differentials of national power can be maintained into the indefinite future. As for the larger consequences of oil usage for the environment or for humanity as a whole, strategic realism recognizes only that oil is essential to capital and capital is essential for the status quo to continue. The potential disaster of oil in this discourse is figured as the possibility that, through mismanagement or misrecognition of geopolitical strategy, a commodity essential to state power might no longer be available in the abundance necessary for continued economic growth.

Techno-Utopianism

A founding assumption of strategic realism is that the political future will look more or less like the present: we cannot count on new sources of energy, but must rather refine our ability to control (economically, diplomatically, or militarily) existing ones. However, there is another narrative here, one that confronts the looming end of oil by calling on science and technology to develop energy alternatives that will enable us to pass through this crisis unscathed.

This is the narrative that I am calling techno-utopianism. Government officials, environmentalists, and scientists from across the political spectrum have espoused this approach, which proposes two solutions to the end of oil: either scientific advances will perfect techniques for eliminating carbon emissions (exhaust scrubbers, carbon sequestering, etc.), while simultaneously enabling access to oil resources hitherto too expensive to develop (the Alberta tar sands, deep sea reserves, etc.), or science will create entirely new forms of energy, such as hydrogen-fuel cells for space-age automobiles. Techno-utopianism has become, like strategic realism, a ubiquitous and familiar discourse. It is already being resorted to rhetorically when politicians wish to defer difficult political decisions to some distant future, as the prime minister of Canada, Stephen Harper, did recently when he announced new "intensity-based" emissions standards: "With technological change, massive reductions in emissions are possible… We have reason to believe that by harnessing technology we can make large-scale reductions in other types of emissions. But this will take time. It will have to be done as part of technological turnover" (Curry and Hume). Somewhat more convincingly, techno-utopianism supports the activities of those scientific and technological researchers who are working as fast as they can to steer civilization away from its blunder of hitching a complex global economy to a non-renewable dirty fuel source that is fast evaporating from the earth.

An excellent example of techno-utopianism can be found in a special issue of Scientific American on "Energy's Future – Beyond Carbon." The issue's subtitle announces its politics directly: "How to Power the Economy and Still Fight Global Warming." The issue presents multiple technological strategies for reducing carbon—new transportation fuels, efficient building design, clean options for coal, possibilities for nuclear power, and so on (46–114). The long-term impact of existing energy use—primarily oil—on the environment is the focus here; each article provides a potential solution based on current scientific research and technological innovation. The articles are all structured in much the same way, beginning with descriptions of the deleterious environmental

effects of existing social and cultural practices, especially those in the developed world, and then moving to analyses of the failures at the level of politics to enact necessary changes to environmental laws and standards. In his introduction to the special issue, Gary Stix writes that "the slim hope for keeping atmospheric carbon below 500 ppm hinges on aggressive programs of energy efficiency instituted by national governments" (46–49). Since such ambitious programs don't seem to be on the horizon, techno-utopians rush into the gap vacated by public policy. Scientific innovation, they assure us, can absorb and mediate all the risks that might normally unfold at the level of the political; technology will save us from ourselves. A profusion of developments from the astonishing to the relatively banal—new refrigerators that use a quarter of the energy of their 1974 counterparts, LCD computer screens that use 60 percent less than CRT monitors—are supposed to bring about not only a cleaner environment but also a soft landing for oil capital. If the various timescale charts and projections for reductions in oil usage are less than comforting, we are reminded of the following: "Deeply ingrained in the patterns of technological evolution is the substitution of cleverness for energy" (Socolow and Pacala 52). The natural historical flow of scientific discovery will resolve the energy and environmental problems we have produced for ourselves—or so it is claimed.

Faith in such technological evolution lies at the heart of not only techno-utopian solutions to the disaster of oil, but of modern imaginings of science more generally. Technology is figured as just around the corner, always just on the verge of arriving. Innovation can be hurried along, but only slightly: just-in-time technological solutions arrive when needed and not before; but they never fail to emerge. This, as we see above in Harper's comment, is certainly part of the politicians' dream, but it is equally part of the scientists' self-imaginings. For example, hydrogen is said to be waiting in the wings as the new energy source. All that is needed is a little push to put it in its proper temporal place: "The vast potential of this new industry underscores the importance of researching, developing, and demonstrating hydrogen technologies now, so they will be ready when we need them" (Ogden 101). At the core of the notion that technological solutions will appear as and when they are needed lies another fantasy: that technological developments have in the past always appeared in the nick of time to help push modernity along. But where? And how? History offers no models whatsoever, and the dream that a coincidence between technological discovery and historic necessity will emerge now, to bring about (in this case) a change from oil capital to hydrogen capital, simply reinforces the bad utopianism of trusting in technological solutions to the looming end of oil.

Apocalyptic Environmentalism

In his editorial in Scientific American Gary Stix writes that "sustained marshalling of cross-border engineering and political resources over the course of a century or more to check the rise of carbon emissions makes a moon mission or a Manhattan Project appear comparatively straightforward… Maybe a miraculous new energy technology will simultaneously solve our energy and climate problems during that time, but another scenario is at least as likely: a perceived failure of Kyoto or international bickering over climate questions could foster the burning of abundant coal for electricity and synthetic fuels for transportation, both without meaningful checks on carbon emissions" (49). The third narrative of the end of oil focuses on this scenario of eco-apocalypse. If strategic realism is largely a favorite of the right, its complement on the left is often to be found in this kind of thinking. Eco-apocalyptic theorists face the disaster of oil capitalism head on: the dire social-political-environmental consequences of inaction in regard to oil are laid out, and, because it then becomes obvious that avoiding these results would require changing everything, apocalyptic narratives and statistics are trotted out. The first two narratives remain committed to capitalism and treat the future as one in which change (new geopolitical realignments, innovations in energy use) will occur because it has to occur. Eco-apocalypse sees the future more grimly: it understands that fundamental social and political change is essential to address the end of oil. However,

since such change is not on the horizon, or impossible to imagine, eco-apocalypse sees the future as Bosch-like—a hell on Earth, full of the tortured survivors of the present who drag themselves through a denuded landscape obscured by choking carbon-dioxide smog.

The Final Energy Crisis, edited by Andrew McKillop and Sheila Newman, is but one of many books and articles in this genre. With great care, clarity, and attention to scientific evidence about fossil-fuel depletion and environmental impacts, the volume lays out the case for the inevitability of the looming disaster. The statistics pile up to paint a truly terrifying picture: fertilizers are impossible to produce without fossil fuels; in their absence, the earth's carrying capacity for human life will necessarily fall by 50 to 60 percent; the growth of car ownership in India and China to Western levels, even with conservative estimates as to distance traveled, will require 10 billion barrels of oil each year, "three times total oil imports of all EU countries in 2002, nearly three times the maximum possible production capacity of Saudi Arabia." Post-oil France will not be able to sustain a population of more than 20 to 25 million, Australia fewer than 1.5 million (7, 232, 265–73). And so on: everything in the book points to utter disaster as the only possible outcome of oil capitalism.

It isn't that such claims are unfounded or such scenarios unbelievable. The question is what such information is intended to accomplish. All three of the discourses I've introduced make demands of the global body politic, inviting it to generate an appropriate response to the end of the energy source on which we have built our social reality. Even while recognizing the potential traumas for human communities and for capital, strategic realism and techno-utopianism function within existing understandings of the way the world operates, and hope to maintain the status quo. Eco-apocalyptic discourse starts from the premise that disaster cannot be avoided without fundamental changes to human social life. Conditions for avoiding disaster are put forward. We must live differently, must move to a "simpler, non affluent way of life," engage in "more communal, cooperative and participatory practices," adopt "a much more collective, less individualistic social philosophy and outlook," and, of course, create "an almost totally new economic system (Trainer 280, 283, 286–87, 284 respectively).

The statistics and warnings of eco-apocalyptic discourse are intended to make us realize that without a complete change in social life, we have "no chance whatever" of avoiding future disaster. How we are to do this is left open. Although a new social system is outlined in utopian fashion, down to what kind of houses should be on a single street and the kinds of animals that we might find in our suburbs (281), at the heart of eco-apocalyptic discourses is an acceptance that a major transformation is not likely to happen. Even if the coming disaster can be predicted and described in detail, nothing can be done to stop it. Indeed, there is a sense in which the disaster is almost welcome: the end of oil will mean that capitalism has dug its own grave, since, without oil, current configurations of capital are impossible.

Left Futures

National futures, technological futures, and apocalyptic ones. If these are the dominant discourses with respect to our oil futures, where does this leave us? We can, as a form of critical activity, point to the limits of such discourses—to the revival, for instance, of the idea of fortress nations and nationalism in strategic realism, or to the shaky historical foundations and pie-in-the-sky futurism of techno-utopianism, or to the political defeatism of eco-apocalyptic discourses. However valuable such criticisms might be, we remain in need of a discourse that can navigate its way through and around the limits of the existing narratives, while avoiding the temptation to place all our faith in science, to depend blindly on the secure comforts of nations, or to indulge in the dystopian imaginings of the End Times.

What might such an alternative discourse look like? We are certainly not lacking in exhortations and enticements for a new politics, our already shaky belief in liberal democracy having been seriously tested by the public's abandonment of the ballot box in Western democracies, the repeated use of fictional elections to legitimize dictatorships of every stripe, and the export of "democratic" governments through military force. The time is ripe for articulations of a genuine democracy, one that no longer meekly ties its fate to the will of the liberal individual —for whom we have sacrificed almost everything in our world, including, it seems, the health and balance of the physical world itself. Constantly rising gas prices and the concomitant clear visions of a future without adequate supplies of fuel are making it evident to anyone who cares to look that the economy we have celebrated as having made many societies relatively wealthy is based not on the genius of the system called capital, but on a single, hitherto cheap and easily available commodity. But oil was never free, and now the price is going up sharply. Jacob Lund Fisker notes that "the increase in human wealth and well-being during the past few centuries is often attributed to such things as state initiatives, governmental systems and economic policies, but the real and underlying cause has been a massive increase in energy consumption… discovering and extracting fossil fuels requires little effort when resources are abundant, before their depletion. It is this cheap 'surplus energy' that has enabled classical industrial, urban and economic development" (74). A collapse in faith in its empty democracy, the disappearance of its secret source of wealth: never has oil capital been so weak and the possibilities for alternative political and economic forms so strong. Even the new head of the World Trade Organization, Pascal Lamy, has said it clearly and directly: "Capitalism cannot satisfy us."

So why hasn't the left painted a different future? Why the assumption that eco-apocalypse is unavoidable? Why meek hopes about possible transformations of capital from oil capital into hydrogen, solar, or nuclear capital; why not, instead, proposals for doing away with capital? Now is the time to be blunt: "What is most urgently needed… is not short-term technological fixes but a different paradigm of political economy. This new political economy must take our impact on the planet's environment fully and realistically into account" (Oosthoek and Gills 285). Almost twenty years after the end of the Soviet experiment, it is perhaps time to start speaking again, directly and unapologetically, about the need for what has unfortunately come to be unthinkingly rejected as an obscene concept—the planned economy, the labor of a real collective in place of a free market whose operations are no less planned for all their supposed anonymity and invisibility. Call this narrative rational futurism. The old idea of a planned economy brings to mind grainy black and white films of the Soviet era, the drama of five-year plans, and images of bar graphs made up of tractor icons displaying incredible economic growth. Planned economies of the twenty-first century would be of a different order; new technologies and scientific discoveries would shape plans for human labor and the use of fuels and other commodities in new ways, enabling societies to create meaningful, prosperous economies within ecological limits. The Soviet planners, no less than the capitalist system they opposed, still measured the success of their economies by growth—a growth also enabled by cheap fuel. Rational futurism sees economies planned not around profit or growth, but on the real costs of fuels and other inputs, and on more aggressive redistribution of the fruits of the economy. An outline of such an economy is contained in Kim Stanley Robinson's remarkable "Science in the Capital" trilogy, especially in the final book, Sixty Days and Counting, in which large-scale terraforming operations become necessary to keep the Earth habitable for humanity.

The idea of aggressive intervention, of forcefully reworking the environment, sounds shocking—until one realizes that we have been doing just that to the Earth all along, but entirely randomly and destructively, without any plan or idea of the larger impact of our activities.

This alternative narrative can come across as threatening or frightening. On the left, it has become an automatic reflex to reject any proposal that hints at "totality" and seems to reduce the possibility of free choice. Elsewhere,

the success of thirty-five years of neoliberalism (beginning with the intervention of the Chicago School into South American economies) can be measured by the degree to which planning of any kind has come to be seen by the public as necessarily antidemocratic and an impediment to the glorious freedom of the consumer subject. One struggles to imagine even small steps, such as the possibility of any national government ever again increasing taxes, which is to say, increasing their ability to attend to collective needs. Taxation has become an evil of which everyone is frightened: perversely, we seem to fear taxes more than the end of the environment. Even if we are living its end now, we seem to prefer to cast it away into the future, into that nebulous space where somehow, things will "work out" on their own.

The immediate political challenge is of course how to make rational futurism into the guiding discourse of our oil futures. It is here that criticism of the other three narratives can be productive. But there must also be an insistence on the necessity of planning, for the present and for the future, in new ways. To the typical rejoinder—that is, that an idea like rational futurism is unworkable, irrational, or against human nature—the left must point to the irrationality of oil capital, its multiple failures and its historicity. There is a desperate demand for new visions that would reintroduce hope into politics and social life. The way forward is not to paint dreamy visions of a socialist future in which everything is resolved all at once by a miraculous shift in the valence of the current system. Rather, it is by emphasizing the problems and breakdowns that are appearing in the complex systems that sustain human life—systems of information, transportation, sewage, food and fuel—and addressing these with all the knowledge and insight that we have, that we will be able to begin to move people toward a view of the future that depends not on an eternal war of all against all, or the disaster of the end of nature, or even the ruthless continuation of capitalism, but on collective human ingenuity, wisdom, and hope. Rational futurism is our best chance and we should seize it now.

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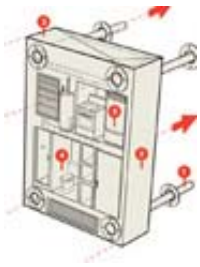

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