"The New Topographics, Dark Ecology, and the Energy Infrastructure of Nations: Considering Agency in the Photographs of Edward Burtynsky and Mitch Epstein from a Post-Anarchist Perspective"

Michael Truscello
September 6, 2012

To Cite this Article:

Truscello, Michael. "The New Topographics, Dark Ecology, and the Energy Infrastructure of Nations" Imaginations 3:2 (2012): Web (date accessed) 188-205. DOI: 10.17742/IMAGE.sightoil.3-2.11

To Link to this article:

http://dx.doi.org/10.17742/IMAGE.sightoil.3-1.11

THE NEW TOPOGRAPHICS

DARK ECOLOGY, AND THE ENERGY INFRASTRUCTURE OF NATIONS: CONSIDERING AGENCY IN THE PHOTOGRAPHS OF EDWARD BURTYNSKY AND MITCH EPSTEIN FROM A POST-ANARCHIST PERSPECTIVE

MICHAEL TRUSCELLO

Edward Burtynsky's aesthetic and the New Topographic aesthetic from which it derives, I argue, should not be seen as apolitical but rather as traces of an empire in ruins and a sociality to come; that is, by employing a post-anarchist analysis, I demonstrate how Burtynsky's photographs in his recent collection *Oil,* and Mitch Epstein's images from *American Power*, produce an aesthetic of what Yves Abrioux calls "intensive landscaping," or "landscaping as style, as the promise of a social spacing yet to come" (264). What Burtynsky and Epstein accomplish in their photographs related to energy in particular is "to invent relations, rather than assert ideological or cultural control" (ibid.); the place of energy extraction and transport becomes not a self-contained striation of ecological degradation, but a "place of passage," to use Deleuze and Guattari's terminology, a depiction of wildness and civilization in contact, assembled and reformulating the landscape into something other. The aesthetic under consideration has much in common with Timothy Morton's "dark ecology" and Stephanie LeManager's "feeling ecological," theories that attempt to understand the affective connections between the infrastructure of oil capitalism and ecology ("Petro-Melancholia" 27).

Je propose dans cet article que l'esthétique d'Edward Burtynsky, de même que la nouvelle esthétique topographique dont elle est issue, sont les traces d'un empire en ruines qui invite à un nouveau type de sociabilité plutôt qu'à une lecture apolitique. À l'aide d'une approche analytique post-anarchiste, je démontre la manière dont son récent recueil de photos *Oil*, de même que les images de Mitch Epstien dans *American Power*, produisent une esthétique de ce qu'Yves Abrioux appelle « l'aménagement paysager intensif », c'est-à-dire « l'aménagement paysager comme style, comme plan d'espacement social de l'avenir » [Notre Traduction] (264). Burtynsky et Epstein réussissent ainsi à « inventer des relations, au lieu d'affirmer un contrôle idéologique ou culturel » [Notre Traduction]. Par conséquent, l'importance de l'extraction énergétique et du transport se trouve dans leur capacité d'être des « endroits du passage » (terme emprunté à Deleuze et Guattari), les endroits d'une rencontre entre la sauvagerie et la civilisation qui transforment le paysage en quelque chose d'autre. L'esthétique que j'emploie ici a beaucoup à voir avec les théories de « l'écologie obscure » de Timothy Mortons et avec le « sentiment écologique » de Stephanie LeManager. En effet les deux tentent de comprendre les connections affectives entre l'infrastructure du capitalisme pétrolier et l'écologie ("Petro-Melancholia" 27).

[I]t is certain that the state itself needs a hydraulic science… But it needs it in a very different form, because the State needs to subordinate hydraulic force to conduits, pipes, embankments, which prevent turbulence, which constrain movement to go from one point to another, and space itself to be striated and measured, which makes the fluid depend on the solid, and flows proceed by parallel, laminar layers. (Deleuze and Guattari 363)

Empires have a way of coming to an end, leaving behind their landscapes as relics and ruins. (Mitchell 19)

The New Topographics

The New Topographics movement in photography—made famous by the *New Topographics: Photographs of a Man-Altered Landscape* exhibit at the International Museum of Photography at George Eastman House in Rochester, New York in October 1975—broke with the traditional landscape photography of Ansel Adams and Eliot Porter to frame the post-war industrialization of America in aesthetic terms "marked by repetition and isolation," the disappearance of community "in an atmosphere of vacant alienation" defined by suburban sprawl, and a "celebration of directness, emotional remove, and attentiveness to humanity's shaping of the land" (Rohrbach xiv). Curator William Jenkins included in the famous exhibit (reproduced in 2009) photographers Robert Adams, Lewis Baltz, Bernd and Hilla Becher, Joe Deal, Frank Gohlke, Nicholas Nixon, John Schott, Stephen Shore, and Henry Wessel, Jr.. Decades after the seminal exhibit, the New Topographics aesthetic is being reassessed by scholars, and the aesthetic itself remains relevant; for example, the Museum of Contemporary Photography in Chicago hosted an exhibit called "Public Works," which examined contemporary built infrastructure, in the summer of 2011. Above all, and perhaps concomitant with post-1968 cultural theorists who emphasized the micropolitics of everyday life, the New Topographics photographers demonstrated an appreciation for "the altered environments of daily life," something Finis Dunaway sees as "contributing to ecological citizenship by encouraging viewers to form attachments to a broader continuum of sites" (Dunaway 42).

Contrary to earlier forms of landscape photography that situated nature as pristine and untouched by human development, the New Topographics engaged American landscapes as the scarred and decaying byproducts of capitalist exploitation, often vacant spaces for automobility such as parking lots, highways, or gas stations, as in the work of Robert Adams, indicating "the new West's utter dependence upon petroleum and private transportation" (Dunaway 27). The Rochester exhibit's "juxtaposition of abandoned, new, and incomplete structures instills the human-altered landscape with a sense of built-in obsolescence and distinguishes its rapid growth from the natural environment in which it is situated" (Foster-Rice 53). Whether borrowing aesthetic inspiration from commercial real estate photography (Salvesen 81) or aerial photography (Sichel 87), the New Topographics was a photographic style commonly interpreted as apolitical, due to its "flatness, dehumanization, and deception of scale" (Sichel 94). The same complaint has been levied against Canadian photographer Edward Burtynsky, whose manufactured landscapes seem to avoid explicit commentary on the industrial alterations they depict, and often seem to beautify industrial waste and human devastation.

In her review of Burtynsky's *Manufactured Landscapes*, Nadia Bozak writes, "Because Burtynsky systematically aestheticizes industrial civilization's environmental incursions, his images are marked with an almost insentient detachment and lack of critical positioning that can be troubling" (68). Jonathan Bordo asks, "Does such beautification sooth irremediable loss by making human interventions appear like inevitable natural facts?" (94). This essential tension between ecological catastrophe and aesthetic beauty becomes the central dilemma for most viewers of Burtynsky's photographs, what Bordo characterizes as "an ambiguous situation of pondering pictures of ecological devastation while beholding dazzling visual surfaces" (91). Burtynsky's aesthetic and the New Topographic aesthetic from which it derives, I argue, should not be seen as apolitical, but rather as traces of an empire in ruins and a sociality to come; that is, by employing a post-anarchist analysis, I demonstrate how Burtynsky's photographs in his

recent collection *OIL*, and Mitch Epstein's images from *American Power*, produce an aesthetic of what Yves Abrioux calls "intensive landscaping," or "landscaping as style, as the promise of a social spacing yet to come" (264). What Burtynsky and Epstein accomplish in their photographs related to energy in particular is "to invent relations, rather than assert ideological or cultural control" (Abrioux 264). In Burtynsky specifically, the place of energy extraction and transport becomes not a self-contained striation of ecological degradation, but a "place of passage," to use Deleuze and Guattari's terminology, a depiction of wildness and civilization in contact, assembled and reformulating the landscape into something other. Burtynsky himself described the ambivalence of his images:

> I think that's the duality. I think that's what makes the images unstable. I think that's what makes them interesting that they're not kind of used as indictments. . . . Their meaning is not fixed and I think in most really interesting art which does touch upon political bends or whatever. Fixing the meaning then also takes that work and locates it directly in a particular time and so it really doesn't migrate very well into the future once that is considered no longer a threat or an issue, so dies the work. ("Thoughts on Oil")

It is obvious to observers of Burtynsky's photographs that they catalogue ecological devastation. What is often perceived as a beautification of this devastation might also be considered a rhizomatic depiction of an always-incomplete process of becoming post-empire, post-capital, and post-natural; the industrial revolution, after all, "fuelled by coal, oil and gas has resulted in a level of landscape change that is—in both its nature and magnitude—unprecedented in the history of humankind" (Nada and van der Horst 144). The ambivalence provoked by these photos signifies the death of conventional landscape photography and its ossified understanding of nature as a static, pristine construct, a representational form passing into something else. Burtynsky and Epstein depict a post-anarchist associationalism in place of State modalities

of capture and striation, while foregrounding the energy relationships that shape landscapes as the sun sets on the suicidal State.

What is especially compelling about Burtynsky's vision of State capture and striation is that it perceives this passage from the "distant vision" of a State, unlike some "environmentalist" framing of ecological devastation, which often sees "apparatuses of capture" from the vantage of what Deleuze and Guattari call the "close-range" (492) vision of smooth space. That is, Burtynsky's photographs see State modalities "like a State," like the cadastral maps that produced the "synoptic view of the state" (Scott 39), and this perspective is unnerving for many viewers, especially those who do not identify with the optical space of the State. Absent are the intimate portraits of oil-soaked birds, dislocated indigenous communities, or tattered corpses that normally signify in the visual register of the social justice jeremiad the criminal machinations of Big Oil. Instead of witnessing industrial evisceration from the intimate space of the indignant observer, Burtynsky complicates the observer's relationship to agency in the Age of Oil by foregrounding the scale, technological complexity, and almost mythical ubiquity of petroculture. Absent is the bilateralism of earnest environmental portraiture, the simplistic agential dualism that pits 'people' against Big Oil. Instead, Burtynsky offers a vision of a distributed agency, in which the "unstable cascade" (Bennett 457) of intentionalities resists a linear cause and effect in favour of depicting objects produced by flows of energy, material combinations, and "the conjoined effect of a variety of kinds of bodies" (454), an ontological reality that seems particularly noteworthy for industrial nations built on vast and complex technological infrastructures with extensive historical, political and environmental legacies.

State Infrastructure

The modern State form co-evolved with the material capacities of infrastructure, massive hydraulic processes that could generate and transfer electricity, excavate waste, and couple mobility with communication. "Between 1880 and 1950 modern nation states emerged

TRUSCELLO

as great territorial 'containers' with growing powers over many domains," note Graham and Marvin (73). Within this context, infrastructure was widely perceived as the cohesive assemblage for a sense of national identity, and "infrastructure policies were the central way in which national states engaged in shaping capitalist territorial organization" (74). Some of the most notable infrastructure projects of this period include "the Nazis' *Autobahn* network, the electrification of the Ukraine and the Soviet Union, the New Deal regional projects of the Tennessee Valley and the national highway programme in the United States" (77). These historical touchstones conform to Deleuze and Guattari's definition of State territorialization:

> One of the fundamental tasks of the State is to striate the space over which it reigns, or to utilize smooth spaces as a means of communication in the service of striated space. It is a vital concern of every State not only to vanquish nomadism but to control migrations and, more generally, to establish a zone of rights over an entire "exterior," over all the flows traversing the ecumenon. If it can help it, the State does not dissociate itself from a process of capture of flows of all kinds, populations, commodities or commerce, money or capital, etc. There is still a need for fixed paths in well-defined directions, which restrict speed, regulate circulation, relativise movement, and measure in detail the relative movements of subjects and objects. (Deleuze and Guattari 385-386)

James C. Scott traces this striation of space in early modern Europe primarily in the form of cadastral maps used for the segregation and taxation of land, among other State functions, in his book *Seeing Like A State*. Beginning with German scientific forestry, in which the "uniform forest was intended to facilitate management and extraction" (18), Scott demonstrates the translation of the State's synoptic vision from forestry to other forms of striation including taxation.

For the purposes of taxation and conscription, and in conjunction with the emergence of the modern State, cadastral maps translated the complexity of phenomenal flows into simplistic abstractions, becoming, to use Mark Halsey's phrase from another context, "a machine of axiomisation," something that "expunges the world of pre-formed things, the world of haecceities, the world composed only of rhythms and of bodies without organs, and in its place substitutes the certainties of Royal science and (il)logics of capital" (Halsey para. 12). Scott writes:

> The crowning artifact of this almighty simplification is the cadastral map. Created by trained surveyors and mapped to a given scale, the cadastral map is a more or less complete and accurate survey of all landholdings…. The cadastral map and property register are to the taxation of land as the maps of tables of the scientific forester were to the fiscal exploitation of the forest. (Scott 36)

The cadastral map, this "machine of axiomisation" or modality of State capture, not only "ignored anything lying outside its sharply defined field of vision" (Scott 47), it also produced a specific aesthetic: "The visual sign of the well-managed forest, in Germany and in the many settings where German scientific forestry took hold, came to be the regularity and neatness of its appearance" (18). Similar to the symmetry and synthetic appearance of the managed forest, landscapes under the synoptic vision of cadastral maps exhibit a quilted calculus primarily visible from an elevated vantage, "a God's-eye view, or the view of an absolute ruler" (57). The reconstruction of Paris by Baron Haussmann from 1853 to 1869 exhibited the same logic as the scientific management of old-growth forests, and in the city "the aboveground order… facilitates its underground order in the layout of water pipes, storm drains, sewers, electric cables, natural gas lines, and subways—an order no less important to the administration of a city" (56-57). Thus, submersed infrastructure functions as a supplementary force of relations with 'aboveground' striations, the repressed material strata of the *flanêur*.

Edward Burtynsky's OIL

> I began to think about oil itself: as both the source of energy that makes everything possible, and as a

Fig. 1 Edward Burtynsky, *Oil Fields #22, Cold Lake, Alberta, Canada, 2001*

Fig. 2 Edward Burtynsky, *Oil Fields #27, Bakersfield, California, USA, 2004*

source of dread, for its ongoing endangerment of our habitat. (Burtynsky, *OIL*)

"The cadastral map is very much like a still photograph of the current in a river," writes Scott (46), using a simile that effectively expresses the paradox of Burtynsky's photography about oil. The cadastral map captures innumerable social processes in a state of becoming and occludes their very transitive properties for the administrative logic of the State. Burtynsky's photographs often provide a sense of stasis where enormous sociotechnical apparatuses are operating in conjunctural tension. A perfect example of this is *Oil Fields #22* (Fig. 1), taken near Cold Lake, Alberta. The image, which opens his *OIL* collection, captures pipelines parsing a forest in a nondescript patch of wilderness. The aboveground pipelines travel from outside the left frame to beyond the horizon near the centre of the image, in a winding path that evokes the natural contours of a river rather than the mechanical

trajectory of something constructed. And yet this river of oil is still, the trees are erect as if there is no wind, and, typical of Burtynsky and the New Topographics, no human activity is visible. Despite an enormous flow of oil across the landscape, we detect no motion at all. The effect resembles what Shannon and Smets suggest should be the architectural ambition of infrastructure, a blending of landscape and infrastructure: "Once married with architecture, mobility, and landscape, infrastructure can more meaningfully integrate territories, reduce marginalization and segregation, and stimulate new forms of interaction. It can then truly become 'landscape'" (Shannon and Smets 9). Their understanding of the future of infrastructure is not to reduce the amount of it, but rather to integrate it with landscape in such a way that the two become a newly marked assemblage of 'landscape' proper; Burtynsky's *Oil Fields #27* (Fig. 2) accomplishes something like this effect, in which the latticework of oil infrastructure is

scarcely discernible from the rolling hills of Bakersfield, California.

To "reduce marginalization and segregation" sounds equally egalitarian and possessed of the same sameness that drives the administering arm of the synoptic State. "Landscape and infrastructure merge and movement corridors are (re)worked as new vessels of collective life," in the words of Shanon and Smets (9). An image such as *Oil Fields* #22 seems to take this approach to the oil pipelines, at least in the absence of more obvious indicators of critique, and one could therefore imagine this picture on the wall of an oil industry executive's office, as easy as one could imagine it hanging in the same room as the most ardent Greenpeace activists.

 The stasis of the oil delivery apparatus and its river-like curvature connote ambivalence about *what is really happening*, an ambivalence registered above by the reviewers of Burtynsky's work. We could note, for example, that the more than 370,000 km of pipelines in Alberta present a number of significant threats to the provincial environment: potential contamination of land and water from spills; loss and fragmentation of wildlife habitat and natural vegetation; loss and compaction of soils; reduced availability of agricultural, prairie and forested areas; loss of historical resources such as archeological sites; and stream sedimentation (Government of Alberta). At the same time, oil is implicated in a host of social benefits (medical advances, certain forms of mobility, warmth, agricultural production, etc.) and devastation (militarism, pollution, toxification of water and soil, agriculture—again, etc.), and complex, distributed forms of agency make it difficult to create a binary division of sinners and saints, malevolent demand and benevolent supply, those who are solely responsible for the petrocultural apparatus and those stand entirely outside of it. Most notably absent from Burtynsky's oil images, and yet most aggressively affected by capitalist resource extraction, are the First Nations communities of Northern Alberta. This absence contributes to the ambivalent tone of his photographs, by visually displacing the most obviously aggrieved subjects of oil capitalism; their presence would make it easier for

viewers to identify a political trajectory of accusation. But such a trajectory would also ignore the distribution of complicity with the atrocities of oil capitalism. By expanding our understanding of distributed human and non-human agencies in "petromodernity" (LeManager, "The Aesthetics of Petroleum" 60), we can better recognize the shifting intensities of petrocultural assemblages.

The juxtaposition of the forest and the pipelines in *Oil Fields* #22 recalls what Deleuze and Guattari famously described as the rhizomatic multiplicity that contrasted with the hierarchical structure of the tree, associated with what they called arborescent thought—"thought, which like a tree, judges the world from one fixed point (roots, Descartean rationality), or requires that thinking proceed in only one direction (scientifically, dialectically)" (Halsey para. 1). Burtynsky's collection *OIL* thus begins with an image of trees, a metaphor used by Deleuze and Guattari to describe arborescent thought. However, the structure of the pipeline system has also been compared with a tree:

> The pipeline system is organized like a tree. Small collector pipelines in the oil field, called flow lines, are the fine roots of the system. They gather crude oil from many wells and bring it to the field processing station. Somewhat larger pipes carry the oil to the terminus of a main-line pipeline, which supplies refineries hundreds of miles away; this is the trunk of the tree. The products of the refinery are then distributed through another system of main-line pipes, which divide into smaller and smaller branches until they reach distribution depots—the leaves of the tree. (Hayes 162)

The entire apparatus of oil extraction, refinement, and distribution perfectly encapsulates the hydraulic science of the State, its hierarchical, arborescent thought that captures flows in a constant struggle with rhizomatic, open multiplicities. Burtynsky's *OIL* begins not with an image of oil extraction or combustion, but with an image of trees and a tree-like system of pipelines, the image of Royal science, arborescent thought.

Fig. 3 Edward Burtynsky, *Oil Fields #19a, Belridge, California, USA, 2003*

The rows of "nodding donkey" oil wells in Belridge, California, depicted from an oblique angle in Burtynsky's *Oil Fields #19a* (Fig. 3), could easily be mistaken for an abandoned oil patch, if not for the two devices in the foreground visibly blurred because they are operating. Much like the pipelines in *Oil Fields #22*, the wells depicted in *Oil Fields #19a* encode the ambiguous agencies of modern industrial infrastructure. The oblique angle separates the image from the conventional geometry of the cadastral map, but only the two wells in the foreground appear to be moving. No humans are visible. Is this a dried up oil patch, or the beating heart of the industrial society? Burtynsky allows the viewer to contemplate the space of passage between the two, between the dying empire and the vision of sociality to come, by isolating the materiality of petroculture from a detached and distant perspective. Instead of bisecting a forest, which might commonly connote forms of biodiversity, the wells depicted here are located in the desert, a landscape frequently associated with hostility to

life, and, in the context of oil, with the crude oil deposits of the Middle East. A combination of elements in this image suggests psychological tension and alienation: the oblique angle, god's-eye view, desert setting, and absence of human activity. Burtynsky's familiar use of the horizon intimates a mythological scale of production. But where are the people who use the oil, and to what ends do they use it? Is this particular striation of oil wells and transformers, pipes and storage tanks, the beginning or the end of agency, the source of combustible mobility, long distance communication, and petroleum-based cultural products, or the mechanical moans and sighs of an empire reaching exhaustion? Burtynsky does not tell us. Burtynsky described this picture to the CBC, in terms that reflect the associationalist perspective for which I have been arguing: "It's a mosquito drawing blood. It's like we have these pipes into the ground sucking it out and we never really get a chance to see very much of the material itself, but each one of us is almost using it every day" ("Thoughts on Oil").

To understand the materiality of agency in Burtynsky's photography, we can summon the observations of the 'new materialisms' of political theorists such as Jane Bennett, Diana Coole, and Timothy W. Luke, and of critical urbanists including Stephen Graham and Simon Marvin. Prominent strands of materialist cultural studies and urban studies employ the concept of "assemblage" (Anderson and McFarlane 2011; Deleuze and Guattari 1987; McFarlane 2011) in order to understand the distributed agency of urban infrastructure, which is often obscured either by its relative invisibility or by the anthropocentrism of cultural theory. As Jane Bennett writes, "There was never a time when human agency was anything other than an interfolding network of humanity and nonhumanity. What is perhaps different today is that the higher degree of infrastructural and technological complexity has rendered this harder to deny" (463). Oil pipeline or well assemblages, in this context, should not be studied as just the material product of oil company intentions, nor should their construction be understood as either the victory of an oil company or the loss of community resistance (the popular media framing of pipeline debates). Rather,

Fig. 4 Edward Burtynsky, *Oil Refineries #34, Houston, Texas, USA, 2004.*

cultural critics need to examine the "unstable cascade" (Bennett 457) of intentionalities, flows of energy, material combinations, and "the conjoined effect of a variety of kinds of bodies" (454) that are contained within the mass structures of petrocultural landscapes. Assessing the distributed agency of petrocultural assemblages is not an act of becoming an apologist for environmental degradation or colonial racism, but instead recognizes that individuals are "simply incapable of bearing *full* responsibility for their effects" (463). Burtynsky's photography, I wish to suggest, is particularly useful for encouraging a discussion of agency in this manner.

Oil pipelines are but one aspect of oil extraction, transport and use, but they connect the environmental, cultural and health impacts of oil exploration, drilling and extraction with the assemblages of oil transport, refining, and consumption. The spillage of oil is not always the most devastating effect of this process: "The physical alteration of environments from exploration,

drilling, and extraction can be greater than from a large oil spill" (O'Rourke and Connolly 594). Oil refineries, such as the one from Texas depicted in Burtynsky's *Oil Refineries #34* (Fig. 4), "produce huge volumes of air, water, solid, and hazardous waste, including toxic substances such as benzene, heavy metals, hydrogen sulfide, acid gases, mercury, and dioxin" (603). The oil and gas industry in the United States creates more solid and liquid waste "than all other categories of municipal, agricultural, mining, and industrial wastes combined" (594). The transport of oil from its place of extraction occurs by supertankers, barges, trucks, and pipelines; there are now "more miles of oil pipelines in the world than railroads" (598). Typically, these pipelines have "caused disproportionate impacts on low-income and minority communities in the United States and been connected to human rights violations around the world" (602). In other words, perhaps we could view what often lies within Burtynsky's frame as an invitation to contemplate the many associations beyond the frame; in the case of his photographs about oil, the pipelines, wells, and refineries represent passages, associations, transfers of energy beyond the frame. Burtynsky's images do not neglect social, psychological and environmental devastation, so much as they invite consideration of an agency that is multiple and beyond arborescent capture.

Therefore, when we see an image such as *Highway #5* (Figure 5), we might see in this image an aesthetic parallel with *Oil Fields #22*.

In *Highway #5*, tributary lanes of traffic converge into a river of asphalt that extends to the horizon in a seemingly endless bisection of the frame and the built landscape. Like the pipelines in *Oil Fields #22*, the highway bends casually as it drifts toward the horizon; this curvature, again a feature of undomesticated objects, contrasts with the cadastral strips of habitation on either side. In the foreground is a highway that runs parallel with the frame, and in the background lie rolling hills. While the foreground and background portray conventional contrasts of striated and smooth space, the centre of the image features a provocative strip of highway that destabilizes our topographic expectations. The horizon

Fig. 5 Edward Burtynsky, *Highway #5, Los Angeles, California, USA, 2009.*

once again gives the impression that the built landscape continues forever, the hills standing like phantasms on the edge of a dream.

Burtynsky's *OIL* collection is organized to emphasize the ubiquity of oil and, I would argue, the distribution of agency. It is telling that the image of a pipeline opens the collection, and not an image of the point of extraction, refinement, or use; this is a collection about the places of passage. Without that epigraphic image of the pipeline, the rest of the collection would unfold in a more conventional way: the section titles progress from "Extraction and Refinement" to "Transportation & Motor Culture" and "The End of Oil." The last image in the collection, *Recycling #10*, is that of oily footprints in the earth, taken at Chittagong, Bangladesh. The last section of the collection depicts abandoned oil wells, scrap yards with discarded jets and bombers, cars and tires, and the shipbreaking yards in Bangladesh where oil tankers go to die. Obviously, there is a conventional

message here: the culture of oil leaves a footprint, and it is massive and destructive. But the image of the pipelines in the forest that opens the collection suggests we should not read the processes of petroculture as unidirectional and linear, as the obvious passage from extraction to deposit. Instead, consider the absence of human activity in the first and last images of *OIL*. Burtynsky's vision is distinctly materialist, with human activity reduced to a relatively minor presence (in the few photographs devoted to "Motor Culture" and later to "Shipbreaking" and "Recycling"). The diminution of human actors reveals at least two ways in which Burtynsky's photography is consonant with the "materialist turn" in cultural studies: first, his cadastral vision articulates what Patrick Joyce and Tony Bennett call the "muteness" of infrastructural power, the ways in which "infrastructure is a good location for understanding how material powers can to varying extents operate outside human consciousness and language," the durable power of "objects and processes," "this capacity to be left to operate by themselves" (10); and second, Burtynsky's relative resistance to the "close range" of smooth space suggests the primary concern of his photographs about oil is "less the ways in which objects become effective by being integrated into the subjective world of human consciousness, and more the difference they make in their own right as a consequence of their specific material properties considered relationally" (Joyce and Bennett 5).

Mitch Epstein's American Power

I wanted to photograph the relationship between American society and the American landscape, and energy was the linchpin…. Energy—how it was made, how it got used, and the ramifications of both—would therefore be my focus. (Epstein, "Afterword")

While Edward Burtynsky tells us he had his "oil epiphany" in 1997, American photographer Mitch Epstein embarked on a form of what he calls "energy tourism" in 2003 after witnessing the evacuation of an Ohio town from environmental contamination. For five years, Epstein catalogued the various forms of

Fig. 6 Mitch Epstein, *Amos Coal Power Plant, Raymond City, West Virginia 2004*

Fig. 7 Mitch Epstein, *BP Carson Refinery, California 2007*.

American energy production and their consequences. His comments in the Afterword of *American Power* reflect a realization about energy that emphasizes the current moment as one of passage:

> About a year into making this series of pictures, I realized that power was like a Russian nesting doll. Each time I opened one kind of power, I found another kind inside…. But now—while America teeters between collapse and transformation—I see it differently: as an artist, I sit outside, but also within, exerting my own power.

Epstein's photographs share in common with Burtynsky's this sense of living between a dying empire and the sociality to come. They also share an understanding of being implicated as artists in what Imre Szeman calls "oil capitalism" (Szeman 806). Many of Epstein's images, such as *Amos Coal Power Plant* above (Fig. 6), juxtapose the settings of the New Topographics, in documentary form, with the types of energy that either

make habitation possible or constitute the industry for that locale. In *Amos Coal Power Plant*, a lower-middle-class habitat shares the frame with an apparitional power plant; the connection of everyday life with what in Burtynsky's images is often a distant and secluded phenomenon—the production of energy—foregrounds the associative ethos of Epstein's photo, and the lush, saturated conceptualism of the habitat makes the power plant seem even more discordant by contrast. Epstein's documentary proficiency and almost surreal conceptualism creates an effect much like the ambiguity of Burtynsky's cadastral images: something either banal or deeply corrosive acquires an aesthetic sheen that troubles the viewer's desire to condemn in simple binarisms the social and environmental causes and effects that produced this scene. Whereas Burtynsky prefers the cadastral spatiality of the distant view and the frequently unseen materials of petroculture infrastructure, Epstein visits many of the everyday spaces and architectures typical of the New Topographics. Epstein captures the associative qualities of energy production and transfer

Fig. 8 Mitch Epstein, *Poca High School and Amos Coal Power Plant, West Virginia 2004*

not by gesturing beyond the frame, as Burtynsky often does, but by filling the frame with uncommon objects within this transfer: the perforated American flag that adorns the refinery in *BP Carson Refinery* (Fig. 7), for example, or the belching stacks of the Amos coal power plant observing a high school football practice in *Poca High School and Amos Coal Power Plant* (Fig. 8).

Alien Capitalism and the Dark Ecology of Burtynsky and Epstein

The content of Burtynsky and Epstein's photographs invites an associationalist perspective on the relationships between energy and landscapes. More specifically, Burtynsky and Epstein evoke some of the implications of Timothy Morton's "dark ecology": in the way they "linger in the shadowy world of irony and difference" (Morton, *The Ecological Thought* 17), in the way their images are "dark but not suicidal" (100), and in the way they foreground what Morton calls "hyperobjects," materials that will "far outlast current

social and biological forms" (130). In *Ecology Without Nature*, Morton declares that his work is "about an 'ecology to come,' not about no ecology at all" (6). The idea of 'nature', so explicitly foregrounded in the photography of Ansel Adams and reconfigured in the New Topographics, "will have to wither away in an 'ecological' state of human society," says Morton (1). "Substantialist images of a palpable, distinct 'nature' embodied in at least one actually existing phenomenon (a particular species, a particular figure)," claims Morton, "generate authoritarian forms of collective organization" (17). Morton's project is to deconstruct "nature" to the point it no longer registers, resulting in what he calls "the ecological thought," the "thinking of interconnectedness" and a form of thinking "that is ecological" (*The Ecological Thought* 7).

The concept of dark ecology is a "melancholy ethics" (*Ecology Without Nature* 186) that "preserves the dark, depressive quality of life in the shadow of ecological catastrophe" (187). Morton believes "we can't mourn for the environment because we are so deeply attached to it—we *are* it" (186); instead, deep ecology is "saturated with unrequited longing," "a politicized version of deconstructive hesitation or aporia" (186). In this article, I have suggested repeatedly that Burtynsky and Epstein represent this kind of ambivalence in their photographs, even in the face of certain catastrophe; however, some might challenge this reading of the photographs, perhaps not seeing the same ambivalence or irony. To this objection, I would promote dark ecology as a more ethical response to these photographs than the perspective that sees only arborescent capture; in other words, as Morton writes, "We should be finding ways to stick around with the sticky mess that we're in and that we are, making thinking dirtier, identifying with ugliness, practicing 'hauntology' (Derrida's phrase) rather than ontology" (188). Burtynsky's *SOCAR Oil Fields #4* (Fig. 9) exemplifies "the sticky mess that we're in," pausing at an abandoned oil field in Baku, Azerbaijan, to see its haunted reflection in a pool of dirt and oil, proof that not only does rust never sleep, it also has nightmares. Dark ecology also promotes lines of flight that interrupt the intersection of *nation*

and *nature*, cadastral map and the ecological thought. "Later in the modern period," Morton writes in *Ecology Without Nature*, "the idea of the nation-state emerged as a way of going beyond the authority of the monarch. The nation all too often depends upon the very same list that evokes the idea of nature" (15). Deconstructing the synoptic view of the State conjoins with the ecological thought, when contemplating and practicing the ecology to come.

Nowhere in these collections of photographs does one find an image that intimates a possible return to some form of pristine natural world; instead, viewers must confront the toxic future of oil refineries, hundreds of thousands of kilometres of pipelines, and other hyperobjects of petromodernity. Morton compares these hyperobjects, such as the plutonium waste from nuclear reactors, to the "acidic blood of the Alien in Ridley Scott's film" (130). Indeed, in conjunction with Rob Nixon's concept of "slow violence," Morton's hyperobjects begin to articulate what I would call *alien capitalism*, an economic system whose materiality kills while dying, unleashes almost unimaginable toxicity even as its purpose or functionality wanes. In this sense, *the sociality to come* is always already toxic. Certainly, Burtynsky and Epstein do not try to avoid the *toxicity to come* in their haunted images.

In addition to Timothy Morton, the work of Stephanie LeManager speaks to the aesthetics of ecology and energy in the work of Burtynsky and Epstein. Burtynsky and Epstein provide an aesthetic experience of energy infrastructure that presents some of its associations with landscape but does not impose a solution to the problem of environmental degradation (there are no images of wind farms juxtaposed with oil refineries, for example). There are, however, several impressions of everyday life under oil capitalism: a high school football team practicing, a busy freeway, the Talladega Speedway, a McDonald's, a gas station. LeManager rightly identifies the relationship between "ecological narrative" ("Petro-Melancholia" 26) and the embodied memories of life under petromodernity, moving forward:

Fig. 9 Edward Burtynsky, *SOCAR Oil Fields #4, Baku, Azerbaijan, 2006*

The petroleum infrastructure has become embodied memory and habitus for modern humans, insofar as everyday events such as driving or feeling the summer heat of asphalt on the soles of one's feet are incorporating practices, in Paul Connerton's term for the repeated performances that become encoded in the body. 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. ("Petro-Melancholia" 26)

One way to decouple "human corporeal memory from the infrastructures that have sustained it" is, as Epstein does, to depict explicit conjunctions of energy production and everyday life, such as a coal-fired power plant looming over a lower-middle-class home and yard, or that same power plant spectating at a high school football practice. The juxtaposition of toxic energy production and everyday life performs a kind

of defamiliarization that disrupts the quotidian affect associated with petromodernity. Burtynsky often isolates energy production from human cultures; however, his images of energy production, as noted above, depict the "sticky mess" we are in, what LeManager calls the "humiliating desire and dependency of the human visa-vis non-human actors" ("Petro-Melancholia" 27). LeManager, in a nod to Morton, calls this "feeling ecological," and it "need not be pleasant" (27).

Conclusion: Post-Anarchist Ecology and the Synoptic View

The photography of Edward Burtynsky and Mitch Epstein provides a series of cultural objects with which to consider relationships between agency and energy in oil capitalism. As demonstrated above by reference to the (largely Marxist) 'material turn' in cultural studies and the poststructuralist associationalism of Deleuze and Guattari, the foregrounding of infrastructure in the context of oil capitalism in the photographs of Burtynsky and Epstein offers an occasion and a visual lexicon for interrogating the "cascade of intentionalities" often unseen in everyday life. Agency, once explored through a materialist and associationalist lens, appears distributed among human and non-human actors, and the images of oil wells, pipelines and power plants represent temporary stabilizations of agency observable from the cadastral perspective of the State. After close readings of various photographs, I now wish to explore some of the consequences of this theory of agency; in particular, I advocate for a *post-anarchist ecology*, in which distributed agency is one component.

Post-anarchism is the term given to forms of poststructuralist and postmodern anarchism. Most of these ideas and practices emerged from the May 1968 uprisings in France, and were given new public visibility in the context of the post-Seattle anarchist milieu. As Süreyyya Evren writes in the introduction to *Post-Anarchism: A Reader*, "post-anarchism is better understood as an anarchist theory first and foremost rather than a post-structuralist theory. At the end of the day, it is an anarchism, it is not a new kind of post-structuralism" (Evren 10). In particular what Deleuze

and Guattari call 'geophilosophy'—described by Patrick Hayden as an "attempt to formulate a mode of thinking in association with, and as the affirmation of, the diversity and multiplicity of the continuous becomings of a fluctuating natural reality" (29)—represents a post-anarchist form of ecology that is anti-essentialist, anti-humanist, and decentralist. The basic question of geophilosophy, for the current moment of ecological crises brought on primarily by oil capitalism, is the following: "How do Deleuze and Guattari help us rethink our ecological crises beyond the impasses of State-sanctioned resource exploitation and reactive environmentalism?" (Chisholm para. 1). This impasse is, I think, a source of ambivalence commonly found in critiques of Burtynsky's work.

As Bernd Herzogenrath explains,

> As a conceptualizing machine, [Deleuzian philosophy] can provide ecology with concepts that complement its scientific prospects or 'reprocess' its inherited philosophical notions. Deleuzian concepts are 'ecological' in the sense that they do not address the essences of things, but the dynamics of events and the becomings that go through them" ("Introduction" 4).

The philosophy of becoming advocated by Deleuze (and Guattari) allows for the "active, unfinalized flux of constantly circulating relations, interactive encounters, and shared transformations" among the Earth's "natural-social habitats" (Hayden 31), while simultaneously it offers political ecology a consideration of "which concepts, practices, and values best promote the collective life and interests of the diverse modes of existence inhabiting the planet" (34). In this sense, a post-anarchist ecology works against the systematizing and categorizing of conventional imperialist science.

Deleuze and Guattari are unique in post-structuralist circles by their promotion of a form of naturalism. "Deleuze's naturalism is not an essentialist theory," notes Hayden, "nostalgically seeking to return to some pristine nature that is an object apart from human existence, conceptualization, and intervention" (35).

Instead, Deleuze promotes "a type of naturalism that highlights the diverse interconnections between human and nonhuman modes of life, in such a way as to provide some overlooked philosophical resources for integrating ethical and political considerations with ecological concerns, while resisting the reductive temptation to turn nature into a static metaphysical foundation" (24). This form of naturalism, what I am calling a post-anarchist ecology, stands in contrast to some prominent thinkers in the anarchist tradition because it rejects both "a static metaphysical foundation" (including a static understanding of "human nature") and forms of speciesism that have contaminated Left thinking, as Steven Best writes, "from Kropotkin and Marx to Bookchin and beyond" (Best 190).

A post-anarchist ecology emphasizes the micropolitical over the macropolitical, but not to the exclusion of the macropolitical. Hayden argues that "for ecopolitical activism to engage itself effectively, it must steer clear of universalized abstractions and carefully study the specific needs and alternative possibilities within localized situations" (34). The global scale of the ecological crisis has led some to demand a global solution; however, "while existing ecological problems undoubtedly present a danger to the entire planet, a micropolitical focus on the particular needs and interests of diverse local habitats and inhabitants in light of the available knowledge of ecological conditions will perhaps better contribute to the creation of effective ecopolitical interventions than will a focus solely from a unitary, large-scale framework" (35). This mode of thought is also consistent with the anarchist preference for direct action and aversion to bureaucratic and institutional structures. Any global response to environmental crises is more likely to produce arborescent power structures than it is to produce open multiplicities. Deleuzean micropolitics "is about critical emancipation, not necessarily *from* systems, but *towards* other types of open systems" (Cato and Hillier 11). For centuries, state capitalism has killed indigenous ways of existing and non-human species, to the point of mass extinction in which we now live. The prolonged emancipation from this rule of arborescent thought will require an unprecedented proliferation of "open systems" attuned to "diverse local habitats and inhabitants," not a one world order of resistance.

Finally, a post-anarchist ecology could embrace Deleuze and Guattari's concept of machinic assemblages, not only for the epistemological and ontological advantages of a process philosophy that emphasizes relations over essences, but also to avoid the limitations of debates over what kinds of technology are appropriate for an anarchist politics (for a brief discussion of anarchism and technology, see Truscello 2011). Herzogenrath summarizes the advantage of the concept of the "machine" in Deleuze and Guattari, which concerns connections rather than essences: "Their model [of machines] also affords a single mode of articulating developmental, environmental, and evolutionary relations within ecological systems, and makes room for a conceptualization of a general, non-anthropomorphic affectivity within dynamic systems" ("Nature|Geophilosophy|Machinics|Ecosophy" 4). From this perspective, a post-anarchist ecology concerns itself with "resonances, alliances and feedback loops between various regimes, signifying and non-signifying, human and non-human, natural and cultural, material and representational" (5). The resulting philosophy avoids outmoded invocations of the technology "neutrality" thesis and Manichean compartmentalizations of "good" and "bad" technology:

> [Deleuze and Guattari's] "machinism" avoids both technophilia and technophobia, its guiding principle being that of the invention of possibilities of life. For Deleuze and Guattari values are perspectival, and hence unavoidably allied to what deep ecologists might deem "speciesism." However, Deleuze and Guattari's problematization of the concept of the human ensures that their perspectivism is not anthropocentric, at least in the conventional sense of the term. (10)

Instead, as Mark Halsey notes, the "function of machines" in Deleuze and Guattari "is to break and redirect flows—flows of capital, wood, metal, genes, friendship, knowledge, work and so forth" (Halsey 40).

In other words, the machinic assemblages of Deleuze and Guattari refer to the "*processes* which give to the earth its discursive qualities and quantities (the effects levied by abstract machines of coding) and which, on occasion, implode the logic underpinning such qualities and quantities (the effects levied by abstract machines of absolute decoding)" (40). How machines connect flows of desire and produce habit-forming potentials is never simply a question of *doing the right thing* for the environment, obviously, and something always escapes machinic encoding. But at least Deleuze and Guattari offer a perspective that always seeks to proliferate the "invention of possibilities of life."

Halsey argues that this perspective forces the "critical question: what would it mean to cease mapping the earth? Alternatively, what might it mean to map earth according to, for instance, a becoming-eagle, a becoming-fish, a becoming-redwood, a becoming-worm, or a becoming-river? This is what Deleuze and Guattari demand of us—that we move beyond the bodies, lexicons and modes of envisioning traditionally associated with late capitalist subjectivities in order to develop and inhabit the worlds of others" (45). Burtynsky reminds us of the cadastral legacy of the synoptic State, but as a place of passage. As Halsey concludes, "What else are environmental problems other than the visible and audible result of attempts to constitute various portions of earth as a unity in spite of its being a multiplicity? The challenge, it would seem, is to develop a lexicon which does the least violence to the nuances of each (socio-ecological) event" (51). In this context, the photographs of Burtynsky and Epstein effectively invite viewers to see oil infrastructure and human interaction with it as a multiplicity with distributed agency. Rather than depict alternatives to oil capitalism, Burtynsky and Epstein show us places of passage in the infrastructural web of human and non-human actors; they foreground the transitional, associative, and conjunctive debris of petroculture. They show us we are becoming something other, but do not dictate the terms on which this passage shall be accomplished or its destination.

The transition from post-empire to the *sociality to come*

has, as a result of the material infrastructure of the petromodern State form, more than simply ideological possibilities: the gathering storms of climate crises, toxic hyperobjects, and rapid resource depletion, all intimately connected to the infrastructure of petrodmodernity, represent an assemblage of material conditions that threaten the survival of the human species. Unlike liberal and progressive responses to oil capitalism, which often propose technological fixes or global institutional arrangements, a post-anarchist ecology is better equipped to describe and respond to the *longue durée* of petromodern infrastructure, the 'slow violence' of its principal assemblages, and the suicidal State form of hydraulic sciences that are slowly but surely striating the escape routes.

Works Cited

Abrioux, Yves. "Intensive Landscaping." *Deleuze/Guattari & Ecology*. Ed. Bernd Herzogenrath. London: Palgrave Macmillan, 2009. 251-265. Print.

Bennett, Jane. "The Agency of Assemblages and the North American Blackout." *Public Culture* 17.3 (2005): 445-465. Print.

Best, Steven. "Rethinking Revolution: Total Liberation, Alliance Politics, and a Prolegomena to Resistance Movements in the Twenty-First Century." *Contemporary Anarchist Studies: An Introductory Anthology of Anarchy in the Academy*. Ed. Randall Amster, Abraham DeLeon, Luis A. Fernandez, Anthony J. Nocella, III, and Deric Shannon. New York: Routledge, 2009. 189-199. Print.

Bordo, Jonathan. "The Wasteland—An Essay on *Manufactured Landscapes*." *Material Culture Review* 63 (Spring 2006): 89-95. Print.

Bozak, Nadia. "Manufactured Landscapes." *Film Quarterly* 62.2 (Winter 2008/2009): 68-72. Print.

Burtynsky, Edward. *OIL*. London: Steidl, 2011. Print.

---. "Thoughts on Oil." CBC. Web. August 11, 2012.

<http://www.cbc.ca/nl/features/burtynskyoil/thoughts_on_oil.html>.

Cato, Molly Scott, and Jean Hillier. "How Could We Study Climate-Related Social Innovation? Applying Deleuzean Philosophy to the Transition Towns." *Environmental Politics* 19.6 (2010): 869-887. Print.

Chisholm, Dianne. "Rhizome, Ecology, Geophilosophy (A Map to This Issue)." *Rhizomes* 15 (Winter 2007). Web. July 24, 2012.

Coole, Diana. "Rethinking Agency: A Phenomenological Approach to Embodiment and Agentic Capacities." *Political Studies* 53.1 (2005): 124-142. Print.

Coole, Diana H., and Samantha Frost. *New Materialisms: Ontology, Agency, and Politics*. London: Duke University Press, 2010. Print.

Deleuze, Gilles, and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987. Print.

Dryansky, Larisa. "Images of Thought: The Films of Antonioni and Godard, and the New Topographics Movement." *Reframing The New Topographics*. Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 107-120. Print.

Dunaway, Finis. "Beyond Wilderness: Robert Adams, *New Topographics*, and the Aesthetics of Ecological Citizenship." *Reframing The New Topographics*. Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 13-44. Print.

Epstein, Mitch. "Afterword." *American Power*. Ed. Susan Bell and Ryan Spencer. Gottingen: Steidl Publishers, 2009. n.pag. Print.

Evren, Sureyyya. "Introduction." *Post-Anarchism: A Reader*. Ed. Sureyyya Evren and Duane Rousselle. London: Pluto Press, 2011. 1-11. Print.

Foster-Rice, Greg. "'Systems Everywhere': *New Topographics*, and the Art of the 1970s." *Reframing The New Topographics*. Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 45-70. Print.

Foster-Rice, Greg, and John Rohrbach, eds. *Reframing The New Topographics*. Chicago: The Center for American Places at Columbia College, 2010. Print.

Government of Alberta. "Pipelines." *Alberta Environment and Sustainable Resource Development*. Web. March 3, 2012. <http://environment.alberta.ca/02260.html>.

Graham, Stephen, and Simon Marvin. *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*. New York: Routledge, 2001. Print.

Halsey, Mark. "Deleuze/Guattari and the Ada Tree." *Rhizomes* 15 (Winter 2007). Web. July 25, 2012.

Halsey, Mark. "Ecology and Machinic Thought: Nietzsche, Deleuze, Guattari." *Angelaki* 10.3 (December 2005): 33-54. Print.

Hayden, Patrick. "Gilles Deleuze and Naturalism: A Convergence with Ecological Theory and Politics." *An [Un]Likely Alliance: Thinking Environment[s] with Deleuze/Guattari*. Ed. Bernd Herzogenrath. Newcastle: Cambridge Scholars Publishing, 2008. 23-45. Print.

Hayes, Brian. *Infrastructure: A Field Guide to the Industrial Landscape*. New York: W.W. Norton & Co., 2005. Print.

Herzogenrath, Bernd. "Introduction." *An [Un]Likely Alliance: Thinking Environment[s] with Deleuze/Guattari*. Ed. Bernd Herzogenrath. Newcastle:

Cambridge Scholars Publishing, 2008. 1-22. Print.

---. "Nature|Geophilosophy|Machinics|Ecosophy." *Deleuze/Guattari & Ecology*. Ed. Bernd Herzogenrath. London: Palgrave Macmillan, 2009. 1-22. Print.

Joyce, Patrick, and Tony Bennett. "Material powers: Introduction." *Material Powers: Cultural Studies, History and the Material Turn*. Ed. Tony Bennett and Patrick Joyce. New York: Routledge, 2010. 1-22. Print.

LeManager, Stephanie. "The Aesthetics of Petroleum, after *Oil!*" *American Literary History* 24.1 (Spring 2012): 59-86. Print.

---. "Petro-Melancholia: The BP Blowout and the Arts of Grief." *Qui Parle* 19.2 (Spring/Summer 2011): 25-56. Print.

Mitchell, W.J.T. "Imperial Landscape." *Landscape and Power*. 2nd ed. Chicago: University of Chicago Press, 2002. 5-34. Print.

McFarlane, Colin. "Assemblage and Critical Urban Praxis: Part One." *City* 15.2 (2011): 204-224. Print.

Morton, Timothy. *Ecology Without Nature: Rethinking Environmental Aesthetics*. Cambridge, MA: Harvard University Press, 2009. Print.

---. *The Ecological Thought*. Cambridge, MA: Harvard University Press, 2012. Print.

Nada , Alain, and Dan van der Horst. "Introduction: Landscapes of energies." *Landscape Research* 35.2 (2010): 143-155. Print.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press, 2011. Print.

O'Rourke, Dara, and Sarah Connolly. "Just Oil? The Distribution of Environmental and Social Impacts of Oil Production and Consumption." *Annual Review of Environment and Resources* 28 (2003): 587-617. Print.

Rohrbach, John. "Introduction." *Reframing The New Topographics*.Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 1-12. Print.

Salvesen, Britt. "'Real Estate Opportunities': Commercial Photography as Conceptual Source in *New Topographics*." *Reframing The New Topographics*. Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 71-86. Print.

Scott, James C. *Seeing Like A State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998. Print.

Sichel, Kim. "Deadpan Geometries: Mapping, Aerial Photography, and the American Landscape." *Reframing The New Topographics*. Ed. Greg Foster-Rice and John Rohrbach. Chicago: The Center for American Places at Columbia College, 2010. 87-106. Print.

Szeman, Imre. "System Failure: Oil, Futurity, and the Anticipation of Disaster." *South Atlantic Quarterly* 106.4 (Fall 2007): 805-823. Print.

Truscello, Michael. "Imperfect Necessity and the Mechanical Continuation of Everyday Life: A Post-Anarchist Politics of Technology." *Post-Anarchism: A Reader*. London: Pluto Press, 2011. 250-260. Print.

Image Notes
Fig. 1 Burtynsky, Edward. *Oil Fields #22, Cold Lake, Alberta, Canada, 2001*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>.

Fig. 2 Burtynsky, Edward. *Oil Fields #27, Bakersfield, California, USA, 2004*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>.

Fig. 3 Burtynsky, Edward. *Oil Fields #19a, Belridge, California, USA, 2003*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>.

Fig. 4 Burtynsky, Edward. *Oil Refineries #34, Houston, Texas, USA, 2004*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>.

Fig. 5 Burtynsky, Edward. *Highway #5, Los Angeles, California, USA, 2009*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>.

Fig. 6 Epstein, Mitch. *Amos Coal Power Plant, Raymond City, West Virginia, 2004*. *American Power*. Gottingen: Steidl Publishers, 2009. 1. Print.

Fig. 7 Epstein, Mitch. *BP Carson Refinery, California 2007*. *American Power*. Gottingen: Steidl Publishers, 2009. 2. Print.

Fig. 8 Epstein, Mitch. *Poca High School and Amos Coal Power Plant, West Virginia 2004*. *American Power*. Gottingen: Steidl Publishers, 2009. 3. Print.

Fig. 9 Burtynsky, Edward. *SOCAR Oil Fields #4, Baku, Azerbaijan, 2006*. Photograph. Edward Burtynsky Photographic Works. Web. August 14, 2012. <edwardburtynsky.com>

Truscello, Michael: Michael Truscello is Assistant Professor of English and General Education at Mount Royal University in Calgary, Alberta. His publications have appeared in journals such as *Postmodern Culture and Affinities*, and recently in anthologies such as *Transgression 2.0: Media, Culture, and the Politics of a Digital Age* (Continuum, 2011) and *Hit The Road, Jack: Essays on the Culture of the American Road* (McGill-Queen's UP, forthcoming). He is currently working on a book about technology in the anarchist tradition, and a second book about art, infrastructure, and the new materialism.

Truscello, Michael : Michael Truscello est professeur adjoint d'anglais et de formation générale à l'Université Mount Royal à Calgary, en Alberta. Il a publié dans *Postmodern Culture and Affinities* et, plus récemment, dans des anthologies parmi lesquelles *Transgression 2.0: Media, Culture, and the Politics of a Digital Age* (Continuum, 2011) et *Hit The Road, Jack: Essays on the Culture of the American Road* (McGill-Queen's UP, à paraître). Ses projets actuels comportent un livre sur la technologie dans la tradition anarchiste, et un second ouvrage sur l'art, l'infrastructure et le nouveau matérialisme.