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Evaluating the Effectiveness of Empathy-Based Education in the Modern Zoo

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Abstract

Approximately 10,000 zoos exist in the world, attracting an estimated 600 million visitors annually. At the most basic level, these zoos are tourist destinations dedicated to assembling animals in confinement from around the world. The arguably most modern and conservation-minded zoos today form the Association of Zoos and Aquariums. In January of 2019, twenty AZA-accredited zoos and aquariums created the Advancing Conservation through Empathy Network (ACE). AZA facilities that are part of the ACE Network engage visitors through a process known as Empathy-Based Education (EBE). EBE encourages compassion and emotional connection to animals by having the visitor take the place of an animal and encouraging them to relate to what the animal experiences. This connection causes people to care about animals for moral reasons, and therefore motivates them to take ethical action to protect them. However, major systemic issues still exist in zoos today, and this Empathy-Based Education process alone is not enough to fix them. Firstly, zoos today still carry a legacy of imperialist power and domination that perpetuates false ideas of civilization and nature. Additionally, the animals that live in zoos are often treated unethically, are bred and sold as commodities, and are objectified for human entertainment. Finally, despite zoo efforts, visitors still do not leave zoos with enough information to effectively address modern environmental problems. However, some experts have proposed alternatives to zoos as we currently know them. These substitutions allow empathy, connection, care, and action to be fully realized in an ethical and effective setting.

Introduction - A Brief History of Zoos

For thousands of years, humans have engaged in capturing and keeping animals for a multitude of reasons (Hancocks, 2001). In recent history some of the most prominent of these collections are zoological parks and aquariums. Approximately 10,000 zoos exist in the world, attracting an estimated 600 million visitors annually (Tribe, 2003). Zoos conveniently consolidate species from all over the world to view for the price of an admission ticket (Nekolny & Fialova, 2018). At the most basic level, these zoos are tourist destinations; assemblages of animals kept in confinement so that people can observe them without travelling to their home habitats (Nekolný & Fialová, 2018).

Zoos trace their origins back to ancient menageries: collections of animals held by powerful rulers of ancient civilizations like Babylon, Greece, and Rome (Hancocks, 2001). These menageries served as statements of power by the rulers that owned them, often as a representation of the exotic lands they had conquered (Braverman, 2011). In Europe in the 19th century, Zoological Parks emerged as the age of Enlightenment inspired new interest in zoology (Zuckerman, 2019). These Zoological Parks displayed exotic animals that were often organized by taxonomic classification to amaze visitors with the world's curiosities (Zuckerman, 2019). These animals were treated as live collections which displayed biodiversity and the wonders of nature (Hancocks, 2001).

This trend spread to America in 1860 with the establishment of the Central Park Zoo in New York (Braverman, 2011). American zoos soon became common in public parks as places of relaxation and respite from the busyness of the city (Montgomery, 1995). Animal exhibits were interspersed between large trees, flower gardens, and landscape displays. These parks were intentionally distinct from the business of streets, skyscrapers, cars, and other man-made

inventions, and attempted to be as free from human presence in their displays as possible (Hanson, 2004). By the turn of the 20th century, these American zoos were essential features of cities and provided entertainment and relaxation, as well as an escape from “civilization” (Braverman, 2011). Western society defined “civilization” as modern technology, buildings, and places where humans lived and worked. This was distinct from “nature”, which was the vast expanse of supposedly untouched wilderness which humans had not yet corrupted or tamed (DeLuca & Demo, 2001). The American zoo pandered to the commonly-held belief that modern civilization was expanding into nature, and that without zoos and other such facilities all of nature would soon be gone (Hanson, 2004; Montgomery, 1995).

These early zoos were designed primarily to entertain guests, which usually came at the expense of the animals there (Boyle, 2017; Hanson, 2004). As a result, public outcry in the 1960’s and 70’s put pressure on zoos to rebrand themselves as places that helped animals, rather than centers of entertainment (Milstein, 2009). Zoos began to put time and money into conservation efforts to protect captive animals’ wild counterparts through captive breeding programs and research projects (Rabb, 2018). Animal displays moved away from barred cages and became more naturalistic and authentic to the animal’s home habitat (Patrick and Tunnicliffe, 2013) (Hanson, 2004). Zoos also focused on conservation-related messaging in exhibit displays and educational programming (Patrick and Tunnicliffe, 2013; Rabb, 2018). Today, the majority of visitors to zoos expect to not only be entertained by the captive animals, but also to be educated by them (Roe, 2015). Additionally, a large percentage of visitors expect zoos to be centers of conservation that protect and preserve zoo animals’ wild counterparts (Tribe, 2003).

Defining Empathy-Based Education

The zoos that are (self-reportedly) the best at meeting those expectations are part of the Association of Zoos and Aquariums (AZA) (“AZA: About Us”, 2021). The AZA is a group of certified zoos around the world that “help its members and the animals in their care thrive by providing services advancing animal welfare, public engagement and the conservation of wildlife”, according to their mission statement (“AZA: About Us”, 2021). The AZA has currently accredited 240 facilities in 13 countries that meet rigorous standards of animal welfare, conservation efforts, and visitor education (“AZA: About Us”, 2021). According to the AZA, this dedication to animal welfare, education, and conservation makes their existence ethical (“AZA: About Us”, 2021).

In January of 2019, 20 AZA-accredited zoos and aquariums formed the Advancing Conservation through Empathy Network (ACE) as a new approach towards the AZA’s conservation-minded mission (“Empathy Initiative”, 2021). The goal of the ACE is “to strengthen how accredited institutions create, use and evaluate practices to foster empathy for wildlife leading to conservation actions” (“Empathy Initiative”, 2021). The zoos involved in this initiative send representatives to attend yearly Creating Change Symposiums hosted at the Woodland Park Zoo. They also sent representatives to the Developing Empathy For Conservation Outcomes Conference hosted at the Seattle Aquarium in 2020 (“Fostering Empathy for Wildlife”, 2021). Participants at these events learn techniques to improve the education departments that they represent through empathy. Empathy, the core value of the ACE Network, is defined as “a stimulated emotional state that relies on the ability to perceive, understand, and care about the experiences or perspectives of another person or animal” (Woodland Park Zoo Staff, 2019a).

AZA facilities that are part of the ACE Network claim that engaging visitors using empathy makes their experience memorable, educational, and ethical. They call this process Empathy-Based Education (EBE). According to a document titled *The Case for Empathy* that was created for Woodland Park Zoo's EBE program, empathy for animals is a powerful motivator for change (Owen, 2018). As the document explains, empathy encourages compassion and emotional connection to animals, because it causes the visitor to take the place of an animal and allows them to relate to what the animal experiences (Owen, 2018) (Woodland Park Zoo Staff, 2019a, 2019b). This connection causes people to care about animals for moral reasons, and therefore motivates them to take ethical action to protect them (Woodland Park Zoo Staff, 2019a, 2019b). The document, written by a consultant named Kathryn Owen (2018), goes on to list sources that support this reasoning.

The Woodland Park Zoo also outlines how, exactly, to inspire visitors to make empathetic connections with its animals. Two documents posted on its website outline the ideal process that EBE follows at a zoo, broken down into five steps (Woodland Park Zoo Staff, 2019a). The first step is to assure the visitor that the animal they are observing is cared for and is treated well. The second and third steps are to introduce the animal as an individual, with a name and pronouns, and to tell relatable stories about the animal that identifies it as an individual with a personality. The fourth step is to invite perspective-taking by asking the visitor to put themself in the place of the animal, by asking questions such as "what do you think the animal is doing?" and "how do you think he/she is feeling?". The fifth and final step is to invite the visitor to take a conservation action, such as donating money or making an ethical consumer choice (Woodland Park Zoo Staff, 2019a).

In this paper, I argue that major systemic issues still exist in zoos today, and that this Empathy-Based Education process alone is not enough to fix them. I address three prevalent

problems in zoos, and present counterarguments to explore nuance. Firstly, zoos today carry a legacy of imperialist power and domination that perpetuates false ideas of civilization and nature. Additionally, the animals that live in zoos are often treated unethically, are bred and sold as commodities, and are objectified for human entertainment. Finally, despite zoo efforts, visitors do not leave zoos with enough information to effectively address modern environmental problems. The modern zoo in its current state is a flawed institution that promotes both unethical treatment of animals and visitor apathy, and cannot be justified by Empathy-Based Education alone. I do not attempt to evaluate every ethical aspect of zoos, only the effectiveness of EBE in the context of zoos today. Each of my arguments are explored more thoroughly in the sections below to supplement the thesis.

Problematizing the Concept of Nature

Despite attempts towards modernization, zoos today still carry the legacy of their unethical past. Like zoos of the 19th century, modern zoos present nature as an abstract concept; as an idealized place where people can go and escape civilization, rather than as nature actually is. In Milstein's (2009) essay *Somethin' Tells Me It's All Happening at the Zoo*, she explains that zoos present nature through three lenses: mastery, othering, and exploitation. In Western cultural tradition, nature is a wild force needing to be tamed or *mastered*. Animals and nature are considered an "*other*" that are distinct from, and less advanced than, human beings. This reasoning justifies the *exploitation* of nature: its commodification and accumulation for economic gain.

In Milstein's essay (2009) she goes on to provide examples of how these three themes still exist in modern zoos, specifically at a zoo she calls "Zoo West", her pseudonym for the Woodland Park Zoo (WPZ). At WPZ, animals are grouped by ecosystems, including an

"African Savanna" and a "Tropical Asia". The African Savanna and Tropical Asia are centered around simulated "traditional" villages that include dwellings, one-room schools, and gathering spaces. Alongside them, animals native to east Africa and southeast Asia are displayed. However, these exhibits are eerily devoid of people and appear as stereotypical versions of those places. WPZ also intentionally hides windows, doors, and other viewing areas in the exhibit from the visitor's gaze to further give the illusion of a peopleless nature. Flags of countries from Africa, Asia, and South America are hung outside the gift shop, but Western flags are noticeably absent, strengthening the idea that nature is an exotic place far away. All of these examples contribute to the exoticized cultural theming present at WPZ, which presents nature as an "*other*" that is separate from the viewer and that exists only to entertain them. Nature at the Woodland Park Zoo is an exotic entity, not an intricate system of which the visitor is a part. This imperialistic way of presenting nature has existed since the founding of zoos and still carries on despite structural changes to zoos in modern times (DeLuca & Demo, 2001).

Unfortunately, exotic cultural themes are widespread across AZA facilities (Beardsworth and Bryman, 2001). This process of *othering* animals and nature leads to Milstein's (2009) third principle of the Western concept of nature, *exploitation*. Beardsworth and Bryman (2001) call this process "Disneyization" because of zoos' striking similarities to Disney theme parks. Like theme parks, modern zoos use an immersive theme to sell merchandise and to entertain their viewers. In the case of zoos, this theme is "the wild": a fictional place where humans are absent except as tourists (Beardsworth & Bryman, 2001; Montgomery, 1995). According to Beardsworth and Bryman (2001), "…zoos simultaneously commoditize the wild and pander to public anxieties about the erosion of the natural world in the face of urbanization" in order to draw in visitors. This "*other*" becomes a commodity that people must use quickly before it is gone. Animals become a product which motivate people to pay admission, buy cheap tourist

items, take pictures, and generally treat zoos as they would a Disney theme park (Beardsworth & Bryman, 2001).

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In response to these arguments, some zoos say that the nature they present is not a peopleless commodity at all, and that it actually pays homage and respect to the Indigenous cultures that inhabit it (Milstein, 2009). However, according to Milstein (2009), “exoticized cultural theming may instead turn the mirror of captive animals and the mirror of simulated exotic/primitive cultures toward each other, allowing visitors a degree of imperialistic invisibility that, in turn, strengthens the visitor’s unreturned zoological gaze.” In other words, exoticized cultural theming actually encourages visitors to actively exclude Indigenous people from “civilization” by including them in the “other” (Milstein, 2009). Civilization is a false abstract that is used to mean “the opposite of ‘nature’”, and also implies that anything outside civilization is not as advanced (DeLuca and Demo, 2001). Instead of dismantling this nature-civilization dichotomy, putting Indigenous cultures on display serves to strengthen it. It implies that Indigneous cultures are simple, primitive, and exotic, rather than complicated societies that actively shape and manage the ecosystems that they live in (Milstein, 2009). This encourages Western viewers to exclude Indigneous peoples from “civilization” , which by definition also means they are less advanced and less human (Grazian, 2017). Rather than presenting Indigenous cultures as nuanced people with complex ways of interacting with nature, they are reduced to being *one* with nature.

According to the Empathy-Based Education, empathy remedies the disconnect between humans and nature at zoos. Ideally, EBE would dismantle the concept of nature as a place that is separate from civilization by reconnecting people emotionally to it. Many sources argue that EBE does have the power to do so. One study suggests that a visit to a zoo is enough to trigger an empathetic response towards nature that measurably increases the

visitor's connectedness to nature (Bruni et al., 2008). Connectedness is defined as "an individual's belief about the extent to which he or she is part of the natural environment." (Bruni et. al, 2008). Another source, cited by the Woodland Park Zoo, demonstrates that this increased connectedness is enough to inspire visitors to protect it (Pfattheicher et al., 2016). Through empathy, visitors understand that they have a role to play in preventing things like climate change and habitat loss and take action to prevent those problems (Pfattheicher et al., 2016). Another study conducted at several zoos provides evidence that a visitor's level of connection with nature is correlated with their level of concern about nature (Grajal et al., 2017).

It is a good start for visitors to feel that they have a role to play in preventing climate change or other problems that threaten nature. However, as long as nature at zoos is presented in its "Disneyfied" form, visitors are forming connections between two false ideas. In aiming to bridge the gap between civilization and nature, EBE is suggesting that humans and nature are still separate entities. This "untouched, pristine nature" that visitors are connecting to still does not actually exist. It is an idealized one which remains harmful to both animals and Indigenous peoples. Additionally, EBE is a one-way connection, *from* visitor *to* nature, that does not address the complex ways that nature shapes humanity in return. The power of empathy is simply not enough to fix these structural problems with the way nature is presented in zoos.

Animals as Commodities

Beyond their presentation of nature, zoos are also unethical in the ways that they display and treat the animals that live there. Like nature, animals themselves are treated as commodities that exist to entertain zoo visitors. Historically, zoos were places of power where

triumph over wild beasts was displayed through iron bars and pits in the ground (Beardsworth and Bryman, 2001). Zoo exhibits today tend to be more naturalistic and reminiscent of the animal's natural habitat. However, zoo animals are still captured under the human gaze. The visitor is free to come and go, and to receive enjoyment, wonder, and awe from the animal being displayed (Berger, 2015). The animal, on the other hand, is trapped. Total control is exercised over them: what they eat, where they can go, and even who they can mate with (Milstein, 2009). Renowned art critic John Berger (2015) compares a visit to a zoo to the experience of looking at art in a museum. By being displayed behind glass or bars, the animal is reduced to a token, dressed up with theatre props around it. It is the victim of a one-way gaze from zoo onlooker to object, and it cannot return the gaze because it is powerless (Berger, 2015). The animal is reduced to the entertainment, education, and power that it provides for the spectator.

There is also evidence to support that animals in zoos are largely bored, depressed, and mistreated in zoos due to lack of care, stimulation, and natural environmental conditions (Wickins-Dražilová, 2006; Kleiman et al., 1997; Delon, 2018; Morgan, 2007). Animal welfare guidelines that exist in zoos tend to follow a "one size fits all" mentality that rarely assesses the needs of an animal as a unique species or individual (Wolfensohn et al., 2018). The topic of animal contentment in confinement is a controversial one that is difficult to explore every aspect of. However, if animals are suffering in zoos, as evidence suggests, that alone is sufficient proof to say that zoos need a structural shift. If zoos are not seeking out their own animals' well-being and happiness first and foremost, that is a sign that they view their animals as commodities and not as individuals.

One way that zoos attempt to justify the commodification of animals is through conservation and breeding programs. An important qualification for AZA accreditation is that

the facility invests in endangered species and habitat protection (“AZA: About Us”, 2021). Zoos overemphasize their contribution to conservation breeding efforts, and the Woodland Park Zoo is no exception. According to their website, WPZ participates in 111 “Species Survival Plans”, which are “cooperative breeding programs coordinated through the Association of Zoos & Aquariums” for endangered and threatened animals (“Conservation Breeding”, 2021).

Upon further research on the AZA website, however, one can read that SSPs are designed to sustain “healthy, genetically diverse, and demographically varied AZA population(s)” of animals (“Species Survival Plan Programs”, 2021). In other words, the term “conservation breeding” almost always means the breeding of animals to pass around to other AZA facilities to sustain the zoo industry. In reality, the vast majority of animals at any zoo are not endangered in the wild and are not part of any reintroduction program (Milstein, 2009). Instead, they serve to provide entertainment value to bring in crowds and revenue, and are therefore reduced to economic commodities. Captive breeding for wild populations is inefficient, costly, and hardly ever effective, so zoos breed animals to sustain themselves instead (Tribe and Booth, 2003). A study conducted at the turn of the 20th century found that globally, only 145 animal reintroduction projects were documented in the past century (59% involved zoo animals), and of them only 11% were successful in creating a wild, self-sustaining population (Beck, 1995). Consequently, “conservation breeding” actually contributes to the commodification of animals as objects to bring in revenue and entertain guests. The 11% success rate is not enough to justify the suffering of the countless other zoo animals trapped in the zoo industry simply to be sources of revenue.

There are other ways that zoos attempt to justify animal captivity as well. The AZA cites the benefits of research and knowledge that comes from animals being kept in close proximity to humans. According to their website, “The AZA believes that contemporary animal

management, husbandry, veterinary care, and conservation practices should be based in science, and that a commitment to scientific research, both basic and applied, is a trademark of the modern zoological park and aquarium" ("Research and Science", 2021). According to this statement, a large portion of zoo animal research is used for veterinary care and husbandry. Ironically, these two causes are only necessary because they can be re-applied to other zoo animals. The rest of the research, in theory, can be applied to animals' wild counterparts and can be used in conservation initiatives. However, several studies provide evidence that these research studies are expensive, impractical, and come at the cost of animal suffering (Minteer et al., 2013; Tribe & Booth, 2003; Zimmerman, 2010). Again, if human knowledge is coming from the suffering of confined animals, it may be time to focus research elsewhere, and reconsider the institution of a zoo altogether.

From an Empathy-Based Education standpoint, the use of animals as objects for entertainment and power is justified by the emotional connections that people form with them. One study finds that the word "connection", when defined by zoo guests, often simply means that the visitor enjoyed looking at or was entertained by the animal (Howell et al., 2019). Gaining pleasure and enjoyment from an animal in this way is just another form of commodification. A source cited by the Woodland Park Zoo is used to support the idea that zoos promote emotions beyond entertainment, such as respect, care, and wonder (Myers et al., 2004). However, what the study actually concludes is that zoos are a place for pre-existing emotions to be *expressed* towards animals, but not necessarily formed. The zoo environment simply "appears to provide conditions conducive for visitors to experience several positive emotions in an optimally-aroused fashion" (Myers et al., 2004), but this does not mean that it alone is responsible for causing them. In reality, the emotions elicited at a zoo are often predetermined based on a person's cultural and personal background (Colléony, 2016). At the end of the day, these predetermined and often shallow emotions are not enough to ensure that

an animal is treated as an autonomous being rather than an object. Through EBE, people may experience an empathetic connection towards the animals at the zoo, but that is not powerful enough to fix the greater problem of animal commodification.

Motivating Visitors to Action

Modern Western zoos have many structural problems in the ways that they present nature and animals within their own walls, but they also are problematic in the ways that they inspire people to act once they leave the zoo. Zoos are often vague and unfocused in the "caring action" step of the 5-step Empathy-Based Education process. The Woodland Park Zoo, for example, provides actions for inspired visitors to take after viewing the "Tropical Rainforest Exhibit" (Milstein, 2009). A display informs the viewer about clear-cutting of tropical rainforests, but fails to mention which human entities are responsible for this, or why, exactly, the forests are being cut and burned. The display then suggests that the visitor "reduce, reuse, and recycle", and that they should buy "sustainably farmed" coffee from the zoo's Cafe. The problem is oversimplified, and the visitor is left without a clear understanding of the structural problems that cause rainforest clearcutting. There is no mention of efforts that a visitor could take to lobby for better regulation of large corporations, or the role that America plays in transnational economic processes. Nothing on the display challenges a visitor's understanding of their relationship to nature, the economy, or other countries (Milstein, 2009). Unfortunately, this is a pattern in zoos: visitors often leave zoos understanding broad conservation concepts, but without a clear understanding of how they play a part in them (Carr and Cohen, 2011).

Studies cited by the Woodland Park Zoo to support Empathy-Based Education provide evidence that empathy does motivate conservation action on the part of the visitors once they leave the zoo. Specifically, EBE encourages visitors to donate money and make ethical

consumer choices (Berenguer, 2010; Pfattheicher et al., 2016). Visitors do leave zoos believing that they are part of the solution, and can have an important role to play (Falk et al., 2007). There is also evidence to support the idea that zoos can motivate people to take action against climate change specifically (Clayton et al., 2014).

However, anti-climate change actions that are promoted at zoos tend to be small-scale choices like turning off lightbulbs and driving electric cars (Grazian, 2017). “Ethical consumer choices” often mean making a purchase at the zoo’s gift shop or restaurant, further funding the institution (Milstein, 2009). Rarely do zoos address systemic problems in society and the structural change that must occur in order to undo them (Carr and Cohen, 2011; Grazian, 2017). Without clear direction, visitors may be inspired to make small, performative changes in their lives. However, they may not, for example, advise visitors to dismantle the fossil fuel industry, the entity that is actually responsible for climate change. Oftentimes, zoos are actually partially funded through donations from fossil fuel corporations (Widener, 2020). As long as zoos attempt to remain uncontroversial, neutral entities that do not upset the status quo, EBE-suggested “caring actions" will remain unproductive.

Zoos of the Future

The zoo as it currently exists in Western society is structurally flawed. Empathy-based education is not sufficient to dismantle problems of power, oppression, and consumerism. However, some experts have proposed alternatives to zoos as we currently know them. These substitutions allow empathy, connection, care, and action to be fully realized in an ethical and effective setting. Tema Milstein (2009), the author directly criticizing the Woodland Park Zoo, suggests several “non-zoo” replacements. One such “non-zoo” would be a rehabilitation facility filled only with animals that could not survive in their natural habitat. Seeing injured animals

hurt by human action could be a way to help visitors question their impact on ecosystems. Witnessing this would also inspire feelings of care, compassion, and empathy, and could be clearly linked to a “caring action” on the part of the visitors. Another non-zoo suggested by Milstein (2009) is a virtual one - an idea that would certainly be appropriate given the current state of the world. Non-invasive cameras could be set up in ecosystems to let people watch animals as they typically act. Visitors would be able to see animals living their lives with agency, instead of powerlessly trapped as objects of pleasure. People would also be able to see and discuss the effects of human activity upon those places. According to Milstein (2009), “this non-zoo would serve the purposes of directly helping to protect, providing constant collective surveillance of animal habitats and possible human encroachment, as well as educating visitors via actual experiences of wild animals and their interdependencies with their ecosystems.” Rather than presenting an idealized nature, this non-zoo would show animals and their ecosystems in their complex, messy, and true form.

The book “American Zoo” (2017), based on a zoo director’s tour of zoos across the country, also suggests a zoo alternative centered around a specific place. This non-zoo would display fewer animals, in greater detail, that together represent a singular ecosystem. Visitors would be encouraged to slow down and empathize more with the animals on display, and would be able to better immerse themselves in the specific simulated ecosystem being presented. Like at Milstein’s non-zoos, this place would spend significant energy educating visitors about the contemporary problems facing its residents’ wild counterparts.

Regardless of the exact model of the improved zoo of the future, zoos should make several changes now to justify themselves as ethical institutions. A paper by Rabb (2005) suggests the changes that can be made in the meantime until zoos go extinct and are replaced. These improved zoos, referred to in the paper as Conservation Centers, are the

natural step in the evolution of zoos, which began in Menageries of the 18th and 19th centuries and manifest as Zoological Parks today (Rabb, 2005). At their core, Conservation Centers will present animals in a more holistic context. Rather than exhibits, visitors will experience immersive replicas of ecosystems that do not shy away from the complex threats that they face. These facilities will also build on the sense of wonder that visitors experience at a typical zoo. According to Rabb (2005), “Instead of simply offering details about an individual animal species, encouraging visitors to reflect on the sense of themselves in relation to various animals can stimulate wondering appreciation.” This well-rounded, immersive approach will be an effective environment for fostering empathy by encouraging introspection. These zoos will also “strongly encourage support if not direct participation in the determined efforts needed to correct imbalances in the global ecosystem, including the economies, agricultural practices, consumption patterns and numbers of humans Homo sapiens,” causing people to self-reflect about their role in larger ecosystem threats (Rabb, 2005). These strategies combined will create a two-way relationship between the animals and the visitors, rather than a one-way gaze. People will experience care and compassion for animals, and in return will be challenged to work for their benefit.

This process of growing in wonder and care for animals, and in return learning to think ecologically and ethically, as described by Rabb (2005), is ideally what Empathy-Based Education set out to achieve. However, because of the many current structural problems of zoos, EBE is currently largely ineffective. Zoos still perpetuate the false ideals of nature and civilization that are rooted in power and imperialism. The animals that live in zoos are treated unethically, are bred and sold as commodities, and are objectified for human entertainment. Finally, zoos do not educate visitors effectively about how to respond to current environmental concerns. However, evidence does show that in spite of this, zoo visitors do want to learn and be changed by their visits to the zoo (Roe et al., 2014). As zoos continue to improve and learn

from past mistakes, people will be willing and excited to participate in processes similar to EBE. Though EBE is not currently enough to fix the ethical issues of the modern zoo, its basic principles will play a role in the zoo of the future, where authentic connections can truly be formed.

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