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12 The greening of polar bears: Lively commodities in a climate change economy

Introduction

While the work that animals do in the tourism industry has been under-researched. this chapter contributes to this body of knowledge by exploring the hidden and symbolic work polar bears perform in the context of tourism (Carr, 2016; Duffy, 2014; Fennell, 2011; Kline, 2018; Rutherford, 2011; Young & Carr, 2018). Specifically, this chapter discusses the work that polar bears are made to do as ambassadors, both for their own species and as a symbol for climate change. In order to understand their ambassadorial work, we begin by providing context for polar bear tourism in Manitoba, Canada, and the viewing opportunities at both in situ (wild) and ex situ (captive) sites in this region. These case studies allow for a critical analysis of polar bear "work" and a comparison of the ways in which these different settings can alter our perceptions of the bears. In particular, how humans regard them as stand-ins for complex problems is analyzed. Unlike previous research, which explores the literal work that animals perform in tourism, such as working elephants (Duffy, 2014), camels, cows, or horses which often carry people or their luggage (Duffy & Moore, 2010) or the mobility and safety work that service animals do (Rickly, 2018), this research examines the labor that polar bears perform as ambassadors. While this might less obviously be categorized as work, it is, nevertheless, an essential component of their perceived value as tourism attractions and symbols of broader social discourses around ecological crises.

In recent decades polar bears have become a globally recognized symbol for climate change (Born, 2019) (Figure 12.1). As sea ice decreases in area, forms later in the autumn, and recedes earlier in the spring in the northern latitudes, polar bears are rapidly losing their habitat and their ability to hunt their primary food source: seals. This direct connection between a large charismatic species and climate change makes polar bears ideal candidates for acting as ambassadors for all species affected by climate change. Stories and images of polar bears are used to evoke emotion and to prompt people to change behaviors in order to positively affect climate change. In the context of tourism, however, live polar bears can be witnessed in both wild (in situ) and captive (ex situ) settings, which adds an embodied, lived experience of the species to their previous symbolic encounters. Indeed, many ex situ sites, such as zoos, exist under the premise that polar bears are a part of educational work aimed to teach the public about their wild counterparts and the challenges they face, such as the effects of climate change.



Figure 12.1: Oxfam and the symbolic use of polar bears.

Source: WikiMedia Commons.

Against this backdrop, this chapter draws out some of the contradictory practices of polar bear tourism, such as employing polar bears as ambassadors for conservation and climate change while simultaneously encouraging high-carbon emissions travel to ecologically sensitive destinations, thereby directly contributing to climate change and subsequent conservation challenges. Informed by Duffy's work (2000; 2014; 2015), we discuss the problematic ways in which animals are used to do the work of marketing tourism and capitalizing on environmental issues. In particular, we note that last chance tourism is marketed as and capitalizes on "witness[ing] (and consum[ing]) the demise of ecosystems, the extinction of species, or even ecocide, at first hand" (Duffy 2015, p. 533). Moreover, the carbon emissions from long distance travel contributes to climate change to the extent that "the long term sustainability of the polar bear viewing industry under projected climate changes is precarious at best" (Dawson et al., 2010, p. 321). In examining these and other issues, this research uses a case study approach to illustrate human-polar bear relations at multiple scales and settings. Duffy and Moore (2010) argue that contrasting case studies research widens the lens of understanding in comparison to a single case study, by allowing us "to examine the contours, boundaries, challenges and limitations placed on neoliberalism by its encounter with 'nature'" (p. 743). Thus, by comparing both captive and wild polar bear tourism contexts, we delve deeper into complex ethical discourses and render visible the moral

geographies that underlie the symbolic role into which the human species has directly and indirectly cast the polar bear as an ambassador species.

Finally, this chapter also discusses the ethical implications of a green governmentality that can be used to understand the ambassadorial work that polar bears do in wildlife tourism. Rutherford (2011) explains that practices of green governmentality "provide us with a lexicon through which to apprehend the world, and they tell us what nature is, how it is under threat, and the appropriate solutions to its crisis" (p. 275). How these practices are created and narrated has important implications for understanding the ways in which the work of polar bears is leveraged within wildlife tourism. It has been observed that tourism is "shifting the moral geographies of wildlife from the utopian confines of the sanctuary or the ark of wilderness" (Whatmore, 2002, p. 31), to animals that are used as "symbols and consumables" in the marketing of destinations (Huijbens & Einarsson, 2018, p. 23).

Wildlife tourism: The work of captive and wild animals

This section discusses a short history of in situ and ex situ wildlife tourism experiences in order to provide an understanding of how modern zoos and wildlife tourism experiences have evolved, traditionally using animals to do the work of entertaining and educating the public, thereby rendering nature legible to the public by telling particular stories about animals (Carr, 2016). Taking a critical theory approach, the ramifications of creating places and experiences where animals act as ambassadors to educate people about environmental issues will be explored (Born, 2019; Derrida & Wills, 2002; Rutherford, 2011).

Seeing wildlife and ordering nature

We begin with an examination of the evolution of captive animal tourism, as some of the earliest forms of wildlife tourism took place ex situ, where wildlife was captured, tamed, or killed and stuffed in order to be made visible for human interest (Fennell, 2012). The evolution of zoos reflects changes in societies and cultures and how they have constructed nature. Ginsberg (1993) describes changes from the 19th century menagerie, with their taxonomic theme, to the ecologically themed living museums of the 20th century, culminating with conservation centers of the 21st century with environmental themes (Uddin, 2015). These themes address the different concerns of each era beginning with earlier zoos' emphasis on the clear display of animals, then the 20th century concern of research, public education, and captive propagation, to contemporary concerns of biodiversity, conservation, and species survival

with the continued emphasis on public education (Ginsberg, 1993; Uddin, 2015). Zoos often use this perceived progress as a defense against criticisms, including the debates on the ethics of keeping animals in captivity, whether modern zoos can sufficiently provide for all of an animal's welfare, and the degree to which education in zoos is effective (Mason, 2000). That zoos have changed over time is an insufficient defense in and of itself; all public cultural institutions, such as museums, libraries, or galleries have changed over time (Uddin, 2015). In addition, changes in zoos have not occurred at the same rate in all parts of the world, and there are still zoos that are collections of animals kept more for entertainment than for any other reason, these often being referred to as menageries, petting zoos, or even roadside attractions. Disconcertingly, some unaccredited attractions operate under misleading names such as "safaris" or even "zoos" and offer dangerous wildlife petting opportunities and perpetuate captive breeding of wild animals.

It has been argued that modern zoos that meet accreditation standards can make contributions that distinguish them significantly from menageries and zoos of the past (Roe, McConney, & Mansfield, 2014). Using an array of architectural, technological, communications, interpretive, and planning tools, accredited modern zoos consciously construct nature and mediate human-animal relations (Hallman & Benbow, 2007; Roe et al. 2014). Architectural and construction advances allow complex exhibits that can provide, for example, climate-controlled environments, water filtration systems, safe animal handling facilities, and innovative and attractive exhibits (Hallman & Benbow, 2007; Mason, 2000). Technological innovations and computer technologies can link to remote locations through web cameras, extending medical technologies to diagnose and treat animal disease and monitor genetic characteristics. Communications and interpretive programming within zoos are mediated to offer both synchronous and asynchronous engagements and create messages to visitors, which support institutional goals such as education, environmental awareness, and other forms of information (Moss, Esson, & Bazley, 2010; Roe et al., 2014; Stoinski et al., 2002). Lastly, modern zoo exhibits undergo extensive periods of planning to ensure that exhibits, and by virtue of that, the animals themselves, convey messaging to also suit institutional goals. Indeed, many accredited zoos today exist in part due to in situ conservation mandates (Moss et al., 2010; Packer & Ballantyne, 2016; Roe et al., 2014; Stoinski et al., 2002; Tribe & Booth, 2003).

In contrast, wildlife tourism in situ is a relatively contemporary phenomenon. Early forms of wildlife tourism consisted largely of colonial hunting trips, where wealthy Europeans would seek exotic game and consume wildlife as trophies to bring back as evidence of their power and dominion (Rutherford, 2011). Here, consumptive patterns of wildlife tourism demonstrated the effects of the tourist gaze in perpetuating power dynamics, which created a clear hierarchy of human and nonhuman life (Yudina & Grimwood, 2016). With the rise of the industrial revolution, the middle class, and tourism, there was a corresponding increase in the complexity of wildlife tourism. Ironically, in situ tourism where visitors flock to see wildlife did not

fully develop, at least in North America, until delineated "wild spaces" were created with the establishment of national parks (Cronon, 1996). Cronon (1996) describes both a romanticized concept of wilderness where "adventurers," men from elite classes of society who had not had the difficulties of working land themselves, considered the wilderness to be the "ultimate landscape of authenticity" (p. 16), and a dualistic version of wilderness where people were outside or separate from nature.

This dualistic perspective is at the heart of creating a problematic divide between nature and people: "Wilderness dualism tends to cast any *ab-use*, and thereby denies us a middle ground in which responsible use and non-use might attain some kind of balanced, sustainable relationship" (Cronon, 1996, p. 21). This results in the designation of wild and exotic places, in the form of parks, that are close to home, but still far enough away to be distinguished, in the public's view, from everyday life (Rutherford, 2011). In other words, once humanity had been successful enough at removing wildlife from the landscape, designated wild places had to be created in order for tourists to be able to go and see wildlife (Cronon, 1996; Rutherford, 2011). In this way, the creation of wildlife tourism can be seen to be in direct proportion to the moral ordering of human and nature dichotomies and represents a visible shift in the animal gaze (Rutherford, 2011). Power dynamics have evolved through this moral ordering, which the human species ascribes to other non-human life forms, as is evidenced by the shift in wildlife tourism from literal forms of consumption represented in exotic animal or big game hunting, to ocular forms of consumption captured instead by the camera lens (Kline, 2018; Lemelin, 2006; Rutherford, 2011). Lemelin (2006) refers to the ocular consumption of polar bears as part of the tourist gaze, and certainly this transition is part of a literal gaze – where the concept of the gaze is instrumental in laying open the power relations of the systems, which create particular ways of seeing.

The wildlife gaze

The concept of the gaze draws upon the work of Michel Foucault who described how the power and discourse of doctors was, in fact, an act of seeing which was justified and supported by medical institutions and structures (Foucault, 2008; Urry & Larsen, 2011). The gaze describes not only how seeing is informed and normalizes a particular discourse, but also how the impact of being gazed upon further influences subsequent power dynamics (Foucault, 2008). The tourist gaze illustrates the ways tourists' perceptions and attitudes, and the institutions these represent, create and affect that which is gazed upon (Urry & Larsen, 2011). The tourist gaze has power directly through the places and experiences chosen, and indirectly through the ways these choices shape the tourism industry (Urry & Larsen 2011).

In wildlife tourism, both in situ and ex situ, tourists may bring an array of preconceived ideas and attitudes that mediate their gaze (Rutherford, 2011). In both cases, the tourist gaze is carefully framed within the experience, where impressions of wildness are co-mingled with confinement to ensure the safety of the visitors. For example, tourists visiting Churchill assume their experience of polar bears in the wild (or in situ) is more authentic than seeing polar bears in the controlled environment of the zoo (Bueddefeld, 2019). However, polar bear viewing in Churchill it is not without human influence, as tourism operators intentionally take the tourists to locations of polar bear sightings. Specifically, this wildlife gaze within tourism creates a sense of what is and what is not wild.

Braverman (2012) considers that in zoos "the act of seeing animals undermines their wildness" (p. 75), because an animal in the wild would avoid being seen by humans but has no choice in a zoo. Zoos intentionally create exhibits to construct verisimilar nature, with the visitor's gaze complicit in that construction (Rutherford, 2011). Comparing the gaze at the zoo with that in Churchill therefore requires a compromising of authenticity, wildness, and perspectives. "While these gazes may virtually be harmless or non-consumptive, they are predicated on ontological ideas (i.e. the control of nature) and dependent on infrastructures (airports, rail, highways, accommodations, sewers, water systems), which may or may not be sustainable" (Lemelin & Wiersma, 2007, p. 39). Zoos are "not a precise simulacrum of wild nature" (Braverman, 2011, p. 819) because their design must include signs, safety features, and elements to control animal movements and behavior. In addition to the general goals of modern zoos (education, research, conservation, and recreation), zoos design exhibits with specific supporting objectives that reinforce these goals by connecting their agendas to specific social and ecological issues, such as climate change (Moss et al., 2010; Packer & Ballantyne, 2016; Roe et al., 2014; Stoinski et al., 2002; Tribe & Booth, 2003). The wildlife gaze in these spaces can then be understood as directing both physical gaze and movement, as well as the social movements bound up in the conservation messages and consumerism inherent in the visitor experience (Rutherford, 2011).

The historical analysis of zoos has "tended to focus on individual institutions and to emphasize the power relations implicit in the human gaze at caged animals, interpreting it as symbolic of imperial power over colonial subjects" (Hanson, 2004, p. 8). While that privileging of colonialism is not an overt goal of wildlife tourism today, the remnant of that power remains (Uddin, 2015). Both zoos and wildlife tourism settings increasingly attempt to bring diverse constructions of nature from different cultures, while dealing with the challenge of avoiding cultural appropriation. In addition, the stories of individual animals are often used to encourage visitors to make connections to the animals while the origins of other animals may be used to convey a valued narrative (Packer & Ballantyne, 2012). As associated with tourist destinations, animals function as geographic markers that feature in the travel narrative, becoming an iconic symbol of each place (Huijbens & Einarsson, 2018). Animals that, in their wild (in situ) locale, are experiencing environmental threats such as habitat loss,

climate change, or disease, are used to convey that narrative (Packer & Ballantyne, 2012). In this respect, it is intended that the attraction of visitors to the animal and exhibit experience can mediate and consolidate an understanding of the issues (Mason, 2000).

While wildlife tourism has strong links to the growing interest in the ecological impacts of tourism, care must be taken to ensure that this does not merely become a green form of commodification (Collard, 2013; 2014; Duffy & Moore, 2010; Markwell, 2015; Rutherford, 2011). Having good intentions for conservation efforts does not necessarily mean that ethical implications have been fully considered. More specifically, as this chapter examines, the use of the polar bear as an ambassador for climate change challenges tourists to continue to encounter the animal as they make various decisions with regard to climate change (Born, 2019; Manzo, 2010). The power dynamics of intentionally centering polar bears as ambassadors in the climate change narrative reveal that much more is at stake for them as lively commodities in the greening of the tourism economy.

Polar bear tourism in Manitoba

The Canadian prairie province of Manitoba is world-renowned for polar bear tourism. On the coast of the Hudson Bay, nearly 1000 kilometers north of the provincial capital Winnipeg, lies the town of Churchill. Churchill promotes itself as "the polar bear capital of the world" and has a reputation as one of the best places in the world to see large numbers of wild polar bears in relatively close proximity (Dawson et al., 2010; Lemelin, 2006). Polar bears in this region stay on land when the sea ice thaws in summer and tourism operators run polar bear tours starting in July. Visitors arrive in droves during peak polar bear season, which lasts for approximately six weeks in October to November, when the ice begins to form on the Hudson Bay (Dawson et al., 2010).

Churchill's unique geography is the reason polar bears congregate here annually. Situated near the mouth of the Churchill River, it experiences earlier ice formation as the fresh water enters the ocean bay, which means that polar bears have historically congregated in this region waiting for the sea ice to form. This is also why the region has been inhabited, first by Dene and Cree peoples. The Churchill River was also a driving force in establishing the region as an historically important trade route, which eventually led to the building of railway infrastructure in order to more effectively transport grain to the port for shipment to international markets. Over the course of the last century a military presence helped to establish an airport in the region, as well as supporting infrastructure for the modern town of Churchill. Since there is no road access to this part of the province, rail and airport infrastructure was a necessary precursor to polar bear tourism development in the region.

These combined factors helped to propel Churchill, onto the international stage as a destination that is relatively accessible to tourist activity and promises a high degree of certainty of wildlife viewing opportunities. Tourists also come to see other animals, such as beluga whales and migratory birds at other times of the year, and the local tourism economy has developed enough to support several hotels and alternative accommodations that offer learning tours. The majority of visitors during bear season go on day-trip excursions on large, slow-moving tundra vehicles that allow them to see polar bears up close while remaining safely out of the polar bears' reach (Lemelin et al., 2010). As some polar bear tourists come to Churchill just for the day, while others plan longer trips, accurate numbers are not available, though it is estimated that between 6,000 and 10,000 travel to Churchill each season (Dawson et al., 2010).

Churchill is not the only location gaining popularity as a place to see polar bears in the province. The Assiniboine Park Zoo in Winnipeg can house between seven and ten polar bears in its "Journey to Churchill" exhibit and the Leatherdale International Polar Bear Conservation Centre at any one time. The "Journey to Churchill" (JTC) exhibit at the Assiniboine Park Zoo opened in the summer of 2014, following many years of planning and construction. The exhibit includes a variety of Arctic species of mammals and birds, such as polar bears, seals, muskoxen, wolves, and snowy owls, as well as interpretive elements including a representation of the town of Churchill. Interpretive elements feature exhibits about climate change, and the Aurora Borealis Theater runs a short interpretive movie from an Indigenous perspective. The exhibit also includes The Leatherdale International Polar Bear Conservation Centre, which functions as an interpretive space in the area accessible to visitors, and as an active research lab and transition center for orphaned polar bear cubs. With increasing frequency polar bear cubs are found orphaned in the Churchill region. Polar bear scientists attribute this to be, in part, due to the increasing effects of climate change where mothers might abandon or be separated from their cubs while waiting for the sea ice to form (Derocher & Stirling, 1996). For years, when sea ice thaw has been especially early or freeze-up has been delayed, higher incidences of abandoned cubs have been observed (Nelitz et al., 2015). Polar bear cubs that are orphaned in the wild under the age of two have little chance of survival and whether to leave them to perish or to "rescue" them is intensely debated in Churchill.

When orphaned cubs are identified around Churchill, they are assessed by the Assiniboine Park Zoo's veterinary team for their suitability to be transferred to the conservation center, where they become acclimatized to the greater presence of people and are given any additional care. Eventually these polar bears are transitioned into the main JTC exhibit and may later be moved to other accredited zoos. However, under provincial legislation the polar bears are considered property of the government of Manitoba in perpetuity, which affords the province the ability to

track and regulate the care of polar bears (Government of Manitoba, 2019). As these governmental processes and legislation demonstrate, the polar bear has become entangled in the relationship between the human species and its environment and subjugated to the effects of a warming climate and loss of habitat. This has simultaneously enabled development of these sites of polar bear tourism and has exacerbated the effects of climate change. Concomitantly, through the dichotomizing of human landscapes and nature and wildlife, the entangled past of wildlife tourism has subjugated polar bears to the work as an ambassador both for their own species and for the well-being of the planet.

Polar bears: Ambassadors for conservation and climate change

Polar bears in Manitoba work as ambassadors in two ways. First, wild polar bears work generally as ambassadors for climate change (Manzo, 2010). As a species, they are symbolically associated with climate change and are employed by the media to evoke emotional connection and empathy for climate change related issues (Born, 2019; Manzo, 2010). Their work extends beyond the Arctic regions where they live, crossing international boundaries as a symbol of climate change for conservation organizations and they are featured prominently in media headlines (Born, 2019). For example, Coca Cola uses polar bears in their advertising and also to partner with climate change initiatives; similarly, the polar bear as a symbol of climate change is utilized by trusted authorities such as National Geographic (Born, 2019). The icon of the polar bear entails a certain gaze of its own and may in turn influence how tourists choose to photograph and memorialize their experiences (Born, 2019).

Ex situ, or captive, polar bears in Manitoba serve as "ambassadors" for their wild counterparts (Assiniboine Park Zoo, 2020). Here, these bears act as ambassadors for their species, helping to educate visitors about life in the north and climate change issues. The Assiniboine Park Zoo's polar bears exist, in part, to educate the public and create an emotional connection between urban and southern Manitobans and their northern relatives. Indeed, the creation of the "Journey to Churchill" Exhibit was a response to the Polar Bear Protection Act which was passed in 2002 (Government of Manitoba, 2019), and facilitated the transfer of abandoned polar bear cubs to the Assiniboine Park Zoo for conservation and education. Ascribing to captive bears the role of ambassadors for their wild counterparts and raising awareness of climate change, is used to justify this captivity (Assiniboine Park Zoo, 2020). Further, conferring the title of "ambassador" implies the expectation that polar bears accept this elevated position.

In relation to moral ordering and conferring roles and social values to animals, Kline (2018) poses the following question with regard to whale watching:

Perhaps there is social value in asking ourselves when and where else do we engage in moral ordering when it comes to watching vs. eating vs. some other use? Where else do our research efforts need to be more nuanced and holistic? (p. 214)

We argue that this exploration of the social value and the use of wildlife in tourism needs to extend beyond consumption, whether literal or visual. Exemplified in polar bear tourism, the moral ordering of polar bears as ambassador species is bound up in their work in climate change and conservation narratives. The use of wild polar bears is commodified in the form of tourism, particularly last chance tourism (Lemelin et al., 2010), and social in the use of polar bears as an emotional symbol for helping people to connect with and understand the severity and urgency of climate change (Born, 2019). Wild polar bears are situated in an anthropocentric moral ordering where they are important because they help the human species to recognize the harm we are continuing to cause to the planet and other species, and of course ourselves (Huijbens & Einarsson, 2018).

Ex situ, or captive, polar bears are used in a similar manner within the zoo context, where climate change messages are also employed via the medium of the polar bear to help visitors connect with and learn to care about climate change (Bueddefeld, 2019). Yet, captive polar bears are situated further down the moral ordering, as they also work as ambassadors for their wild counterparts. They work in the zoo, as part of a tourist attraction, as a lively commodity, which works to educate and entertain and to support its own existence by attracting visitors in order to pay for the high cost of housing polar bears in a captive setting (Figures 12.2 and 12.3). Furthermore, these captive bears have also paid the price of human impact on the landscape.

Central to understanding working animals is species relations of power and how the relative power held by different animal groups is expressed in their circumstance and experiences (Hovorka, 2019). Not only are animals positioned relative to humans, but they are also positioned relative to each other. The labor of wild and captive polar bears is valued differently on the basis of how wild these groups are perceived to be, and how these perceptions are mediated by their entanglement with human-animal systems (Collard, Dempsey, & Sundberg 2015; Dashper, Chapter 2). The labor of wild and captive polar bears is closely linked with their relationships to the broader ecosystem and its response to climate change.

Further, Braverman (2017) uses a "zoometric" hierarchic scale to compare the relative importance of animals, and in this context the polar bear in its natural ecosystem is valued in terms of being the top predator. However, in terms of perceptions of wild versus captive polar bears, wild bears are viewed as more authentic and therefore with greater value (Bueddefeld, 2019). These perceptions also vary between cultures in terms of the subjectivities that may be ascribed to polar bears. Traditional Inuit hunters believe that polar bears are willing participants in the



Figure 12.2: Children watching a polar bear at an ex situ zoo. Source: Unsplash (Open source). Photo by Vidar Nordli-Mathisen.

hunt and that the imposition of a quota, to conserve populations, would break their trust with polar bear (Lemelin & Maher, 2009); this led to concerns by the Inuit that the polar bear would view them as arrogant and to fears of retribution. On the other hand, the Western view of animals as objects saw the polar bear as augmenting the lived experience of humans and being "a species, a living resource, or a national treasure" (Boyer, 2011, p. 106). These cultural differences in the polar bear gaze highlight the distinction between recognizing the polar bear as an autonomous agent, acting in its own narrative, as opposed to it being an actor in a humancentric narrative.

Neoliberal natures and green governmentality

Critical animal studies trace the moral ordering and neoliberal processes which have made whales (Huijbens & Einarsson, 2018), pigs (Zhou & Grimwood, 2018), elephants (Duffy, 2014), and other animals into lively commodities (Collard, 2013) to be consumed and used by the human species as physical resources in their death and as experiential touristic resources in their life (Rutherford, 2011). The term "lively



Figure 12.3: Visitors on a tundra vehicle photographing a polar bear near Churchill, Manitoba. Source: Author.

commodity," here, refers to living beings whose value is entangled with capitalist processes that render them commodities both in life and death (Collard & Dempsey, 2013; Collard et al., 2015; Rutherford, 2011). Previous research has chronicled the ways in which animal bodies became lively commodities through an array of complex histories: the exotic pet industry (Collard, 2013), animals working as physical laborers and tourism laborers in Thailand (Duffy, 2014), and the process of using captive elephants in Botswana for tourism (Duffy & Moore, 2010), Similarly, research examining shifts in the way animals such as whales have been used - from a resource in whaling to a resource in tourism – identifies a tangible shift in the moral ordering of whales (Huijbens & Einarsson, 2018) as a lively commodity in neoliberal "green" economies (Collard, 2014). Critical theory approaches have made visible the moral ordering of wildlife tourism and have furthered our understanding of how animals are brokered in a complex system of commodities and are commodified for entertainment or education (Collard, 2014; Collard & Dempsey, 2013; Derrida & Wills, 2002; Duffy, 2014; Rutherford, 2011).

Current tourism practices consume wildlife as lively commodities in such a way that perpetuates governmentality; more specifically, a green governmentality where there are moral arguments made to support the use of particular animals as lively commodities (Collard, 2013; Duffy, 2014). Green governmentality addresses how polar bears have been made to work as lively commodities in education, as ambassadors for conservation and sustainability narratives. In research exploring the discursive role of Giant Pandas in politics, Collard (2013) demonstrates that the panda's work is not benign and merely symbolic, but has geopolitical and material implications: "A symbol is far too static a role to account for the dynamic, un-predictable, and material effect that animals can have in political and environmental struggles" (p. 228). Similarly, polar bears as ambassadors transcend the role of static symbol into a material and lively commodity both in tourism and within the climate change discourse.

Tourism, in particular nature-based tourism, is touted as a mutually beneficial industry, where economic profits are in a symbiotic relationship with local people and culture, which promotes the conservation of wildlife and ecosystems (Duffy, 2015). Indeed, green capitalism and the greening of the tourism industry has become integral to sustainable tourism strategies promoted by the United Nations (Duffy, 2015). Yet, the contradiction between unrestricted economic growth and the support of conservation efforts seems to be largely overlooked. Succinctly described by Duffy (2015, p. 531): "Wanner (2014) argues that the green economy is a means by which neoliberal forms of capitalism sidestep and obfuscate the contradictions inherent in the tensions between continual economic growth and ecological limits." The virtue instilled in nature-based tourism, especially where polar bears are employed to teach people about climate change, obscures the fact that the neoliberal processes of tourism in ecologically remote locations such as the Arctic contributes directly to climate change through the carbon emissions associated with travel (Dawson et al., 2010; Lemelin et al., 2010).

Polar bears as lively green commodities

As demonstrated in these case studies, polar bears make visible the tensions between economic growth and ecological limits. For visitors going to see polar bears in Churchill, a moral argument is made whereby a visit to an ecologically sensitive area, requiring a high carbon output, is justified by the value in seeing the polar bear as an ambassador for climate change (Dawson et al., 2010; Lemelin et al., 2010). This justification is often compounded by the increasing market value of last chance tourism opportunities, where the value of the polar bear as a lively green commodity increases in correlation to the negative impact on its habitat and likelihood of long-term survival (Lemelin et al., 2010). Green governmentality is the control of social relations with nature, the natural world, and the environment through economic and political systems. The conception of polar bears as symbolic animals, which have values ascribed to them other than their individual value as living beings, relates to the power relationships and moral ordering that continues to shape wildlife tourism and underscores human relationships with other non-human species (Collard et al., 2015; Hovorka, 2019). How these tourism experiences are created and narrated has important implications for understanding the ramifications of wildlife tourism and the work of polar bears as lively green commodities.

Understanding polar bears as lively green commodities lays visible the practices of green governmentality, under which solutions are justified by framing the polar bear as an ambassador species; however, the work that the polar bear is made to do, or why the polar bear does this work as an ambassador species, is often left unquestioned (Born, 2019). How polar bears are conceptualized as lively green commodities where green governmentality frames the narrative has important implications for the critical thinking about the moral ordering of polar bears and nature in general. Examining the ethical implications of employing polar bears as ambassadors allows for a re-evaluation of the processes by which the human-animal relationships, as such, have formed and continue to reinforce the bears' identity as lively commodities in this touristic exchange.

The ethical implications in these examples are far reaching. As climate change worsens, additional polar bear cubs will likely be found abandoned. This will result in an increase in captive polar bears, and, hence, an increase in polar bear ambassadors at the zoo, and, ironically, more polar bears doing the work to save their wild counterparts. Thus, as the species continues to decline, their rarity perpetuates the polar bears' role as climate change ambassadors in the wild and increases their value as lively green commodities in last chance tourism. In other words, the polar bears' continued suffering through climate change positively benefits their symbolic and therefore economic value. Yet, as tourism to see the wild polar bears increases, so too does the carbon footprint and the effects of climate change, in an ever-worsening cycle of last chance tourism where the polar bear is perpetually working to the death of the species (Dawson et al., 2010; Lemelin et al., 2010).

The gaze is an approach for seeing the ordering and dichotomizing of nature in these tourism contexts (Lemelin, 2006). The power dynamics inherent in the processes by which polar bears are rendered lively green commodities can be better understood through the visitor's gaze of wildlife. Polar bears are made to work as ambassadors in both in situ and ex situ sites, in part, because of visitors and their desire to see polar bears. These experiences, then, may include narratives which frame the polar bears as ambassadors, with the hope of inspiring visitors to care about the species and take action in relation to their impact on climate change. Yet, without exploring the power dynamics which have created these conditions in the first place, as they relate to human and non-human relationships, we fail to critically think about the process of making decisions regarding the value of nature as it pertains to the impact on humans (Carr, 2016; Collard & Dempsey, 2013; Derrida & Wills, 2002). In short, with the additional lens of the gaze we make visible the power dynamics, or moral ordering processes, which have shaped relationships between humans and wildlife over the course of history and have become increasingly complex in modern tourism (Carr, 2016). This provides an additional lens of analysis that allows us to see beyond the literal or figurative consumption of animals through food or photography-based tourism, to their consumption as lively green commodities where tourists consume an ethical narrative of conservation and climate change.

Conclusion

This chapter has examined the work that polar bears are made to do as ambassadors, both for their own species and as a symbol of climate change. In exploring the context of these two case studies we have contrasted the ways in which wild and captive polar bears do their work as lively green commodities in climate change and last chance tourism narratives. Through a critical theory approach, the processes of green governmentality in the polar bear tourism industry are made visible (Rutherford, 2011). Green governmentality mediates social-environment interactions to the extent that the political and economic contexts that have created the current environmental crisis remain largely unquestioned. Moreover, while green governmentality seems to encourage behaviors that have environmental benefits, they are more likely to ensure the maintenance of the capitalist status quo. As Duffy (2015) explains, "In essence, naturebased tourism allows neoliberalism to turn the very crises it has created into new sources of accumulation" (p. 529). Hereby, the use of polar bears for their own conservation, and framing them within the climate change narrative, reinforces the visitor's gaze and the processes of green governmentality that make polar bears continue to labor as lively commodities. This is a process that will continue to the demise of the species, despite its green overtones. If polar bears are to do the work as conservation and climate change ambassadors, the next step in investigating the ways animals work in the tourism industry must be extended beyond their symbolic roles, which render them as lively green commodities and perpetuate the same system that created the current climate crisis. To begin to address and create "appropriate solutions" (Rutherford, 2011, p. 275) humanity must re-examine its current moral ordering (Kline, 2018), which is reinforced and perpetuated by the visitor gaze, rendering polar bears as ambassadors in the first place.

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