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Last-chance tourism: the boom, doom, and gloom of visiting vanishing destinations

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Popular press and industry stakeholders are reporting a travel trend whereby tourists increasingly seek to experience the world's most endangered sites before they vanish or are irrevocably transformed. Termed 'last-chance' or 'doom' tourism in the popular media, the desire for tourists to witness vanishing landscapes or seascapes and disappearing species may have important consequences for tourism management, yet the nature of these consequences is poorly understood by the academic community. This paper describes how last-chance tourism is promoted in various tourism marketing strategies, especially in the Arctic. The analysis is supported through a literature review of web-based information and an analysis of three different studies conducted in Churchill, Manitoba, Canada – the self-declared polar bear capital of the world. The authors also examine more closely the concepts of dark and last-chance tourism, and elaborate on the possible connections between the two. The paper concludes with a discussion of the implications of this type of tourism and identifies potential risks and opportunities.

Keywords: last-chance tourism; doom tourism; disappearing species; vanishing destinations; Arctic; dark tourism

Introduction

Concerns over vanishing destinations such as the Great Barrier Reef, the Everglades of Florida, the ice cap on Mt Kilimanjaro, and the Maldives (Agnew & Viner, 2001; Amos, 2001; Becken & Hay, 2007; Hall & Higham, 2005; Uyarra et al., 2005) have prompted some travel operators and tour agencies to recommend these destinations to consumers before they disappear. The trend is also embodied by a surge in the number of travellers to the Galápagos Islands and the polar regions, all besieged by changes to their ecosystems. Zoos will eventually, according to Hume (2009), be the only places where creatures like polar bears can survive, 'sadly as a collection of "exhibits" for our viewing pleasure'. In popular press articles, this travel trend has been reported as 'disappearing tourism', 'doom tourism', and 'last-chance tourism' (Buhasz, 2007; Salkin, 2007), and specifically

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when climate is a decisive factor, ‘climate tourism’ (Brock, 2008). Other sources discussing this tourism trend include entire books (see Addison, 2008; Burns & Bibbins, 2009; Hughes, 2008; Jones, Phillips, & Jenkins, 2010; Lisagor & Hansen, 2008). However, beyond Shapiro’s (2007) brief description of doom tourism where travellers are deliberately seeking out ‘imperilled destinations and try to experience their grandeur before they vanish’ (Shapiro cited in Ruiz, 2008), few academics, apart from Lemelin and Johnston (2008), Dawson, Lemelin, and Stewart (2009), and Dawson, Stewart, Lemelin, and Scott (2010), have attempted to define and study this emerging tourism trend. Consequently, in this article, the definition of the preferred term ‘last-chance tourism’ is similar to that used by Lemelin and Johnston (2008) and Dawson, Lemelin et al. (2009): a niche tourism market where tourists explicitly seek vanishing landscapes or seascapes, and/or disappearing natural and/or social heritage.

Publicising the vulnerability of certain threatened destinations can be, as Burns and Bibbins (2009) and Dawson et al. (2010) argue, a double edged sword. While it can serve to help raise awareness and visibility for a problem, and may – in some instances – promote conservation efforts, it can also attract more tourists seeking to undergo such experiences before they are gone forever, therefore accelerating negative impacts.

Beyond speculative evidence established in the popular press, the concept of last-chance tourism has rarely been empirically examined or evaluated. The only currently known study to empirically examine last-chance tourism in the Arctic is Dawson, Lemelin et al. (2009) work. Through an examination of the carbon cost of polar bear viewing in Canada, these authors found evidence that the majority of individuals travelling to Churchill, Canada for the purpose of viewing polar bears were strongly motivated by the stated vulnerability of the species and indicated that they wanted to see the bears before they disappear forever.

This paper describes how last-chance tourism is promoted in various tourism marketing strategies, especially in Arctic regions. The discussion is supported through a content analysis of web-based information and an analysis of three different studies conducted in a popular polar bear viewing destination: Churchill, Manitoba, Canada. The authors also examine more closely the concepts of dark and last-chance tourism, and elaborate on the possible connections between the concepts. The paper concludes with a discussion of the implications of this type of tourism and potential solutions. In the next section, we describe how the polar regions have been used to promote vanishing and disappearing destinations, as well as examine the potential ramifications from these changes on travel trends.

The vanishing north

The opportunity to gaze upon polar landscapes, mega-fauna, and unique indigenous cultures have attracted visitors to the Arctic for centuries (Hall & Johnston, 1995; Jasen, 1995; Smith, 1989; Valda, 2002). Today, vanishing destinations in the Arctic include major destinations such as the World Heritage Site of Kluane/Wrangell-St Elias/Glacier Bay/Tatshenshini-Elsek in the USA and Canada, and the Iluslissat Ice fjord, Greenland (Addison, 2008; Jones et al., 2010; Salkin, 2007). The potential loss of these unique polar landscapes through global climate change provides a rationale for some tourists to visit these areas before they disappear. In this context, societal angst over climate change in the polar regions has provided operators with an opportunity to market their products as last-chance tourism (Buhasz, 2007). Indeed, the warming of the Arctic and the Antarctic

has contributed to a mini-boom in tourism as curious travellers rush to see the regions before polar ecosystems are irrevocably transformed (Brock, 2008).

This rush to the Arctic provides communities in the polar north, and tour operators with opportunities to benefit economically from last-chance tourism, at least in the short to medium term. However, the irony lies in the fact that long-haul air travel is often necessary to reach these remote polar locations and this means that tourists are contributing to the demise of the resources they visit through the release of Greenhouse gas emissions, a process that is currently far from sustainable (Agnew & Viner, 2001; Becken & Hay, 2007; Gössling et al., 2005; Higham & Lück, 2007; Uyarra et al., 2005). Concerns for these areas, but more specifically northern environments, were expressed by an international team of scientists (see Nordic World Heritage Foundation & UNESCO World Heritage Centre, 2008) who proposed the creation of the first-ever international 'sea-ice park' designated as a transnational Arctic World Heritage Site to help protect critical ecosystems in the Arctic regions of Canada, Greenland, Alaska, Russia and Norway (Boswell, 2009).

Some researchers have suggested that melting sea-ice (Comiso, Parkinson, Gersten, & Stock, 2008; Stroeve, Holland, Meier, Scambos, & Serrez, 2007), and the opening up of the Arctic, may permit easier access (see Dawson, Maher, & Slocombe, 2007; Dawson, Stewart, Maher, & Slocombe, 2009), thereby allowing last-chance tourists to see ever more polar landscapes before it is transformed. Anecdotal evidence from cruise passengers visiting Arctic Canada supports this claim and suggests that for many tourists the opportunity to see such wildlife species before they were gone forever was a key factor in their decision to visit (Salkin, 2007; Shapiro, 2007). However, other authors indicate that climate change may be problematic for tourism in northern communities, and much more complex than previously imagined (Stewart, Howell, Draper, Yackel, & Tivy, 2007). In this respect, climate change could be thought of as being a double-edged sword with its success causing the eventual destruction of the attraction (Meletis & Campbell, 2007).

The lack of wildlife is not the only factor influencing tourist satisfaction in the Arctic. In November 2008, for example, the first court case based on climate change and the resulting disappearance of pack ice occurred. A German cruise operator promised in a brochure a cruise through the Northwest Passage with a 'journey through meter-thick pack ice', but due to global warming, there was no 'meter-thick pack ice' to be found on this journey (Schwabe, 2008). A disappointed passenger took the tour operator to court and won the case because the judge found that the lack of pack ice was a deficiency of the trip and had indeed been promised in the brochure. Maher and Meade (2008) also reported that some cruise visitors to Canadian Arctic were quite disappointed that they did not see more wildlife. The key question emerging from such development is how long tour agencies can continue to sell Arctic cruises based on images of polar bears, narwhals and beluga whales without actually delivering on those promises? (Stewart et al., 2007).

Literature review

A review of the literature and web-based information reveals over 25 different sources citing climate change, disappearing or vanishing, doom, dying, endangered, last-chance, and 'see it before its gone' tourism, all somewhat predicated on the perceived future effects of global warming on natural and some cultural destinations (Shapiro, 2007). In addition to media sources, five published books (*Last-chance to see* (Adams & Carwardine, 1992), *The disappearing world: 101 of the earth's most extraordinary and endangered places* (Addison, 2008), *Frommer's 500 places to visit before they disappear* (Hughes, 2008),

Disappearing destinations: 37 places in peril and what can be done to help save them (Lisagor & Hansen, 2008), and *Disappearing destinations* (Jones et al., 2010)) and one journal article (*The end of tourism? Climate change and society change* (Burns & Bibbins, 2009)) were found discussing these topics. The message (some in favour and some against) was that wilderness, and wildlife in particular, was disappearing, and that tourism provided the opportunity to view these landscapes and species before they vanished. It should also be noted that many other articles used in news pieces and other media sources exist but are summaries of the original articles by Leahy (2009), Ruiz (2008), and Shapiro (2007) and are as such not included in this overview. If they had been, then the number would have increased greatly (Table 1).

What this literature review illustrates is that there is indeed a growing awareness of this phenomenon in the popular press, and a emerging, albeit slow, recognition by the academic community. Following next is the analysis of various studies conducted in Churchill, Manitoba, to determine whether Shapiro's (2007) postulation that last-chance tourism generates more travellers is supported by this example.

We now examine the polar bear viewing industry in Churchill, Manitoba as a case study to explore the phenomenon of last-chance tourism and to discuss the opportunities and risks associated with its emergence. Two main clusters of research have been conducted on Churchill's polar bear viewing industry: an analysis of the socio-environmental dimensions of wildlife tourism (Lemelin & Wiersma, 2007a, 2007b), and an evaluation of the influence of climate change on polar bear viewing tourism demand (Stewart, 2009), including an estimation of the industries' carbon emissions (Dawson, Lemelin et al., 2009; Dawson et al., 2007; Dawson et al., 2010; Dawson, Stewart et al., 2009). The results of these studies are summarised and the extent to which polar bear viewing tourists were motivated to visit Churchill, Manitoba because of the stated vulnerability of the species (i.e. last-chance tourism) are analysed.

Polar bear (Ursus maritimus) viewing in Churchill

As some polar bear populations across the Arctic are under threat due to significant decreases in sea ice extent and thickness (ACIA, 2004; Furgal & Prowse, 2008; Zhang & Walsh, 2006), the opportunity to view polar bears in their natural environment is perhaps one of the most obvious examples of last-chance tourism, for the species has become one of the iconic symbols of climate change (Lemelin, 2005). The health of polar bears is directly dependent on the amount of time they are able to spend on the sea-ice feeding on ice dependent seals. This relationship is particularly acute for the Western Hudson (WH) Bay subpopulation near Churchill, Manitoba who – unlike some other polar bear subpopulations that spend full seasons on the sea ice – spend several months of the year fasting on land due to the complete annual ice melt in the region (Gagnon & Gough, 2005).

A previous reduction in sea ice in the Hudson Bay region, which occurred between 1988 and 2004, caused the WH polar bear subpopulation to decline by 22% (Stirling & Parkinson, 2006). Projections suggest that if the Hudson Bay regional temperature was to increase the ice-free season by approximately two weeks or more (Etkin, 1991), female polar bears will lose 22 kg of body mass per season, which would greatly reduce conception and birth rates (Stirling & Derocher, 1993). Stirling and Parkinson (2006) even believe that female polar bears in the Hudson Bay region may stop reproducing altogether within the next 20–30 years. This latter prediction is especially troubling to the long-term sustainability of wildlife tourism in Churchill based on its dependence on polar bears.

Table 1. A selection of media headlines related to last-chance tourism (presented in alphabetical order).

Keyword search	Headline	Author/media source/website
Climate tourism	Mass tourism and climate change could lead to destruction of world's wonders	Hickman (2006). The Independent. http://www.independent.co.uk/environment/mass-tourism-and-climate-change-could-lead-to-destruction-of-worlds-wonders
	Tourism at the end of the world	Leahy (2009). Tierramérica http://www.tierramerica.info/nota.php?lang=eng&idnews=1970
	Climate change to hit Kakadu and top end tourism hard: Research	Ravens (2009). National Indigenous Times http://www.nit.com.au/News/story.aspx?id=17293
	Melting mountains: How climate change is destroying the world's most spectacular landscapes	Simpson (2005). Common Dreams. News Centre. http://www.commondreams.org/cgi-bin/print.cgi?file=headlines05/1105-03.htm
	Climate change to kill coastal tourist attractions	Wright (2009). http://www.news.com.au/couriermail/story/0,25549911-17102,00.html
	Five places to go before global warming messes them up	Sutter (2009). CNN. http://www.cnn.com/2009/TRAVEL/02/17/global.warming.travel/index.html
Disappearing destinations	Five disappearing destinations: get 'em before its hot	Onion (2008). Green Daily http://www.greendaily.com/2008/04/22/gallery-five-disappearing-destinations-get-em-before-its-hot/
	500 places to visit before they disappear	Haggarty (2008). AOL Canada http://travel.aol.ca/article/500-places-to-visit-before-they-disappear/435201/
	The future of travel: The 'disappearing destinations' of 2020	Churchill Travel Insurance (2009). http://www.churchill.com/pressReleases/220906.htm
Doom Tourism / Tourism of Doom	Gloom and doom tourism boom: Going, going, gone 'Tourism of doom' on rise	CDNN (2007). http://www.cdnn.info/news/article/a071215.html Salkin (2007). http://www.nytimes.com/2007/12/16/world/americas/16iht-tourism.1.8762449.html
	Endangered sites see boom in 'tourism of doom'	The Sydney Morning Herald (2009) http://www.smh.com.au/travel/endangered-sites-see-boom-in-tourism-of-doom-20090206-7zbv.html
	'Tourism of doom' – seeing earth's natural wonders before it's too late	No Author (2009a). http://www.prlog.org/10181505-tourism-of-doom-seeing-earths-natural-wonders-before-its-too-late.html
	Tourism of doom – travel to imperilled places	Global Travel Industry News (2007). http://www.eturbonews.com/552/tourism-doom-travel-imperilled-places
	Doom tourism: while supplies last	Tsiokos (2007). Population Statistics http://www.populationstatistic.com/archives/2007/12/16/doom-tourism-while-supplies-last/

(Continued)

Table 1. Continued.

Keyword search	Headline	Author/media source/website
	Natures doom is tourism's boom	Shipman (2007). Daily Telegraph http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/12/23/eatour123.xml
	The tourism of doom	Shapiro (2007). http://www.travelagewest.com/article_ektid22624.aspx?terms=doom+tourism
	Doomsday tourism: See natural wonders before they're gone forever	Earthfirst (2008). http://earthfirst.com/tag/endangered-species/page/2/
	A slice of doomsday tourism	Dutt (2008). Yahoo News India http://in.news.yahoo.com/32/20090606/1056/tnl-a-slice-of-doomsday-tourism.html
	Doomsday tourism: Seeing it before you can't	Kendle (2009). Vagabondish. http://www.vagabondish.com/environment-doomsday-tourism-travel-tours/
Dying environments	Dying glaciers draw curious to Swiss Alpine peaks. Reuters	MacInnis (2006). Reuters. http://www.planetark.com/dailynewsstory.cfm/newsid/38141/story.htm
Endangered Destinations	Endangered destinations: Places, like species, can vanish forever. A look at some unique, imperilled treasures	Smith (2008). http://www.usnews.com/articles/science/environment/2008/05/15/endangered-destinations.html
	10 endangered vacations	No Author (2009b). Our Beloved Earth. http://ourbelovedearth.blogspot.com/2009/06/10-endangered-vacations.html
	Endangered natural wonders worth seeing	Ruiz (2008). Forbes.com. http://www.forbes.com/2008/09/15/travel-endangered-ecosystems-forbeslife-cx_rr_0915travel.html
	Travel's most endangered destinations. Put these special wonders on your must-visit list before they disappear	Frank (2009). http://www.msnbc.msn.com/id/25737162/
	Endangered vacations	Shapley (2009). Yahoo Green. http://green.yahoo.com/blog/daily_green_news/78/endangered-vacations.html
Last-chance tourism	Last-chance tourism	Buhasz (2007). Globe and Mail http://v1.theglobeandmail.com/servlet/story/RTGAM.20070216.wclimatealmanac/BNStory/ClimateChange/home?pageRequested=all
See it before its gone tourism	See them before they are gone: Endangered list for travel destinations	Global Travel Industry News (2008). http://www.eturbonews.com/4709/endangered-list-travel-destinations
	5 Places to go before they are gone	Uhland (2009). Gaiam Life. http://life.gaiam.com/gaiam/p/Go-Before-Its-Gone-Destinations-in-Peril.html

The abundance of lakes, rivers, forests, and tundra, coupled with the longstanding tradition of wilderness outfitters, lodges, and other leisure facilities, has provided a firm foundation for Churchill's tourism industry. By the 1960s, Churchill was becoming a popular birding destination; however, it was not until a decade later that some small-scale polar bear outings were offered in the region. Through the help of various existing industries, such as hunting, fishing, birding, whale watching, aurora borealis gazing, and polar bear viewing activities, Churchill's tourism industry continued to grow and diversify throughout the late twentieth century. The economic impact of nature tourism in 2002 was estimated at well over \$3 million [. . .]. One of the most important components of Churchill's wildlife tourism industry is polar bear viewing. (Lemelin, 2005, p. 188)

Polar bears congregate along the shores of Hudson Bay near the town of Churchill, Manitoba for approximately six weeks during the fall, where they await the formation of sea ice. In essence, tourism operators have capitalised on this waiting period where polar bears are relatively inactive and highly visible, thus providing visitors with an opportunity to easily view polar bears in their natural habitat. The polar bear viewing industry evolved from a few vehicles and operators in the late 1960s and 1970s to the current infrastructure, which includes two main operators managing 18 vehicles and two tundra lodges, along with two helicopter companies that are permitted to operate in the area managed by the Manitoba Department of Conservation (Lemelin, 2005).

Components of last-chance tourism are highlighted through the help of three existing studies examining the polar bear viewing industry in Churchill, Manitoba (see Dawson, Stewart et al., 2009; Lemelin & Wiersma, 2007a; Stewart, 2009). Through an analysis of this collective research it becomes clear that the vulnerability of polar bears in the region is an increasing motivation for tourists to travel to Churchill to view polar bears before they are gone. The findings from Lemelin and Wiersma's (2007a; 2007b) on-site interviews of 18 polar bear viewers in Churchill, Manitoba are incorporated within the findings of Dawson, Lemelin et al. (2009) and Dawson et al. (2010).

During the 2007 polar bear viewing season, 334 tourists were surveyed on-site by Dawson, Lemelin et al. (2009) and Dawson et al. (2010). The surveys were administered in order to examine both tourists' perception of climate change in general, and the role that climate change played in their decision to travel to Churchill (i.e. last-chance tourism). Results of the 2007 visitor survey revealed that the market for polar bear viewing is strong and demand for viewing experiences is not likely to decline in the short term (italicised quotes below are taken directly from the Dawson et al. survey). Over 82% of polar bear viewing tourists indicated that even if environmental conditions altered the population dynamics of polar bears so much that they were able *'to view only a quarter of the number of bears they actually saw on a 2007 visit'*, they would still visit Churchill in the future. If visitors were *'not guaranteed to see any bears'* (i.e. they may or may not see them), the percentage of visitors indicating that they would still visit remains above 50%. If, in the future, polar bear populations were to *'appear unhealthy'* (i.e. emaciated), which is and expected to continue, over 60% of visitors would still visit Churchill to see polar bears. The majority of visitors (72%) indicated that if they *'could not view polar bears in Churchill'*, for example, if the WH Bay subpopulation was locally extirpated, they *'would be willing travel somewhere else so they could view polar bears'*. Of the individuals who are motivated to view polar bears despite the potentially negative consequences of climate change, 70% *'would be willing to pay more'* than they did during their 2007 trip, which cost tourists on average between CDN\$5000–8000 per person (Dawson, Stewart et al., 2009). Only 7% of survey respondents disagreed that climate change would indeed impact polar bears in the Churchill region in the future (i.e. leading to local extirpation).

In addition to the main survey, 18 polar bear viewers were interviewed on-site while viewing polar bears. Of those interviewed, only a few expressed their concerns regarding the polar bears (Table 2).

Table 2. Tourist quotations relating to climate change.

Tourist 2	'I wanted to see the bears with my daughter because my grandchildren and their children may not ever know polar bears except in a zoo'
Tourist 5	'I'll tell ya, I'm a single mom and I am unemployed but I still took money out of my precious savings to come up here to see the bears before they are all gone'
Tourist 12	'I was here seven years ago but I wanted to come up again to show my wife the polar bears before they are gone'
Tourist 17	'I thought I better come see the bears because the next time I am in this country they will be all gone'

The vast majority (88%) of polar bear viewing tourists agree or strongly agree that, '*humans are contributing to changes in the global climate*'. However, fewer respondents (69%) agree or strongly agree with the statement, '*air travel is a contributor to climate change*'. These perceptions suggest that there is a general understanding that humans play a role in influencing a changing climate, and that polar bears will feel the impact of change. However, individuals do not necessarily understand how this process occurs or how they might play a role in mitigating against future climate change.

These findings are similar to those of Lemelin and Wiersma (2007a), who noted that Churchill visitors indicated some awareness of the wide range of issues affecting polar bears and their environments, and were deeply concerned about some of them. A number of participants argued that the educational benefits of keeping Churchill accessible far outweighs any potential negative impacts on the polar bears. Although some participants talked about the educational aspects of their outings (Lemelin & Wiersma, 2007a, 2007b), few, however, identified any behavioural changes beyond the on-site experience. Polar bear viewing, in the context of Churchill, Manitoba, did not appear in this particular instance at least, to be an effective agent of change. Such findings then bring into question the potential of wildlife tourism stimulating environmental ethics (as posited by Beaumont, 2001) or the creation of 'climate change and/or environmental ambassadors' (mentioned by Burns & Bibbins, 2009; Meletis & Campbell, 2007).

The economic implications of these findings could be significant for the tourism industry in Churchill in the short term. Increased season length combined with increased demand, and an increased willingness to pay for similar tourism products, is likely to positively influence revenues for operators and the wider community. However, despite the seemingly significant economic potential for the industry in the short term, in the long term, sustainability of the industry is of great concern. Without polar bears there is no polar bear viewing industry in Churchill. Thus, the short boom from the doom tourism will, according to most long-term climate change predictions, end up in gloom.

Stewart's (2009) study of 27 local stakeholders (e.g. educators, managers, operators) and 75 residents also noted that climate change was emerging as an important issue, particularly in relation to declining polar bear populations in the WH Bay region. A few stakeholders were steadfast in their opinion that 'the bears will always be here'. Another stakeholder thought that the bears may '*come off [the ice] in Arviat [the next community to the north]*'. At the other end of the spectrum an educator claimed, 'If climate models are correct the trends suggest there won't be enough ice on Hudson Bay to support polar bears, ringed seals and different birds. No ice means no bears'. Similarly:

Climate change is not a good thing, but Mother Nature is what it is. There is proof that permafrost is melting, not sure how devastating that will be. Canadian wildlife services tells us that the polar bear population is getting smaller, producing less and less able to survive because of the late freeze up and early thaw. (Churchill Stakeholder)

Another stakeholder noted that reports of declining polar bear populations might actually lead to growth in 'last-chance' tourism (at least in the short term) because 'more people will want to see them'. However, discussions about climate change were surprisingly short, with an overall lack of concern about the long-term implications for the tourism industry (apart from two educators), with several stakeholders concluding that 'climate change seems to concern people in the south more than people in the north' and 'climate change is happening, but it's not that much of an issue here'. As one educator put it: '*the community doesn't talk about it [climate change], according to them the bears will always be here*'. The 'smoothing over' of the implications of climate change for Churchill's nature-based tourism industry was intriguing, and it was a topic Stewart (2009) asked one stakeholder more about:

When the Wildlife Service said there were 200 less bears, a lot of blame was thrown around, and a lot of fingers pointed to the harassment of bears by the [tourism] industry. So maybe that is why people don't want to talk about it. (Churchill Stakeholder)

Local residents were also asked about key issues facing the future of tourism development in their community, and climate change was at the forefront in the responses. 'We need to manage the bears, but with climate change they might not be here. To survive, the bears will have to shift. It's unpredictable' and similarly,

there is a lot of talk about the polar bears because of global warming, about whether the bears are eating enough, going onto the ice too early or too late. It's going to be hard on the bears, and tourism will drop off, will be gone forever.

Other residents identified that 'the polar bears won't last forever and that in itself may heighten interest in them because they are on the path to virtual extinction with climate change', and making the connection to sustainable tourism: 'With climate change we might not see so many bears, they are likely to shift north, similarly with the whales [...] All of this threatens long term sustainable tourism'.

An important theme to emerge from the discussion of climate-induced changes (and especially so on the polar bears) was the idea that Churchill has been, and will continue to be, 'resourceful and inventive in light of change'.

Climate change has the potential to change the landscape of business here in Churchill. . . I don't think we'll lose it completely, we'll adapt. It would be devastating if we lost the ice and what-not. No, we won't die, we would adapt.

As other residents put it:

We have no idea, really if the bears will stay here or not, it's not something we can help. It would be nice to see the bears stay on the ice, we'd like more time with them, whether that will happen who knows. A mum and her three cubs just came out, so the birthrate isn't being affected. It'll be much further down the road, if the bears do go, we'll have to invent something else. (Churchill Resident)

So for the short term, the reported long-consequences of climate change or doom are providing an economic boom for this area, for as one local operator noted to a reporter,

'I'd like to do something about it, but what can you realistically do to turn back the clock? If we have to, we'll move our business north. We'll follow the bears' (Struzik, 2007). The paradox with this adaptive rationale is an increase in tourism activity likely will add strain to an environment (both human and ecological) that already is stressed by the effects of climate change (Iyer, 2008). Thus, motivating other tourists to then rush to see further diminished resources (Brock, 2008; Salkin, 2007). Driving this form of tourism, like many other forms of tourism, is encouraged through media and consumerism where, a wide variety of last-chance tourism 'consumption practices may be seen as being defined by or related to the social world of the tourist: that is, [*last-chance*] tourism experiences may be consumed in order to give some phenomenological meaning to tourists' own social existence' (Sharpley, 2005, p. 223, emphasis added). Since part of the attraction of last-chance tourism are disappearing landscapes and vanishing species, the potential links between dark and last-chance tourism are examined next.

Discussion

Visitors, according to Jasen (1995), Smith (1989), and Valda (2002), have been drawn to northern Canada for the past two centuries, so they can witness the vanishing ways of the aboriginal peoples in these areas. More navigable waters in the Canadian north in the early twenty-first century will increase the accessibility of this area to more visitors. Visitors to the Arctic may be less inclined to witness vanishing cultures, and more intent on seeing the disappearing icons (i.e. polar bears, beluga, walrus) of the vanishing north. During these outings, visitors can also become more familiar with this harsh landscape that claimed the lives of so many early European explorers. Some cruise ships will actually take visitors to Beechey Island to see the 'graves of three men from the famed Franklin Expedition, a large British mission sent to discover the passage, as well as King William Island, where the rest of the crew and their ships vanished in 1848' (Petrie, 2009). Although very little information exists regarding the attraction of European and Inuit burial sites, graveyards, battle sites, and areas where early Europeans explorers over-wintered, field observations by some of the authors indicate that these areas are indeed becoming tourism attractions, especially for cruise ship passengers (i.e. visits to Beechey Island) (Stewart, Dawson, & Draper, in press). The growing 'death' appeal of the polar north has been poorly documented, and rarely discussed in the academic literature.

Since the 1990s, terms such as dark tourism (Lennon & Foley, 2000; Sharpley & Stone, 2009), than a tourism (Seaton, 1996; Seaton & Lennon, 2004; Stone & Sharpley, 2008), black spot tourism (Rojek, 1993), morbid tourism (Blom, 2007), and atrocity heritage (Ashworth, 2004) were coined to make sense of the packaging and consumption of human death and disaster for tourism purposes. While differences between these terms exist, they can be usually generalised to encompass travel to a destination motivated in part by the desire for actual or symbolic encounters with death (Seaton, 1996). The most common forms of dark tourism, according to Seaton (1996), are the visitation to areas of mass fatalities, including the holocaust and concentration camps, such as Auschwitz (see Miles, 2002), sites of massacres (Preece & Price, 2005), and battlefields, such as Waterloo (Seaton, 1996). Additional categories of dark tourism are travel to graveyards and catacombs (Dunkley, 2007), battle site re-enactments (Seaton, 1996), public enactments of death (e.g. public executions), internment sites (Strange & Kempa, 2003), terrorists attack locations (e.g. ground zero in New York city), and visits to symbolic representations of particular deaths in locations unconnected with their occurrence (e.g. Holocaust Museum in Washington) (Seaton & Lennon, 2004).

One of the central tenets of dark tourism is the anxiety and/or doubts associated with ideas such as rationality, technology and progress (Ryan, 2005; Sharpley, 2005). However, by focusing on such concepts, researchers on dark tourism have tended to showcase modern human-induced disasters while precluding non-human-induced disasters (Smith & Croy, 2005). These traditional definitions of dark tourism imply that this type of tourism is largely predicated on the destruction or disappearance of socio-cultural heritage or single persons. Even when natural disasters such as volcano eruptions destroyed the city of Pompeii, Italy, or the village of Te Wairoa by Mount Tarawera in 1886 in New Zealand are discussed (see Ryan & Kohli, 2006; Smith & Croy, 2005); or more recent events such as 'Katrina Tours' in New Orleans (Pelluzo, 2009), they are still largely encompassed within a socio-anthropological framework (Miller, 2008). Unfortunately, as Lippard (1999), MacCannell (1999), and Pelluzo (2009) reported, these types of tours can quickly become exploitive and oppressive.

Disappearing areas such as the polar north, coral reefs, or the Amazonian rainforest highlight our anthropogenic legacy in these formerly remote areas. The death appeal of these sites is often natural (i.e. disappearing ecosystems) and/or vanishing cultures (i.e. the traditions of indigenous peoples residing in these areas). However, this argument also reveals another aspect of dark tourism, since the death appeal is largely anthropocentric; missing from this definition then are the deaths of other species and ecosystems. As argued, this facet is reflected in an increasing body of non-academic literature (e.g. Addison, 2008; Lisagor & Hansen, 2008), and some academic literature (Dawson, Lemelin et al., 2009). Largely missing from the realm of academic dark tourism definitions is the inclusion of nature-based/non-human tragedies including the disappearance of natural heritage (i.e. the break up of ice shelves and glaciers in the polar regions, disappearing ski industries, diminishing glaciers (e.g. Mount Kilimanjaro), and/or travel to see endangered species before they are extinct or locally extirpated (i.e. coral reefs, polar bears) (Burns & Bibbins, 2009).

This paper provides some initial documentation of last-chance tourism in one location, and a discussion as to how dark tourism could be applied to the disappearing natural heritage, which is currently witnessed through the impacts of global environmental change, and the perceived disappearances of polar bears in Churchill, Manitoba. How these findings and the last-chance tourism trend applies to other polar locations and tourism destinations more generally will require further research, as will notions that visitation creates climate-change ambassadors. How cultural heritage sites are being impacted by climate change also warrants further analysis (Addison, 2008; Lisagor & Hansen, 2008).

Critics of last-chance tourism point out that while most of these trips are marketed as environmentally aware and eco-sensitive, they have little to do with sustainable tourism and relate more with 'ego-tourism' (Lemelin & Smale, 2007; Wheeler, 1993, 1994), and hyper-consumption (Burns & Bibbins, 2009; Meletis & Campbell, 2007), forms of tourism where travellers 'are increasingly seeking forms of travel and tourism that in some way or another, are status symbol' (Sharpley, 2005, p. 222). In this hyper-consumptive state, little (if any) thoughts are given to environmental and/or social repercussions from one's activities. Essentially it is the exploitation of vulnerable species and ecosystems that are under threat from short-term economic perspectives, for as Brock (2008, p. 43) states 'a tourist boom would be good for arts and crafts. But selling more beadwork would hardly make up for an ecosystem in freefall'. Skeptics also point out that the transportation and accommodation infrastructure required for these types of travel often contribute to environmental degradation and climate change, further precipitating the decline of the system (i.e. the melting of glaciers) (Dawson et al., 2010; Higham & Lück, 2007).

The absence of any discussion relating to sustainability, carbon footprint, or socio-ecological justice in last-chance tourism and related concepts (i.e. doom tourism), and by the tourists visiting these sites, especially in the case of Churchill, Manitoba, is surprising, especially, when one considers the diversity of the clientele that are partaking in these activities (Lemelin & Smale, 2007; Lemelin, Smale, & Fennell, 2008; Lemelin & Wiersma, 2007b). Perhaps, this is one of the lessons that can be acquired from other discussions on dark tourism, which have begun to address the ethical dimensions of these tourism activities, especially in the areas of high cultural sensitivity (Ryan & Kohli, 2006). Proponents of last-chance tourism argue that the economic contributions to local communities are warranted, while carbon-credits help to offset some of the impacts. Indeed, the greatest contribution of this type of travel may be the creation of climate change ambassadors; however, the evidence found provides little support for such conclusions.

Conclusion

Through a content analysis of popular media and some academic materials, and an analysis of three studies conducted in Churchill, Manitoba, this article demonstrates how last-chance tourism, as a motivation for travelling to vulnerable destinations, is occurring. The article also discussed some of the opportunities and challenges associated with marketing this type of tourism. The potential loss of unique polar landscapes or polar bears occurs because global climate change is providing rationale for some tourists to visit these areas before they 'disappear', 'vanish', or are irrevocably transformed. In Churchill, climate change appears to be influencing increased tourism demand from individuals interested in viewing polar bears. The paradox lies in the fact that tourists travelling long distances to view polar bears before they are gone are disproportionately responsible (per capita) for increased emissions, which ironically impact the health of the very resource they are there to see: the polar bear. Although increased demand and publicity could be economically promising for the community in the short term, the long-term sustainability of the industry is precarious at best. The callousness of some operators (see the Struzik, 2007 interviews) regarding the long-term viability of the polar bear population in Churchill highlights the short-term boom from the doom. The previous decades were rampant with definitional debates surrounding the emergence of ecotourism including the difficult task of developing accreditation programs and dealing with 'green washing'. These conversations are likely to continue; however, the ethics around last-chance tourism and its role between ecotourism and dark tourism is a debate that should be of central concern in the coming decades.

However, some authors also describe how some destinations may opt to minimise visitor numbers by continually raising entry costs or by charging additional taxes. Indeed, it is likely that some destinations will go as far as to introduce visitor capping where travellers will either have to 'win' or 'earn' the right to holiday in a particular place via a holiday lottery. Some tourist areas, particularly those that involve long-haul flights, may require travellers to store up 'air mile credits' based on their personal needs and their overall energy use. Additionally, the social contributions that travellers put back into the communities they visit may be considered before being granted visitation rights to a particular destination (Burns & Bibbins, 2009; Meletis & Campbell, 2007). Last-chance tourism, from this perspective, provides a unique opportunity to nurture environmental awareness, for visitors to realise that they 'are the potential saviours of nature, not, inevitably its enemy' (Franklin, 2003, p. 220, 30).

The emergence of last-chance tourism, and the opportunities it may bring such as the promotion of responsible tourism, prompted numerous ethical questions that require

immediate consideration. One of the most immediate is the appropriateness of profiting in the short term from disappearing, dying, vanishing, or irreversibly changed landscapes and species. The discussion in this article indicated that the similarities between dark tourism and last-chance tourism include:

- Predication on disappearing landscapes/seascapes and vanishing socio-cultural heritage (i.e. aboriginal cultures);
- Motivation in part by a desire to witness areas of mass fatalities or in this case, dying wildlife (i.e. polar bears);
- Indirect motivation by a desire to visit graveyards and burial sites;
- Association to social angst surrounding rationality, technological progress, and globalisation;
- Symbolic representation of ecocide and anthropogenic impacts by climate change.

These dimensions outweigh the differences which include that last-chance tourism is a travel experience motivated by a desire (actual or symbolic) to encounter and interact with death; and that tour packages by cruise ships are not presently solely based on human death and disaster (i.e. visiting the grave sites of Franklin's ill fated voyage). Indeed, what this review of last-chance tourism highlights is that the present definition of dark tourism is limited by current anthropocentric notions, which fail to recognise the attraction of disappearing destinations and vanishing species. Further studies examining the potential links between last-chance tourism and disappearing destinations and/or vanishing species in other locals and areas also warrant further analysis.

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