#### Check for updates

#### **OPEN ACCESS**

EDITED BY David Fennell, Brock University, Canada

REVIEWED BY Edward Huijbens, Wageningen University and Research, Netherlands Carol Kline, Appalachian State University, United States

\*CORRESPONDENCE Rachel M. Yerbury R.Yerbury@latrobe.edu.au

RECEIVED 22 March 2023 ACCEPTED 02 August 2023 PUBLISHED 17 August 2023

CITATION

Yerbury RM (2023) Zoos and aquaria: dark tourism or light fun? A post-humanist perspective. *Front. Sustain. Tour.* 2:1191656. doi: 10.3389/frsut.2023.1191656

#### COPYRIGHT

© 2023 Yerbury. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

# Zoos and aquaria: dark tourism or light fun? A post-humanist perspective

### Rachel M. Yerbury\*

School of Psychology and Public Health, La Trobe University, Bundoora, VIC, Australia

Non-human animals in the field of Dark Tourism (DT) is an area of recent discussion. While DT initially described tourist sites of human suffering and death, this field undoubtedly encompasses nonhuman malaise. Some activities are unmistakably DT experiences, like bullfighting and hunting, whereas zoos and aquaria are considered more ambiguous. Using Fennel's post-humanist prototype, animals in zoos and aquaria are highlighted as examples of dark tourism objects who endure pain, suffering and thwarted flourishing. It is argued that animal-based DT activities arise from anthropocentric domination narratives of human exceptionalism and entitlement. In the captive context, nature and nonhumans are conceptualized as "other", extending the dominant, progress-driven misapprehensions of human-nature separation, allowing people to deny the true and far-reaching effects of human impacts on nonhumans and the earth. Dark tourists seek the artificial manifestations of the captive utopia of zoos and aquaria and the collusion provided, permitting the dismissal of animal rights, biodiversity loss and climate change. An alternative perspective of deep justice is offered, where the wellbeing, interests and rights of animals are inherently valued. Embracing this perspective would allow the rejection of captive-animal dark tourism sites such as zoos and aquaria and for the flourishing of all beings to be to be upheld.

#### KEYWORDS

dark tourism, zoos, aquaria, flourishing, capabilities, post-humanist, deep justice

### 1. Introduction

This perspective paper seeks to extend the discussion about nonhuman animals<sup>1</sup> as dark tourism objects, by focusing on the examples of zoos and aquaria. Using the post-humanist grounded prototype of Fennell et al. (2021), it is concurred that the animals in these facilities can be classified as Dark Tourism (DT) objects due to the suffering, thwarted flourishing and lack of justice they experience (Fennell and Sheppard, 2020). Firstly, the paper briefly discusses the evolving definition of DT as tourism related to death and suffering. Next, the evidence around the role of captive nonhumans are reviewed and explored. This paper is predicated on the view that modern settler societies are humanist-based and center around *human* rights, desires and entitlements which animal-based leisure and entertainment supply (Pedersen, 2022). Consequently, the disregard for animal justice results from the assumption that humans alone deserve justice based on their unique sentience and personhood (Fennell and Sheppard, 2020).

<sup>1</sup> The terms non-human animals, non-humans and animals are used interchangeably in the paper. It is noted that the English language struggles to make a distinction between humans and other animals without referring to humans.

From a post-humanist ethical stance, it is argued that zoos and aquaria may be considered a microcosm of the dominant, anthropocentric assumptions of human exceptionalism and division from the natural world (Acampora, 2005). This modern function perpetuates the original purpose of zoos as both opportunities for entertainment and power displays (Carr and Cohen, 2015). The commodified roles of captive animals in zoos and aquaria, are discussed in terms of their servitude to human entertainment, and their individual expendability (Cohen and Fennell, 2016), in a largely profit-fueled industry (Schmidt-Burbach and Hartley-Backhouse, 2018). It is highlighted that zoos and aquaria supply the contrived and constructed spaces that are desired and demanded by the public (Pedersen, 2022). Such tourism perpetuates the delusion that humans are superior to others and that it is normal and acceptable to hold animals in captivity (Doyle, 2017; Pedersen, 2022). However, rather than connecting people with the natural world, these places serve to separate both the human visitor and the animal inmate from their natural ecosystems (Acampora, 2005). In perpetuating nature separation, the dark places of zoos and aquaria create a false world, immune from pollution, environmental disasters and catastrophes. Further, it is argued that they are ethically unjustifiable, due to the

### 2. Dark tourism

deprivation of basic freedoms and rights for animals.

Dark Tourism (DT) is defined as engagement in experiences associated with death, suffering and the macabre (Stone, 2006). DT initially referred to tourism products involving sites of human death and disaster (Foley and Lennon, 1996), with later definitions of DT also including suffering and malaise (Light, 2017). Stone (2006) typology includes seven types of DT locations, including dark fun factories, exhibitions, shrines, resting places, dungeons, conflict areas and genocide camps. The debate over what constitutes a DT site, has also allowed the extension of what it means to be a dark tourist (Sharpley, 2005). Rather than strictly travelers who are fascinated by the macabre, the complexity of dark tourist motives are now recognized to include educational, moral, cultural, personal and social reasoning (Light, 2017). The tourist intention is not the whole picture, as Iliev (2020, p. 971), explains "the motivations of tourists to dark sites are diverse, and many of which are often devoid of dark features". This wider reasoning suggests that not everyone who visit sites of suffering, including zoos and aquaria, have morbid motivations, nor are they all "dark tourists" (Iliev, 2020).

### 2.1. Non-humans as dark tourism objects

From a humanist framework of tourism, DT is focused on *human* death and suffering. However, post-humanist ethical attention has been directed toward the experiences of nonhumans who are killed, die or suffer as tourism objects (Doyle, 2017; Cohen, 2019; Fennell et al., 2021). And it would appear that there are many; Phillips (2009) reports that 120 billion animals live in captivity with one million in zoos and 100 million as work/entertainment animals. In exploring the situation of captive animals, Fennell and Sheppard (2020) maintain that animal tourism needs to span ethics and justice issues because most animals are afforded no justice. Within their varying levels or "scales of justice", they assert that zoos and aquaria represent *shallow justice* as the captive animals are seen as instrumental in generating human consumption benefits, without regard to the wildlife's intrinsic value or agency.

This is because the animal-based tourism industry is fundamentally human-focused, and primarily aims to meet the human right for leisure and entertainment (Carr and Cohen, 2015; Yerbury et al., 2017; Fennell et al., 2022). It is argued that zoos perpetuate colonial narratives of the human privilege to displace and possess (Gilich, 2020). Correspondingly, the industry's disregard for the entitlements and wellbeing of inmates, encompass issues such as displacement, commodification and disempowered containment (Winter, 2020). Ethical consideration for the rights of the non-humans who unwillingly serve the industry, now feature more predominantly in discussions, which expose the unethical and unjustifiable nature of animal touristic captivity (Fennell and Sheppard, 2020; Yerbury et al., 2020). Captivity results in physical and psychological suffering, along with the likelihood of illness and premature death (Yerbury et al., 2017; Nussbaum and Nussbaum Wichert, 2021). Further, violence against zoo animals by visitors and keepers has been noted (Doyle, 2017). In the absence of a comprehensive statement on animal suffering, its extent in zoos and aquaria can be gauged by the reduction of their emotional, physical and behavioral welfare (Fennell and Thomsen, 2021).

# 2.2. Zoos and aquaria: a prototype for animals as DT objects

Recently, Fennell and colleagues (Fennell et al., 2021) examined how animals fit within DT by converging DT scholarship with animal ethics literature. They present a post-humanist prototype for understanding and categorizing dark human-animal tourism entanglements that aims to shift away from anthropocentrism and humanism. The three main categories include the characteristics of animal suffering and death, the subjective nature of the humananimal relationship and tourism supply and demand (Fennell et al., 2021). In applying the prototype to zoos and aquaria, it becomes apparent that many of these tourist attractions fit within the lens of animal DT, as they embody animal suffering via impeded wellbeing.

## 2.2.1. Fennell's prototype category A: the role of animals and human-induced sources of suffering

The first aspect of Fennell's prototype includes the role of animals in captive settings, and anthropogenic sources of suffering. Animals may be dominated, deprived, objectified and exploited for profit, as human power relationships over animals are showcased and reinforced through the human desire for leisure and entertainment (Yerbury et al., 2017; Cohen, 2019). Nonhuman animals enact various commodified roles for tourists within the captive tourism industry; They are slaves, workers and performative objects that amuse and entertain - the targets of the tourist gaze, often providing "bucket list" satisfaction (von Essen et al., 2020). In some captive tourist facilities, non-humans are forced competitors or hunted and killed for sport (Günlü Küçükaltan and Dilek, 2019). Furthermore, it is suggested that under the auspices of anthropocentric entitlement, animals in zoos and aquaria also fulfill the role of reassuring the tourist that the natural world and its beings are not floundering. By doing so, these captive animals arguably become a vehicle through which these yearnings are enacted, reinforcing the wider instinctive psychological defense mechanisms of denial about the distress of the earth and animals (Weintrobe, 2021; Dowd, 2022). This ignorance is so strong, that it allows the moral disengagement of the tourist to dismiss any niggling concerns about animal welfare and rights (Tickle and von Essen, 2020).

The captive tourism industry itself participates in this subterfuge by anthropomorphising and exemplifying certain inmates, who are forced to play the role of "friend" to maximize customer engagement. The captives in zoos and aquaria are not only given names, but are trained as unwilling actors to amuse and entertain tourists, who laugh at the antics of clothed animals trained to kiss trainers and perform tricks (Cowperthwaite, 2013). According to Nussbaum and Nussbaum Wichert (2021, p. 99) the pretense is thus maintained: "humans can lull themselves into believing that they are participants or spectators in a friendship, rather than enablers of cruelty". The fabricated antics perpetuate the artificial manifestations of this captive utopia as desirable and enjoyable for all involved - complete with animals who allegedly want to perform and entertain humans (Neo and Ngiam, 2014; Wiener, 2015; Nussbaum and Nussbaum Wichert, 2021). As key attractions within the tourism industry, it is estimated that zoos and aquaria bring in multibillions of dollars in annual revenue and this tends to be the predominant focus of these captive businesses (Schmidt-Burbach and Hartley-Backhouse, 2018).

A fundamental element of human-induced suffering within these DT spaces, is that wildlife are taken from the wild, or bred to be kept in human-constructed and unnatural settings, often unlike natural wild habitats (White, 2022). While there is no comprehensive position on nonhuman suffering (Fennell and Thomsen, 2021), Nussbaum's Capability Approach (CA) estimates it by understanding the necessary components of animal flourishing (Nussbaum, 2023). The premise behind the CA is that the purpose of sentient, animate existence is the pursuit of their capabilities-core and multifaceted entitlements. Nussbaum (2023) maintains that to thrive, all beings - humans and nonhumans, need opportunities to be who they are meant to be and to fulfill their species-specific good life unhindered.

For example, cetaceans devote their lives to satisfying the life tasks associated with membership within their particular species. They are occupied with traveling great distances within complex family and social groups (White, 2013), co-operatively searching for food and mates (King et al., 2021), nurturing and teaching young (Bender et al., 2009), communicating via complex whistles and echolocation (Luis et al., 2021), navigating threats and risks and so on. Conversely, if animals with complex societies and large home ranges are confined, including wolves, cetaceans, chimpanzees and elephants, their fundamental rights cannot be sustained when they are socially, spatially, sensorially, nutritionally and psychologically compromised (Nussbaum, 2023). Another example in aquaria is the effect of reduced space and social contacts for various species of fish. Bony fishes in zoos and aquaria have been noted to spend less time foraging and more time hovering motionlessly than those in wild places, which indicates reduced wellbeing (Oldfield and Bonano, 2023). Nussbaum highlights the obstruction of flourishing and dignity for several different species of animals held in unnatural and confinement, and she aptly states,

"To put a brute beast in a cage seems no more wrong than putting a rock in a terrarium. But that is not what we are doing. We are deforming the existence of intelligent and complexly sentient forms of life..." (Nussbaum, 2023, p. XV).

Significant stress occurs when animals are deprived of their rights and agency to access natural societies and environments or to enact behaviors and cultural practices (Ventre and Jett, 2015; Dave and Raval, 2019; White, 2022). The cage and tank settings not only inhibit social choices and interactions, but also thwart the practice of species-specific skills, such as communication, hunting and teaching offspring (White, 2007). Further, there is exposure to chronic stress, disease and toxins, as well as conspecific conflict and injuries and self-harm (Cowperthwaite, 2013; Marino et al., 2019; White, 2022). These captive conditions cause significant stress and can break the spirit of sentient animals (Fennell and Sheppard, 2020). For land-based species whose wellbeing is based on social culture, like wolves, solo captivity leads to common nervous behaviors such as pacing (Dave and Raval, 2019). For ocean-based species like long-ranging cetaceans who cannot use their instinctual echolocation to communicate when obstructed by a thick concrete tank, physical and psychological illness results (White, 2022). The restrictions of artificial settings of zoos and aquaria, preclude animal rights and justice and thus disallow these sentient animals to reach their potential (Marino et al., 2019; Nussbaum, 2023).

Essentially their lifeworlds are so altered and unrecognizable, that the essence of being that particular animal is destroyed (Nussbaum and Nussbaum Wichert, 2021), thus thrusting the animal into a life of limited wellbeing and undoubtable suffering.

# 2.2.2. Fennell's prototype category B: the nature of the human-animal relationship that leads to suffering

The second category within Fennell's prototype (Fennell et al., 2021), is the nature of the captive human-animal relationship that leads to suffering. While Fennell and colleagues categorize the handler emotional state as indifferent, it is suggested here that handler positionalities may be as varied as tourist attitudes, even though handler motivation is not necessarily based on ill-intent (Fennell et al., 2022). Many caretakers initially act from animal love and concern (theriophily), however the lines between animal love and abuse can be blurred when profits and entertainment necessitate animal compliance (Bauer, 2020). Further, it is argued that care-behaviors seek to minimize, not eliminate suffering and pain (Fennell and Sheppard, 2020). It is asserted that anthropocentric entitlement and domination predominantly inform the misotheric (negative view of animals as inferior servants) nature of the relationship between captive animals and their captors, under the guise of tourist theriophily

and benevolence (Günlü Küçükaltan and Dilek, 2019; Nussbaum and Nussbaum Wichert, 2021). It is further argued that the ethos of the handlers and the institutions themselves, uphold and foster the human domination paradigm by denying these animals their basic freedoms and flourishing (Nussbaum and Nussbaum Wichert, 2021). If a captive zoo animal tries to escape or comes into contact with humans they are invariably punished or killed (Doyle, 2017) solidifying their fear of their keepers. These relationships are informed by the narratives of capitalist and progress-driven human separation from the natural world, ensuring the maintenance of nonhumans as "other" and less important or valuable as "us" (Feldman, 2022; Pedersen, 2022). When humans consider themselves superior to non-humans, containing or even killing them for entertainment can be justified, as is also observed in wildlife hunting (Lovelock, 2015; Tickle and von Essen, 2020), bullfighting (López-López and Quintero Venegas, 2021) and elephant riding and shows (Cohen, 2015).

Fennell et al. (2021)'s DT prototype proposes several animal ethics theories to describe the utilization of animals and anthropocentrism appears to be an appropriate application for zoos and aquaria. At a deep level, it is suggested that human relationships with these animals reaffirm the post-colonial settler ignorance and disavowal of the inherent dominance and displacement involved in occupation and oppression (Gilich, 2020). Cohen and Fennell (2016) and Holmberg (2021) highlight that anthropocentric violence occurs throughout the process of capture and maintenance of animals in zoos and aquaria. In examining the confinement of Giant Pacific octopi at the Vancouver zoo, Holmberg highlights how an undercurrent of anthropocentric harm is integral and unavoidable to zoo care activities, even when caretakers act from love of animals. Despite the espoused philosophy of care ethic and conservation, the violence becomes magnified when the inmates try to elude human-control, resulting in handler displays of domination. Holmberg concludes that, "captive care at the Aquarium both relies upon and operates in tension with violence because it seeks to save other species through force directed at maintaining the supremacy of our own" (Holmberg, 2021, p. 875).

Similarly, Cohen and Fennell (2016) discuss the widely-known case of young, healthy Marius the giraffe, as an exemplar of the multiple "surplus" zoo animals eliminated each year. Prior to the decision that Marius was not genetically diverse enough to be useful, the Copenhagen zoo named and personified the giraffe to endear him with visitors (Cohen and Fennell, 2016). Marius was eliminated despite various bids to re-home him, and his body was dismembered and fed to the lions in front of watching schoolchildren (Cohen and Fennell, 2016). While it is agreed that this presents a case of handler indifference, it is opined that this unconcern is predicated on misotheric human speciesism (Winter, 2020; Bakota and Bakota, 2022) and is a further example of anthropocentrism and exceptionalism in practice (Weintrobe, 2021).

## 2.2.3. Fennell's proptotype C: supply and demand of the tourism object

The supply and demand of the DT object is the third category of Fennell's prototype (Fennell et al., 2021) and includes the attitudes of the tourist and the tourism product. Use of animals as captive tourism attractions is contentious, with human-focused arguments *for* zoos and aquaria, and animal rights and welfare arguments *against* these captive displays. Tourist attitudes about terrestrial and marine animals (Kellert, 1984, 1991) are complex, diverse and can be unreliable and counter-intuitive (Yerbury et al., 2020). Proponents of the zoo and aquaria industry adhere to the utilitarian view, that captivity allows research, education and promotes attitude change and conservation (Rose and Riley, 2022). Conversely, others argue that these facilities are necessarily dominionistic due to their anthropocentric consumptive function (Ventre and Jett, 2015; Rizzolo, 2021).

Another supply and demand element is the purported benefits for the human side of the captive tourism encounter. Viewing and interacting with animals up close may enhance connections to nature and human wellbeing (Yerbury et al., 2021). However, it has been shown that captive experiences with marine mammals such as cetaceans and pinnipeds are less meaningful and less emotionally beneficial than wild encounters (Yerbury and Weiler, 2020). Others argue that there is no compelling evidence that zoos and aquaria promote education and attitude change toward conservation (Marino et al., 2010), despite the image presented (Carr and Cohen, 2015). Similarly, a recent international online study showed that people who agreed with keeping dolphins and whales in captivity, were also more likely to consider that dolphin and whale conservation was only "slightly important" (Parsons and Naylor, 2019). This is despite claims from the zoo and aquaria industries that their businesses promote education and proconservation attitudes (Carr and Cohen, 2015). In fact, zoos and aquaria may even confuse vistors about natural animal behaviors (Spooner et al., 2021), and the validity of studying and conserving any animal ex-situ has been frequently questioned (Marino et al., 2010; Marino and Frohoff, 2011; Neo and Ngiam, 2014).

Consumers crave the fantasyland of corralled animals and subdued nature to reinforce human domination and power, especially in postcolonial settler societies (Gilich, 2020; Feldman, 2022). In response to demand, zoos and aquaria deliver contrived and desirable tourism products that consumers believe are their right to experience (Fennell and Thomsen, 2021). When faced with the competing reality of species extinction, animal abuses, habitat loss and climate catastrophe, the zoo and aquaria industries seek to reassure us that all is well, colluding with our protective mechanism of disavowal (Weintrobe, 2021; Dowd, 2022).

# 3. An alternative perspective: deep justice in animal tourism

An alternative perspective of tourism involving nonhumans is deep justice. Within Fennell and Sheppard (2020)'s "scales of justice" framework, deep justice is the highest level, and calls for the wellbeing, interests and rights of the animals to be inherently valued and upheld. This is in contrast to the current anthropocentric world which, according to Fennell and Sheppard (2020) denies animals justice in any situation.

In order to functionalise deep justice in tourism, and to reject DT, connection with the natural world and animals is the first step toward developing empathy and compassion beyond humankind (McGinnis et al., 2019). Meaningful connections are more likely in wild-animal encounters than captive, and allow perspectives to emerge that challenge anthropocentric exceptionalism and the entitlement to entertainment (Yerbury and Weiler, 2020). Next, for deep justice to be realized in tourism, the views and needs of diverse sentient species must be represented. This involves privileging understandings of people who have researched and lived with various species of animals and comprehending their unique expressions of flourishing (Nussbaum, 2023). It could further include learning from the wisdom of land-based cultures who have lived in harmony with the earth for millennia and deem animals as persons (McGinnis et al., 2019). Practically, deep justice involves the moral right of animals to live in natural settings and to choose whether to engage in interactions with humans (Fennell and Sheppard, 2020). So, for cultural, social and learning capabilities of animals to be realized, self-determination is crucial (Nussbaum, 2023). Therefore, because freedom and agency are key features, zoos and aquaria are dark tourism places that can never embody deep justice.

### 4. Conclusion

The complex creation of the artificial worlds of zoos and aquaria serve the dominant narratives of human separation, superiority and entitlement by domesticating and controlling wildlife within defined cages and containers (Feldman, 2022). Anthropocentric and human-exceptionalist perspectives allow animals to be enclosed in psychologically, socially and behaviorally unhealthy and deficient dark tourism facilities, that deny their right to characteristic species-specific activities and environments (Nussbaum, 2023). It is further argued that captive nonhumans in tourism play an important role in wider societal rejection of environmental realities, perpetuating the myth of human exceptionalism and immunity from human-induced environmental catastrophe (Weintrobe, 2021), which needs further examination. If we don't acknowledge that we are part of nature, then we are not responsible for her welfare, and if we are superior to nature, then her demise will not touch us. If we believe that other beings are less valuable than humans, then their wellbeing and striving are not as important as our own, and their suffering runs second to our right to entertainment and education. Conversely, embracing the paradigm of deep justice (Fennell and Sheppard, 2020) within tourism would disallow the continuance of animals as dark tourism objects.

### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

### Author contributions

RY contributed to conception, design of the perspective paper, conducted the review of the literature, wrote all drafts of the manuscripts, revised, read, and approved the submitted version.

### Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The author RY declared that they were an editorial board member of Frontiers, at the time of submission. This had no impact on the peer review process and the final decision.

### Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

### References

Acampora, R. (2005). Zoos and eyes: contesting captivity and seeking successor practices. Soc. Anim. 13, 69-88. doi: 10.1163/1568530053966643

Bakota, B., and Bakota, L. (2022). Ethical, legal and linguistic reflections about the status of captive animals in zoos. *Filozofska IstraŽivanja* 42, 229–250. doi: 10.21464/fi42202

Bauer, L. B. (2020). Of Animal Love and Abuse: Exploring Ambivalent Human-Animal Relationships in Tiger King (2020) during the COVID-19 Pandemic. On Culture: The Open Journal for the Study of Culture.

Bender, C. E., Herzing, D. L., and Bjorklund, D. F. (2009). Evidence of teaching in Atlantic spotted dolphins (Stenella frontalis) by mother dolphins foraging in the presence of their calves. *Anim. Cognit.* 12, 43–53. doi: 10.1007/s10071-008-0169-9

Carr, N., and Cohen, S. (2015). The public face of zoos: images of entertainment, education and conservation. *Anthrozoös* 24, 175–189. doi: 10.2752/175303711X12998632257620

Cohen, E. (2015). "Young elephants in thai tourism," in Animals and Tourism: Understanding Diverse Relationships, ed K. Markwell (Bristol: Channel View). Cohen, E. (2019). Posthumanism and tourism. Tourism Rev. 74, 416–427. doi: 10.1108/TR-06-2018-0089

Cohen, E., and Fennell, D. A. (2016). The elimination of Marius, the giraffe: humanitarian act or callous management decision? *Tourism Rec. Res.* 41, 168–176. doi: 10.1080/02508281.2016.1147211

Cowperthwaite, G. (2013). Blackfish. New York, NY: CNN Films.

Dave, M. S., and Raval, J. V. (2019). The behaviour of Indian gray wolf (Canis lupus pallipes) in captivity at Sakkarbaug Zoo Junagadh, Gujarat, India. *Int. J. Environ. Ecol. Family Studies.* 9, 55–68. doi: 10.24247/ijeefusapr20195

Dowd, A. (2022). Vanishing acts: the crisis of our loss of kinship with the morethan-human world. J. Anal. Psychol. 67, 1270–1295. doi: 10.1111/1468-5922.12863

Doyle, C. (2017). Captive wildlife sanctuaries: definition, ethical considerations and public perception. *Anim. Stu. J.* 6, 55–85. Available online at: https://ro.uow.edu.au/asj/vol6/iss2/5

Feldman, A. C. (2022). Staging the Ocean: The Emergence of the Aquarium in Victorian England. (Master's). The City University of New York, New York, NY.

Fennell, D. A., Coose, S., and Moorhouse, T. P. (2022). An animal welfare syllabus for wildlife tourism. J. Sust. Tourism 14, 1–19. doi: 10.1080/09669582.2022.2142597

Fennell, D. A., and Sheppard, V. (2020). Tourism, animals and the scales of justice. J. Sust. Tourism 29, 314–335. doi: 10.1080/09669582.2020.1768263

Fennell, D. A., and Thomsen, B. (2021). Tourism and animal suffering: Mapping the future. *Annal. Tour. Res.* 91, 317. doi: 10.1016/j.annals.2021.103317

Fennell, D. A., Thomsen, B., and Fennell, S. (2021). Animals as dark tourism attractions: a prototype. *Eur. Now J.* 

Foley, M., and Lennon, J. J. (1996). JFK and dark tourism: a fascination with assassination. Int. J. Heritage Stu. 2, 198-211. doi: 10.1080/13527259608722175

Gilich, Y. (2020). 'This is not a pig': Settler innocence and visuality of zoos. Image Text 2, 34. doi: 10.17159/2617-3255/2020/n34a25

Günlü Küçükaltan, E., and Dilek, S. E. (2019). A philosophical approach to animal rights and welfare in the tourism sector. J. Tour. Leisure Hospitality 1, 4–14.

Holmberg, M. (2021). Constructing captive ecology at the aquarium: Hierarchy, care, violence, and the limits of control. *Environ. Plan. Nat. Space* 5, 861–880. doi: 10.1177/25148486211014508

Iliev, D. (2020). Consumption, motivation and experience in dark tourism: a conceptual and critical analysis. *Tourism Geographies* 23, 963–984. doi: 10.1080/14616688.2020.1722215

Kellert, S. R. (1984). "American attitudes toward and knowledge of animals: an update," in *Advances in Animal Welfare Science*, eds M. W. Fox and L. D. Mickley (Washington, DC: The Humane Society of the United States), 177–213.

Kellert, S. R. (1991). Canadian Perceptions of Marine Mammal Conservation and Management in the Northwest Atlantic. Guelph, ON, Canada: International Marine Mammal Association.

King, S. L., Connor, R. C., Krutzen, M., and Allen, S. J. (2021). Cooperationbased concept formation in male bottlenose dolphins. *Nat. Commun.* 12, 2373. doi: 10.1038/s41467-021-22668-1

Light, D. (2017). Progress in dark tourism and thanatourism research: an uneasy relationship with heritage tourism. *Tourism Manage*. 61, 275–301. doi: 10.1016/j.tourman.2017.01.011

López-López, Á., and Quintero Venegas, G. J. (2021). "Animal dark tourism in Mexico: Bulls performing their own slaughter," in *Exploring Non-human Work in Tourism: From Beasts of Burden to Animal Ambassadors*, eds J. Rickly and C. Kline (Berlin: De Gruyter), 69–82.

Lovelock, B. (2015). "Troubled-shooting: the ethics of helicopter-assisted guided trophy hunting by tourists for Tahr," in *Animals and Tourism: Understanding Diverse Relationships*, ed K. Markwell (Bristol: Channel View).

Luis, A. R., May-Collado, L. J., Rako-Gospic, N., Gridley, T., Papale, E., Azevedo, A., et al. (2021). Vocal universals and geographic variations in the acoustic repertoire of the common bottlenose dolphin. *Sci. Rep.* 11, 11847. doi: 10.1038/s41598-021-90710-9

Marino, L., and Frohoff, T. G. (2011). Towards a new paradigm of non-captive research on cetacean cognition. *PloS ONE* 6, 1–9. doi: 10.1371/journal.pone.0024121

Marino, L., Lilienfeld, S. O., Malmud, R., Nobis, N., and Broglio, R. (2010). Do Zoos and aquariums promote attitude change in visitors? A critical evaluation of american zoo and aquarium study. *Soc. Anim.* 18, 126–138. doi: 10.1163/156853010X491980

Marino, L., Rose, N. A., Visser, I. N., Rally, H., Ferdowsian, H., Slootsky, V., et al. (2019). The harmful effects of captivity and chronic stress on the well-being of orcas (*Orcinus orca*). J. Vet. Behav. 35, 69–82. doi: 10.1016/j.jveb.2019.05.005

McGinnis, A., Tesarek Kincaid, A., Barrett, M. J., and Ham, C. (2019). Strengthening animal-human relationships as a doorway to indigenous holistic wellness. *Ecopsychology* 11, 162–173. doi: 10.1089/eco.2019.0003

Neo, H., and Ngiam, J. Z. (2014). Contesting captive cetaceans: (il)legal spaces and the nature of dolphins in urban Singapore. *Soc. Cult. Geography* 15, 235–254. doi: 10.1080/14649365.2014.882974

Nussbaum, M. C. (2023). Justice for Animals: Our Collective Responsibility. Manhatten, NY: Simon and Schuster.

Nussbaum, M. C., and Nussbaum Wichert, R. (2021). Can there be friendship between human beings and wild animals. J. Hum. Dev. Capab. 22, 87–107. doi: 10.1080/19452829.2020.1871209

Oldfield, R. G., and Bonano, P. E. (2023). Psychological and social well-being of bony fishes in zoos and aquariums. *Zoo Biol.* 42, 185–193. doi: 10.1002/zoo.21729

Parsons, E. C. M., and Naylor, W. (2019). An international online survey on public attitudes towards the keeping of whales and dolphins in captivity. *Tour. Marine Environ.* 14, 133–142. doi: 10.3727/154427319X15627970573318

Pedersen, H. (2022). Anatomies of desire: education and human exceptionalism after Anti-Oedipus. *Educ. Philos. Theor.* 2, 1–10. doi: 10.1080/00131857.2022.2130043

Phillips, C. J. C. (2009). The Welfare of Animals: The Silent Majority. Amsterdam: Springer.

Rizzolo, J. B. (2021). Wildlife tourism and consumption. J. Sust. Tour. 31, 1181-1194.

Rose, P. E., and Riley, L. M. (2022). Expanding the role of the future zoo: wellbeing should become the fifth aim for modern zoos. *Front. Psychol.* 13, 1018722. doi: 10.3389/fpsyg.2022.1018722

Schmidt-Burbach, J., and Hartley-Backhouse, L. (2018). *Behind the Smile*. London: Indiana University Press.

Sharpley, R. (2005). "Travels to the edge of darkness: towards a typology of dark tourism," in *Taking Tourism to the Limits: Issues, Concepts and Managerial Perspectives*, eds C. Ryan, S. Page, and M. Aitken (Oxford: Elsevier), 217–228.

Spooner, S. L., Jensen, E. A., Tracey, L., and Marshall, A. R. (2021). Evaluating the effectiveness of live animal shows at delivering information to zoo audiences. *Int. J. Sci. Educ.* 11, 1–16. doi: 10.1080/21548455.2020.1851424

Stone, P. R. (2006). A dark tourism spectrum: towards a typology of death and macabre related tourist sites, attractions and exhibitions. *Tourism Int. Interdis. J.* 2, 145–160.

Tickle, L., and von Essen, E. (2020). The seven sins of hunting tourism. *Ann. Tour. Res.* 84, 102996. doi: 10.1016/j.annals.2020.102996

Ventre, J., and Jett, J. (2015). "Killer whales, theme parks and controversy:an exploration of the evidence," in *Animals and Tourism: Understanding Diverse Relationships*, ed K. Markwell (Bristol: Channel View), 128–146.

von Essen, E., Lindsjo, J., and Berg, C. (2020). Instagranimal: animal welfare and animal ethics challenges of animal-based tourism. *Animals* 10, 30. doi: 10.3390/ani10101830

Weintrobe, S. (2021). Psychological Roots of the Climate Crisis. Neoliberal Exceptionalism and the Culture of Uncare. New York, NY: Bloomsbury Academic.

White, T. I. (2007). In Defense of Dolphins: The New Moral Frontier. Oxford. : Blackwell.

White, T. I. (2013). Humans and dolphins: an exploration of anthropocentrism in applied environmental ethics. J. Anim. Ethics 3, 85–99. doi: 10.5406/janimalethics.3.1.0085

White, T. I. (2022). "Dolphins, captivity and cruelty," in *Animals and Business Ethics*, eds N. Thomas (Cham: Springer International Publishing), 271–295.

Wiener, C. (2015). "Dolphin tourism and human perceptions: Social considerations to assessing the human- dolphin interface," in *Animals and Tourism: Understanding Diverse Relationships*, ed K. Markwell (Bristol: Channel View), 146–163.

Winter, C. (2020). A review of research into animal ethics in tourism: launching the annals of tourism research curated collection on animal ethics in tourism. *Annal. Tour. Res.* 84, 989. doi: 10.1016/j.annals.2020.102989

Yerbury, R. M., Boyd, W. E., Lloyd, D., and Brooks, A. (2017). Right to leisure? Refocusing on the dolphin. *Annal. Leisure Res.* 5, 1–18. doi: 10.1080/11745398.2017.1314190

Yerbury, R. M., Boyd, W. E., and Weiler, B. (2020). Marine wildlife experiences and beliefs: towards reciprocal benefits. *Ecopsychology* 12, 209–221. doi: 10.1089/eco.2019.0068

Yerbury, R. M., Boyd, W. E., and Weiler, B. (2021). Encounters with wild, ecotour and captive marine mammals: what do they tell us about human wellbeing and environmental behaviour? *Tour. Mar. Environ.* 16, 1–19. doi:10.3727/154427320X15888322468764

Yerbury, R. M., and Weiler, B. (2020). From human wellbeing to an ecocentric perspective: how nature-connectedness can extend the benefits of marine wildlife experiences. *Anthrozoös* 33, 461–479. doi: 10.1080/08927936.2020.1771054