Journal of Ecotourism

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/reco20

Animatronic dolphins as the new authentic? posthuman reflections of 'light' tourism on the move

David A. Fennell

To cite this article: David A. Fennell (2022): Animatronic dolphins as the new authentic? posthuman reflections of 'light' tourism on the move, Journal of Ecotourism, DOI: 10.1080/14724049.2022.2099409

To link to this article: https://doi.org/10.1080/14724049.2022.2099409

Published online: 25 Jul 2022.

JOURNAL OF ECOTOURISM
https://doi.org/10.1080/14724049.2022.2099409

Routledge
Taylor & Francis Group

RESEARCH ARTICLE

Animatronic dolphins as the new authentic? posthuman reflections of 'light' tourism on the move

David A. Fennell

Department of Geography & Tourism Studies, Brock University, St. Catharines, Canada

ABSTRACT

Marine parks have successfully positioned themselves as harbingers of 'once in a lifetime' experiences for visitors motivated to get close, embodied experiences with dolphins and other cetaceans. Captive animal venues have amplified these experiences by expanding their programs to include 'fake' encounters with robotic (animatronic) animals as well as conventional wild encounters. This study sought to investigate the choices of university students on the opportunity to experience either a live swim-with-dolphin tour or an animatronic tour, and if their choices remained stable or changed after an intervention. Results indicate that the intervention strategy significantly impacted students' choices, inducing them to later choose the animatronic dolphin experience. The paper tests our conceptions about what is real and artificial in charting a path for the future of responsible and sustainable tourism.

ARTICLE HISTORY
Received 14 February 2022
Accepted 4 July 2022

KEYWORDS
Animatronics; dolphins; animal ethics; tourism; posthumanism; light tourism

1. Introduction

Marine parks have successfully positioned themselves as harbingers of 'once in a lifetime' (Cater, 2010, p. 139) experiences for park visitors motivated to get close, embodied experiences with dolphins and other cetaceans. Indeed, the opportunity to directly interact with animals, such as dolphins, allows participants to appreciate the 'awe', 'beauty', 'intelligence', and 'power' of these animals (Cater, 2010). Captive animal managers have attempted to amplify these rewarding experiences by expanding their programs to include wild encounters, representation of animals, presentations, and quasification – the creation of 'fakes' such as soft plush toys, dead animals on display, and animatronic animals (Beardsworth & Bryman, 2001). However, the power and indulgence inherent in the captivity gaze have, according to Beardsworth and Bryman (2001), become 'less and less appealing, and more difficult to justify' (p. 89) and subject to ongoing scrutiny from a public sensitive to the interests of captive animals (Fennell, 2012). Added to this is the hybrid nature of tourism products, including animals as attractions, challenging us to know what is real and not real in the things that we consume (Franklin & Crang, 2001).

A manner in which to attend to the issues raised above, i.e. how we justify profit and pleasure over the interests of animals, is to continually engage new lines of thinking that

CONTACT David A. Fennell dfennell@brocku.ca Department of Geography & Tourism Studies, Brock University, St. Catharines, Ontario, L2S 3A1, Canada

seek to tease out the moral acceptability of our practices. A posthumanist approach, employed in this paper, is one line of thinking that has recently been a topic in tourism and animal ethics (Cohen, 2019), despite a much longer history in aligning humanities and social science fields like philosophy, anthropology, and sociology. Posthumanism is defined as a "systematic attempt to challenge humanist assumptions underlying the construction of 'the human'" based on the rather difficult undertaking of determining what and who counts as 'human' (Susen, 2021, p. 2). More specific to the present analysis is the belief that posthumanism provides an opportunity for social scientists to elevate, epistemologically and ontologically, the status of animals as 'embodied individuals living their lives entangled with humans and their own wider environment' (Taylor, 2012, p. 40). Such includes the implementation of a more engaged anthropology to recognise the entanglement of human and non-humans, and to more fully embrace the massive scale of violence and exploitation against the latter in many different contexts (Kopnina, 2017). Inherent in the discourse on posthumanism, in fact foundational, are several dualisms such as human/nonhuman, nature/culture, material/spiritual, biological/technological that emphasise anthropocentrism and human exceptionalism at the expense of the other – broadly conceived.

This paper engages traditional human-nonhuman and biological-technological dualisms through a multi-stage approach. Two hypothetical scenarios were presented to participants – conventional versus animatronic swim-with-dolphin tour options – to investigate if new knowledge acts as an agent of change in the use of dolphins in marine park venues. Previous research has highlighted the role that animatronics is starting to play in animal tourism experiences (Cater, 2010, above, and Cohen, 2010 about dinosaurs in Thai culture) and tourism experiences in general (Langhof & Güldenberg, 2019). Animatronics is a form of technology that uses 'machines controlled by computers to make puppets and models move in a natural way in films and other types of entertainment' (Cambridge Dictionary, 2022, online). Research indicates that the more robots are configured to represent the real thing, the greater their experiential value (Christou et al., 2020). The present exploratory qualitative study fills a gap by testing participant opinions on what represents authenticity through a comparative analysis of the real and unreal.

2. Literature review

Research on captive and wild cetaceans has taken centre stage in wildlife tourism studies. Hughes (2001) argued that animal rights advocates in the UK were successful at lobbying for the complete elimination of captive dolphin viewing venues, illustrating the degree to which cetacean tourism is wrapped in evolving political and social complexities. These complexities are further mediated by science. Scientists at the Vancouver meeting of the American Association for the Advancement of Science in 2013 argued that cetaceans demonstrate signs of individuality, including consciousness and self-awareness, so should be categorised as nonhuman persons (BBC News, 2012). These discussions lead to a Declaration of Rights for Cetaceans ratified in Finland in 2010 (Cetacean Rights, 2010; see Appendix 1). In 2013, India abolished the use of dolphins in marine parks based on the argument that they are highly intelligent and sentient and deserving of protection against exploitation.

Research has also investigated the views of tourists as participants in dolphin programs. Curtin and Wilkes (2007) found that although tourists wanted to participate in swim-with-dolphins as a life ambition, to gain close proximity to them, and mythical appeal, they later expressed concern and remorse based on the size of enclosures, captivity, and the performance of trick. Even in wild dolphin populations there is considerable debate over the moral acceptability of wildlife viewing and swim-with programs because of infant mortality, low juvenile survival, behavioural changes (Cater & Cater, 2007), and aggression towards humans (Orams et al., 1996). De Fatima Filla and De Araujo Monteiro-Filho (2009) discovered behavioural changes in cetaceans due to boat traffic that ventured too close to the animals.

Turmoil around the impacts on cetaceans used for entertainment (Erskine, 2020) is driving a new ethos based on the substitution of live animals with real-time animatronic ones (dolphins, great white sharks) that blend live puppeteering, programmed behaviour, and artificial intelligence into experiences that are safe, up close, and personal. The goal of Edge Innovations, a key animatronics industry player, is to 'reimagine the entertainment, educational, and business potential of the marine animal industry' (Edge Innovations, 2021, online) through a postmodern paradigm shift not unlike the quasification noted by Beardsworth and Bryman (2001), in emphasising sustainability, safety and profitability.

2.1. Posthumanism

Posthumanism is not a recently constructed worldview. Ferrando (2016) claims that humans have always been posthuman, advancing through several Eastern spiritual traditions such as Jainism, Hinduism, and Buddhism, which allow us to more deeply understand the technical aspects of human life through spiritual connections. In the fictional literary domain, posthumanism is evident in John Steinbeck's *Cannery Row* (Rohwedder, 2011) and Cormac McCarthy's *Child of God* (1973), *The Crossing* (1995), and *The Road* (Pless, 2012). Mootoo's (1996) novel *Cereus Blooms at Night* explores identity, diaspora and imagined space and place in a posthumanist account that rests outside the epistemic norms established by colonisers. Press (2019) argues that dominant hierarchies and conventional anthropocentric exceptionalism are replaced in *Cereus Blooms at Night* by terrestrial cosmopolitanism, interspecies alliances, and the democratisation of environmental bodies, which blur the boundaries between nonhumans and humans.

At its core, posthumanism is dynamic, plural, inclusive, non-hierarchical, non-linear, post-anthropocentric, and post-dualistic (Ferrando, 2021, online) in confronting the superiority and transcendence that humans express over other beings (Wood, 2004). 'Centrisms' like anthropocentrism and ecocentrism are rejected, favouring a flat ontology that recognises the intricately interconnected nature of the social and natural world entities (Deleuze & Guattari, 1987; Ferrando, 2016). For Wolfe (2009), posthumanism is not about eclipsing the human or denying that humans are different from other beings, but instead supports a move away from anthropocentrism and speciesism. In this latter vein, posthumanism advocates for animal agency, 'singular, intentional living beings acting on their own' (Lindgren & Öhman, 2019, p. 1202), in expanding the boundaries of moral consideration. The suppression or outright elimination of agency is a central operating

principle in the commodification of animals in circuses, zoos and aquaria as "objects for *infotainment* (Lindgren & Öhman, 2019, p. 1204).

Braidotti (2013; see, also, Seaman, 2005) argues that there are three main axes of transformation in rejection of species supremacism and human exceptionalism: becoming-animal; becoming-earth; and becoming-machine. The first axes, becoming-animal, implies a trans-species solidarity principle where there is a symbiotic relationship between humans and all other species instead of a reality based on the discursive practices that define an unbridled Anthropos. The second, becoming-earth, supports a return to holism, including embedding social and ecological sustainability as buffers against anthropocentric domination. Finally, becoming-machine recognises the vital role that technology plays in our lives and elevates this relationship not just as a metaphor or defined by profit, but rather as 'playful and pleasure-prone' (p. 91) mutually beneficial to machine and human.

Research emphasising Braidotti's (2013) three axes, especially the latter, includes Haraway's (1985; 1991) early work on the cyborg metaphor premised on the disintegration of colonialist, patriarchal, and essentialist boundaries as hallmark characteristics of humanism. Haraway's work canvases the spaces between seemingly unchallengeable categories with a metaphorical nod to the cyborg (part machine and part human) as a symbol of the rejection of the organic body. Stated as such, and as I discuss later, there is a belief in the elimination of the boundaries that have formally separated human and technological creations (Goulding et al., 2013), with the belief that such an advanced state will change humanity for the better.

Becoming-animal and becoming-machine are represented in Szczygielska's (2013) work on the hybrid nature of zoo animals as transbiological beings. Szczygielska writes that transbiology involves 're-engineering the boundaries of the self, nature and the human by focusing on hybrid entities and shape-shifting categories emerging from the new technological advancements open to biosciences' (p. 101). Zoo animals fall into the category of transbiological posthuman entities because they have been bred in captivity for years, have their genetic material as the source of international trade, and are now genetically engineered. Such has prompted Szczygielska to observe that zoos animals are caught in a friction zone – a clash between culture and nature. While they are supposed to be wild animals, their fuzzy hybrid natures based on the modifications and uses in contrived enclosures in urban settings says something very different.

Following an initial foray in tourism and animal studies by Cohen (2019), posthumanism has been investigated through the lens of multispecies livelihoods (Fennell, et al., In press; Thomsen, 2021; Thomsen et al., 2021) and multispecies assemblages from the perspective of video to explore co-constructed relationships between nonhuman and humans through sled dog tourism in Finland (Haanpää et al., 2021). Sturød et al. (2020) show how the Kyrgyz horse belongs to multiple realities, through multiple enactments, from multiple administrative agencies, i.e. the horse is a food source, a fighter, symbol both culturally and historically, a gene bank, and pet. The discussion on agency resurfaces here as Sturød et al. (2020) argue that horses can exercise their agency (animals acting on their own, as noted by Lindgren & Öhman) based on interactions with humans (see also Ren, 2011).

A posthuman ontology has also been used in Von Hagen's Body Worlds as a mobile exhibition of plastinated corpses. Goulding et al. (2013) position this exhibition as a form

of dark tourism according to five different themes: the body as spectacle (not unlike going to see exhibits at a museum); the body as mortality salience (increased awareness of our vulnerability); the body as a commodity (a work of art and not a real body which allows for guilt-free viewing); the body as machine (lacking subjectivity in a clinical or medical sense as a body as object), and the dehumanised body (commodification and objectification by removing the feeling that the exhibit as a being or something that was once before alive). These contrived bodily states test our limits by tapping into our views of what it means to be human.

If animals in captive settings have come to occupy a posthuman hybrid state in contrived settings, as noted by Szczygielska (2013), research studies need to investigate how animals in such a state are experienced by the viewing public. Indeed, if captive animal settings are a primary meeting ground for animals and humans due to alienation between humans and authentic wild nature (Tuan, 2007), what does it mean to be real or unreal, or authentic or contrived, in these settings? This paper attempts to unravel some of these complexities through an investigation of the opinions of students concerning live and robotic swim-with-dolphin tours.

3. Methodology

There were two phases to the collection of data in this study based on the responses of third-year students taking a course on tourism and animal ethics taught by the author. The study took place in the first stages of the course before any instruction had occurred. In phase one, students were asked to write their answer to the following question: "If given the opportunity to participate in only one of two dolphin attractions as a once-in-a-lifetime experience, which one would you choose?

1. A swim-with-dolphin tour in an aquarium-type setting where you could get up close and personal with live dolphins (touch, feed, swim alongside).
2. A swim-with-dolphin tour in an aquarium-type setting with a life-like animatronic (robotic) dolphin that mimics the actual behaviour and appearance of real dolphins and replicates the experience in 1 (apart from feeding)".

The question also contained the following statement: 'Your answer is not being used to judge you as an individual or the class in general. Also, your responses do not have to be lengthy. I am using your *objective* and honest responses as a baseline for as second phase of to follow.'

There is a danger that students may find their responses to studies conducted by their professors embedded in power relations based on influence and fear, i.e. responses by students that are influenced by how the professor sees the world (CIHR, NSERC, SSHRC, 2010). To avoid this scenario, measures were taken in the description of the study to alleviate such fears, as explained above, and by following research ethics protocols according to consent, anonymity and confidentiality.

After receiving responses to the question, students were asked to engage in a second phase of the research based on the same considerations identified in Phase 1. The second phase of the study introduced two interventions in two videos that the students were asked to view. The first was a 55-minute documentary titled *Lolita: Slave to*

Entertainment (https://www.youtube.com/watch?v = rWDL_bhDFwA) which documents the life of a killer whale (Lolita), captured in the Puget Sound roundup of several young killer whales in the early 1970s, and made to work in the Miami Seaquarium for decades in the service of the tourism industry. The movie shows how compromising the venue is to the physical and psychological wellbeing of Lolita, as well as the lengths that many have gone to secure her release. The Director of the film, Tim Gorski, describes the documentary in the following way:

> This Provocative and Revealing must-see documentary uniquely addresses man's relationship with wildlife. It speaks not only to animal lovers and activists, but to anyone at all who may have been duped by marine theme park propaganda. In fact, this is the film that an entire industry would rather you not see. And whether you like it or not, Lolita: Slave to Entertainment is assured to ignite conversation - if not heated debate (Gorski, 2003).

The second intervention involved a promotional video by Edge Innovations on one of their robotic dolphins (https://www.onegreenplanet.org/animalsandnature/robotic-dolphins-could-soon-replace-real-ones-at-tourists-attractions/).

After viewing these two videos, students were then asked to revisit the original question based on the two scenarios identified above and asked if their opinion and choice changed after viewing these videos in an effort to gauge the impact of the intervention.

This study adopts a critical/transformative paradigm approach based on issues of power, justice and oppression (Kivunja & Kuyini, 2017) of an industry that places profit and pleasure over the interests of animals. The study rests within a phenomenological framework that identifies how people qualitatively experience, conceptualise, perceive, and understand various phenomena (Marton, 1988). A method that fits within this methodological framework is thematic analysis (TA). I follow the work of Braun and Clarke (2006; 2013), who argue that TA is noted for its flexibility and for not being tied to a particular paradigmatic orientation, and it can stand alone as a methodological approach or act as a foundation for other qualitative approaches. Braun and Clarke (2006; 2013; 2021) embrace a reflexive style of TA which they argue is better for understanding people's views and opinions, individual experiences, and why people think or feel the way they do. This form of TA is bracketed by using semantic codes over latent codes to provide a more realistic account of people's experiences or opinions. TA also avoids the use of inter-rater reliability coefficients, which are underscored by positivism, in favour of a more flexible approach to coding, which is organic and where coding evolves through the coding process allowing for the personal mark of the researcher.

Braun and Clarke (2006) illustrate that TA is easily used because it has a clear set of different linked phases. These include becoming familiar with the data, the generation of initial codes, generating initial themes, reviewing themes against coded data and the dataset in general; defining and naming themes; and providing a thick description of the results. Codes, Braun and Clarke (2006; 2013) illustrate, capture a single idea that pertains to a section of data, while themes "captures a common, recurring pattern across a dataset, clustered around a central organising concept (Braun & Clarke, 2021, online). Additionally, Braun and Clarke (2021) indicate that thematic analysis studies are judged to be small (6-10), medium (10-20), or large (30 + participants). The present study involved 15 participants placing it into the medium-sized category. Appendix 1

provides an overview of the 15 participants included in the study and how they were coded to maintain anonymity using pseudonyms.

4. Results

The results of the thematic analysis are illustrated in Table 1 for the first phase of the research, and Table 2 for the second phase. Table 1 shows four main themes for the live dolphin experience and four for the animatronic option. The first theme in Table 1, Live as Authentic, illustrates the importance of live dolphin experiences for students to maintain what might be viewed as a traditional human-animal interaction. Open coding terms and phrases included the difficulty of replicating a real experience, feelings of satisfaction that emerged out of experiences that a live animal could only attain, and dissatisfaction with dolphins not real. The need to get up close and personal with a dolphin was also crucial to those who embraced this option. Supporting the live dolphin as the real thing, Owen commented that:

> As someone that adores aquatic animals, I do find it hard knowing that the numbers of these animals are decreasing in our world, but I must say swimming with an animatronic dolphin would just not be the same as the real thing. There is that sense of excitement that I get when I come across a wild animal. I have swum with sharks in the ocean, and I've also swum with dolphins in an aquarium setting. That experience for me was once in a lifetime just because of what the dolphins were doing and how they were behaving. You would not be able to get this type of experience out of an animatronic dolphin.

The second central theme in Table 1 was coded as Akrasia and Ethics because of the moral questions raised by respondents over what was right and wrong with interacting with live dolphins in captive environments. Respondents posed several questions about the rightness and wrongness around captivity, dolphin health, suffering, and whether to leave animals wild. In the end, however, they still selected Option 1. Lucy wrote that

> Although that would be my choice [Option 1], I understand that having dolphins exposed to human interaction in an aquarium style environment is not healthy for the dolphin and inhumane in a sense, therefore I am not strongly in favour of my choice.

The power of the interaction with a live animal such as a dolphin was overwhelming in some cases. Even Patricia, a self-proclaimed animal rights advocate, struggled with her decision around the two options. She wrote:

> [I favour the] first option, which is quite hard to admit because of my stance on animal rights (it feels almost embarrassing to admit my preference). Even with understanding the animal rights issues and the abuse the dolphin endures as a part of that type of establishment, I still can't deny my preference for the live dolphin experience.

What also surfaced in the student responses of those who favoured Option 1 was the need to experience a live dolphin based on an extrinsic motivation. Getting tangible and intangible products from the experience provided a token of remembrance in the form of selfies, direct interaction, and securing something they could hold onto as a cherished memory. Nancy highlighted the value of the experience as a top priority in her travel plans:

Table 1. Phase 1 thematic analysis.

Option 1: Support live dolphin experience Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
Want to experience the real thing (1:M1-Donald) Not the same as the real thing (1:M2-Owen) Animatronic cool idea but not the real thing (1:M2-Owen) Swimming with a robot would be strange (1:F3-Harriot) Hard to replicate being with live animals (1:M3-Ian) Feeling of satisfaction not the same with robot (1:M3-Ian) Need to get up close and personal (1:F5-Fran) Knowing it isn't real dissatisfying (1:M4-Larry) Excitement about being with live animals (1:M2-Owen)	Live as the real thing. Cannot replicate live animals. Satisfaction and excitement versus dissatisfaction. Close embodied experience.	Live as Authentic
Breaks my heart to see them suffer, but … (1:M2-Owen) Understand that exposure to humans is not healthy and is inhumane, but … (1:M2-Owen) Agree that the artificial experience is better to leave animals wild, but … (1:F1-Lucy) Not in agreement with animal captivity, but … (1:F4-Nancy) Change opinion if the venue was a sanctuary for rehabilitation (1:M1-Donald) Factors make me feel wrong pulling me to the middle (1:F3-Harriot) Embarrassed and guilty to choose live dolphin as an animal rights advocate (1:F2-Patricia) Important that staff treat dolphins right (1:M1-Donald) As an animal lover, I feel bad for dolphins living in aquariums (1:F3-Harriot)	Questions over what is right and wrong Questions over suffering, poor health, leaving animals wild, captivity Change	Akrasia & Ethics
Opportunity to take selfies (1:M2-Owen) Live animals more memorable (1:M3-Ian) Swimming with live dolphins on my bucket list (1:F4-Nancy) Always wanted to feed a dolphin (1:M4-Larry) Something I would cherish for the rest of my life (1:M4-Larry)	Selfies as keepsakes Need for direct interaction Memorable experience Goal orientation	Extrinsic motivation
Interactions with animals so special to me (1:F2-Patricia) Adore wild animals so getting close is exciting (1:F3-Harriot) Love of animals, so interacting with a fake animal not attractive … a let down (1:F4-Nancy) Education acceptable but not entertainment (tricks) (1:F6-Ingrid) Always wanted to do as a child because I love dolphins (1:F2-Patricia) (1:F6-Ingrid)	Special interactions Adoration Love of animals	Love of other
Option 2: Support animatronic dolphin experience Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
Documentaries show unethical conditions for live dolphins in enclosures (2:F1-Pam) Changed opinion of aquaria after reading news articles on abuse and suffering (2:F2-Eileen)	Media as a conduit for what is ethical. Media as important in changing perceptions	Education
Poor health from restricted mobility (2:F1-Pam) Size of enclosure doesn't matter; never the same as natural habitat (2:F1-Pam) Removal of freedom (2:M1-Peter) Reduced welfare of dolphins in enclosures (2:F4-Sage)	Poor health Mobility and enclosures Freedom	Health & wellbeing
Cruelty wrong for our pleasure (2:F1-Pam) Treating them as commercial products (2:M1-Peter) Marine entertainment businesses just interested in money (2:F2-Eileen) Marine entertainment should go out of business (2:F2-	Pleasure Pain Profit Products	Commerce

(*Continued*)

Table 1. Continued.

Option 1: Support live dolphin experience Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
Eileen) Can't justify profit over pain (2:F3-Roberta)		
Animatronic option more ethical and sustainable (2:F2-Eileen) Just doesn't seem as ethical; denies the rights of dolphins (2:F3-Roberta) We should be seeking more responsible models (2:F3-Roberta) Captivity is not justice for dolphins (2:F4-Sage)	Responsibility Ethics Sustainability	Morality

> Swimming with dolphins is an activity that has been on my travel bucket list, so the robotic alternative just seems like a let-down, even though it is impressive that a creation such as animatronic dolphin was achieved.

The final central theme in Table 1 for those selecting Option 1 was coded as Love. Respondents indicated that being with a dolphin would be a unique experience, that they had a deep adoration and love for dolphins, which for some manifested in childhood. Harriot explained the excitement that such an experience would create and how much she adores being with animals. She wrote:

> This would be a once-in-a-lifetime opportunity and would be extremely fascinating. I adore animals so getting to see a live dolphin that close would be very exciting and interesting to study the way they swim, eat, and interact with us.

The second part of Table 1 shows a stark in those who favoured the animatronic dolphin experience (Option 2) compared to those choosing Option 1. Participants who favoured Option 2 (n = 5) clearly outlined why a move away from living dolphin experiences is the right course of action. The first of the four themes, Education, was identified through two sub-themes: media as a conduit for what is ethical and media as necessary in changing perceptions. Documentaries and print media provided the opportunity for participants to learn about the harm that animals, like dolphins, experience in captive settings.

> As a kid, I once experienced feeding the dolphins at Marineland. I enjoyed watching the dolphins do amazing tricks like jump through hoops or tail walking. The experience of interacting with dolphins was so graceful and surreal. However, after reading several news articles on how Marineland mistreats aquatic animals, I am in favour of the life-like animatronic experience.

Participants also showed concern over the direct Health and Well-being problems that manifest regarding animals in captive settings and all of the demands placed on these animals to satisfy human interests. Sub-themes identified include poor health, the inability of dolphins to move around freely and extensively, and the size of enclosures preventing that mobility and freedom.

Sub-themes of pleasure, pain, profit, and products represent participants' opinions who chose Option 2 and were summarised into the central theme of Commerce. Participants thought that cruelty was wrong for our pleasure, that dolphins were being treated as commercial products, the marine entertainment business was unethical and should go out of business, and that it is challenging to justify profit over pain. As a major marine

Table 2. Phase 2 thematic analysis post-intervention.

Change from Option 1 to Option 2 (Post-intervention) Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
Broken heart to see animals in small cages (1: M2-Owen) Feelings of sadness over entertainment industry (1:F3-Harriot) Sympathy inducing strong feelings of protection (1:F3-Harriot) Feeling selfish for choosing option 1 (1:F3-Harriot) (1:F5-Fran)	Sympathy Sadness Selfishness	Empathy & introspection
Animatronic dolphin just like a real dolphin (1: M2-Owen) No idea engineering could create such an experience (1:F6-Ingrid) Couldn't tell if the robot was real or fake (1: F3-Harriot) No lost experience from animatronic dolphin (1:M3-Ian) The robot provides a memorable experience (1:M3-Ian) Animatronic dolphin is the right ethical decision for all involved (1:M4-Larry)	Impressiveness of engineering Positive and memorable experience Best ethical decision	New authentic
Dolphins taken from their families in the wild (1:M2-Owen) The capture of dolphins is disgusting (1:F1-Lucy) Brutal capture from their habitats (1:F3-Harriot) Captivity leads to suffering (1:M2-Owen) Captivity leads to exploitation (1:F1-Lucy) No dolphin should endure a life like that (1: M3-Ian) Captivity leads to depression and sadness in dolphins (1:M3-Ian) The lengths people go to capture dolphins for entertainment (1:F4-Nancy)	Process of capture Impacts of capture Impacts of captivity	Capture
Lack of knowledge and close-mindedness (1: F2-Patricia) Need to learn from experts (1:F5-Fran) Need to learn about the importance of life, freedom & respect (1:F5-Fran)	Knowledge Learning	Education
Option 2 unchanged (Post-intervention) Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
No regard for animal rights or welfare (2:F1-Pam) (2:F3-Roberta) Tanks too small in financial gain (2:F1-Pam) Training reflects control and neglect (2:F1-Pam) Captivity space too small for dolphins (2:M1-Peter) Treated like a slave with lost freedom (2:M1-Peter) Disturbing to do tricks (2:M1-Peter) Dolphins as objects, not subjects (2:F2-Eileen) (2:F4-Sage) Cetaceans are like slaves (2:F2-Eileen) Exploited by being fed if they do tricks (2:F2-Eileen) Admission supports entertainment (2:F2-Eileen) (2:F3-Roberta)	Poor animal wellbeing Size of enclosures Training as control and exploitation Support of venues leads to impacts	Negative impacts

(*Continued*)

Table 2. Continued.

Change from Option 1 to Option 2 (Post-intervention) Primary words/phrases as open coding	Sub-themes: Axial coding	Main theme: Selective coding
Animatronic provides the illusion of real Animatronic is just as good for entertainment and more ethical (2:F1-Pam) Animatronic successful in education and entertainment (2:M1-Peter) This should be the future of aquaria (2:F4-Sage)	The illusion of real means success in entertainment, education and ethically sound	Superior product

captive venue is located approximately 20 min away from the university the participants attend, the community is frequently exposed to a culture of resistance to this operation. One student referenced this venue and its terrible record of keeping cetaceans. Pam noted that 'It is unfair for us as humans to subject marine animals to a cruel life that is unhealthy for them out of our own pleasure', while Peter commented that 'the live dolphin option basically uses them as commercialised products'. Eileen observed that:

> This robotic experience can mimic what I experienced as a kid. I support this life-like animatronic experience because many rules and regulations support ending marine life captivity due to the way they are mistreated. Meaning, the marine entertainment industry would be going out of business.

The final central theme in Table 1 was categorised as Morality in response to the strongly referenced opinions of participants surrounding the keeping of dolphins in conditions that are not like their natural habitat. Participants referenced poor responsibility, ethics and sustainability as why the animatronic option was morally the better choice. Roberta argued that 'we should be actively seeking more responsible models in the provision of these attractions that side with the interests of dolphins, not humans', while Sage commented that 'We should all be concerned about the fact that captive marine businesses are not even close to extending justice to dolphins and whales. When will we respect dolphins and stop being irresponsible.'

The second phase of the research was designed around an intervention strategy that involved a documentary on the recognised cruelty in captive marine venues, and a promotional video on the value of animatronic dolphins as an alternative to live venues. After watching these two videos, the participants were asked if their original opinions had changed. Of the ten participants who chose the live dolphin experience in Phase 1 of the study, all but one changed their choice to the animatronic option in Phase 2.

As the only participant standing by his original option, Donald explained that animatronic dolphin was a great innovation, hoping to drive further interest and demand, including shedding light on 'the dark side of the animal entertainment industry'. However, Donald argued that.

> After watching both videos regarding the dolphin entertainment industry, I would still choose the real live animal instead of the robotic replacement. After watching the first video - the capturing of Lolita – I felt disturbed, the way the dolphins cry for one another and how many casualties resulted in the capture (sinking the dead ones with anchors, filling with rocks, secret disposal) … my opinion on the matter has not changed

> after watching both videos because nothing can replicate a live animal, from the physical features, to the sounds and movements.

Thematic analysis of the remaining nine participants is shown in Table 2 and focuses on 'why' participants changed their views from Option 1 to Option 2 after the intervention. Although only five individuals were categorised as Option 2, they offered several reasons why they stuck with their initial option. It is also significant that all five of these participants indicated that the interventions strengthened their convictions about why the animatronic dolphin was a better choice and experience. Such a stance is represented by Peter, who, after seeing the documentary and video, exclaimed, '… *my conviction to favor animatronic dolphins strengthened to the max*.' Eileen wrote, '*No, my opinion has not changed after viewing these videos but instead made me surer of my choice*.'

Two main themes are illustrated in Table 2: one broad and the other targeted around the success of the animatronic option. This group of participants shared a sense of alarm over how dolphins and killer whales (from the documentary) are held, which confirmed and intensified their earlier convictions. These convictions are summarised in the central theme of Negative Impacts and concern aspects of enclosures, training, slavery and lost freedom, and exploitation in the name of entertainment and profit. Eileen wrote.

> The marine animals are exploited, fed if they perform tricks, and then put into a confined steel tank, which is unhealthy for their development. 'In tourism, animals are seen more as objects than as subjects,' but many tourists do not understand the connection between animals and the ethics of their practice.

The final category in Table 2, Superior Product, indicates the belief of these five students that the animatronic dolphin was a better option for visitors. The illusion of reality, the feeling that it was just as good at entertaining and educating, and because it was simply a better moral option provided grounding for this perspective. Pam's views on this theme represent this standpoint:

> The animatronic dolphins look extremely life-like and would give the illusion of a real animal and thus I must agree that an animatronic dolphin is a far better attraction than the live animal version if not just for entertainment than ethically as well.

6. Discussion

Results of the analysis provide evidence of radical change in the opinions of captive dolphin use based on two hypothetical scenarios. First, participants who supported the live dolphin experience in Phase 1 of the study (n = 10) did so based on wanting to experience authentic live dolphins, even though questions emerged over the moral acceptability of this use. Several participants stated that although using live dolphins was cruel and inhumane (which came packaged with feelings of guilt), they still could not pull themselves away from choosing this option (see Curtin & Wilkes, 2007). The pursuit of self-interest was represented by the need to secure a long-lasting experience with a live dolphin, including the desire to take a selfie with dolphins (see O'Neil, 2016). Akrasia is the philosophical perspective that explains the weakness of will in decision making. Even though we know the right course of action, we choose another irrational option to serve our goals and interests. Fennell (2015) used akrasia to

explain why people choose to purchase endangered animal souvenirs and why some participate in sex tourism with minors, even though they know these practices are wrong. The results of this study confirm the importance of akrasia as an inroad to seeking deeper explanations of why tourists use animals in consumptive ways (see, also, Rizzolo, 2021).

All participants who chose the live experience in Phase 1, except one, later changed their opinions favouring the animatronic dolphin after the intervention. Changes were brought on due to empathy and introspection, recognition that the animatronic dolphin was incredibly real (New Authentic) because they were unaware of the impacts of capture and captivity, and finally, the need to know more. In all cases, those who chose option 2 (animatronic) in Phase 1 were even more strongly committed to this option after the intervention, citing negative impacts of tanks, training, and treatment of dolphins, and because the animatronic dolphin was a superior product. The necessity of understanding the nature and degree of suffering and pain that animals endure in tourism has started to generate new strands of research (Fennell, 2021). Returning to Braidotti (2013), empathy is not restricted to the boundaries of being human but ought to be extended to include the moral consideration of other beings. Such sentiment has been embraced by Susen (2021), who writes that we humans "cannot feel good about ourselves in a morally valuable way unless we feel *with* and *for* others (p. 19). Those who supported the animatronic robot during the first phase of the study (n = 5) had prior exposure to education that opened their eyes to such practices' health and well-being, commerce, and moral aspects.

Moral reasoning and awareness are also subject to normative influences. What the collective is doing (in society or our organisational contexts) is embraced by individuals because it is judged to be easy and certain. Saul (1995) argued that settling for certainty leads to passivity and conformity, ultimately narrowing and flattening our options. In contrast, ethics forces us to live with *un*certainty because it agitates the waters of inevitability, forcing us to make decisions that are often difficult to imagine, let alone implement. I argue that the inspiration for such a radical change towards the animatronic dolphin for many of the students came at the hands of 'knowing' as 'believing' that there *are* alternatives for captive dolphins, which can be packaged in different (much different in this case) ways. Grounding these alternatives in a broader ecological mindset will help change values and opinions. Edge Innovations employed such a strategy by using the sustainability rhetoric, along with the impacts brought on by the capture and transport of live animals for entertainment. Such a belief is supported in this research.

Although education and ethics are catalysts that bring added meaning to experience, I further argue that it is also emotional understanding of the challenges that captive dolphins endure that can affect change. This position is supported by Haidt's (2001) social intuitionist model, which states that moral reasoning is a post hoc construction that emerges after an initial moral judgment based on intuitions. Only later do we make sense of these intuitions as right or wrong through the process of cognitive moral reasoning. According to Haidt (2001), the key is that our cognitions often take place outside of consciousness and that emotions are not as irrational as once thought. There is considerable scope for advancing studies on animals in tourism from the perspective of pre-cognitive states.

Scholars also argue that there is value in 'real-lived experience' encounters between animals and humans. For example, Lloro-Bidart's (2017) ethnographic research at California's Aquarium of the Pacific illustrates that interacting with animals in embodied, affective and emotional ways allows humans to truly know nonhuman animals. However, what we have witnessed through this research is the possibility of getting to truly know dolphins in a way that is not based on a real live experience but, alternatively, through an interaction with a machine – graceful, functional, and attractive as that machine might be. It seems plausible to suggest that what has emerged in this exploratory study is the emergence of a new authentic in the form of animatronic technology that not only benefits humans but also, and just as importantly, dolphins by rendering them even more 'real' than the transbiologically hybrid or 'unreal' beings that they have become, in contrived settings they are made to inhabit (Szczygielska, 2013).

This study parallels new research by Fennell et al. (2021), which argues that dark tourism is equally applicable to the broad range of situations and settings in which animals endured suffering and death. Fennell et al. (2021) assembled nine animal dark tourism categories such as status and setting, sources of suffering and death, the role of animals, temporal period, the scale of suffering and death, the negative–positive state of handlers, animal theories describing how animal were or are being used, tourist attitudes towards animals, and finally Stone's (2006) seven dark tourism products/supply.

Traditional aquaria may be conceived as dark tourism because of the suffering that animals endure as entertainers (Stone's category of "Dark exhibitions, despite the entertainment value for visitors) and because 'real' is now a contested domain. 'Real' (that is to say living) dolphins in their transbiological, hybrid, posthuman form (Szczygielska, 2013) must be re-imagined as dark tourism attractions at the hand of captive breeding and genetic engineering, control, domination, suffering, pain, and confinement, to be considered anything else.

The intervention implemented in this study induced participants to view the animatronic dolphin in a new light giving us hope for an entirely new reflection on the role of aquaria in the future. Seaton (2019) used 'light' tourism to envision tourism attractions differently – to sustain visitation in events like the second world war in Japan as it moves further into the past. Seaton (2019) argues that light tourism attractions are both bright (and inspire) and enlighten for the purpose of education. The animatronic dolphin surfaces as an example of light tourism because of its ability in real-time (and realistically) to educate, inspire, offer hope, and act as a responsible and sustainable option to that which is increasingly less appealing and equally difficult to justify (Beardsworth & Bryman, 2001). Moreover, allowing dolphins to live their lives in wild settings participating in normal behaviours must also be positioned as light tourism as long as service providers adopt state-of-the-art practices in elevating the interests of wild dolphins over pleasure and profit.

The results of this study also point to the emergence of posthuman hybridity. Captive animals like dolphins now 'resist extinction and a linear understanding of evolution by existing as technologically enhanced creatures' (Szczygielska, 2013, p. 108). Simultaneously, replacing wild dolphins with animatronic ones in captive settings is viewed as a postmodern manifestation of light tourism thinking as a mechanical surrogate for the 'real' thing. Both test our conceptions of the body as spectacle, body as a commodity,

and body as machine (Goulding et al., 2013) as we explore just what the animal turn is to look like in the future.

The preceding suggests that it is often difficult to blur the lines between human-human, human-animal, human-machine, animal-animal, and animal-machine, which is a hallmark principle of posthumanism. Indeed, the criticisms of posthumanism are abundant and circulate the need for more humanity – our qualities and capacities of reason, language in the creation of a revisionary project for the future (Soper, 2012), to challenge and correct the injustices and planetary destruction (Gare, 2021). Cohen (2019) identified the intriguing nature of posthumanism as a de-stabler of categories but concluded that 'its attempt to put humans and nonhuman animals on the same level seems to be fraught with fundamental paradoxes … [which] make a thorough embracement of posthumanism in any disciplinary field, including tourism, difficult if not impossible' (p. 424). For Umbrello (2018), posthumanism's elusive origin and multitude of interpretations cloud and obscure its meaning and application rendering it as 'fickle'. Umbrello's response is for 'rebirth in which the human form itself changes as a necessary step of moving from the inside of the circle to the outside, it is the only way to survive the self-induced ecological crisis' (pp. 29-30).

But unquestionably, there are inherent pitfalls in humanist directions too. The word 'robot' stems from Karel Capek's 1920 play 'Rossum's Universal Robots' and is Slavic in origin from Czech *robotnik* 'forced labour' and Old Church Slavonic *rabota* 'servitude' and *rabu* 'slave' (Online Etymology Dictionary, 2021). Ferrando problematises the propensity for humans to view robots as slaves because it sustains in our consciousness an overriding sense of 'entitlement, dualism, dichotomy, and supremacy' (Ferrando, 2021, online). The danger of humanism is that we slip back into traditional dichotomous, hierarchical positions that elevate the interests of one group over another. Under such conditions, our animatronic dolphin would exist within a humanist regime that fails to relinquish its foothold of dominance and supremacy over other 'lesser' beings.

7. Conclusion

The results of this study and subsequent discussion lead to the conclusion that in charting a path to the future, the best way to get there is through ethical pluralism, where there is a collision of reason and action from posthumanism and traditional animal ethics. The intersection of these two different perspectives 'may come together in an unruly swarm; migrate, mutate, and merge into hybrid forms and shapes to inspire new dynamic constellations of knowledge, theory and practice in academia and beyond' (Pedersen, 2011, p. 79; see also Pedersen, 2010). To be sure, the animatronic/robotic dolphin that has taken centre stage in this research is an apt example of what this mutation, hybridity, and dynamism can look like. However, it is first a product of human exceptionalism and a unique representation of posthumanism in action that broadens our ethical horizons through humility, kinship, connection, acceptance, rapprochement, (self)forgiveness, and empathy (Worsham, 2013).

'Centres' and 'centrisms' represent the very antithesis of what posthumanism aims to achieve. However, the radical change is not for humans to abandon the centre as noted above by Umbrello (2018) – to go out into the cold as it were (see also Roden, 2014). That will never happen. Instead, the goal should be to invite those living on the margins inside

to widen the circle of morality, which has been a rallying call for humanist animal ethics scholars for years (Singer, 2011). Let's keep the edge, if not simply as a metaphor of a turbulent time of where we once were, as hard as this will be to achieve. Companies like Edge Innovations test the limits of acceptability as we ride a wave of uncertainty about our place and the place of animals alongside us, real and otherwise, in the struggle to define an advanced state of responsibility and sustainability in tourism.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

BBC News. (2012). *Dolphins deserve same rights as humans, scientists say*. Retrieved at https://www.bbc.com/news/world-17116882.

Beardsworth, A., & Bryman, A. (2001). The wild animal in late modernity. *Tourist Studies*, *1*(1), 83–104. https://doi.org/10.1177/146879760100100105

Braidotti, R. (2013). *The posthuman*. Polity.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage.

Braun, V., & Clarke, V. (2021). Answers to frequently asked questions about thematic analysis. Retrieved at https://cdn.auckland.ac.nz/assets/psych/about/our-research/documents/Answers%20to%20frequently%20asked%20questions%20about%20thematic%20analysis%20April%202019.pdf

Cambridge Dictionary. (2022). Animatronics. Retrieved at https://dictionary.cambridge.org/dictionary/english/animatronics

Cater, C. (2010). Any closer and you'd be lunch! interspecies interactions as nature tourism at marine aquaria. *Journal of Ecotourism*, *9*(2), 133–148. https://doi.org/10.1080/14724040903125039

Cater, C., & Cater, E. (2007). *Marine ecotourism*. CABI.

Cetacean Rights. (2010). Cetacean Rights: Fostering moral and legal change. Retrieved at https://www.cetaceanrights.org/

Christou, P., Simillidou, A., & Stylianou, M. C. (2020). Tourists' perceptions regarding the use of anthropomorphic robots in tourism and hospitality. *International Journal of Contemporary Hospitality Management*, *32*(11), 3665–3683. https://doi.org/10.1108/IJCHM-05-2020-0423

CIHR, NSERC, SSHRC. (2010). Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010. Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.

Cohen, E. (2010). Dinosaurs in Thai culture and tourism. *Tourism Culture & Communication*, *10*(2), 117–135. https://doi.org/10.3727/109830410X12815527582828

Cohen, E. (2019). Posthumanism and tourism. *Tourism Review*, *74*(3), 416–427. https://doi.org/10.1108/TR-06-2018-0089

Curtin, S., & Wilkes, K. (2007). Swimming with captive dolphins: Current debates and post-experience dissonance. *International Journal of Tourism Research*, *9*(2), 131–146. https://doi.org/10.1002/jtr.599

De Fatima Filla, G., & De Araujo Monteiro-Filho, E. L. (2009). Monitoring tourism schooners observing estuarine dolphins (*sotalia guianensis*) in the estuarine complex of cananéia, south-east brazil. *Aquatic Conservation: Marine and Freshwater Ecosystems*, *19*(7), 772–778. https://doi.org/10.1002/aqc.1034

Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. Continuum.

Edge Innovations. (2021). Bringing art and technology to life. Retrieved at: https://www.edgefx.com/

Erskine, E. (2020). Robotic dolphins could soon relace real ones at tourists attractions. Retrieved at: https://www.onegreenplanet.org/animalsandnature/robotic-dolphins-could-soon-replace-real-ones-at-tourists-attractions/

Fennell, D. A. (2012). *Tourism and animal ethics*. Routledge.

Fennell, D. A. (2015). Akrasia and tourism: Why we sometimes act against our better judgement? *Tourism Recreation Research*, *40*(1), 95–106. https://doi.org/10.1080/02508281.2015.1006419

Fennell, D. A. (2021). Afterword: On tourism, animals & suffering: Lessons from aeschylus' *oresteia*. In J. Rickly, & C. Kline (Eds.), *Exploring nonhuman work in tourism: From beasts of burden to animal ambassadors* (pp. 253–260). De Gruyter.

Fennell, D. A., Thomsen, B., & Fennell, S. R. (2021). Animals as dark tourism attractions: A prototype. *EuropeNow*, *45*. https://www.europenowjournal.org/2021/11/07/animals-as-dark-tourism-attractions-a-prototype/

Fennell, S. R., Copeland, K., Thomsen, K., Copeland, S., & Duggan, M. (In press). Toward an era of multispecies livelihoods in coastal and marine community-based tourism. In A. Madic (Ed.), *Routledge Handbook of nature-based tourism development*.

Ferrando, F. (2016). Humans have always been posthuman: A spiritual genealogy of posthumanism. In D. Banerji, & M. R. Paranjape (Eds.), *Critical posthumanism and planetary futures* (pp. 243–256). Springer.

Ferrando, F. (2021). *Am interview about posthumanism in a time of crisis*. EuropeNow.

Franklin, A., & Crang, M. (2001). The trouble with tourism and travel theory? *Tourist Studies*, *1*(1), 5–22. https://doi.org/10.1177/146879760100100101

Gare, A. (2021). Against posthumanism: Posthumanism as the world vision of house-slaves. *Borderless Philosophy*, *4*, 1–56.

Gorski, T. (2003). Lolita: Slave to Entertainment. Retrieved at: https://www.imdb.com/title/tt1326158/?ref_=ttpl_pl_tt

Goulding, C., Saren, M., & Lindridge, A. (2013). Reading the body at von hagen's 'body worlds'. *Annals of Tourism Research*, *40*, 306–330. https://doi.org/10.1016/j.annals.2012.08.008

Haanpää, M., Salmela, T., García-Rosell, J.-C., & Äijälä, M. (2021). The disruptive 'other'? Exploring human-animal relations in tourism through videography. *Tourism Geographies*, *23*(1-2), 97–117. https://doi.org/10.1080/14616688.2019.1666158

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*(4), 814–834. https://doi.org/10.1037/0033-295X.108.4.814

Haraway, D. (1985). A manifesto for cyborgs: Science, technology and socialist feminism in the 1980s. *Socialist Review*, *80*, 97–120.

Haraway, D. J. (1991). A cyborg manifesto. In D. J. Haraway (Ed.), *Simians, cyborgs, and women: The reinvention of nature*. Routledge.

Hardt, M., & Negri, A. (2000). *Empire*. Harvard University Press.

Hughes, P. (2001). Animals, values and tourism — structural shifts in UK dolphin tourism provision. *Tourism Management*, *22*(4), 321–329. https://doi.org/10.1016/S0261-5177(00)00070-4

Kivunja & Kuyini. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, *6*(5), 26–41. https://doi.org/10.5430/ijhe.v6n5p26

Kopnina, H. (2017). Beyond multispecies ethnography: Engaging with violence and animal rights in anthropology. *Critique of anthropology*, *37*(3), 333–357.

Langhof, J. G., & Güldenberg, S. (2019). Pirates, ghosts and customer loyalty – *reviewing* the dark ride experience. *Tourism Management Perspectives*, *31*, 398–420. https://doi.org/10.1016/j.tmp.2019.06.004

Lindgren, N., & Öhman, J. (2019). A posthuman approach to human-animal relationships: Advocating critical pluralism. *Environmental Education Research*, *25*(8), 1200–1215. https://doi.org/10.1080/13504622.2018.1450848

Lloro-Bidart, T. (2017). A feminist posthumanist political ecology of education for theorizing human-animal relations/relationships. *Environmental Education Research*, *23*(1), 111–130. https://doi.org/10.1080/13504622.2015.1135419
Marton, F. (1988). Phenomenography: Exploring different conceptions of reality. In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education: The silent scientific revolution* (pp. 176–205). Praeger.
McCarthy, C. (1973). *Child of God*. Vintage.
McCarthy, C. (1995). *The crossing*. Vintage.
McCarthy, C. (2006). *The road*. Vintage.
Mootoo, S. (1996). *Cereus Blooms at night*. Grove.
O'Neil, L. (2016). Dolphin calf dies after tourists use it for selfies. Retrieved at: https://www.cbc.ca/news/trending/dolphin-calf-dies-after-tourists-use-it-for-selfies-1.3456188
Online Etymology Dictionary. (2021). Robot (n.). Retrieved at https://www.etymonline.com/word/robot
Orams, M. B., Hill, G. J. E., & Baglioni, A. J. (1996). "PUSHY" BEHAVIOR IN A WILD DOLPHIN FEEDING PROGRAM AT TANGALOOMA, AUSTRALIA. *Marine Mammal Science*, *12*(1), 107–117. https://doi.org/10.1111/j.1748-7692.1996.tb00308.x
Pedersen, H. (2010). Is 'the posthuman' educable? On the convergence of educational philosophy, animal studies, and posthumanist theory. *Discourse: Studies in the Cultural Politics of Education*, *31*(2), 237–250. https://doi.org/10.1080/01596301003679750
Pedersen, H. (2011). Release the moths: Critical animal studies and the posthumanist impulse. *Culture, Theory and Critique*, *52*(1), 65–81. https://doi.org/10.1080/14735784.2011.621663
Pless, M. H. (2012). *Another world entire: The posthumanism of Cormac McCarthy* [MA thesis]. Department of English, The University of Mississippi. Electronic Theses and Dissertations. 232. https://egrove.olemiss.edu/etd/232
Press, S. V. (2019). Terrestrial cosmopolitanism, posthumanism, and multispecies modes of being in *Cereus Blooms at night*. *Humanities*, *8*(2), 92. https://doi.org/10.3390/h8020092
Ren, C. (2011). Nonhuman agency, radical ontology and tourism realities. *Annals of Tourism Research*, *38*(3), 858–881. https://doi.org/10.1016/j.annals.2010.12.007
Rizzolo, J. B. (2021). Wildlife tourism and consumption. *Journal of Sustainable Tourism*. DOI: 10.1080/09669582.2021.1957903
Roden, D. (2014). *Posthuman life: Philosophy at the edge of the human*. Routledge.
Rohwedder, C. (2011). The human animal: Posthumanism in John Steinbeck's *Cannery Row*. MA, Department of English, College of Arts, Humanities, and Social Sciences, North Dakota State University.
Saul, J. R. (1995). *The unconscious civilisation*. House of Anansi Press.
Seaman, M. J. (2005). Becoming more (than) human: Affective posthumanisms, past and future. *Journal of Narrative Theory*, *37*(2), 246–275. https://doi.org/10.1353/jnt.2008.0002
Seaton, P. (2019). Islands of "dark" and "light/lite" tourism: War-related contents tourism around the seto inland Sea. *Japan Review*, *33*, 299–327.
Singer, P. (2011). *The expanding circle: Ethics, evolution, and moral progress*. Princeton University Press.
Soper, K. (2012). The humanism in posthumanism. *Comparative Critical Studies*, *9*(3), 365–378. https://doi.org/10.3366/ccs.2012.0069
Stone, P. (2006). A dark tourism spectrum: Towards a typology of death and macabre related tourist sites, attractions and exhibitions. *Tourism: An International Interdisciplinary Journal*, *54* (2), 145–160. https://hrcak.srce.hr/161464
Sturød, A. G., Helgadóttir, G., & Nordbø, I. (2020). The Kyrgyz horse: Enactments and agencies in and beyond a tourism context. *Current Issues in Tourism*, *23*(12), 1512–1527. https://doi.org/10.1080/13683500.2019.1626813
Susen, S. (2021). : Reflections on the (post-)human condition: Towards New forms of engagement with the world? *Social Epistemology*. DOI:10.1080/02691728.2021.1893859

Szczygielska, M. (2013). Transbiological re-imaginings of the modern self and the nonhuman: Zoo animals as transbiological entities. *Identities: Journal for Politics, Gender and Culture*, *10*(1-2), 101–110. https://doi.org/10.51151/identities.v10i1-2.285
Taylor, N. (2012). Animals, mess and method: Posthumanism, sociology and animal studies. In L. Birke, & J. Hockenhull (Eds.), *Crossing boundaries: Investigating human-animal relationships* (pp. 37–50). Brill.
Thomsen, B. (2021). Wolf ecotourism: A posthumanist approach to wildlife ecotourism. In D. A. Fennell (Ed.), *Routledge's Handbook of ecotourism* (pp. 117–131). Routledge.
Thomsen, B., Thomsen, J., Copeland, K., Coose, S., Arnold, E., Bryan, H., Prokop, K., Cullen, K., Vaughn, C., Rodriguez, B., Muha, R., Arnold, N., Winger, H., & Chalich, G. (2021). Multispecies livelihoods: A posthumanist approach to wildlife ecotourism that promotes animal ethics. *Journal of Sustainable Tourism*. DOI: 10.1080/09669582.2021.1942893
Tuan, Y.-F. (2007). Animal pets: Cruelty and affection,". In L. Kalof, & A. J. Fitzgerald (Eds.), *The animals reader: The essential classic and Contemporary writings, (pp.)*. Berg.
Umbrello, S. (2018). Posthumanism. *Con Texte*, *2*(1), 28–32. https://doi.org/10.28984/ct.v2i1.279
Wolfe, C. (2009). Human, all too human: 'animal studies' and the humanities. *PMLA*, *124*, 564–575.
Wood, D. (2004). Thinking with cats. In P. Atterton, & M. Calarco (Eds.), *Animal philosophy: Ethics and identity* (pp. 129–144). Continuum.
Worsham, L. (2013). Toward an understanding of human violence: Cultural studies, animal studies, and the promise of posthumanism. *Review of Education, Pedagogy, and Cultural Studies*, *35*(1), 51–76. doi:10.1080/10714413.2013.752697

Appendix 1. Declaration of Rights for Cetaceans: Whales and Dolphins

Based on the principle of the equal treatment of all persons;

Recognising that scientific research gives us deeper insights into the complexities of cetacean minds, societies and cultures;

Noting that the progressive development of international law manifests an entitlement to life by cetaceans;

We affirm that all cetaceans as persons have the right to life, liberty and wellbeing.

We conclude that:

1. Every individual cetacean has the right to life.
2. No cetacean should be held in captivity or servitude; be subject to cruel treatment; or be removed from their natural environment.
3. All cetaceans have the right to freedom of movement and residence within their natural environment.
4. No cetacean is the property of any State, corporation, human group or individual.
5. Cetaceans have the right to the protection of their natural environment.
6. Cetaceans have the right not to be subject to the disruption of their cultures.
7. The rights, freedoms and norms set forth in this Declaration should be protected under international and domestic law.
8. Cetaceans are entitled to an international order in which these rights, freedoms and norms can be fully realised.
9. No State, corporation, human group or individual should engage in any activity that undermines these rights, freedoms and norms.
10. Nothing in this Declaration shall prevent a State from enacting stricter provisions for the protection of cetacean rights.

Appendix 2. Respondent profiles and codes

Respondent	Gender	Option 1 (Live) coded as	Option 2 (Animatronic) coded as
1	Male	1:M1 (Donald)	
2	Male	1:M2 (Owen)	
3	Female	1:F1 (Lucy)	
4	Female	1:F2 (Patricia)	
5	Female	1:F3 (Harriot)	
6	Male	1:M3 (Ian)	
7	Female	1:F4 (Nancy)	
8	Female	1:F5 (Fran)	
9	Male	1:M4 (Larry)	
10	Female	1:F6 (Ingrid)	
11	Female		2:F1 (Pam)
12	Male		2:M1 (Peter)
13	Female		2:F2 (Eileen)
14	Female		2:F3 (Roberta)
15	Female		2:F4 (Sage)

Note: A code of 1:M1 means the following: 1 = Option 1 (live); M = Male; 1 = the first participant in Option 1
A code of 2:F3 means the following: 2 = Option 2 (animatronic); F = Female; 3 = the third participant in Option 2