Contemporary landscape photographers, especially those interested in exploring the potential of aerial photography, have contributed to a radical rethinking of the notion of nature and landscape photography itself, focusing on environmental issues such as global warming, pollution and land devastation. Addressing environmental and sustainability issues as found in photographic series, meaningful connections between contested landscapes and the socio-political issues associated with the Anthropocene¹ can be established. The work of landscape photographers as diverse as David Maisel, Edward Burtynsky, James Balog, Daniel Beltrá, Peter Goin, Terry Evans, David T. Hanson, Richard Misrach, Andreas Seibert and Ian Teh, among numerous others, exemplifies this environmentally conscious agenda.

In this article I pay close attention to how photographers are interested in the potential of aerial photography such as the Canadian Edward Burtynsky and David T. Hanson, from the United States, not only go beyond (Nature) as a perennial master signifier in landscape photography, but also beyond human viewing capabilities in their quest for what could be described as a nonanthropocentric viewpoint. As we will see, the wish for a nonanthropocentric perspective is fraught with potential dangers associated with what could be termed the «industrial abstract».2 In order to better understand such thought-provoking photographic work, the notion of the hyperobject, which is defined below, will help to reframe nature and the environmental issues associated with the Anthropocene. While the contribution of media artists to the iconography of the Anthropocene has already been discussed³, the timely work of landscape photographers remains to be examined in the context of the scholarship surrounding the Anthropocene and continental philosophy.

The Anthropocene and Its Hyperobjects

In the 1970s, New Topographics photographers such as Robert Adams, Frank Gohlke, or Lewis Baltz rejected the idea of pristine Nature as found in the work of landscape pioneers such as Carleton Watkins or Ansel Adams to focus on the man-altered landscape in their black-and-white images avoiding the sublime and the monumental. In contrast, one can clearly discern in the series of 21st century landscape photographers a different visual quest from that of the New Topographics. Indeed, facing the impossibility of documenting mundane landscapes and (non-places) as it had been done in the 1970s, contemporary landscape photographers have used representational strategies that reveal our environmental predicament.

While the aforementioned account of the evolution of the landscape genre is quite well known, it is necessary to emphasise that 21st century landscape photography has been engaged in a radical rethinking of the representation of the land and nature. In what might be a (post-nature) photographic practice, landscape

photographers have refashioned the human-land relationship in images that have questioned the anthropocentric biases of the genre via their recourse to the aerial perspective afforded by drones and other custom-made apparatuses. These recent technological innovations call for a photo-philosophy for the 21st century and the Anthropocene era, which could be said to find a potential ally in continental philosophy and «Speculative Realism». The contribution of Speculative Realism can actually help to reshape debates over Nature in landscape photography. Simply put, contemporary landscape photography and Speculative Realism can inform each other because they share similar obsessions. These include our access to the natural world, the relationship between human beings and their environment, and how to best describe our apprehension of reality generally speaking. In the work of photographers interested in documenting the Anthropocene, the representational content gives access to a world whose reality can be characterised as precarious. The challenge for landscape photographers is to find the most appropriate representational strategies to make sense of our collective environmental predicament.

What may be Timothy Morton's most crucial contribution to Speculative Realism and the understanding of landscape photography in the Anthropocene is the notion of the hyperobject, which is a recent development in object-oriented ontology (hereafter OOO). Building on both previous publications in the field of environmental criticism with a focus on British Romanticism and the American philosopher Graham Harman's ground breaking analyses of objects, Morton has proposed a flexible concept with which to address both artistic productions and Anthropocene issues. He has coined the word (hyperobject) to address a singular type of object that is impossible for humans to grasp empirically, given their preferred phenomenological and epistemological strategies that have come to define the term (anthropocentrism).

In Morton's work, hyperobjects «refer to things that are massively distributed in time and space relative to humans». Global warming functions as the hyperobject that perhaps best characterises the Anthropocene. Morton elaborates on the historical context in which we live, implicitly referring to non-anthropocentricism: «we are no longer able to think history as exclusively human, for the very reason that we are in the Anthropocene. A strange name indeed, since in this period non-humans make decisive contact with humans, even the ones busy shoring up differences between humans and the rest». This state of affairs calls for a type of thinking, a photo-philosophy in our case, «that doesn't think simply in terms of human events and human significance». As Chris Washington puts it: «Morton mobilizes the concept of the exorbitant hyperobject to combat not only real-world problems like global warming but also the underlying thought processes wrought by the gridlock of post-Kantian phenomenological and epistemological legacies». It is in this sense that the notion of the hyperobject can be said to be a contribution to both 21st century continental philosophy and environmental criticism.

A second key feature of hyperobjects is that they withdraw, as OOO argues of any object. Morton writes: «hyperobjects are not simply mental (or otherwise ideal) constructs, but are real entities whose primordial reality is withdrawn from humans». ¹⁰ This signifies that no other human or nonhuman entity can fully describe them or their activities. This is plausible as hyperobjects are «huge objects consisting of other objects: global warming comprises the sun, the biosphere, fossil fuels, cars, and so on». ¹¹ The ontology of the single photographic image certainly refracts

the ontology of hyperobjects in the sense that the single image qua image can never capture or exhaust the complexity of the subject it portrays, just as the reality of any given object can never be fully described. The need for a series of images—a sequential narrative—soon arises in the case of a photographic project that aspires to disclose the complex nature of a hyperobject within the Anthropocene.

The complex temporality of hyperobjects—combining past, present and future qualities and considerations—makes it very difficult to describe and represent in an image. This difficulty is related to the various attributes (viscosity, non-locality and phasing) that Morton uses to qualify hyperobjects. If one were to add the fact that «many of the hyperobjects Morton identifies (the biosphere, evolution, global warming, microwaves) do not simply coexist with humans but at least partially *contain* us only increases the urgency of coming to terms with them», ¹² then one can perceive how difficult it is for the photographer to address the reality of Anthropocene objects. If indeed hyperobjects «are never fully visible», ¹³ which certainly corresponds to the fact that like any object they withdraw, then the photographer's task is even more gargantuan given that we as human entities have consistently failed to acknowledge the existence of hyperobjects in our anthropocentric way of apprehending the world.

What kinds of photographic practices and viewer experiences are to be found in the Anthropocene that reflect the complexity and the evasiveness of hyperobjects? Can landscape photography conceive of nature in relation to a nonanthropocentric experience of the world? Have landscape photographers questioned what Evan Gottlieb has called «our spontaneous anthropocentrism»¹⁴ and what T.J. Demos has characterised as «human-centered exceptionalism»¹⁵ in documenting the Anthropocene and its countless human and nonhuman objects? The art historical emphasis on the sublime certainly positioned Nature as a nonhuman entity to be captured by humans, and it prompted critics to revel in phenomenological assessments of how Nature felt to us as conquerable space. This type of epistemological reduction, which is still to be found in writings on landscape photography, has failed to think Nature on its own ontological terms. The work of Edward Burtynsky and David T. Hanson demonstrates how human and nonhuman entities can coexist in both the still image and the extended photographic series without resorting to anthropocentric ways. That said, there are still potential dangers lurking in aerial photography that the nonanthropocentric perspective cannot justify, as explained below.

Aerial Photography: To Abstract or not to Abstract

From an ontological standpoint, what are the singular characteristics of a 21st century landscape photograph? Firstly, there is no doubt that a certain concern for the spectacular is back in the large-sized colour prints that have been gracing the walls of art galleries and museums around the world for decades now. Moreover, departing from the black-and-white representations characteristic of the genre up to the 1980s, contemporary landscape photographers have jettisoned the Romantic sublime in order to highlight the sense of urgency that defines the Anthropocene in their large prints.

Secondly, and probably the most striking aspect of contemporary landscape photography, is the revival of aerial photography as a result of photographers employing both traditional means of transportation (helicopters or small planes) and more recent technological inventions such as drones and custom-made apparatus-

es that have helped to detach landscape photography from the habitual ground-level point of view, and, therefore, defy gravity in order to achieve new heights and reveal unforeseen patterns. These new strategies follow in the footsteps of the generation of post-sublime photographers that actively documented landscapes in the second half of the 20th century. In the aerial work of pioneers such as Emmet Gowin and David Maisel, one could certainly perceive the wish to emancipate vision from its human standpoint, but this strategy remained marginal among landscape photographers. This is no longer the case, especially in the work of 21st century landscape photographers. Thirdly, a defining aspect of landscape photography in the Anthropocene is not only the revival of the aerial point of view, but also the return to abstract compositions. Indeed, while the aerial point of view has become the favoured perspective from which to make sense of the transformations the land has endured in the Anthropocene, the wish to abstract the land in the photographic series of the following generation of photographers cannot go unmentioned, as the reappearance of photographic abstraction can also be perceived as reactionary.

Discussing the ontological nature of aerial photographs, Denis Cosgrove and William L. Fox note the two poles towards which contemporary landscape photography gravitates: «Reflecting the Modernist and avant-garde context in which it developed, aerial photographic art has been dominated by an interest either in abstract patterns or in documenting human interactions with the natural world, with an emphasis—in recent years—on environmental criticism».¹⁷ The Anthropocene and its hyperobjects certainly call for new ways of capturing images, and landscape photographers have answered the call in making series that address our collective predicament. What is particularly interesting with regard to Cosgrove and Fox's diagnostic is that the predilection for abstract patterns has been combined with the interest in documenting the interactions between human and nonhuman entities.

Paramount in this discussion of post-nature landscape photography and the nonhuman is the need to emancipate human vision by promoting a type of nonhuman gaze that can embrace an entire territory or area and reveal unexpected patterns. Joshua Schuster goes so far as to claim that the aerial shot has the «ability to capture scales of space and time not set according to human sensibility. In the conjunction of scale and technology, the aerial shot is post-human». While there are important distinctions between post-humanism and nonanthropocentrism, I do agree with Schuster's implicit point that aerial photography demands a rethinking of the photographic gaze in photo-philosophy.

It is quite intriguing that the wish to be after nature would call for a type of gaze that is after the human. In order to achieve an alternative to human vision, aerial photography capitalises on the development of technologically sophisticated objects such as drones that go beyond human capability to create a new iconography that could be said to be as much about speculative abstraction as it is about representing the land. A selection of Edward Burtynsky's recent images exemplifies this trend.

Since the early 2000s, Burtynsky has explored the potential of aerial photography with helicopters, planes, flying buckets, drones, lifts, and pneumatic poles to allow his camera to reach new heights. While taking pictures from a plane or helicopter is not too dissimilar from the presence of 19th century photographers in balloons, attaching a camera to a drone or placing a camera in a bucket so that it can hover over a dam constitutes a significant departure from the strategies

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employed by previous generations of landscape photographers. Indeed, when Burtynsky's 60-megapixel Hasselblad H5D camera takes flight attached to a drone or strapped to a bucket to capture images that could not be captured any other way, the airborne digital camera, as a complex technological object itself, acts in the absence of the photographer's body that is only remotely involved in the capture of the images. The gravity-defying assemblage made up of a medium format digital camera, a bucket and a steel cable reaches a position in the air where a yet-unseen image of a gigantic construction site will be recorded and, most importantly, an image that no human being on his or her own could take without the help of such a device that can be said to generate nonhuman perspectives.

Burtynsky's current project is aptly titled *Anthropocene*, and could be said to serve as a capstone effort for previous series such as *China* (2005), *Oil* (2009) and *Water* (2013).¹⁹ As of this writing, a few *Anthropocene* images have been shared with the public, three of which lavishly illustrating a 2016 *New Yorker* piece on Burtynsky,²⁰ while others feature in the recently published *Salt Pans* (2016) series made in India.²¹ Another image is a gigantic print (4.3 m x 7.5 m x 15.2 cm) titled *Mushin Market Intersection, Lagos, Nigeria* (2016) installed at the Evergreen Brick Works in Toronto in December 2016. What characterises numerous images in the *Water* and *Salt Pans* photobooks²² and the ongoing Anthropocene project, beyond the now domineering aerial perspective adopted, is the puzzling return to the abstracted image of the land and the somewhat painterly quality of the aerial photographs. The abstraction of the land to the point that the viewer can no longer discern if he or she is looking at a painting or a photograph raises questions about the re-objectification of the land for seemingly formalistic purposes.

There are two interrelated issues to consider in the case of Burtynsky's aerial photographs: the increasing recourse to the elevated point of view and the will to abstract the landscape not so much compositionally speaking as in terms of post-production enhancements. On the one hand, regarding the possibility of reaching new heights and making yet-unseen images, aerial photography discloses aspects to the land that a ground-level view cannot achieve. This is difficult to dispute, as countless landscape images have made us more aware of our environmental predicament precisely because of their elevated vantage point. On the other hand, where the landscape image tends to lose its efficacy and credibility is when it abstracts the land by beautifying it for no other apparent reason than the need for an aesthetically pleasing image that art dealers will be able to sell. This tension between documentation and beautification has long been noted in reflections on aerial photography, as Cosgrove and Fox explain:

One of the things that aerial photography does remarkably well is to reveal and even create pattern at varying scales on the earth's surface. Unless viewed stereoscopically or taken from an oblique angle in sharp shadow, it also flattens the image, emphasizing surface. When aerial photographers deliberately seek out, frame and create pattern rather than seeing their work as serving purely documentary purposes, they approach the conventional realm of art.²³

Widely discussed in the reception of Burtynsky's images over the years is the potential problem of the conventional realm of art, which revels in aesthetics for aesthetics' sake, that is, to marvel at the wonderful, colourful patterns and lines our exploitation of natural resources have made or to complacently evoke (the sublime). One must not forget that, in Burtynsky's case, these so-called sublime patterns and crisscrossing lines are the scars of the earth.

Furthermore, the type of aerial photography that emphasises formalist traits would actually function as a throwback to the early years of the genre and would serve, in the Anthropocene, a rather conservative purpose. The problem, therefore, does not lie with aerial photography per se, but with the aestheticisation of these photographs, transforming them into beautiful images while their subject matter is environmental devastation. In his reflections on aerial photography, Charles Waldheim explains the tension at the heart of the subgenre:

Aerial photography provides a modern rupture with previous modes of representation and allows an implicit critique of the objectification of land. This reading suggests the aerial photograph's complicity with the map as a modern tool of instrumentality, surveillance, and control, useful for exposing hidden relationships between cultural and environmental processes while establishing new frames for future projects.²⁴

To the tension between aerial photographs serving as an accomplice of the state and private industry to instrumentalise and objectify the land and their fundamental role in revealing the urgent environmental problems that Waldheim mentions, we should also add that aerial photography can serve conservative aesthetic purposes that emphasise the genre's indebtedness to formalist abstraction. Thus, evaluating the merits or lack thereof of such images is a task that has never been more urgent and difficult.

Photography critic David Campany's reflections on what he has described as (alien landscapes) are symptomatic of our collective predicament in assessing aerial images in the Anthropocene. As the reader soon realises, Campany's thoughts are more interrogations than assertions on the topic. He asks: «What happens when we look at a photograph but cannot figure out what it is of?»²⁵ Introducing the often-abstract nature of contemporary landscape photographs, Campany notes how «Habits of seeing are estranged strategically in the hope of opening up a space to think differently (about warfare, about landscape, about photography, about vision)».26 This «politics of abstraction» nevertheless seems to raise more questions than it can answer: «How to discuss abstraction ... while avoiding empty formalism? How to address the systemic rationalizing of the world's appearance without turning it into mere pattern? How to interpret such imagery without resorting to extrapolation?»²⁷ Should viewers be content with «reveling in abstraction for its own sake»?²⁸ These reflections are by no means novel in the case of aerial photography, but they are recurring ones revealing the unease with which viewers and critics alike have not been able to reconcile the documentary nature of the landscape photograph and its aesthetic charge as a document of the Anthropocene. A different way of making aerial images is needed to fully express our photographic ambitions in the 21st century.

An alternative to the rising abstraction in the work of a photographer such as Burtynsky can be found in the images of David T. Hanson. Having worked on a number of series since the early 1980s, Hanson has focused his energies on the Midwest and the state of Montana in particular in projects such as *Colstrip, Montana* (1982–85) and *Waste Land* (1985–86). In the former, for example, Hanson does have recourse to aerial photography to document extraction sites, but his approach differs from Burtynsky's in that he always includes in the frame the presence of humans and their tools to exploit the land. In the images concluding the *Colstrip, Montana* photobook (Ill. 1). Hanson's camera adopts a bird's-eye point of view to reveal Montana mines and excavation projects and their impact on the land. In



1 David T. Hanson, *Waste Ponds*, from the series «Colstrip, Montana» (1984), Ektacolor print, 38 x 46 cm © David T. Hanson 2017



2 David T. Hanson, California Gulch, Leadville, Colorado, from the series «Waste Land» (1986), Ektacolor print, modified topographic map and gelatin silver print, 44 x 119 cm © David T. Hanson 2017

photographs such as *Excavation*, *Deforestation*, *and Waste Ponds*, *Waste Ponds and Evaporation Ponds* and *Waste Ponds*,²⁹ the camera does make a record of the land, but the scale and distance at which it does so make possible the identification of roads and heavy machinery in the landscape, thus recording human and nonhuman entities in the same frame without abstracting the land. In what is perhaps Hanson's most conceptually strong series to date, *Waste Land* (Ill. 2), triptychs featuring a modified topographic map, an aerial photograph, and an Environmental Protection Agency (EPA) site description give an overview of toxic waste sites across the

United States.³⁰ The aerial document itself does manage to give a sense of scale and distance similar to the one in *Colstrip*, *Montana*.

The concerns expressed in Campany's piece with regard to the dangers and pitfalls of photographic abstraction do not find an echo in Hanson's pictures; his are meticulously composed in such a way as not to alienate the viewer with regard to scale, distance and representation, as Hanson does not exceedingly enhance colours in post-production to the point that they become somewhat artificial or otherworldly looking. His aerial work thus escapes the predominantly formalist orientations of some of his contemporaries.

Conclusion

The importance of the aerial perspective in 21st century landscape photography practices cannot be overstated. The newly found possibilities for both the photographer and the viewer are numerous. For the image-maker, the seemingly unavoidable ground-level position has become only one possible vantage point among many to make compelling pictures that can reveal hitherto unseen perspectives on human actions. For the viewer of such images, she would be able to testify to the impact humans have had on the land and question her own responsibility in the process.

Are landscape photographers unwittingly reproducing the reification of Nature in the 21st century, or have they significantly moved beyond the type of representation found in the work of their predecessors? In the context of the Anthropocene, hyperobjects and the nonanthropocentrism they both require, perhaps the most critical issue that the examination of Burtynsky's and Hanson's aerial photography raises is photo-philosophy's reconfiguration of the photographic gaze in the form of the nonhuman point of view. While surveillance cameras, Google Earth and military imagery have familiarised us with the aerial shot, the work of landscape photographers who have capitalized on the elevated point of view and the various mobile apparatuses that can allow the production of these images raises questions that differ from the ones associated with surveillance. Indeed, the photographer who wishes to reach a nonhuman vantage point to capture yet-unseen images of the earth by revealing symmetrical and dissymmetrical patterns and unsuspected colourful arrangements in the tragedy of the Anthropocene can be said to be have abandoned the sublime spaces and the non-places of previous generations to challenge 21st century viewers and confront them with a nonhuman perspective on human actions. However, as discussed above, trading the sublime for the abstract is most likely not going to function as the most convincing representational strategy the Anthropocene and its hyperobjects demand for such a gaze. Finally, it will be crucial to abandon the recurring keywords (the sublime, beauty, truth, etc.) that still populate writings on contemporary landscape images and fail to reveal our collective predicament as represented in photographs. As argued in these pages, OOO and hyperobjects, supported by a photo-philosophy that favours nonanthropocentrism, can generate fresh interpretations of Anthropocene-related artistic productions.

- «Industrial Abstract» is the quite apt title of a solo exhibition of Edward Burtynsky's images held at Von Lintel Gallery, Los Angeles, March 11-April 22, 2017.
- For example, see Art in the Anthropocene, ed. by Heather Davis and Etienne Turpin, London 2015.
- Speculative Realism is the name of a school of thought that has taken continental philosophy by storm over the last decade. Named after a 2007 conference at Goldsmiths where it was first discussed by Quentin Meillassoux, Graham Harman, Ian Hamilton Grant and Ray Brassier, Speculative Realism wishes to counter the tradition of phenomenological and anti-realist inquiries into human consciousness and language by making the provocative claim that the world exists irrespective of our sensory perception and our ability to discuss it. A cornerstone of Speculative Realism is Meillassoux's groundbreaking After Finitude (London 2008), in which the author mounts an attack on correlationism, that is, «the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other» (p. 5). According to Meilloussoux, correlationism has defined philosophical thought since Kant's distinction between the noumenal and the phenomenal world. As is well known, the former refers to a world that is beyond human cognition; it is the Kantian thing-in-itself [Ding-an-sich] that resists human understanding, whereas the latter points to the world humans can know through the senses, which is the world phenomenological and epistemological studies have examined extensively. It is the finitude of human thought that Meillassoux rejects in Kant's understanding of the noumenon. For the French philosopher and his counterparts, it is possible to know the world in itself, and they have offered numerous studies of the world and its objects to revive both continental philosophy and ontological speculation. Speculative Realism has now morphed into other movements such as speculative materialism (Meillassoux), transcendental materialism (Grant), transcendental nihilism (Brassier) and object-oriented ontology (Har-

- man). For an introduction to Speculative Realism, see The Speculative Turn: Continental Materialism and Realism, ed. by Levi Bryant, Nick Srnicek and Graham Harman, Melbourne 2011.
- See Graham Harman, Tool-Being: Heidegger and the Metaphysics of Objects, Peru, IL 2002.
- Timothy Morton, Hyperobjects: Philosophy and Ecology after the End of the World, Minneapolis 2013, p. 1.
- Ibid., p. 5.
- 8 Ibid., p. 7.
- Chris Washington, «Romanticism and Speculative Realism» in: Literature Compass, 12.9, 2015, p. 451.
- Morton 2013 (see note 6), p. 15.
- 11 Ibid., p. 199.
- Evan Gottlieb, Romantic Realities: Speculative Realism and British Romanticism, Edinburgh 2016, p. 47, emphasis in original.
- 13 Ibid., p. 47.
- 14 Ibid., p. 16.
- T. J. Demos, Decolonizing Nature: Contem-15 porary Art and the Politics of Ecology, Berlin 2016, p. 19.
- See Emmet Gowin, Changing the Earth, New Haven 2002, and David Maisel, Black Maps, Göttingen 2013.
- Denis Cosgrove and William L. Fox, Photography and Flight, London 2010, p. 101.
- Joshua Schuster, «Between Manufacturing and Landscapes: Edward Burtynsky and the Photography of Ecology», in: Photography & Culture, 6.2, 2013, p. 208. The post-humanism the critic refers to is not the same as the non-anthropocentrism I have been discussing. While post-humanism still retains a focus on the human in its evolved stage to even consider its impending death, non-anthropocentrism adopts a flat ontology in which humans and nonhuman entities such as machines are considered on an equal footing.
- See Edward Burtynsky, China, Göttingen 2005; Edward Burtynsky, Oil, Göttingen 2011; and Edward Burtynsky, Water, Göttingen 2013. See Raffi Khatchadourian, «The Long View» in: New Yorker, 2016. http://www. newyorker.com/magazine/2016/12/19/edward-burtynskys-epic-landscapes, Feb. 2017.
- Edward Burtynsky, Salt Pans, Göttingen 2016. See http://www.edwardburtynsky.com/ site_contents/Photographs/Salt_Pans.html, accessed Feb. 2017, for sample images.
- Some of the images in the «Agriculture» section of the Water photobook (see note 19) exemplify this concern, as does the entirety of the Salt Pans series.
- Cosgrove and Fox 2010 (see note 17), p. 100.

- 24 Charles Waldheim, «Aerial Representation and the Recovery of Landscape»; in: Recovering Landscape: Essays in Contemporary Landscape Architecture, hg. v. James Corner, Princeton 1999, p. 132.
- **25** David Campany, «What on Earth? Photography's Alien Landscapes» in: *Aperture*, 211, 2013, p. 48.
- 26 Ibid., p. 51.
- 27 Ibid., p. 51.

- 28 Ibid., p. 51.
- **29** See David T. Hanson, *Colstrip, Montana*, Fairfield, IA 2010. A selection of Hanson's photographs can be found at: http://www.davidthanson.net/gallery/01.html, accessed Feb. 2017.
- **30** See David T. Hanson, *Waste Land: Meditations on a Ravaged Landscape*, New York 1997, p. 52–131.