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Toxic Sublime: Imaging Contaminated Landscapes

Jennifer Peeples

This essay attempts to address the lack of critical analyses of images of toxins by examining the photography of landscape artists whose goal is to create a presence for contaminated sites. Imaging toxicity is no simple task as many pollutants are invisible and sites of contamination are concealed, especially for those of privilege. Contemporary artists who attempt this challenge are often criticized that the beauty of their images obfuscates the health and environmental risk of the polluted sites they photograph. In response, this essay introduces the concept of the toxic sublime as a means of analyzing the tensions arising from visual representations of environmental contamination: beauty and ugliness, magnitude and insignificance, the known and the unknown, inhabitation and desolation, security and risk. The essay charts the evolution of the sublime in the US, describing how it has evolved from sites of nature to sites of technology to human damaged landscapes, some of which produce a toxic sublime. Through a close examination of Manufactured Landscapes, a twenty-five year retrospective of the images of noted environmental photographer Edward Burtynsky, this essay extends our understanding of the invention of the sublime in images, reconceptualizes the sublime response to contaminated places, as well as adding to our knowledge of how visual texts function to encourage contemplation of the viewers' position within a polluted world.

Keywords: Toxic Sublime; Landscape Photography; Edward Burtynsky; Environmental Rhetoric; Sublime Response

An unnaturally colored tailings pond sits in the bottom right corner of noted photographer Edward Burtynsky's image, "Mines #22". The pond's eerie, emerald luminescence stands in contrast to the gray sky and tan rock found in the open amphitheater of one of the world's largest copper mines. The contents of the pond, the size of the pit and the extent of the potential contamination are all

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beyond the frame of the photograph. The image is at once stunningly beautiful and unnerving, the color scheme harmonious yet still wrong somehow. A group of contemporary environmental photographers, crafting elements of the sublime used by nature photographers, present landscapes like this one that have been forever altered by human technology, weaponry and industry—the most contaminated sites on earth.

The photographers' task of producing a visual awareness of these toxic places is complicated by the fact that most toxic agents are invisible and sites of contamination, at times, unremarkable. Pezzullo notes in *Toxic Tourism* that the detection of toxins is not “predicated on sight. Many people who see a toxic dump for the first time are surprised at how benign it looks” (2007, p. 29). For those living near a polluting industry, the detection of contamination often occurs when the toxins manifest themselves in the body through pain or disease. The corporeal aspect of residents' toxic epistemology has such dominance that many contaminated communities engage in toxic tours, inviting others from outside to come, smell the air, meet the residents and hear their stories, while having visitors put their own bodies at risk, at least for the moment (Pezzullo, 2007; see also Peeples & DeLuca, 2006, for a discussion of body epistemology and environmental justice). In addition to the difficulties associated with visually reproducing something invisible, Pezzullo notes that images can function a means of surveillance (as opposed to engagement) and have the capacity to hide suffering, leading her to call for a less ocularcentric perspective (2007, pp. 27–33). And yet, providing a visual representation of these sites of contamination is often necessary for eliciting social response and/or policy change. Far fewer people will travel to polluted sites than open the *New York Times*, view MSNBC.com or youtube.com, or even visit a museum or gallery. Knowles and Sweetman (2004) acknowledge that a visual orientation to the world is now “a fundamental fact of social existence” (p. 1). Photographs have a “determining influence in shaping what catastrophes and crises we pay attention to” (Sontag, 2003, p. 105). More importantly for environmental concerns, Ferreira, Boholm and Löfstedt (2001) contend that from “epidemics to ecological disasters,” images heighten awareness of “the fragility of life-systems in face of different kinds of hazards” (p. 283). In dealing with environmental problems, a lack of visual representation can mean a lack of social or political power as there is nothing to show, no compelling visual evidence of the extent or severity of the problem.

Because of the toxins' invisibility and banality, individuals often attend to environmental problems not because they are the most dire, pressing, or dangerous, but because they are the most evocatively articulated. Ulrich Beck in *Risk Society* states, “[Toxins and pollutants] generally remain *invisible*, are based on *causal interpretations*, and thus initially only exist in terms of the (scientific or anti-scientific) *knowledge* about them. They can thus be changed, magnified, dramatized or minimized within knowledge, and to that extent they are particularly *open to social definition and construction*” (1992, p. 23). Of all forms of representation, images can most easily hide their social construction. They are consistently associated with realism, a sense that what is seen accurately reflects what existed at the time of

production. But, as Sturken and Cartwright note, “the creation of an image through a camera lens always involves some degree of subjective choice through selection, framing and personalization” (2009, p. 16); and those choices by the artist inevitably create an “interested version of ‘reality’” (DeLuca & Demo, 2000, p. 245). Even with a general understanding that photographers “construct” landscapes rather than “documenting” them, photographs continue to have an evidentiary force that exceeds other arts, especially when called upon to provide proof of environmental changes (Seppänen & Välvirronen, 2003, p. 59).

In response, scholars in the last two decades have begun to examine how images function in environmental communication. Not surprisingly, considering the limitations of toxins’ visibility, this work has primarily focused on images of nature, specifically, natural landscapes (DeLuca & Demo, 2000; Halloran & Clark 2006); nature in advertising (Corbett, 2006; Hope, 2004); in news reporting (Smith, 1998); and in tourism (Stamou & Paraskevopoulos, 2004). Others specifically address the role that images play in activism (DeLuca, 1999; Slawter, 2008). In the edited book *Ecosee: Image, Rhetoric and Nature* (2009), Dobrin and Morey break down their text into sections on seeing animals, seeing land and seascapes, and seeing space and time. Studies addressing the visual representation of pollution focus almost exclusively on climate change (Doyle, 2009; Hansen & Machin, 2008; Mellor, 2009). Exceptions include DeLuca’s 1999 book *Image Politics*, which explores the use of image events—acts of protests intended to gain media attention—for both preservation and anti-pollution advocacy. Wolfe’s analysis (2008) of the children’s classic, *The Lorax*, is one of the few articles in *Communication Studies* that examines how pollution is constructed through images.

This essay attempts to address the lack of critical analyses of toxic images by examining the photography of landscape artists whose focus is making contamination visible. Specifically, it extends our understanding of the invention of the sublime in images, reconceptualizes the sublime response to contaminated places, as well as adding to our knowledge of how visual texts function in environmental communication. In what follows, I briefly present three categories of contemporary landscape photography followed by an introduction to Edward Burtynsky, the artist whose work provides the case study for this essay. I then chart the evolution of the sublime in the US, describing how it has evolved from sites of nature to sites of technology to human damaged landscapes, some of which produce a toxic sublime. I define the term “toxic sublime” as *the tensions that arise from recognizing the toxicity of a place, object or situation, while simultaneously appreciating its mystery, magnificence and ability to inspire awe*.¹ Using Burtynsky’s images, I describe how five tensions found in the toxic sublime function to alter the sublime response in order to encourage contemplation of the viewers’ position within a polluted world.

Photography and Altered Landscapes

In the last four decades, photographers have constructed images that document human-altered landscapes. Goldberg (1991) traces the transformation of environmental

photography from ecotopic to dystopic images to a 1970s group of photographers loosely grouped together as “New Topographics,” who began to “depict an American landscape that was no longer innocent or unspoiled but forever marked by the traces of human intervention” (1991, p. 107; see also Baillargeon, 2005). Vicky Goldberg, photo critic for the *New York Times*, and Robert Bruce Silberman, senior consultant with Goldberg on a book and three-part PBS series on American Photography, describe three different compositional structures used by American photographers to capture transformed landscapes (1999). The first is the “photographic plea”: images of beautiful, pristine sites that are in danger of destruction or have since been destroyed (p. 200). The second is the “environmental nightmare” photograph. These images function as apocalyptic visions of what is to come if growth and exploitation continue to expand unchecked: sprawl, pollution, waste and destruction. The third composition contrasts the plea and nightmare in the same photograph: “the unspoiled and the despoiled in one neat pictorial package” (Goldberg & Silberman, 1999, p. 200). Their taxonomy of landscape photography does not adequately categorize the work of contemporary landscape photographers whose images problematize these neat divisions.

Instead of contrasting the beautiful and unsightly, the pristine and the desecrated, these photographers create beauty in destruction—stunning images of devastated environments. Some of the more noteworthy artists working in this genre are David Hanson (1997), David Maisel (2004, 2005, 2006), Chris Jordan (2000, 2005), Alan Berger (2002, 2006), Peter Goin (1991, 1996) and Emmet Gowin (Reynolds, 2002), and Edward Burtynsky (Pauli, 2006; Mitchell & Rees, 2009), along with exhibitions such as “The New American Pastoral: Landscape Photography in the Age of Questioning” at the Whitney Museum of American Art in 1990 and “Imaging a Shattered Earth: Contemporary Photography and the Environmental Debate” originating at the Meadowbrook Art Gallery in 2005. These artists explore the bookends of consumption: the sites where raw materials are extracted, processed and shipped (e.g. metal mines, oil refineries, clearcuts, interstates and rail lines) and the landfills, dumps and recycling centers where products end up after use.

The artists’ choice to make contaminated sites visually pleasing is not without detractors. Critics argue that the beauty of the images can be seen as an exaltation of the industries that create the contamination and a means of obfuscating the physical and environmental dangers of the toxins produced by those industries. In response to Emmet Gowin’s work on strip mining in 1994, *New York Times* art critic Charles Hagen comments, “So elegant are these figures gouged or plowed into the ground that one forgets the activities that caused them” (p. C26). And environmental writer Wendell Berry (1997) in the preface to David Hanson’s book *Waste Land* argues, “It is unfortunately supposable that some people will account for these photographic images as ‘abstract art,’ or will see them as ‘beautiful shapes.’ But anyone who troubles to identify in these pictures the things that are readily identifiable (trees, buildings, roads, vehicles, etc.) will see that nothing in them is abstract and that their common subject is monstrous ugliness” (p. 3). More troubling for Berry is that the beauty of

the surface hides what dwells underneath: “the steady seeping of poison into our world and our bodies” (p. 3).

Instead of a genre of environmental photography that depicts a clear environmental ethic, as seemingly called for by these critics, the toxic sublime produces dissonance by simultaneously showing beauty and ugliness, the magnitude of the projects and the insignificance of humans, illustrating what is known of production and unknown of effect, questions the role of the individual in the toxic landscape while simultaneously eliciting the feelings of security and risk, power and powerlessness.

Burtynsky

Since the 1980s, Edward Burtynsky’s photographs have become some of the most recognizable work in this body of contemporary landscape photographers.² His many awards demonstrate his excellence as a photographer (e.g. the International Center of Photography Infinity Award, Art category and the National Magazine Awards Foundation—Photojournalism Silver Award), as well as the significance of his subject matter, such as the Focus Media/Industry Eco-Hero Award (for a full list of awards see http://www.edwardburtynsky.com/Sections/Statement_CV/CV.html). His plans to use his images to promote environmental sustainability won him a TED prize, a yearly award given to four people whose ideas change the world. The subsequent recipients have included President Bill Clinton, Bono and E.O Wilson. His work has an impact far beyond galleries and coffee table books, appearing in, among other places, *The National Geographic Society*, *Art and America*, *The Smithsonian*, *Newsweek*, *Christian Science Monitor*, *The Washington Post*, *Harper’s Magazine*, *Playboy*, *Time Magazine*, *Life Magazine*, *GQ* and frequently the *New York Times*.

Like the photographs produced by the New Topographics group, Burtynsky’s work has met with critical response from those who question his images’ ability to call attention to the greater environmental, political and social injustices that afflict the location of each photograph. Columnist David Segal queries in the *Washington Post*, “Do Ed Burtynsky’s Photos Glorify Industry or Vilify It?” After explaining that the images of Bangladeshi shipbreakers document the most dangerous worksite in the world, Segal deadpans, “But dang, it’s lovely” (2005, p. C1). Others note the ambiguity in his work, leaving the images’ meaning open to competing and contradictory interpretations. Burtynsky’s lack of an explicit political agenda, also frequently commented on, appears at odds to his “environmental artist” designation. Burtynsky responds, “I don’t want to be didactic. I’m not trying to editorialize and say this is right or this is wrong. Either extreme is too simplistic” (quoted in Torosian, 2006, p. 48). Taking a moral stance, he argues, requires his audience to agree or disagree, justify or defend. He prefers his audience to think (Baichwal, 2006). Somewhat surprising, considering his lack of an explicit environmental position, his work is positively embraced by many environmental organizations as exposing industrial crimes against the environment (see online reviews of his work in Mother Jones, <http://motherjones.com/media/2007/10/manufactured-landscapes>; the Earth

Island Institute, http://www.earthisland.org/journal/index.php/eij/article/petroleum_planet/; and Treehugger <http://www.treehugger.com/files/2010/08/ed-burtynsky-on-gulf-oil-spill.php>). This seemingly supports Whyte's hypothesis that Burtynsky's subject matter meets "different eyes in very different ways, from environmentalists, who could easily see the work as damningly anti-capitalist, to industrialists who adopted the images as heroic tributes to their empires" (2006, p. C04). Potentially because of the photographs' adaptability and ambiguity, Burtynsky's work has not had a demonstrable political or policy impact, though as Burtynsky has repeatedly stated, his intent is not propagandistic, but aimed at eliciting individual deliberation.

Cammaer makes a more pointed critique of his photography in her review of Jennifer Baichwal's *Manufactured Landscapes*, a documentary film that follows Burtynsky as he creates his photographs and presents at the TED awards. The crux of Cammaer's argument is that Burtynsky creates "art" not social commentary (2009, pp. 122–123) and that he emphasizes beauty, distance, and decontextualization over "realism" (2009, pp. 125–126). "Burtynsky," she maintains, "destabilizes the very ontological character of the photograph by deflating the evidential real in favor of aesthetic value" (p. 126) concluding that his emphasis on the aesthetic deprives his images of "any other reading, be it an ecological, social or cultural one" (p. 129). The creation of a visual presence for a place or issue that was previously unseen allows for social, cultural and/or political analysis, even if it simply prompts the question, "Why haven't I known this exists?" This is not an insignificant query; as Pezzullo notes, "most toxic places are excluded from sight due to racial and economic residential segregation" (2007, p. 29). More specifically, as I argue here, Burtynsky's aesthetic choices capture/create the sublime in the toxic. The historical prominence of the sublime in landscape photography creates a familial resemblance and a perceptual connection from Burtynsky's work to other nature photographers, such as Carlton Watkins and Ansel Adams, whose highly artistic work altered the perception (and eventually the politics) of land use and natural resources in the US (DeLuca & Demo, 2000; Stormer, 2004). In addition, Burtynsky identifies Watkins as a model for his work (Torosian, 2006, p. 47), and the Shelbourne Museum exhibited Adams' and Burtynsky's photographs in "Constructed Landscapes" (June 2011–October 2011). As we can see, Burtynsky's aesthetic choices add his work to a powerful and provocative legacy of images altering environmental attitudes and action.

For this analysis of the function of the toxic sublime, I focus on one of his seven photography books, *Manufactured Landscapes*. Pauli's (2006) publication of Burtynsky's photographs offers a compilation of twenty-five years of his images of railcuts, mines and tailings, quarries, urban mines, oil fields and refineries, and shipbreaking. Other Burtynsky books focus their attention on one industry, site or resource (e.g. Oil (2009), China (2005), Quarries (2009)). *Manufactured Landscapes* instead provides the opportunity to examine how sublimity functions in images with a greater diversity of subjects and locations. The type of sites chosen by Burtynsky, his decision to focus on large-scale industries, his attempts at visually constructing toxicity, and the extensive and diverse audiences that have been exposed to his work, make it an exemplary text for exploring the toxic sublime.

Transforming the Sublime

The difference between beauty and the sublime, long contemplated by philosophers, is useful in understanding how toxic images function rhetorically, especially with critics of the environmental photographs who cite their beauty as an example of their potential ineffectiveness in eliciting an appropriate response to the devastation. Edmund Burke (1909) differentiated the beautiful from the sublime, arguing that while beauty could be found in small objects, things that are smooth, delicate, elegant, graceful and clean, fair, and mild in color, the sublime exhibits vastness, privation, difficulty, infinity, magnitude, and magnificence (pp. 57–71, 102). For the eighteenth century German philosopher, Immanuel Kant, magnitude and physical power defined the sublime (such as seen in a hurricane). Kant concluded that beauty and the sublime functioned differently. With beauty, the mind was restful and contemplative; with the sublime, the mind was moved (2007, p. 72). Furthermore, he maintained “it is the state of mind produced by a certain representation with which the reflective Judgment is occupied, and not the Object that is to be called the sublime” (p. 66). Simply, the sublime is a mental state caused by our inability to fathom the power, vastness, magnitude and magnificence of an object witnessed.

Throughout the last century, what counts as a sublime object has continually shifted. Constructions of the sublime in nature, descriptions and images of majestic cliffs, soaring mountains, fearsome ocean storms and precipitous drops recreated an understanding of the human–nature relationship from one of fear and conquest to spiritual and political significance (DeLuca & Demo, 2000; Oravec, 1981). Those with firsthand experiences with these places were enhanced by virtue of their proximity to these divine places. This moral enhancement, Oravec notes, arrives in a series of stages:

First, the individual is exposed to the sublime object—usually an outstanding natural object—which produces sensations of overwhelming magnitude and quality. The individual attempts to comprehend intellectually and emotionally the sublimity of the natural object, but failure to do so leads to the second stage of the response. Here a negative state is produced. Whether a result of fear, alienation, awe, or loss of identity, the sense of self is diminished and the individual feels a separation from, or lack of control of, the natural environment. Finally, the individual moves past the feeling of inferiority to a sensation of exaltation, or at least wonder, at the relative grandeur of the object compared to the self (Oravec, 1982, p. 219; see also Oravec, 1981, p. 248).

During the early twentieth century, this sense of awe, alienation, fear and eventual understanding would begin to be associated with human-made objects whose immensity and magnificence rivaled the natural world’s ability to boggle the mind.

In *American Technological Sublime*, Nye charts the transformation of the sublime response from natural objects to the “technological sublime,” which is evoked in those who witness industrial leaps such as the advent of the railroad or space travel. According to Nye, the technological sublime produces awe through recognition of human achievement and abilities (1994). Those who stared up at the first skyscraper

or watched as Neil Armstrong walked on the moon could not help but feel the weight of human accomplishment. While the natural sublime was attributed to God, according to Nye, the technological sublime was a sign of the “potential omnipotence of humanity” (p. 285), and its “ability to construct an infinite and perfect world” (p. 287). For those who see Burtynsky’s photographs as “heroic tributes” to industry, their sublime response would fall within that of the technological sublime—pride and wonder in humans’ ability to master their environment. For those who are awed and overwhelmed by the images, but made uncomfortable by their reflections of unchecked environmental degradation, another response is elicited—the toxic sublime.

The *toxic sublime*, then, is the counterpart and required “other” to the technological sublime. It shares with the technological sublime a marvel at human accomplishments. Instead of staring up as a rocket soars into the sky, the viewer stares a mile straight down into a open-pit mine—both constructed by humans, both amazing feats of technology capable of conjuring feelings of insignificance and awe. But the toxic sublime acts to counter that marvel with alarm for the immensity of destruction one witnesses. Furthermore, in contrast to the sublime in nature, which functions to improve moral character (Oravec, 1982), the horror of the toxic sublime calls to question the personal, social and environmental ethics that allows these places of contamination to exist.

In response to these toxic places and images, it would appear that the viewer would be caught in the second stage of the sublime response, the negative state, wherein “the sense of self is diminished and the individual feels a separation from, or lack of control of, the [human-made] environment” (Oravec, 1982, p. 219). But Burtynsky and other environmental photographers do not leave the viewer in a state of paralysis. The compositional choices of the artists render images fraught with tensions that require thought and contemplation which, as argued here, provide the impetus necessary for attitudinal change. This can be contrasted to a potentially overwhelming response of repulsion, fear or alienation that may accompany an unmediated interaction with contaminated places (Baker, 2006; Diehl, 2006) or an indifferent response that can accompany unguided contact with seemingly banal sites of pollution (Pezzullo, 2007).

Tensions and the Toxic Sublime

In describing Burtynsky’s photographs, critics comment on the contradictions in his work: the beauty *and* the ugliness; the pleasure *and* pain (Segal, 2005, p. C1). Burtynsky maintains that he wants “to invite people into the piece . . . I want to make it an immersion experience where people say, ‘I’m in here but I shouldn’t like it.’ I want to create that tension, have them attracted yet repulsed, to show them the dilemma we’re in” (quoted in Allen, 2009, p. E1). His interest in generating dissonance aligns itself with Kant’s understanding of the sublime, in which the satisfaction is arrived at indirectly, as one is attracted to the sublime object, but alternatively repelled, a state Kant calls “negative pleasure” (2007, p. 62). Elements of

Burke's sublime (vastness, difficulty, infinity, magnitude, and magnificence) imbue Burtynsky's images and those of other environmental photographers with multiple paradoxes that construct this negative pleasure to the viewing audience. Some of the tensions reflect our own complicity with pollutants. They are by-products of the things we need and desire and yet we are repelled by the toxins created in their construction and destruction. While some contradictions are inherent in our relationship to the toxins, the ones I will focus on for this project are the tensions constructed visually through the composition of the photographs.

Beauty and Ugliness

Burtynsky's images fill the page with artists' tools of symmetry, line and repetition of form. Works like "Densified Oil Filters, #1, Hamilton, Ontario" have been compared to Jackson Pollock's paintings, with their abstract shapes and colors spread evenly across the work. The image shows hundreds of neatly crushed oil filters tossed on a pile at random angles, each reflecting light from the rusted, silvery metal, the filters' labels punctuating the image with bright dots of primary color (<http://www.edwardburtynsky.com/>). Still, Burtynsky is "cautious about applying the term 'beautiful' to his photographs," notes Pauli. "What interests [Burtynsky] is getting beyond the automatic response that equates manufacturing with ugliness and pollution" (2006, p. 24).

Edmund Burke's writings on the sublime separate beauty and sublimity, as each are attributed unique qualities and compositions. Anything capable of evoking "terror" was a source of the sublime (Burke, 1909, p. 36, 52), while beauty excited "the passion of love" (p. 96). In "Abandoned Marble Quarries #1," Burtynsky also juxtaposes beauty and the sublime. On the right hand side of the photograph, the orange and yellow leaves have cascaded down the rock, sprinkling fall color on the top of the flat water of the flooded quarry. The image conjures the characteristics of beauty: delicate, fair, graceful and mild in color (Burke, 1909, p. 102). On the left side of the photograph, the rocks are streaked black and yellow. The large cuts in the stone quarry (rock steps the size capable of supporting trees) are evidence of the heavy machinery which at one time was used to cleave the rock face. The black water in the bottom of the photograph is impenetrable. Its depth is impossible to assess, but the stillness of the surface hints at its volume, calling to mind the power, vastness, and magnitude of the sublime (Burke, 1909).

Far from mitigating or hiding the horror of the industrial damage, the tension between beauty and the sublime found in toxic sublime photographs gives the images a force that would be lessened without the contradiction. With the natural sublime, the subject matter has an innate draw. Without coercion and at times with great effort, people, especially Americans, seek out natural places. In contrast, the unadorned and material substance of the altered landscapes may repel viewers. For those of privilege, waste and destruction are hidden from sight, whether under the sink, on the edge of town or shipped out of the country. Residuals from consumptive lifestyles are often intended to remain unseen from the consumer. The taboo against

revealing the purposefully hidden can require an elixir, something to aid in the digestion of the ugliness of the subject matter. Beauty functions as that aid. As Diehl (2006) argues, “While always aware of the devastated nature of what we’re viewing, we keep on looking because there’s always some visual pleasure to engage us . . .” (p. 120). The images are not easily dismissed. And while the beauty of the photograph may entice the viewer, the beauty is held in tension with the power and potential for devastation that is brought forth through the incorporation of the magnitude, mystery and solitude of the sublime.

Magnitude and Insignificance

Toxins may be measured in milligrams, but for the toxic sublime, size matters. “The sublime is that in comparison with which everything else is small” (Kant, 2007, pp. 65–66). When asked how he chooses his subject matter, Burtynsky responds, “I often look for the largest example of something—the largest mine, the largest quarry, the most active area. Massive operations result in the greatest and most complex transformations” (as quoted in Torosian, 2006, p. 54). Burtynsky then creates outsized 30 × 40 and 50 × 60 inch color prints in an attempt to capture the immensity of his chosen industrial projects and, perhaps, to mitigate the domestication of the sublime that takes place when sublime images are mass produced and mass consumed, deadening the impact of the sublime on the viewer (DeLuca & Demo, 2000).

While the size of the photographs is striking, the size of the subject matter is not always, or at least initially, clear. In “Rock of Ages #26,” light colored quarry walls extend the full length of the photograph. The beauty of the white boxes of stone turns to astonishment only when, upon a closer inspection, the viewer notices the tiny ladders and staircase that create a thin vertical scar on the face of the quarry. An individual would be no more than an indistinguishable dot.

Burtynsky’s most striking images are framed without horizon, causing the viewers to search the photograph for recognizable content with which to orient themselves. The careful viewer finds a coil of rope, a ladder, a truck, a tire. The size and complexity of the prints does not allow the viewer to see the whole and the parts simultaneously. Kant maintains that an object is sublime when it is “almost too great for any presentation . . . almost too great for our faculty of apprehension” (2007, p. 68). The diligent viewer is “rewarded” with these gifts of recognition, but recognition also comes with uncertainty and insignificance. It is only after examining the photograph and situating oneself within the subject matter that the image elicits the full extent of the viewer’s astonishment.

Burtynsky also evokes a sense of greatness, beyond simple comprehension, by cropping the edges of the subject in the frame. We only see a piece of the railcut, a slice of the erosion. It is a huge slash out of a mountainside, but it may go on for miles and the erosion may extend hundreds of feet further down. The viewer can not know. In “Oil Fields #24, Oil Sands, Fort McMurry Alberta,” mounds and mounds of disturbed, relocated dirt fill the frame. A strip of milky blue sky cuts across the horizon, providing some relief from the monotony of tan and brown. It is impossible

to tell the scope of the altered landscape. The mines, the tailing ponds and the quarries are all shown to be enormous projects, but the extent of them—the projects in their entirety—remain unknown to the viewer. It is unclear whether the landscape is really so vast as to be wholly unrepresentable without losing recognizability, though the framing of Burtynsky's images leads the audience to question whether the destruction is just too massive to fit within the frame of his camera. And while it is possible to get statistics for many of these sites, Kant maintains that "all estimation of the magnitude of the objects of nature is in the end aesthetical (i.e. subjectively and not objectively determined)" (2007, p. 66). Similarly, knowing that the Kennecott Copper Mine is almost three miles across and a mile deep does not come close to providing the sense of astonishment felt when one realizes that the tiny, dark, dotted line on one of the mine's benches is actually a full size locomotive (Image 1, "Mines #22, Kennecott Copper Mine, Bingham Valley Utah").

Using scale to make the toxic appear sublime comes with risk. It may predispose people to look for toxins in the extraordinary, as opposed to on the shelves of their garages. In addition, being small in the presence of the *natural* sublime functions positively for the environment. Few who have witnessed the hulking rock of Half Dome then sit and contemplate how best to dismantle it. Being made to feel insignificant in the face of human-made environmental destruction may cause bewilderment and inertia at the thought of rectifying a problem as massive as one sees.

Known and Unknown

Contemporary environmental photographers create magnitude through the size of their images and the scale of the subjects, but also through visually constituting the presence and extent of the contaminants themselves. The "toxins" in Burtynsky's images are represented through unexpected, sometimes startling color and/or streaks on the surface of his subjects that appear as though something contrasting, unnatural or unwanted has moved across its face. On the cover of *Manufactured Landscapes*, a neon red stream cuts through banks of black earth that extend to the top of the frame, providing no horizon, no end to the contamination. The contrast between red and black is stark and arresting. The text reveals that this red river comes from nickel tailings (Pauli, 2006, pp. 75–77). In "Carrara Marble Quarries #25" it is the yellow stain running down the otherwise startling white walls. In "Rock of Ages #17" it is the vivid red splashed over the rocks in the upper middle section of the image. Bodies of water are unnaturally emerald, purple, red, or black. Images with fog, dust and steam work similarly to raise questions as to what might be present in the air (Rock of Ages #1, Nickel Tailings #34, Oil fields #6, #13, Shipbreaking #11). Not all of the images attempt to show the movement of toxins, but once the viewer has seen the startling red river of nickel on the cover and the metallic red of the oxidized ferrous scrap metal, the painted red horse heads of the oil derricks in McKittrick, California appear as a warning (for a further discussion of the psychology of color, see Wolfe, 2008).

Burtynsky's choice to severely limit text, a point of contention for some critics, heightens the sense of unknown, unseen danger. The captions explain the subject of a shot (a quarry, mine shaft, railcut, oil refinery), where it is located (Oakville, Ontario; Barre, Vermont; Rajasthan, India), and occasionally a company name (Anaconda Copper Mine, C.N. Track, Makrana Marble). On the rare occasion when Burtynsky does name the substance, for instance "Uranium Tailings #12, Elliot Lake, Ontario," the viewer is unsure what effect it has on the environment or the body, how dangerous it is, how long it has been there or how long it will stay, how deep it goes, or how far its contaminants have spread.

While the massiveness of the *production* is established through the photograph, the magnitude of the place's toxicity remains unknown. The framing suggests that the extent of the contamination is even larger than what the viewer sees. The power, difficulty and magnitude of the toxic sublime images are then twofold: the massive sites of production and the toxins they produce. While the structures found at these toxic sites are constructed by the photographers as magnificent, too great to be boxed in by the scope of the frame, it is the toxins in their movement and resistance to visual representation that summon questions of omnipresence.

Inhabitation and Desolation

From a high-angled perspective, one looks out over what appears to be a plague of mechanical locusts on the tan windswept landscape—hundreds of oil derricks start at the bottom of the frame and disappear into the distant horizon. Tire tracks loop endlessly around the derricks, testifying to their frequent use, though not a single car or person is seen (Oil Fields #2, Belridge, California). In this image and many others, humans are absent from the photographs of contemporary landscape artists. David Maisel, David Hanson, and Emmet Gowin's use of aerial photography precludes the photographic capture of individuals in their landscapes and of the fifty-six photographs in the Meadow Brooke art gallery's exhibition "Imaging a Shattered Earth," only five include people.

While individuals are rarely included in Burtynsky's photographs, people are monstrously present in their absence. The physical evidence of their existence is the impetus for each image. Burtynsky's exclusion of people runs counter to Carleton Watkins' uninhabited photographs, which Watkins carefully crafted to exclude any evidence of human activity in the pristine landscape (DeLuca & Demo, 2000). Burtynsky does not contend that the sites are unpopulated landscapes—quite the contrary. Why not then have humans as the focal point of the images? Pauli (2006) responds that Burtynsky's photographs do not assign blame (p. 22). In most cases, the "responsible party" is not included in the title. On the occasion that company names are included (six total), he does not provide information as to whether the damage was created by this organization or a previous owner, whether the company should be applauded for making steps to clean up the contamination or whether it should be condemned for its lack of progress. There is no easy release of guilt for the audience: no rhetorical "devil" or "scapegoat" associated with these sullied places.

Perhaps even more significant, besides the shipyard workers in Bangladesh, there are no victims. The suffering of the people who labor or live near these dangerous landscapes, who have had their health affected by them, who die early deaths, do not appear in these photographs (for a discussion of the inhabitants' response to living in toxic places, see Pezzullo, 2007). And in Bangladesh, their presence appears to be primarily a means of showing the enormity of the hulking ship frames and quarry walls being dismantled. In a number of images, the open posture of the workers with their faces tilted towards camera creates the impression of engagement between the subject and the viewers, what Kress and van Leeuwen refer to as a "demand" shot (2006, p. 118). As opposed to a head shot, in which the viewed and the viewer can "meet" eye to eye, Burtynsky's choice to use a long shot does not allow recognition between the subject and the audience member. The open posture and faces provide some comfort for the viewer that the subject recognized and permitted the photograph, but does not allow for engagement. More importantly, the raised position of the camera means that the viewer is always looking down on the men, creating a feeling of mastery over the subject.

While one can rightfully criticize Burtynsky for erasing or even "cleansing" his images of victims, I offer an alternative reading. Excluding the people in closest proximity to the toxins precludes the audience from the closure associated with knowing all three elements of a toxic narrative: a contaminant, a victim and a site (Ferreira, Boholm, & Löfstedt, 2001). The audience is denied the certainty of knowing that the victims are someone else, someplace else—people who may appear racially, socio-economically and physically different from the audience of Burtynsky's art. The purposeful omission of a victim leaves open the space for viewers to question whether they themselves might be the casualties of the toxins, since no other victims are present. In addition, excluding people from the image may allow for a more compelling sublime response. The viewer does not compete with a subject for a connection to the sublime object, nor does the viewer question the subject's response to the object. Instead, the viewer is left "alone" to confront the object and compare it to one's self, the final stage of the sublime response (Oravec, 1982).

Security and Risk

Burtynsky raises a feeling of anxiety through the mystery of the toxins and its victims, but also through the precarious positioning of the viewers. He uses an elevated perspective, one that allows the viewer to look down on the subject matter, and at the same time fills the photograph with the project he is capturing. The high vertical angle should call forth a feeling of power and mastery, as the viewer is positioned with an unrestricted panorama of the landscape. But Burtynsky denies a stable ground from which to make that assessment. The viewer is situated looking over the lip of a steep precipice, dangling above a quarry, or hovering a few feet above an unknown sludge or discolored water. Staying in place seems precarious, stepping down is impossible (or at the very least unwise), and stepping back would send the viewer into something unseen, and potentially even more treacherous. Burtynsky

could position the viewer as impotent—looking up from at the bottom of a quarry or the foot of a derrick. Instead, he gives the audience supremacy, but calls the power into question with the precarious positioning of the camera and the cropping of the shots. The viewer may be powerful, but is still at risk.

Nature provides similar circumstances of safety and risk. When people face the fury of the sublime in nature (hurricanes or tornadoes) they are both attracted and frightened by what they see. Even if the person is in a safe location, Kant argues, the sights “raise the energies of the soul above the accustomed height, and discover in us the faculty of resistance of a quite different kind, which gives us the courage to measure ourselves against the apparent almightiness of nature” (2007, p. 75). The toxic sublime functions similarly. The attractive images compel and at the same time frighten the audience. Like the people who encounter the sublime in nature, the audience is also in a position of relative security (potentially looking at the image from the comfort of their homes or museums), with the possibility of physical harm raised by the noxious subject matter. With a collective environmental history that includes nuclear bombs (and their radioactive legacies at test sites and production facilities), Love Canal, Bhopal, Three Mile Island, Times Beach, Agent Orange, and now Fukushima, the relationship between toxins and illness—toxins and cancer—is terrifyingly real for most viewers. It is finally this tension, above and beyond the others, that Kant argues raises energies and forces measurement of the individual against the perceived risk.

The reaction to the uncertainty of safety allows individuals to move past the feeling of paralysis that accompanies the second and negative stage of the sublime response, calling forth three somewhat contradictory, yet essential, reactions in order to face large-scale contamination: self-exploration, deliberation and irrationality. It is in the third stage of sublime response, according to Oravec, that the object is compared to the self, creating a moment of personal exploration and the clarification of goals (Oravec, 1982, p. 248; see also Oravec, 1981, p. 220). As noted above, Kant also sees the final interaction with the sublime as being a measurement of the self against the object. Stormer adds that even if one does not feel sublimity when “gazing on images of the sublime . . . they can still lay claim to [one’s] attention and constitute a location of self-perception” (2004, p. 221). Oravec uses the example of Clarence King, who as he gazed at the mountain he was about to climb later explained, “I looked at it as one contemplating the purpose of his life; and for just one moment I would have rather liked to dodge that purpose or to have waited, or have found some excellent reason why I might not go; but all this quickly vanished, leaving a cheerful resolve to go ahead” (as quoted in Oravec, 1982, p. 220–221). While no one approaches the question of contamination with cheerful resolve, the process of acknowledging the challenge, contemplating avoiding or ignoring its presence, and then moving forward is more crucial in a contaminated world than in a pristine one. Had King not climbed the mountain, the world would be no worse off; no one can say the same about the challenge of pollution. In addition, envisioning one’s self as separate from the contaminated places, unaffected or untouched by them, a practice encouraged by waste disposal policies and systems, provides no imperative to act. When one

measures the self against these sites, it is not necessarily an evaluation of moral character or spiritual strength, as would be the case with nature. It instead requires a confrontation with our consumptive habits, what we buy, where we buy it, what organizations and industries we directly or indirectly support, and how those choices are influential in creating the sites we see.

Yet, to act against something as massive as that portrayed in these environmental images requires a level of audacity that most of us do not under ordinary circumstances display. A rational, scientifically-minded actor may logically determine that one individual's behavior will not significantly alter the course of destruction witnessed. But interaction with the absurdity of the toxic sublime (as opposed to statistical information, timelines and forecasts) can alter thinking. Sublimity moves "beyond debate, description, or determination" (O'Gorman, 2008, p. 46.) More importantly for toxicity, "Sublime reasoning emphasizes the breaks and ruptures which challenge rationality... [it] stimulates advocacy, rather than evaluation (Oravec, 1987, p. 35). Audacious thinking when facing the natural sublime leads to a desire to protect places where the spiritual and emotional trumps the logical—the Hetch Hetchy valley as a "House of God" as opposed to a utilitarian "water repository." Irrationality, in response to the toxic sublime, functions differently. It leads not to a desire to protect these places of contamination, but provides a mental space where, contrary to the overwhelming visual evidence provided, a person can envision that positive change is possible.

Conclusions

Images of human altered landscapes provide a presence for contaminated sites that are, by virtue of location, institutional regulations, size, complexity, invisibility, and racial and economic segregation, impossible for many to conceive. In the last 40 years, contemporary photographers have used parallel compositional approaches to create a presence for human devastated landscapes. The features of this photographic genre are large industrial projects as subject matter, the use of an elevated perspective (including aerial views), and the incorporation of surprising shapes and/or colors. These images are often presented with limited descriptions of what is seen. Toxins without a dramatic visual presence, though potentially more damaging to environmental and physical health, are excluded from this body of work.

What this narrowly focused subject matter does is allow landscape photographers like Burtynsky to incorporate elements of the sublime into their images through their choice of frame, length of shot, camera angle, format, and size of image. More significantly, these compositional choices construct images that elicit a sublime response, a negative pleasure, in those who view them. This response is necessary to move beyond paralysis or indifference to the active contemplation of the self in relation to the object. In contrast to scientific or government documents, the choices made by the contemporary environmental landscape photographers are not ones intended to clarify, simplify or elucidate the object as a whole. Instead, the tensions of the toxic sublime heighten the complexity and mystery of these places, creating the

sublime responses of self-evaluation, deliberation, and irrationality from these altered landscapes where these responses would not otherwise exist. Although the measurement of the self against the sublime object and irrational thinking have been established as common responses to sublimity, this essay argues for their altered function and necessity when dealing with pollution. In measuring oneself against the natural sublime, for example the towering walls of El Capitan, a person does not question what she has done to cause such a place to exist. In contrast, a comparison of the self to the toxic sublime raises questions of complicity, producing an internal reckoning (at least initially) as one measures one's life choices against the sites of destruction. The recognition of a connection to these toxic places is the important step to understanding the need for alternative resource and waste protocols and decision-making. In addition, the improbability of the sublime also allows for audacious thinking as one grapples with solutions to the difficult and abstruse problems of contamination. The toxic sublime, then, confronts two of the most damning barriers to dealing with contamination: (1) a lack of a visual presence leading to people not knowing the extent of the environmental damage and (2) a sense of impotence when facing the omnipresence and destructive capacity of the toxins.

As an extension of the natural and technological sublime, the objects and the emotions of the toxic sublime are also important indicators of the particular cultural/environmental moment. "Indeed, the sublime is perhaps best characterized by a reflexive process, wherein an aesthetic concept comes to inform a great variety of cultural practices," notes O'Gorman (2008): "[A]nd these cultural practices in turn shape new conceptual approaches to the concept itself" (p. 47). The tensions found in toxic sublime images mirror greater environmental tensions: the questions of size and impact (from downsizing houses to encroachment); the concern over the unknown toxic loads in our bodies, food, air and water; the desire for uninhabited places with the recognition that all places have been altered by human involvement; and, most importantly, the ongoing concern over environmental and physical safety and security.

While this project looks specifically at landscape photographs, a productive extension of this work would be to examine whether these tensions also group themselves together in other environmental images, in written and spoken environmental discourse (for example possible ties to environmental melodrama, Schwarze, 2006), or in other social and political issues beyond the environment.

With the invisibility, complexity, and uncertainty of many toxins and an image-fixated western audience, constructing a compelling and potentially transformative visual frame for toxins is an ongoing challenge. The works of contemporary environmental landscape photographers draw upon the progressive tradition of photographing industry and the sublime, transforming both with their application. Elements of the sublime that were at one point used by rhetors to elevate technology to being unquestioned in terms of its benefit to humanity are now being used to raise awareness of the contaminated landscapes that are the by-products of the same

technologies. The choice of the sublime as a means of creating presence reflects a cultural understanding of toxins that acknowledges both our pride in extraordinary human accomplishments and our horror at the unwanted results.

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Notes

- [1] de Pastino, 2001; Goldberg, 1991; Diehl, 2006; Fairlie, 2006 have used the term “toxic sublime” as a description of contemporary landscape photography in their newspaper or trade journal articles. None have provided a working definition of toxic sublime, described its rhetorical function nor has the toxic sublime been employed it as a means of critical analysis. Other descriptive terms that highlight the sublime in these photographs include the “man-made sublime” (Stadler, 2001), the “tainted sublime” (Cembalest, 1991; Friedman, 1997), the “industrial sublime” (Drabble, 2008; McDonald, 1996).
- [2] An excellent selection of Burtynsky’s photographs, all the images discussed in this article, and many found in *Manufactured Landscapes*, can be seen at <http://www.edwardburtynsky.com/> under the titles breaking ground, quarries, urban mines, ships and oil.

References

- Allen, H. (2009, October 4). Burtynsky’s fuel for thought: What are we thinking? *Washington Post*, p. E1.
- Baichwal, J. (Director). (2006). *Manufactured landscapes* [Motion Picture]. USA: Zeitgeist Films.
- Baillargeon, C. (2005). Imaging a shattered earth. In C. Baillargeon (Ed.), *Imaging a shattered earth: Contemporary photography and the environmental debate* (pp. 26–32). Rochester, MI: Meadow Brook Art Gallery.
- Baker, K. (2006). Form versus portent: Edward Burtynsky’s endangered landscape. In L. Pauli (Ed.), *Manufactured landscapes: The photographs of Edward Burtynsky* (pp. 40–45). Ottawa: National Gallery of Canada.
- Beck, U. (1992). *Risk society: Towards a new modernity*. Newbury Park, CA: Sage.
- Berger, A. (2002). *Reclaiming the American West*. Princeton, NJ: Princeton Architectural Press.
- Berger, A. (2006). *Drosscape: Wasting sand in urban America*. Princeton, NJ: Princeton Architectural Press.
- Berry, W. (1997). Preface. In D.T. Hanson (Ed.), *Waste land: Meditations on a ravaged Landscape* (p. 3). New York: Aperture Foundation.
- Burke, E. (1909). *On taste; On the sublime and beautiful; Reflections on the French revolution; A letter to a noble lord: with introduction, notes and illustrations*. New York: P. F. Collier & Son.
- Cammaer, G. (2009). Edward Burtynsky’s *Manufactured Landscapes*: The ethics and aesthetics of creating moving still images and stilling moving images of ecological disasters. *Environmental Communication: A Journal of Nature and Culture*, 3, 121–130.
- Cembalest, R. (1991). The ecological art explosion. *ARTnews*, 90, 96–105. Retrieved April 13, 2009, from the Academic Search Premiere database.

- Corbett, J.B. (2006). *Communicating nature: How we create and understand environmental messages*. Washington DC: Island Press.
- DeLuca, K.M. (1999). *Image politics: The new rhetoric of environmental activism*. New York: The Guilford Press.
- DeLuca, K.M., & Demo, A.T. (2000). "Imaging nature: Watkins, Yosemite, and the birth of environmentalism. *Critical Studies in Media Communication*, 17, 241–261.
- de Pastino, B. (2001, September 13). The toxic sublime: Uncovering the faint beauty of a defaced, degraded American West. *Phoenix New Times*. Retrieved June 12, 2009, from the LexusNexus database.
- Diehl, C. (2006, February). The toxic sublime. *Art in America* 94, 118–123. Retrieved April 13, 2009, from the Academic Search Premiere database.
- Dobrin, S.I., & Morey, S (Eds.). (2009). *Ecosee: Image, rhetoric, nature*. Albany, NY: SUNY Press.
- Doyle, J. (2009). Seeing the climate? The problematic status of visual evidence in climate change campaigning. In S.I. Dobrin & S. Morey (Eds.), *Ecosee: Image, rhetoric, nature* (pp. 279–298). Albany, NY: SUNY Press.
- Drabble, M. (2008, January 26). In the path of Priestley. *The Guardian* (London), p. 46. Retrieved June 12, 2009, from the LexusNexus database.
- Fairlie, D. (2006). *Manufacturing desire: Sylvain Louis-Seize and the toxic sublime*. Bloomfield, ONT: OENO Gallery.
- Ferreira, C., Boholm, A., & Löfstedt, R. (2001). From vision to catastrophe: A risk event in search of images. In J. Flynn, P. Slovic, & H. Kunreuther (Eds.), *Risk, media and stigma: Understanding public challenges to modern science and technology* (pp. 283–300). London: Earthscan Publications Ltd.
- Friedman, H. (1997, May 2). Art: The prints of darkness. *Mail and Guardian* (Johannesburg). Retrieved June 12, 2009, from the LexusNexus database.
- Goin, P. (1991). *Nuclear landscapes*. Baltimore, MD: Johns Hopkins University Press.
- Goin, P. (1996). *Humanature*. Austin, TX: University of Texas Press.
- Goldberg, V. (1991). A terrible beauty. *ARTnews*, 90, 106–113. Retrieved April 13, 2009, from the Academic Search Premiere database.
- Goldberg, V., & Silberman, R. (1999). *American photography: A century of images*. San Francisco: Chronicle Books.
- Hagen, C. (1994, April 19). Art in review [Review of Emmet Gowin's exhibition at the Pace/MacGill Gallery]. *The New York Times*, p. C-26. col 6.
- Halloran, S.M., & Clark, G. (2006). National Park landscapes and the rhetorical display of civil religion. In J. Prelli (Ed.), *Rhetorics of display* (pp. 141–156). Columbia, SC: University of South Carolina Press.
- Hansen, A., & Machin, D. (2008). Visually branding the environment: Climate change as a marketing opportunity. *Discourse Studies*, 10, 777–794.
- Hanson, D. (1997). *Waste land: Mediations on a ravaged landscape*. New York: Aperture.
- Hope, D.S. (2004). Gendered environments: Gender and the natural world in the rhetoric of advertising. In C.A. Hill & M. Helmers (Eds.), *Defining visual rhetorics* (pp. 155–178). Mahwah, NJ: Lawrence Erlbaum Publishers.
- Jordan, C. (2000). *Intolerable beauty: Portraits of American mass consumption* [Artists statement]. Retrieved July 5, 2009, from <http://www.chrisjordan.com/>
- Jordan, C. (2005). *Intolerable beauty: Portraits of American mass consumption*. Self-Published. Retrieved from <http://www.chrisjordan.com/gallery/intolerable/>
- Kant, I. (2007). *Critique of judgment*. (J.H. Bernard, Trans.). New York, NY: Cosimo Classics. (Original work published London: MacMillan and Co. 1892. Revised 1914).
- Knowles, C., & Sweetman, P. (2004). *Picturing the social landscape: Visual methods and the sociological imagination*. London: Routledge.
- Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design* (2nd ed). London: Routledge.

- Maisel, D. (2004). *Lake project*. Portland, OR: Nazraeli Press.
- Maisel, D. (2005). *Terminal mirage*. San Francisco, CA: Paul Kopeikin Gallery.
- Maisel, D. (2006). *Oblivion*. Portland, OR: Nazraeli Press.
- McDonald, J. (1996, September 28). Islands of lost souls. *Sydney Morning Herald* (Australia), p. 14. Retrieved June 12, 2009, from the LexusNexus database.
- Mellor, F. (2009). The politics of accuracy in judging global warming films. *Environmental Communication: A Journal of Nature and Culture*, 3(2), 134–150.
- Mitchell, M., & Rees, W. (2009). *Edward Burtynsky*. Oil. New York: Steidl Photography International.
- Nye, D.E. (1994). *American technological sublime*. Cambridge, MA: MIT Press.
- O' Gorman, N. (2008). Eisenhower and the American sublime. *Quarterly Journal of Speech*, 94, 44–72.
- Oravec, C. (1981). John Muir, Yosemite, and the sublime response: A study in the rhetoric of preservationism. *Quarterly Journal of Speech*, 67, 245–258.
- Oravec, C. (1982). The evolutionary sublime and the essay of natural history. *Communication Monographs*, 49, 216–227.
- Oravec, C. (1987). *The aesthetics of critical reasoning: Reflections on the sublime and the beautiful. Argument & Critical Practices. Proceedings from the National Communication Association/American Forensic Association* (pp. 33–37). Alta, UT: Alta Conference on Argumentation.
- Pauli, L. (2006). Seeing the big picture. In L. Pauli (Ed.), *Manufactured landscapes: The photographs of Edward Burtynsky* (pp. 10–33). Ottawa: National Gallery of Canada.
- Pauli, L. (Ed.). (2006). *Manufactured landscapes: the photographs of Edward Burtynsky*. Ottawa: National Gallery of Canada.
- Peeples, J.A., & DeLuca, K.M. (2006). The truth of the matter: Motherhood, community and environmental justice. *Women's Studies in Communication*, 29, 39–58.
- Pezzullo, P. (2007). *Toxic tourism: Rhetorics of pollution, travel, and environmental justice*. Tuscaloosa, AL: University of Alabama Press.
- Reynolds, J. (2002). *Emmet Gowin: Changing the earth, aerial photographs*. New Haven, CT: Yale University Press.
- Schwarze, D. (2006). Environmental melodrama. *Quarterly Journal of Speech*, 92.3, 239–261.
- Segal, D. (2005, October 31). Beauty in the beast: Do Ed Burtynsky's photos glorify industry or vilify it? *Washington Post*, p. C-1. Retrieved June 12, 2009, from the LexusNexus database.
- Seppänen, J., & Välvirronen, E. (2003). Visualizing biodiversity: The role of photographs in environmental discourse. *Science as Culture*, 12.1, 59–85.
- Slawter, L.D. (2008). Tree-huggerTV: Re-visualizing environmental activism in the post-network era. *Environmental Communication: A Journal of Nature and Culture*, 2, 212–228.
- Smith, C. (1998). Visual evidence in environmental catastrophe TV stories. *Journal of Mass Media Ethics*, 13, 247–257.
- Sontag, S. (2003). *Regarding the pain of others*. New York: Farrar, Straus and Giroux.
- Stadler, M. (2001). Two photographs by Peter de Lory. *Cityworks: Seattle public utilities revealed. Photographs by Peter de Lory*. pp. 7–8. Retrieved from <http://linctech.com/Design/CityWorks.bro.pdf>
- Stamou, A.G., & Paraskevopoulos, S. (2004). Images of nature by tourism and environmentalist discourses in visitors books: A critical discourse analysis of ecotourism. *Discourse and Society*, 15, 105–129.
- Stormer, N. (2004). Addressing the sublime: Space, mass representation and the Unpresentable. *Critical Studies in Media Communication*, 21, 212–240.
- Sturken, M., & Cartwright, L. (2009). *Practices of looking: An introduction to visual culture* (2nd ed). New York: Oxford University Press.
- Torosian, M. (2006). The essential element: An interview with Edward Burtynsky. In L. Pauli (Ed.), *Manufactured landscapes: The photographs of Edward Burtynsky* (pp. 46–55). Ottawa: National Gallery of Canada.

Whyte, M. (2006, December 3). His changing world. *The Toronto Star*, p. C-04.

Wolfe, D. (2008). The ecological jeremiad, the American myth, and the vivid force of color in Dr. Seuss's *The Lorax*. *Environmental Communication: A Journal of Nature and Culture*, 2, 3–24.