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MENAGERIES MULTIPLE: AN INTRODUCTION TO ZOOLOGICAL MULTIPLICITY IN THE MODERN AMERICAN ZOO

by

EMILY D. GRATKE

SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF THE DEGREE OF BACHELOR OF ARTS

PROFESSOR PERINI PROFESSOR WILLIAMS

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INTRODUCTION

On February 9, 2017, Packy, an Asian elephant housed at the Oregon Zoo in Portland, Oregon was announced dead.¹ Zoo officials stated that Packy had experienced the resurgence of an antibiotic resistant strain of tuberculosis (TB), which he contracted in 2013 from another of the Oregon Zoo's elephants. After battling the disease for nearly three and a half years, veterinarians and zoo management declared Packy's quality of life to be severely lacking and proceeded to euthanize him. Following the announcement of the elephant's passing, the story made national news from a variety of sources: "Oregon Zoo kills Packy the Elephant," "Packy, the much-loved Oregon Zoo elephant, dies at 54," "Zoo mourns Asian elephant Packy, oldest male of his species," the headlines read.^{2 3 4} Packy's loss was not felt solely by the zoo, but by a national and global community of zoogoers, animal activists, and conservationists.

Packy's death was not the first news coverage surrounding the elephant: Packy had been making international news since his first day on Earth. Packy was born at the Portland Zoo on April 14, 1962, and while he was the 301st elephant to reside in the United States at the time, he was the first elephant to be conceived, born, and survive in captivity in the country.⁵ The United States had not seen the birth of an elephant calf in

¹ "Remembering Packy," *Oregon Zoo*, February 9, 2017,

http://www.oregonzoo.org/news/2017/02/remembering-packy.

² Elizabeth Claire Alberts, "This Zoo Just Killed A Beloved Elephant For No Good Reason," *The Dodo - For Animal People*, February 9, 2017, https://www.thedodo.com/packy-elephant-killed-oregon-zoo-2250817941.html.

³ Kale Williams, "Packy, the Much-Loved Oregon Zoo Elephant, Dies at 54," *OregonLive.com*, accessed April 17, 2017, http://www.oregonlive.com/pacific-northwest-

 $news/index.ssf/2017/02/packy_the_much-loved_oregon_zo.html.$

⁴ "Zoo Mourns Asian Elephant Packy, Oldest Male of His Species," *Oregon Zoo*, accessed April 17, 2017, http://www.oregonzoo.org/news/2017/02/zoo-mourns-asian-elephant-packy-oldest-male-his-species.

⁵ Leverett Richards, "'It's a Boy' for Big Belle At Portland Zoo," *The Sunday Oregonian*, April 15, 1962, 81 edition, sec. 1, The Oregonian Historical Archive, https://tinyurl.com/mekfawu.

nearly half a century—44 years to be exact—and Oregonians beamed with the pride at their elephant's instant success.⁶ First the moment of his birth on, Packy was the star of the Oregon Zoo. Zoogoers came from all over the globe to catch a glimpse of the newborn elephant, and the zoo reported over 1 million visitors in the year after his birth.⁷ The zoo held a submission based contest to name the new calf, and LIFE magazine covered the elephant's birth with an 11-page spread of photos and interviews about the furry, exotic creature.⁸ Packy's birth was considered a miracle, and over his lifetime, Packy served as a species representative for Asian elephants globally: zoo officials observed Packy's diet, growth, reproduction, and daily behaviors, and conservationists used this information to inform public knowledge about the species.⁹ He was visited at the zoo by generations of family members, and his presence helped Portland to become the affluent tourist center it is today. Packy was the pride and joy of elephant lovers and conservationists across the globe for the entirety of his 54 years of life.

While Packy was the pride and joy of the zoo, there were those who felt that his life at the zoo was less than perfect. When Packy was diagnosed with TB in 2013, it was revealed that another bull elephant at the Oregon Zoo, Rama, also had contracted the degenerative lung disease.¹⁰ A course of treatment was started, and Rama's condition began to improve, but Packy's did not. In 2015, a third elephant, Tusko, was diagnosed,

⁶ Richards, "'It's a Boy' for Big Belle At Portland Zoo."

 ⁷ Len Reed, "Oregon Zoo's 1.5 Million Visitors a New Record," *OregonLive.com*, July 5, 2007, http://blog.oregonlive.com/breakingnews/2007/07/oregon_zoos_15_million_visitor.html.
 ⁸ Shana Alexander, "Belle's Baby - 225 Pounds and All Elephant," LIFE, November 5, 1962, Google Books.

⁹ Grant Butler, "Packy Timeline: A Look at the Oregon Zoo Elephant's Long, Illustrious Life," *OregonLive.com*, February 9, 2017, http://www.oregonlive.com/pacific-northwest-news/index.ssf/2017/02/packy_timeline_a_look_at_the_o.html.

¹⁰ Hova Najarian, "Rama the Elephant Is Being Treated for Tuberculosis," *Oregon Zoo*, accessed April 17, 2017, http://www.oregonzoo.org/node/2262/media.

and Packy's condition was still not responding to treatment. Upon Packy's diagnosis, many animal rights activist and welfare groups took up Packy's cause.¹¹ Tuberculosis is not uncommon in captive elephants, but it is not typically a disease that they encounter in the wild due to lack of close contact with human populations.^{12 13} TB is zoonotic, meaning that it can be passed from humans to animals and vice versa, and it is presumed that Packy contracted it from the place where he encountered germs from thousands of visitors each day: his home, the zoo. Animal rights groups had been pushing for the abolition of elephant exhibits and zoos themselves for years on the basis that animals should not be imprisoned and held in cages, but the Oregon Zoo had not responded to the push to close the elephant exhibit, and instead remodeled it to make it larger and more comfortable for the animals.^{14 15 16} Still, because of his disease, Packy had to be quarantined and isolated from the other elephants, setting him up for the enactment of stereotypically anxious behaviors, as elephants are naturally social animals (Figure 1).¹⁷

¹¹ "Our Mission," *Free the Oregon Zoo Elephants*, accessed April 17, 2017,

http://freeoregonzooelephants.org/mission/.

 ¹² Arun Zachariah et al., "Mycobacterium Tuberculosis in Wild Asian Elephants, Southern India,"
 Emerging Infectious Diseases 23, no. 3 (March 2017), doi:10.3201/eid2303.161741.
 ¹³ Susan K. Mikota, "A Brief History of TB in Elephants," accessed April 17, 2017,

https://www.aphis.usda.gov/animal_welfare/downloads/elephant/A%20Brief%20History%20of% 20TB%20in%20Elephants.pdf.

^{14 &}quot;Our Mission."

 ¹⁵ "Zoo's New Elephant Lands Opens to Pachyderms, Public," Oregon Zoo, December 15, 2015, http://www.oregonzoo.org/news/2015/12/zoos-new-elephant-lands-opens-pachyderms-public.
 ¹⁶ "Zoos," Last Chance for Animals, accessed April 18, 2017,

http://www.lcanimal.org/index.php/campaigns/animals-in-entertainment/zoos. ¹⁷ Williams Kale, "Oregon Zoo Staff Disagreed on Timing of Packy's Death," OregonLive.com, February 15, 2017,

http://www.oregonlive.com/portland/index.ssf/2017/02/oregon_zoo_staff_disagreed_on.html. ¹⁸ Camie L. Meller, Candace C. Croney, and David Shepherdson, "Effects of Rubberized Flooring on Asian Elephant Behavior in Captivity," Zoo Biology 26, no. 1 (January 1, 2007): 51–61, doi:10.1002/zoo.20119.



Figure 1. Rose Tu and Samudra, two members of Packy's former herd¹⁹

Because of his isolation, activists continually pushed for Packy's relocation to a sanctuary where he could live out the remainder of his life with more specialized care and facilities, but still, the Oregon Zoo opted to keep Packy at his life-long home.²⁰ In late 2015, Tusko and Rama were euthanized, and Packy became the sole diseased elephant at the zoo.²¹ In 2016, his treatment was ceased as it continued to be ineffective in fighting the tuberculosis.²² When Packy was euthanized in February 2017, activist communities around the world were enraged and criticized the Oregon Zoo for not providing alternative care and a more comfortable life for Packy.

Following his death, the Oregon Zoo has held multiple public remembrances for the elephant, and many "friends of Packy" who encountered the elephant in some

²⁰ "Elephants," Free the Oregon Zoo Elephants, accessed April 18, 2017, http://freeoregonzooelephants.org/elephants/.

¹⁹ Emily D. Gratke, *Oregon Elephants*, 2017, photograph.

²¹ "Oregon Zoo's Asian Elephant Tusko Euthanized," The Washington Times, December 23, 2015, http://www.washingtontimes.com/news/2015/dec/23/oregon-zoos-asian-elephant-tusko-euthanized/.

²² "Packy's TB Treatment Suspended; Zoo Weighs next Steps," Oregon Zoo, accessed April 18, 2017, http://www.oregonzoo.org/node/3256/media.

capacity over his lifetime have published articles and memorials via social media and news outlets.^{23 24} A life-sized memorial was erected at the zoo's indoor exhibit and those who knew Packy are encouraged to come, learn, and pay tribute to his memory.²⁵ As part of this memorial, timeline was constructed detailing Packy's life and contributions to elephant research, and a glass wall with Packy's image towers ten feet into the air, covered in notes and remembrances to and about Packy (Figure 2).^{26 27} Packy is remembered as a friend, family member, zoo animal, prisoner, patient, wild animal, hero, research subject—the list goes on. The question here is simple: what was Packy? Can an elephant embody this many societal roles? The answer to this second question is even simpler: yes.

²³ "Remembering Packy."

²⁴ Karly Imus, "Oregon Zoo Elephant Dies: Share Your Packy Memories," OregonLive.com, February 9, 2017, http://www.oregonlive.com/pacific-northwest-

news/index.ssf/2017/02/oregon_zoo_elephant_dies_share.html.

²⁵ Holly Pruett, "Packy the Elephant: Well Loved, Well Mourned," Holly Pruett Life Cycle Celebrant, February 28, 2017, http://www.hollypruettcelebrant.com/2/post/2017/02/packy-the-elephantwell-loved-well-mourned.html.

²⁶ Ibid.

²⁷ Butler, "Packy Timeline."



Figure 2. Notes written by zoo visitors and left for Packy on his memorial at the Oregon Zoo²⁸

Packy was an elephant multiple: his purpose and role as an elephant were shaped by the practices he participated in and spaces that he occupied. Activist groups shaped the idea of Packy as a martyr through their media coverage of his death, thus reinforcing the construction of his identity as a captive, ill-cared-for creature in his last years. Packy was a species ambassador because of zoo practices that allowed for Packy to be taken as the standard for Asian elephant behavior, and Packy's continued interaction with these practices shaped this perception. Packy was shaped by the Oregon Zoo and networks of animal lovers around the world, and his existence and embodiment of the roles that he was perceived in further shaped these groups and their perceptions throughout his life.

Today, in a world at a crossroads with respect to environmental policy and animal rights, it appears that animal lovers and advocates are two exclusive groups that are

²⁸ Emily D. Gratke, *Notes to Packy*, 2017, photograph.

constantly at odds with one another. The modern American zoo is situated right at the hub of this tension, making it a particularly interesting topic of study. Activists call for the abolishment of zoos as institutions while the general public (zoogoers) loves the zoo, and zoos themselves are crucial to wildlife conservation programs across the globe. How did zoos come to inhabit this space? Why does this tension exist? Where does this tension manifest? What are the effects of this tension, and what can be done to mediate it? These are the questions that shape this project, and in the following pages, I will propose a new underlying source of this tension, detail its effects, and direct future research related to it.

First, however, I present an example to demonstrate that this aforementioned tension between zoogoers, zoos, and animal activists does exist. The tension between these groups is visible on any zoo's social media page, for example, the Oregon Zoo's Facebook profile.²⁹ Viewers and visitors are invited to review the zoo on a scale of one to five stars and provide written justification for this view. Following Packy's death, reviews became particularly tenacious, as Facebook users sparked debates over the zoo and the care it afforded its animals. One user wrote

I have been going to the Oregon Zoo since I was a toddler. Going to their summer camps inspired my fascination with and love of the natural world and all of the crazy species that inhabit it. Thanks for inspiring me to pursue Biological research as a career! Thank you for all of your work educating the public about wildlife and wildlife conservation! This is one of the best zoos in the country.³⁰

On this post, another visitor commented that she had two degrees in animal welfare and told the original poster that she "should think twice before offending others and posting

²⁹ "Oregon Zoo," Social Media, Facebook, accessed April 18, 2017, https://www.facebook.com/oregonzoo/.

³⁰ "Comments on Oregon Zoo Facebook Page," Social Media, Facebook, (February 13, 2017), https://www.facebook.com/mari.howardmcguire/activity/10210605608367953.

unrealistic reviews."³¹ The two continued to engage in a dialogue about captivity, which ended when the commenter wrote "Believe it or not, I don't really care what you think. I speak for those wild animals kept in captivity for idiots to look at."³² This exchange demonstrates the aforementioned tension: the original poster represents a zoogoer while the latter is a self-described animal activist. The two are at odds with one another, but it is clear that both care for animals and foster an appreciation for them. It is this tension between individuals with a common background and purpose that encapsulates the necessity of this project.

The importance of this project lies in the ways that tension between animal appreciating human groups affects the animals they strive to care for. By arguing over methodologies and ideologies, three of the most prominent groups in the animal care landscape, zoo management, zoo patrons, and animal rights activists, prevent animal care from effectively occurring. "How is this possible?" One might ask, "how can three groups all claiming to work for the good of animals everywhere be doing exactly the opposite?" Packy represents an example of this issue.

Packy was cared for by the Oregon Zoo for his entire life. Other than his contraction of TB, Packy presented no other severe health issues or signs of distress. Zoogoers loved Packy, and generations of family members visited him at the zoo. However, animal rights activists pushed for Packy's relocation to an animal sanctuary and boycotted the Oregon Zoo after Packy contracted TB. Because of the media coverage reflecting poorly upon the Oregon Zoo, zoogoers were discouraged from visiting the zoo, and thus not provide the zoo with funding. However, by encouraging zoogoers to boycott

³¹ Ibid.

the zoo in protest, animal rights activists inadvertently withdrew funding from Packy and his fellow zoo animals. Patron and donor funding is essential for zoo animal care, so by protesting the existence of the zoo in support of its animals, activists effectively discouraged animal care. Rather than supporting research into elephant TB and encouraging directed donations for the improvement of Packy's health, activists protested the zoo, which ultimately was a loss for Packy.

Packy was not the only animal at a disadvantage because of human based tensions surrounding zoos and animal care, and he is absolutely not the only animal understood differently by multiple groups of people. Animals perceived simultaneously as multiple creatures exist at every zoo across America. Redd, a newborn orangutan at the Smithsonian National Zoo is compared to human infants almost daily, and zoogoers love to watch him nurse and play with his mom, just like their own children. Zoogoers sent Dinky, a pink flamingo, friendly get well cards and messages after hearing about the Bronx Zoo's rehabilitation of the bird. Activists went so far as to sue the Los Angeles Zoo over the "imprisonment" of Billy the elephant. All of these animals are animals loved by various individuals and human groups attempting to do what is best for them, but these groups disagree on the practices that are best for the animals, creating a tension that detracts from the protection and care of the animal and its fellow species members.

Herein, I propose the idea that all zoo animals are animals multiple: they are examples of zoological multiplicity. This multiplicity has been shaped by zoo practices since the beginning of zoos themselves, and the historical rise of this multiplicity can be observed through the development of human-animal relationships over time. Packy, in both life and death, was and is the embodiment of zoological multiplicity. The name Packy means a variety of different things, and the elephant that Packy represents played a different role based on practical and observational context. I propose that it is this multiplicity that is contributing to and the foundational cause of the public tension and subsequent inefficacy of zoo progress and development. Because of zoological multiplicity, the animals that are the foundation of zoos embody multiple connotations and roles. These roles are advocated for by groups of people, and at times, the practices and goals that these groups use to further refine these roles are in tension or collaboration with the goals and practices of other advocating groups. The overlap of these roles further exacerbates this tension because until now, it has gone unaddressed and unidentified. It is important to note that zoological multiplicity is not a good or bad thing, it is simply a reality. Herein, I will demonstrate that zoological multiplicity exists and can be seen in nearly every space that a zoo animal occupies. I will discuss the major roles that have been shaped for zoo animals, and simultaneously discuss how zoo animals shape these roles. I explore the idea that this multiplicity is the source of contemporary debates on zoos and zoo animals, and examine the ways in which these debates further emphasize zoological multiplicity. Overall, I will explore the relationships and modes via which zoological multiplicity operates, the effects that it has, and what those effects mean for future work related to zoo management practices and the future of zoos themselves.

This work does not seek to present the answer to the zoo problem on a silver platter, but rather it seeks to explore multiple modes of inquiry to guide future research in the process of tackling the zoo problem. This work is not the answer, but rather the first steps in identifying and understanding zoological multiplicity as a route to an answer. Through this project, I seek to show that zoological multiplicity exists (and has for quite some time), that multiplicity shapes and is shaped by zoo practices, and that acknowledging the major zoo animal roles produced via this multiplicity is essential to understanding the current "zoo problem" i.e. the tensions between human groups related to the future of zoos and animal care. I first approach this task via a historical exploration of the development of human-animal relationships, zoos, and zoological multiplicity, followed by a characterization of the three predominant perceptions of zoo animals: pets, prisoners, and ambassadors. I seek to demonstrate that these roles are both the creators and products of zoological multiplicity and examine the effects of the interplay between these roles. Through this characterization, I will provide evidence that current human tensions surrounding animal rights and zoos are the result of zoological multiplicity and will provide a potential plan for the future study of this tension.

Methodology and Term Definition

For the purposes of clarity, it is important to define some terms and the scope of this project before continuing further. This project pays specific focus to zoological parks, animal rights activism, and animal appreciation within the United States. Due to the country's relatively young age, the aforementioned topics and ideals were established recently, making the boom of these movements particularly interesting. The term zoological park or zoo, for the purposes of this investigation applies to non- and not for profit establishments that primarily house terrestrially based animals and are accredited as such by the Association of Zoos and Aquariums. Site visits for this investigation were conducted at the San Diego Zoo in San Diego, CA and Oregon Zoo in Portland, OR during February and March 2017. Ex situ conservation efforts are those that take place outside of a zoo environmental, and in *situ* conservation projects are those that take place within. Zoological multiplicity will be more fully defined throughout, but for preliminary intents and purposes, is the idea that an animal, in this case a zoo animal, can inhabit and represent multiple identities in society.

Additionally, it is important to note that each of these identities can be closely associated with an animal care stakeholder group, and evidence shows that these groups only predominantly perceive the animal identity they are most aligned with. The three dominant stakeholder groups in the animal care landscape are animal rights activists, zoos, and zoogoers, and they can be closely tied to perceptions of zoo animals as prisoners, ambassadors, and pets, respectively. It is

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these stakeholder groups and their corresponding views that will be primarily characterized within this piece.

The methods utilized herein follow those demonstrated in Annemarie Mol's *The Body Multiple.*³³ That is, rather than taking a purely analytical and technical approach, this investigation is dominated by exploratory and observational methods. The stories and examples from site visits are meant to demonstrate the nature of both historical and contemporary zoo practices, and to prove through observation that zoological multiplicity exists. The goal herein is not to solve the problems and tensions related to zoo management and animal activism, but to draw attention to a potential cause of these tensions. This project is not the end, but the beginning of an exploratory method for academic work studying zoo management, animal rights activism, and animal appreciation in modern society. Using examples and observations from social media, public media resources, and zoos themselves, I seek to paint the picture of groups of animal lovers simultaneously in contention and collaboration with one another. The account herein is not intended to praise or condemn, but rather to draw attention to a confusing overlap of ideas that causes tension and a lack forward progress for zoos and zoo animals in contemporary society.

³³ Annemarie Mol, *The Body Multiple: Ontology in Medical Practice*, Science and Cultural Theory (Durham: Duke University Press, 2002).

CHAPTER ONE.

Zoological Multiplicity Through Time

To explore the idea of zoological multiplicity and the roles that Packy and zoo animals inhabit, it is necessary to examine the development of this multiplicity. At a basic level, the study of zoological multiplicity development is a study of the establishment of animal-human relationships in the United States. Animals have been present on the continent since long before humans arrived, as evidenced by fossilized remains, but since zoological multiplicity is influenced by human perception, its history begins with interactions between humans and animals.

For the purposes of this investigation, it is fruitful to start with a brief history of domestication in the United States. With the growth of animal domestication came the origination of zoological multiplicity: by domesticating wild animals, these animals were viewed not just as wild, but working animals. Following this domestication, certain animals were further assimilated into the household and became members of the owner's family. Treated with a certain reverence, these animals became a form of dependent creature, similar to that of a child or grandparent, further expanding their role within the human consciousness. Other animals, those considered rare and exotic, became the focus of spectacle and awe in entertainment venues. The oddities were collected, examined, and studied, and eventually, scientists were able to characterize and describe them. The evolution of various animals from other to cohort/pet/collectible is the core of the evolution of animal-human relationships. Humans have perceived animals in various ways since their first encounters with them, and by making assumptions and observations about their various states (intelligence, physical, emotional, etc.), humans have shaped the roles that animals play within society. Different groups of people predominantly perceive animals as filling certain roles—these various perceptions are the foundation of zoological multiplicity. For this reason, to fully understand zoological multiplicity and its effects in American zoos, it is essential to examine the history of animal-human relationships in the United States.

The Emergence of Pet Keeping

Animal keeping in the United States dates back to the growth of human populations in the Americas. Tied to the history of domestication, it follows that pet keeping resulted from the symbiotic relationship between animals and human beings. When settlers first came to North America with working dogs and cats in tow, they came in direct contact with indigenous peoples that already maintained a close, complex relationship with companion canines.³⁴ Not only were these dogs working animals, like domesticated cows and sheep, they served as hunting companions, caretakers, and religious symbols.³⁵ The multiplicity of the roles of Native American dogs has been touched upon in other works, and is an interesting study of zoological multiplicity in its own right, but for the purposes of this discussion, it is enough to say that dog-human relationships on the American

 ³⁴ Grier, Katherine C. *Pets in America*: A History. Chapel Hill, NC: University of North Carolina Press, 2006.
 ³⁵ Ibid.

frontier were extremely intricate and reflect the complexities of the zoo animalhuman relationships to come.³⁶

Pets, in the household sense recognized today, came to North America with European settlers. In the first half of the 18th century, dogs were brought by the Spanish as fighting animals for the purposes of war and colonialization. It wasn't until the latter half of the 18th century that animals were brought to the colonies as pets in the traditional sense: household animals meant to bring joy to their owners.³⁷ By the 1880s, "fad" animals had developed in the distinctive breeds of the St. Bernard and pug.³⁸ Children were known to keep a variety of "found" and juvenile animals—frogs, salamanders, guinea pigs, mice, and so on—as these creatures were often acquired outside, relatively small, and hardy enough to allow children to play with.³⁹ Cats did not prominently become a part of family dynamics until the early 1900s, and birds were very popular house companions for the privileged classes. The wealthiest of classes became fascinated with terrarium and aquarium keeping in the early 20th century—the idea of owning and caring for a strange, miniature, and dependent world of their own creation spoke to the fancy of power and intrigue of the time. Irrespective of privilege, many pet keepers loved their pets, and welcomed wide varieties of animals into their homes to study and dote on, becoming more invested in their health, nutrition, and overall wellbeing as the 19th and 20th centuries progressed.⁴⁰ The moment that animals entered the

³⁶ Ibid.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

hearts and homes of their caretakers, the roles and varieties of domesticated and household species expanded rapidly and profoundly—a reflection of the animal appreciating sentiment that appears to be firmly embedded within the consciousness of human beings. It is through this animal appreciating sentiment that zoological multiplicity operates, and it is because of this sentiment that multiplicity fuels stakeholder tension.

The Growth of the American Zoo

Simultaneous to the growth of American pet keeping was the expansion of early exotic animal collections and menageries—the animal viewing experiences that modern zoos would grow out of. In the early 18th century the first animalbased entertainment experiences were primarily concerned native species found on the North American continent.⁴¹ These travelling menageries, as they were called, made money for the showman as he travelled from city to city with bears and smaller mammals.⁴² Most immigrants to the New World had never witnessed any of the species showcased in these menageries, and the idea of viewing wild animals up close was of great interest to all social classes.⁴³ Through these menageries, animals were viewed simultaneously as a source of income for the showman, and as objects of wonder and mystery to the patron.

 ⁴¹ Kisling, Vernon N., ed. Zoo and Aquarium History: Ancient Animal Collections to Zoological Gardens. Boca Raton, Fla: CRC Press, 2001.
 ⁴² Ibid.
 ⁴³ Ibid.

Concurrent with the growth of native species menageries was the beginning of "exotic" animal shows featuring creatures from distant lands. The first "exotic" animal documented in the U.S. was a lion in Boston brought to the continent in 1716.⁴⁴ The lion was offered up first for viewing to "all persons having the curiosity of seeing the Noble and Royal beast" in the home of Captain Arthur Savage.⁴⁵ Eventually the lion was moved as an attraction to a woman's home, and it was shown throughout the U.S. until its historical disappearance in 1728.⁴⁶ The lion was followed by a camel in 1721 and polar bear in 1733, and though they were popular exhibits, because of the difficulties of transport and care, exotic animals arriving in the North American colonies were typically few and far between.⁴⁷

When exotic animals did make it across the Atlantic, they were sold for large sums of money, and the buyer subsequently had to employ the animal in a travelling show to avoid bankruptcy and recoup their investment. Thus, as in native species menageries, the wild, exoticized animal became a working animal, employed as a spectacle for people to come from far and wide to see. These shows were wildly popular, but animals did not prosper in the conditions provided, and many did not survive for long.⁴⁸ Those that did live were exhibited in major cities and advertised in many papers and flyers as oddities and marvels, enhancing the public perception of animals as exotic curiosities, but most of these advertisements have been lost to

⁴⁴ Ibid.

⁴⁵ Mark Hurwitz, "Capt. Savage's First Lion in US," The Old North Church, September 26, 2016, http://oldnorth.com/2016/09/26/this-old-pew-23-and-38-captain-arthur-savage-the-first-lion-in-america/.

⁴⁶ Kisling, Zoo and Aquarium History.

⁴⁷ Ibid.

⁴⁸ Ibid.

time. One of the few advertisements that has survived is an ad describing the "The Elephant," a two-year-old female who arrived in New York in 1796 and was never named because she was known to be the sole living elephant in the US.⁴⁹ The elephant stayed healthy for roughly two decades, during which she was the subject of spectacle and awe. She was immensely popular and her long life allowed her to cover her own costs of upwards of \$10,000, thus affirming her role as a profitable performer to her owner and a spectacle in the public eye.⁵⁰

As America moved into the 19th century as an independent nation, more firmly characterized attitudes toward animals began to develop: the frontier was still considered wild and dangerous, and this contributed to the development of the rugged American attitude toward the domination of the wilderness. This involved the expansion and continued proliferation of these now highly profitable travelling menageries, as they exemplified the idea of a manageable, contained wilderness. This understanding of wild animals as domesticated subsets of their native populations represents an early form of induced species ambassadorship: viewers were encouraged to come and see "tame" versions of the dangerous species that they heard about on the frontier and across the globe. In 1835, the Zoological Institute was formed to support these menageries and their owners, and the 1830s were characterized by the coming of age of the circus and menagerie.⁵¹

While the growth of early menagerie management would be stunted by the Civil War, in 1859, the Zoological Society of Philadelphia was established with a

⁴⁹ Ibid.

⁵⁰ Ibid. ⁵¹ Ibid.

purpose to create a living collection of animals on a grand scale: America's first zoo.⁵² Travelling menageries began to transition into permanent urban ones, meant to provide natural experiences and entertainment to those trapped within crowded, urban living environments.⁵³ These menageries and the Zoological Society's collection were primarily advertised to serve the purpose of "instruction and recreation of people."⁵⁴ The public was encouraged to engage with the animals within and learn about them, promoting a relationship between the zoo animal and zoogoer. On July 1, 1874, the Philadelphia Zoological Garden opened with 282 mammals.⁵⁵ The presentation of the zoo as a natural garden became more appealing to the general public as recreational activities compatible with natural settings became increasingly popular. A variety of these permanent animal attractions in "natural" and parklike spaces began to pop up around the young United States, thus encouraging exposure and public knowledge about exotic animals. The Atlanta zoo was established using animals from a bankrupt circus, and in 1887, the Smithsonian Natural History Museum developed a zoo unintentionally by creating a living animal department for their taxidermists to study.⁵⁶ This federally owned department became the leading attraction in Washington DC, influencing the creation of the official national zoo. Public interest in wild animals was high, and this curiosity fostered the development of zoos and animal parks across the country.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

Visible within the timeline of zoo development are inklings of conservation work amidst the public shell of entertainment and spectacle: a handful of Midwestern zoos were developed with the sole purpose to educate the public on the protection and preservation of native species.⁵⁷ The emphasis on conservation of native species tied into ideas regarding the purpose of zoos and their predominant goals, while connecting the captive animals with their noncaptive counterparts, thus muddling the understanding of what exactly a zoo animal was.

In pursuit of clarifying this answer, the main proponents of early American zoos included Dr. William Carmac, Phineas T. Barnum, and William T. Hornaday, and as all three of these men advocated for the educational nature of zoos, the academic purpose that they sought to build into zoos formed the foundation for modern day zoo-based conservation centers.⁵⁸ As they began to carry out their visions for what a zoo could be, i.e. a center for education as well as entertainment, via a combination of wealth, influence, and power, zoos began to take shape in the public eye as centers of conservation and learning, while still being spaces of family fun and intrigue. As the purpose and direction of the American Zoo developed, so did the perceptions and roles of the animals contained within.

This continued process of shaping the purpose of the zoo and perceptions of its animals continued via zoo practices such as the implementation of new habitat designs. In particular, as zoos began to move toward more conservation and protection based ideologies and missions, these missions became apparent through

⁵⁷ Ibid. ⁵⁸ Ibid.

enclosure renovation. Conservation was and is defined as the preservation of species in the interest of biodiversity. In the early 1900s, habitats started to become more openly designed, an example of the movement toward immersive experiences preferred by zoos today. However, many zoo directors were not keen on the open concept design for safety and cost reasons, but moved toward it when it proved to be highly successful with public audiences, demonstrating the immense control that public opinion had on animal and zoo care.⁵⁹ By incorporating public desires for visibility and more naturalized spaces, the zoo became a place that the public believed could teach about the living elements of the natural world because it was one of the few spaces in which they could view exotic animals in their "natural" habitat. Today, zoos contribute to conservation by having immersive, open viewing enclosures. The purpose of these enclosures is bifold: they allow the public to more easily view the exhibited animal, and they often more closely resemble the animal's natural habitat. Through behavioral research, it has been concluded that animals rely on their natural habitat to carry out natural behaviors, many of which aid in successful mating. Successful mating is a tenant of biodiversity maintenance and conservation, so open concept habitats directly relate to and reflect zoo based conservation efforts. It is then through the funded development of these habitats that zoo practices shape zoo animals as ambassadors to their wild counterparts.

As zoos continued to proliferate and expand, in 1924, the precursor to the Association of Zoos and Aquariums (AZA) was formed as the American Association

⁵⁹ Vicki Croke, *The Modern Ark: The Story of Zoos: Past, Present, and Future* (New York: Scribner, 1997).

of Zoological Parks and Aquariums (AAZPA). The goals of the AAZPA were to assist "zoos and aquariums in the areas of conservation, education, science, and recreation."⁶⁰ The founding of the AAZPA and its subsequent acceptance of member zoos and aquariums allowed for the member institutions to affirm their existence as spaces of animal based education and conservation. Prior to the establishment of the AAZPA, zoos as institutions were distinct from one another and lacked collective purposes. With the development and support of the AAZPA, zoos no longer were separate spaces lacking common goals and purposes: zoos across the country became unified by conservation oriented programs. The AAZPA was formed in part, as a response to a need for guidance for newly developing zoos, and its development enabled zoos to take on a joint mission and place within modern societies. The formation of the AAZPA was the spark to ignite the flame of zoos developing as conservationist spaces, and it is this understanding of zoos that allowed zoos to substantiate and affirm their existence as conservation-centered spaces in the minds of the public and conservation groups. This affirmation would go on to contribute greatly to the zoological multiplicity and zoo animal roles observed in American zoos today by way of the conservation-based practices that the AZA encourages and shapes.

While the above developments catalyzed the development of conservation based zoos, landmark changes in the direction of conservation and animal rights can be pinpointed to the 1960s and 1970s with the development of the Animal Welfare

⁶⁰ "American Zoo and Aquarium Association - Silver Spring, Maryland, USA." NCHPAD. Accessed December 14, 2016. http://www.nchpad.org/Directories/Organizations/2267.

Act (AWA) and the Endangered Species Act (ESA). With the passage of these pieces of legislation, zoos were forced to reevaluate their practices: the ESA prohibited the acquisition of new wild animals and the AWA set the minimum standard for entertainment based animal care.⁶¹ ⁶² The passing of these acts was a landmark in the development of zoological multiplicity because they affirmed the existence of animals as creatures in need of protection and care, thus garnering sympathy and emotional attachments from legislators and the public who sought to provide that care. The AWA induced the major decline of the circus because of its requirements for adequate habitats, veterinary care, and food to possess exotic animals, and in order to prevent a similar fate, zoos were forced to take a critical look at their animal care practices and adapt accordingly. The ESA deemed the further removal of any exotic species from their natural habitat unethical and unlawful, thereby forcing zoos to turn inward and to similar institutions to ensure that their collections of animals remained healthy and sustainable. In response to these acts, zoos began to develop more animal oriented habitats and enrichment and turned to researching wildlife breeding patterns to keep from losing their licenses, accreditations, and animals. From there, some zoos developed individual conservation centers separate from the zoo itself to perform conservation related research and further encourage the public perception of zoos as the primary champions of wildlife conservation rather than centers focused on entertainment, recreation, and spectacle. It is zoo

⁶¹ "Endangered Species Act (ESA)," *NOAA Fisheries*, February 11, 2016, http://www.nmfs.noaa.gov/pr/laws/esa/.

⁶² "Animal Welfare Act | Animal Welfare Information Center," *USDA National Agricultural Library*, accessed April 18, 2017, https://www.nal.usda.gov/awic/animal-welfare-act.

practices in response to the AWA and ESA that contribute to zoo perceptions of zoo animals as species ambassadors because these acts led to the development of Species Survival Plans (SSPs) that emphasized the study of captive animals to help support endangered species. It is through these same practices that the activist view of zoo animals as prisoners is supported because many of these practices involve *in situ* conservation: conservation of captive zoo animals.

The Development of the Modern Animal Rights Movement

As zoo practices influenced the perception of zoo animals as prisoners by animal rights activists in the 1960s and 70s, the modern animal rights movement was born. With the publication of Rachel Carson's *Silent Spring* in 1962, a new era of environmental awareness quickly developed. As Diane Beers writes in her book *For the Prevention of Cruelty*, Carson's "ability to connect belief in preservation of species with compassion for individual animals" spoke to activists and animal lovers across the globe.⁶³ The idea of connecting the welfare of a species with the welfare of an individual animal connects deeply with activist ideologies today, who believe in the rights of animals on every scale from individual to kingdom.⁶⁴ Continuing the late 20th century developments of activist ideology is Peter Singer. Widely considered the father of modern animal rights activism, Singer published his book *Animal Liberation* in 1975.⁶⁵ *Animal Liberation* presented the idea of animals as

⁶³ Diane L. Beers, For the Prevention of Cruelty: The History and Legacy of Animal Rights Activism in the United States (Athens, Ohio: Swallow Press/Ohio University Press, 2006).

⁶⁴ "Animal Issues," *PETA*, accessed April 18, 2017, http://www.peta.org/issues/.

⁶⁵ Beers, For the Prevention of Cruelty.

sentient objects trapped within the imposed framework of human hierarchies—the first heavily publicized iteration of the animal as a prisoner. Though early animal rights sentiments can be viewed in the United States from 1865, the activism focused on animal autonomy and liberation originated with Singer's text, and it is this focus that shapes the zoological multiplicity observed within contemporary zoo and animal activist practices.⁶⁶ Through this focus and its resultant practices, animals are constructed as captives, creating historical and contemporary tension between activist and zoo communities, an idea that will be further explored in the following sections.

Moving on to Modern Multiplicity

The history of zoological multiplicity is intimately intertwined with the histories of zoos and animal-human relationships in the United States. It is because of the way that animals developed alongside humans as pets and zoo animals that allows them to inhabit multiple roles shaped by human practices. Via this shaping, zoological multiplicity affects zoo animals and the human populations that care for them in both obvious and nuanced ways. At the root of these issues, it is because of this multiplicity that the tension surrounding zoos and their futures exists, and the specific ways that it influences zoo animals, their viewers, and their practices will be explored in the next chapter.

⁶⁶ Ibid.

CHAPTER TWO.

Animals in Action: Contemporary Manifestations of Multiplicity The Perception of the Zoogoer

In the depths of the Oregon Zoo, the Predators of the Serengeti exhibit houses two cheetahs, Strike and Ranger. The two big cats are twins and have lived at the Oregon Zoo since October of 2011.⁶⁷ On the day of my visit, the cats took refuge from the rain in a cave adjacent to a viewing area and could be seen sleeping for most of the afternoon. Past the viewing windows was signage describing cheetah conservation efforts and the projects in which the zoo was participating. Alongside these signs were donation bins where guests could listen to music produced by a coin dropping to the bottom of the bank. Adjacent to these donation stations were four computerized kiosks roughly two feet off the floor—the perfect height for children to interact with (Figure 3). These kiosks let visitors design a poster about cheetah conservation to send to friends and family not visiting with them. There were four options of main ideas to focus on in the poster: cheetahs and their speed, cheetahs as misunderstood predators, wild cheetahs and their need for human help, and cheetahs as bigger versions of pet cats. When you select the pet option, facts about cheetah vocalization (they purr and chatter), marking (they rub their chins and faces on family members), and daily activities (they spend much of the day lounging) that resemble house cat traits appear, and visitors can add photos of cheetahs and cats to the poster before emailing it away.

^{67 &}quot;Cheetah," Oregon Zoo, accessed April 18, 2017,

http://www.oregonzoo.org/discover/animals/cheetah.

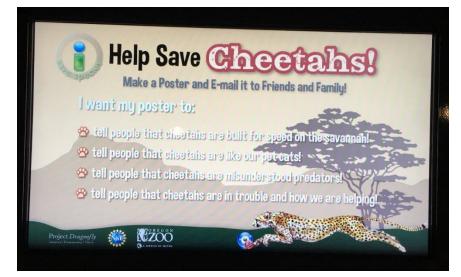


Figure 3. Cheetah poster-making kiosk at the Oregon Zoo⁶⁸

These posters at the Oregon Zoo comparing cheetahs to house cats are just one facet of the multiplicity established in zoo animals. This facet is the product of an emotional connection with zoo animals: animals are experienced and thought of in similar ways to domestic animals and pets. The role of the zoo animal as a pet is created by zoo practices and the subsequent public responses to these practices and is also informed by the animals themselves, making it one of the three predominant facets of zoological multiplicity. In this chapter, this role and its influences will be examined, paying particular attention to the way that this facet is primarily linked to zoogoer communities.

In the case of the cheetahs, rather than solely focusing on ways in which cheetahs are wild animals and in need of help in their natural habitats, the Oregon Zoo went with a multi-fold approach for encouraging cheetah conservation. Contemporary zoos are the biggest global advocates for conservation work, and as they are non- and not for profit institutions, the money from zoos put toward

⁶⁸ Emily D. Gratke, *Cheetah Kiosk*, 2017, photograph.

conservation projects is sourced from zoogoer donations and tickets. Because zoo funding is partially dependent on public patronage, zoos typically utilize multiple methods to encourage visitors to donate and return to the zoo. One of these methods involves encouraging zoogoers to become emotionally involved with the animals.

One underlying reason that zoo practices seek to create emotional attachments between zoogoers and zoo animals is the theory of the domestic ethic of kindness. The domestic ethic of kindness, outlined by Katherine Grier in her book *Pets in America: A History*, is the theory that animals experience complex emotions, and because they have the capacity to experience complex emotional relationships (i.e. love and loss), humans are able to emotionally connect with them.⁶⁹ As a part of this emotional connection, humans are more likely to experience a sense of obligation to care for the animal. Zoos attempt to create this connection to encourage sponsorship and stewardship to the zoo and by extension, conservation and protection projects.

One way that zoos foster this emotional connection is by associating zoo animals with familiarized animals that are members of many households: pets. The Oregon Zoo did this with cheetahs, and it seems that cheetahs elsewhere are also a recipient of this form of association. At the San Diego Zoo, the cheetahs are bonded with Labrador Retrievers (Figure 4).⁷⁰ Signs describe the bonding as a "buddy system" that helps "some animal ambassadors take things in stride." The program

⁶⁹ Grier, Pets in America.

⁷⁰ "Cheetah," San Diego Zoo, October 3, 2013, http://zoo.sandiegozoo.org/animals/cheetah.

bonds domesticated puppies with cheetah and wolf cubs to help the animals stay calm in stressful situations, such as school visits and exhibitions. While the Oregon Zoo encourages viewers to associate cheetahs with their own household companion, the San Diego Zoo provides a companion for wolves and cheetahs that could have stepped out of a viewer's living room. Both of these situations serve to foster the psychological and emotional association of zoo animals with pets.



Figure 4. Ayana, a San Diego Zoo cheetah who is bonded with a dog companion⁷¹

When zoo animals are conflated with pets, part of their identity becomes that of a pet in the subconscious minds of zoogoers, creating tension related to the animal's care. Because zoogoers associate zoo animals with their pets and form similar emotional connections with them, by the definition of a pet, zoo animals become a form of pet as perceived by zoogoers. This identity exists concurrently with the animals' identity as zoo animals—a form of zoological multiplicity. While a visitor at the Oregon Zoo may feel emotionally attached to and responsible for a

⁷¹ Emily D. Gratke, *Cheetah Gaze*, 2017, photograph.

cheetah because it has been compared to their house cat, zoo officials still experience the cheetah as a wild animal in their care. The cheetah exists in multiple roles—as multiple perceptions of a cheetah—at once. One would think that this multiplicity and emotional attachment from multiple groups would enhance care for the animals, but unfortunately, because of the degrees of separation between the humans and the animals, it does not. The zoo employees see the animals every day and are considered directly responsible for them, and thus the legal owners of the zoo animal/pet, and they care for them as such. The zoogoer is indirectly responsible for the animal's care: ticket sales and donated funds help feed and care for the animal. However strong an emotional connection is that the zoo fosters in the zoogoer, because of the indirect nature of the care provided by zoogoers, it is not enough for the visitor to accept the zoo animal as their own personal pet, but rather a societal pet or one of a friend that they do not have to actively care for.

The distinction between indirect and direct care for zoo animals, with specific respect to the zoogoer, and its subsequent tension can be visualized in animal feeding programs at zoos. At both the Oregon Zoo and San Diego Zoo, along with many other institutions across the country, zoogoers can pay to feed giraffes and other animals during specified hours (Figure 5).⁷² ⁷³ ⁷⁴ Rather than the zookeeper feeding the animal behind the scenes, zoogoers are directly providing nutritional care for the animal, and thus directly taking care of the perceived

⁷² "Animal Encounters," San Diego Zoo, November 12, 2013,

http://zoo.sandiegozoo.org/content/animal-encounters.

 ⁷³ "Want to Feed a Rhino? New Tours Go behind the Scenes at Zoo," *Oregon Zoo*, February 19, 2015, http://www.oregonzoo.org/news/2015/02/want-feed-rhino-new-tours-go-behind-scenes-zoo.
 ⁷⁴ David A. Orban, Janice M. Siegford, and Richard J. Snider, "Effects of Guest Feeding Programs on Captive Giraffe Behavior," Zoo Biology 35, no. 2 (March 1, 2016): 157–66, doi:10.1002/zoo.21275.

communal pet. Direct visitor-animal interactions, such as feeding programs, are demonstrated to increase patronage and return visits, supplementing income for the zoo and increasing funds available for animal care and conservation work.⁷⁵ Thus, fostering direct interaction and perception of care is in the best interest of the zoo because by increasing the care-based-face-time a visitor gets with an animal, the more the visitor is willing to engage financially and emotionally with the zoo.



Figure 5. One of the giraffes that zoogoers can feed at the San Diego Zoo⁷⁶

This face-to-face care, however, creates tension between the zoo and zoogoer because of potentially negative effects that direct contact with a visitor has on an animal. Primates have been shown to exhibit significantly more stressed and aggressive behaviors when in close proximity to zoogoers, and thus, direct care interactions between zoogoers and the animals would pose a threat to both the

⁷⁵ Eduardo J. Fernandez et al., "Animal–visitor Interactions in the Modern Zoo: Conflicts and Interventions," Applied Animal Behaviour Science 120, no. 1–2 (August 2009): 1–8, doi:10.1016/j.applanim.2009.06.002.

⁷⁶ Emily D. Gratke, *Giraffe*, 2017, photograph.

zoogoer and the primate.⁷⁷ Because of this threat and the varied reactions of zoo animals to direct interactions with zoogoers, direct care cannot be initiated in many species, and thus, a more closely associated pet relationship cannot be fostered for the zoos benefit. In order to maintain a balance between animal welfare and zoogoer support, zoos foster an emotional connection and direct care association between individual animals and zoogoers, but because of the needs of the animal, this relationship can only be fostered to a certain extent. Thus, though zoos work toward making human-animal connections in some species, because of the distance necessitated by others, zoogoers reach the understanding of zoo animals as a community pet but not a personal one.

The perception of a zoo animal as a community or society pet rather than a personal pet is an essential distinction to make because this specification of multiplicity influences the ways in which zoogoers interact with the zoo and its animals. Personal pets are those that zoogoers and pet keepers typically think of: domesticated animals that reside in ones' home and essentially become members of the household or family. For example, a dog that a child has grown up alongside would be considered a personal pet. A community or honorary pet is something very different from the dog that sleeps at the foot of the bed or the kitten that curls up in the crook of a child's arm. In the definitions provided by Grier, a community pet is an animal symbolic of a group of people and an honorary pet is a wild animal

⁷⁷ Ibid.

whose life seems to reflect the values of a group of people, and thus is collectively cared for by that group.⁷⁸

Zoo animals fit the definitions of both community and honorary pets, but it is their embodiment of the latter that is primarily of interest here. Zoo animals are honorary pets, by definition, because of the ways in which humans associate their own familial values with them while collectively caring for the zoo animals as a society. However, because the zoo animals are honorary pets and not household pets due to zoo practices and obligations to animal welfare, no one zoogoer is perceived as directly necessary to providing their care. If two thousand zoogoers visit the zoo over the course of the day, they collectively appreciate the zoo animals, the reflection of their personal values, and the animals' value to society, but they are not the ones hand feeding a tiger or rolling out an enrichment ball for an elephant. This becomes an issue with respect to zoo research and operations because zoos require constant funding from patrons to remain functional, and while they are often not directly caring for the zoo animals, zoogoers and patrons are indirectly essential to their care. It is significantly easier for a patron to mentally and literally pass off responsibility for a zoo animal because they do not see that animal every day or engage directly with it. In the same way that a family can forget to put out food for the neighborhood rat catcher one night with the understanding that someone else probably did, zoogoers can neglect to donate consistently more than their ticket price for the care of zoo animals.

⁷⁸ Grier, Pets in America.

This tension between the zoo and zoogoer with regard to provision of care goes back to the domestic ethic of kindness—the idea that animals experience complex emotions that allow humans to associate with them on a deeper cognitive level.⁷⁹ The domestic ethic of kindness allows humans to perceive animals as honorary pets because it provides for the ways in which humans project their values and emotions onto the non-human creatures. Specifically, this projection of human emotion and the implications of care associated with the understanding of the zoo animal as a pet relate to specific issues that animal rights activists take with zoos. These issues are indicative of tension that arises between the zoogoer and the activist, as well as between the zoo and the activist, once again affirming the underlying zoological multiplicity that incites tension in human groups. To better understand the perception of the animal rights activists, we must examine the practices and understandings that shape the second predominant facet of zoological multiplicity: the role of the zoo animal as a prisoner.

The Perception of the Activist

The modern animal rights movement is generally uncompromisingly opposed to zoos. Googling "Animal rights activist view on zoos" yields the first result as a link from the People for the Ethical Treatment of Animals (PETA) website outlining the organization's stance on zoos. Self-described as an "uncompromising stand on animal rights," PETA "opposes zoos because cages and cramped enclosures

⁷⁹ Ibid.

at zoos deprive animals of the opportunity to satisfy their most basic needs."⁸⁰ The website describes zoos as "warehouse" institutions that breed adults to "produce cute baby animals to attract zoo patrons and generate revenue" while doing nothing to address the serious problems of extinction.⁸¹ PETA encourages readers to not patronize zoos and to donate to animal advocacy and preservation groups instead, with a "donate now" link at the bottom of the article.

This PETA statement is an example of a practice that is informed by and informs zoological multiplicity. Zoological multiplicity allows zoo animals to embody multiple roles simultaneously, and PETA, along with the majority of the animal activist community, views zoo animals in a very different way than the as a zoogoer's community pet. By publishing its statement on zoos, PETA further shapes the second major portion of a zoo animal's existence as an animal multiple: the role of the unwilling prisoner.

Zoo practices primarily shape the role of the zoo animal prisoner simply via their institutional nature: zoos keep captive animals. As described earlier, the modern zoo grew out of menageries and collections wherein humans profited off the exposure of exoticized species plucked from their natural habitat and shipped miles away. These menageries evolved into the modern conservation-oriented zoos, but in either context, zoos are held captive, and humans maintain control over their movements, nutrition, behaviors, and life overall. Zoo animals are not provided with the autonomy that they would be afforded in the wild: their habitats, activities,

 ⁸⁰ "Animal Rights Uncompromised: Zoos," *PETA*, accessed April 18, 2017, http://www.peta.org/about-peta/why-peta/zoos/.
 ⁸¹ Ibid.

interactions, and nearly every other aspect of life are dictated by zoo management. It is through this practice of control that zoos shape the perception of zoo animals as prisoners in the understanding of animal activists.

Zoogoer practices also inform the role of the zoo animal as a prisoner: by patronizing zoos, zoogoers are deemed complicit in the jailing of zoo animals by activists. Additionally, zoogoer entertainment and education are two of the main reasons that zoos exist: zoogoers seek a form of animal appreciation and education that typically can only occur in zoos. Without the demand for zoos, they would not exist in their current form. Thus, tension is created between zoogoers and activists because zoogoers support the institutions that activists work uncompromisingly to abolish.

Additional tension is created between zoogoers, zoos, and activists by the lack of overlap and subsequent conflict between their various views of zoo animals, specifically the disconnect between the view of zoo animals as pets and prisoners. As discussed in the previous section, via zoo practices, zoogoers view zoo animals as pets. By legal definition, a pet is classified as a form of sentient personal property. As with zoos, many animal rights activists possess an uncompromising view against the institution of pet keeping.⁸² Because irresponsible pet care results in a "surplus" of unwanted animals in shelters and on the streets, activists oppose pet keeping and the suffering that it can institutionally cause animals.⁸³ Additionally, activists do not agree with the legal definition of pets as they believe that sentient and autonomous

⁸² "Animal Rights Uncompromised: 'Pets,'" *PETA*, accessed April 18, 2017, http://www.peta.org/about-peta/why-peta/pets/.
⁸³ Ibid.

beings should never have their right to autonomy revoked by humans. Activists seek to reduce animal suffering because of the perceived autonomy and intelligence that animals possess, and the institution of pet keeping is seen to enhance this suffering by discrediting non-human intelligence, worth, and purpose.

As with the materials presented to criticize pet keeping, animal rights activists highlight the perceived sentience and intellectual capacity of many zoo animals through marketing practices in order to invoke imagery of captive. prisoner-like animals and inspire negative associations with zoos. Activists attempt to turn zoogoers against the zoo by posing a series of questions such as "If zoo animals are sentient, how can they be kept in zoos without their consent?" and "If the animals are really 'owned' by the zoo, how can zoos claim to be responsible caregivers if the zoo cannot provide care without external funding?" Activists argue that because of zoos' fiduciary dependency on outside sources, they cannot be considered responsible in their animal care and ownership. Additionally, because of the separation of the donating groups and zoogoers from the animals, no matter the emotional connection, the zoogoer is not directly responsible for the care of the animal and feels a diminished responsibility to that animal, as previously discussed, so activist communities can argue that zoo animals cannot adequately be cared for by these groups either. Thus, zoos are perceived as not keeping animals captive for the benefit of the animals, forming the perception of the zoo animal as an unwilling, unwell prisoner. The reasoning and argument behind animal intelligence and responsibility of care enhances the activist view of zoo animals as voiceless

prisoners in need of advocacy and autonomy, which conflicts directly with the zoogoer view of the animal as an honorary pet in need of human care.

Because of the fundamental practices of zoos, indirect care practices of zoogoers, and dissemination practices of activists, the identity of the prisoner is added to the roster of roles that zoo animals embody. While the activist-possessed role is practically in conflict with the zoogoer-possessed role, activists clash even more obviously with zoos themselves. To characterize this profound tension, the third and final primary facet of zoological multiplicity must be examined: the role of the animals as a species ambassador. In the following section, the ways in which zoos understand their own animals and use this understanding to shape the perceptions of activists and zoogoers will be exemplified.

The Perception of the Zoo

At the entrance to the San Diego Zoo, a wall of names greets the eager zoo visitors. The list of donors seems vast, but a closer look reveals that about half of the name plates are left blank. Above this list, next to an illustration of a panda, a Margaret Mead quote reads "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has..." The change that the zoo is attempting to incite becomes more visible to the zoo visitor throughout their visit. On each animal's habitat, a sign describing their natural living conditions, species name, and threats also features a scale on which the animal's population is classified as stable (green), threatened (black), or endangered (red). Signs in the gift shop make the goal crystal clear: with phrases such as "your purchase helps to conserve wildlife around the world," "thank you! your generous support in 2016 made it possible to protect and save so many species around the world!" and advertisements for *endextinction.org*, it is obvious that conservation and saving wildlife is a concern of zoo management.

The San Diego Zoo Wildlife Conservancy runs a website known as endextinction.org and uses this platform to educate the public on the Conservancy's wildlife conservation work. A quick perusal through the site reveals that San Diego Zoo Global is developing breeding programs for 165 endangered species in 35 countries, and cites its mission statement as "Our goal is to engage and inspire people worldwide to help us end extinction."⁸⁴ Similarly, the San Diego Zoo's official mission statement reads "San Diego Zoo Global is committed to saving species worldwide by uniting our expertise in animal care and conservation science with our dedication to inspiring passion for nature."⁸⁵ The San Diego Zoo is just one of hundreds of zoos across the globe that are committed to wildlife habitat conservation work, and these zoos are the predominant sponsors of global conservation projects. It is through this work and conservation based practices that zoos contribute to yet another variation in the conception of the zoo animal.

Through zoo practices and conservation goals, zoo animals become ambassadors: representatives of their species used to guide both *in situ* and *ex situ* conservation research. The animals do not just represent their individual selves:

⁸⁴ "END Extinction," *EndExtinction.org*, accessed April 18, 2017, http://endextinction.org/end-extinction.

⁸⁵ San Diego Zoo Global. (n.d.) About San Diego Zoo Global.

http://zoo.sandiegozoo.org/content/about-san-diego-zoo-global.

they are viewed as the archetype of physiology and behavior for their whole species and are portrayed as such through zoo materials given to the public. This type of scientific and representative ambassadorship is particularly useful and necessary in conservation work because in many natural habitats, humans are not able to observe animals closely enough to gain a sense of their daily activities and lives. By employing marketing techniques that imply zoo animals are representatives for their species, zoos encourage zoogoers to form associations between the zoo animals they see and the populations they hear about. It is for this same reason of ambassadorship that animal lovers and zoogoers appreciate zoos: they provide a subset of wild animals for human study and observation. Some may argue that if human habitat encroachment had not occurred, zoo based conservation projects would not be a necessity for the survival of endangered species. However, because of the current state of habitat and wild population devastation for a multitude of threatened and endangered species, in some cases, in situ conservation programs are the only hope for rehabilitating and fostering wild populations, and to foster these populations, we must learn more about them. Thus, due to the current state of environmental and conservation research, zoos view themselves and their animals as necessary satellites to research recovery projects for wild populations.

The best illustration of the species representative faction of zoo animal identity is the Giant Panda Conservation program at the San Diego Zoo. Giant pandas are infamously known for their extremely delicate reproductive needs: females only have a 24 to 36-hour period per year when they are fertile and receptive to breeding, which provides an extremely small window for her to become pregnant.⁸⁶ In addition to this difficulty, an infant panda is about the size of a stick of butter at birth, and the babies have a high mortality rate due to disease susceptibility. Because of these issues, along with habitat encroachment, bamboo loss, and human influences, the number of wild giant pandas was decreasing dramatically during the late 20th century, and the bears quickly became endangered.⁸⁷ In partnership with the Wolong Panda Conservation Center in China, the San Diego Zoo studied two giant pandas (Bai Yun and Shi Shi) to characterize their breeding and reproductive needs in an effort to bring the species off the endangered list.⁸⁸ The zoo's research and breeding program was highly successful, and six panda cubs have been born at the zoo since the program started in 1996. With help from other research groups and panda conservation programs worldwide, giant pandas were reclassified as a "vulnerable" species rather than an "endangered" one in 2016 (Figure 6).⁸⁹

⁸⁶ "Panda Facts," accessed April 18, 2017, https://www.pandasinternational.org/education-2/panda-facts/.

⁸⁷ Ibid.

 ⁸⁸ 1. "Giant Panda No Longer Endangered | Stories | WWF," World Wildlife Fund, September 4, 2016, https://www.worldwildlife.org/stories/giant-panda-no-longer-endangered.
 ⁸⁹ Ibid.



Figure 6. Gao Gao, the San Diego Zoo's oldest giant panda⁹⁰

Just as the San Diego Zoo was able to observe Bai Yun and Shi Shi and in turn help their wild counterparts, the Oregon Zoo was able to study Packy for information about Asian elephant behavior, and these two zoos are not the end of this association. Because of the current practices of conservation work, zoos view their animals as species ambassadors with good reason—such an approach has proven to be effective in developing SSPs and wildlife conservation projects. Because a handful of animals from each species are housed in zoos, they become the most accessibly studied members of their general species, making them ideal subjects for zoo based conservation research programs to support their species members in the wild. By residing in zoos and being relatively healthy members of a species, zoo animals become species representatives, and zoos reinforce this idea by treating them as such through research programs.

⁹⁰ Emily D. Gratke, *Gao Gao*, 2017, photograph.

The Meaning of Multiplicity

As demonstrated throughout this chapter, zoo animals are not simply animals. They are primarily pets, prisoners, and representatives, as shown by the examination of the stakeholder groups that possess these perceptions. These are not the only roles that zoo animals embody, however—the roles of zoo animals vary based on perception and practices. All of these roles can exist simultaneously depending on the viewer, practices, and context that the animal and perceiving group belongs to, and these factors bring about zoological multiplicity. In the contexts and roles described previously, zoological multiplicity is shaped by the animals themselves and the practices of the humans that align themselves with animal care causes. Having described the primary facets of this multiplicity, we now turn to its effects and implications on the future of zoos, stakeholders, and zoo animals.

CHAPTER THREE.

The Effects of Zoological Multiplicity

While zoos work toward creating connections between animals and guests to promote donations for conservation work, this work often doesn't advance conservation funding in the intended way. This is because zoo efforts to create emotional connections with animals to promote funding and stewardship encourage zoogoers to view zoo animals as community or honorary pets. Animals are seen as dependent, but well cared for, and are not connected to their wild counterparts. By viewing the animals as community pets, zoogoers do not perceive themselves as directly fiscally responsible for the animal care afforded to zoo animals. This compounds with the zoogoer observation that animals are taken care of and without a need for additional monetary support. While it may be true that zoos are receiving enough funding to support the animals contained within, it is the zoo animal's related wild populations that zoos are striving to support. Zoos see their animals as species representatives, and try to encourage the public to see zoo animals as such, but through their efforts to connect the viewer with the animal, the viewer sees the animal as a community pet rather than a species ambassador. This results in a steady stream of zoo patrons visiting the zoo for animal appreciation and education purposes but not to provide the influx of funding that zoos require to fully support and fuel conservation projects.

This missed association is a direct result of zoological multiplicity's induced varied perceptions of zoo practices and animals. Zoo management teams, including those involved in marketing, primarily perceive their animals as species ambassadors, and the idea of the wild populations is always present in this perception. In contrast, zoo patrons cannot be assumed to constantly connect the zoo animal with its wild counterparts as zoo employees do. It is the assumption of this association that results in the lack of connection, and zoo marketing techniques intended to increase sponsorship to wild animal populations are unsuccessful because the public makes its emotional associations with individual zoo animals as community pets and not the wild populations that zoos seeks to support.

A concrete example of this comes in the form of zoo animal adoption programs. Outside of the gift shop at the San Diego Zoo are signs with photographs of tigers and giant pandas encouraging the zoogoer to "become a wildlife hero" and support the zoo's "wildlife adoption program." For varying denominations between \$35 and \$1,000, the zoogoer can make a one-time donation and receive an adoption certificate making the donor the adoptive parent for an endangered animal species.⁹¹ If the donor gives more than \$100, they receive a stuffed plush version of the animal they are sponsoring: the donor literally becomes a parent to a household version of the animal. This is an example of the way that zoo management tries to stimulate visitor sponsorship by encouraging emotional attachments with the animals. However, zoo management sees these donations as being made toward the preservation of global endangered populations while potential donors see it as the adoption of the community pet within the zoo. It is not made clear that the money from the donation goes toward *ex situ* conservation projects because zoo

⁹¹ "Wildlife Adoptions," *San Diego Zoo Global*, accessed April 18, 2017, https://secure3.convio.net/sdzoo/site/Ecommerce;jsessionid=00000000.app315a?store_id=3441& NONCE_TOKEN=682505535785DC5739F89F3990E059AF.

management thinks of the zoo animals as species representatives and thus sees everything related to the zoo animals as related to wild populations. Zoogoers see the animals as a form of pet, not a species representative, and connect them to household pets, not wild populations. The wildlife adoption program reinforces this idea of a zoo animal as a pet and further separates differences between zoo management and zoogoer perceptions because of the implicit assumptions made about the role of zoo animals by management in the marketing of the program.

This further alienation of zoogoer and zoo perceptions is problematic because of both the ideological and physical tension it creates. Because of the zoological multiplicity observed in the viewing of zoo animals as pets and species representatives simultaneously, there is resultant tension between zoos and the zoogoers themselves. With specific regard to zoo animal species adoption programs, since zoos make assumptions influenced by their differing perceptions of zoo animals, this assumption is a product of zoological multiplicity. The perception of their animals as species ambassadors rather than community pets further reinforces the practices that zoos employ that establish zoological multiplicity in the first place, establishing a cycle of missed connections and tension produced by zoological multiplicity.

This cycle is best demonstrated via the financial operations of the average American zoo. As has been discussed through the history of zoos and their contemporary practices, AZA accredited zoos all prioritize funding for conservation based initiatives. These projects occur both *in situ* and *ex situ*, with the goal of preventing the extinction of Earth's endangered and threatened species. In pursuit

of this goal, member institutions collectively spend approximately \$186 million each fiscal year to support conservation initiatives, making zoos one of the foremost contributors to conservation research.⁹² In order to continue this funding, zoos must garner monetary support from donors and zoo patrons. Everything from ticket sales to fundraising galas helps to raise funding for conservation projects and daily operations, and this funding comes from zoogoers and zoo appreciators. In turn, zoos are able to support in house projects that promote animal welfare and conservation, providing a place for zoogoers and animal appreciators to continue to view and learn about a variety of animal species. There is an established cycle in which the zoogoer relies on the zoo as a space for education and animal viewing, and by providing this space, zoos raise money to participate in conservation, which seeks to prevent the viewable species from going extinct.

When the cycle of fiscal support starts to break down, as it does when activists protest zoos for their captive environments and zoogoers view animals as pets rather than species ambassadors, zoos are left without funding. The currently separate understandings of zoo animals held by stakeholder groups will eventually result in a lack of zoo funding and support, and without zoogoer funding and support, zoos cannot support conservation work. Without conservation work, many species, such as clouded leopards, are at an extreme risk for extinction due to the lack of successful breeding programs. If conservation work continues to break down, over time, the species that draw many zoo visitors will go extinct, eventually

⁹² Shelly Grow, Amy Rutherford, and Arslan Ahmad, "2015 Annual Report on Conservation and Science Highlights" (Association of Zoos and Aquariums, 2015),

resulting in zoo evolution into a form of natural history museum: a space with only artifacts of animals and species past. This financial conservation cycle is the direct result of zoological multiplicity—zoo animals are ambassadors to some, pets to others, and prisoners to alternative groups. Because these groups are affected by zoological multiplicity and shape zoo animal roles via their practices, the cycles that the animals depend on for present and future survival are essential to maintaining necessary processes of animal care. However, because their views are shaped by zoological multiplicity at the foundational level, zoo animals inhabit the roles of pet, prisoner, and representative simultaneously, thereby confusing zoogoer, activist, and zoo practices and priorities, resulting in a lack of progress and funding in favor of the animals themselves.

This tension and confusion between stakeholder groups is further exacerbated when animal rights activists and their conservation priorities are added to those established by zoos. As discussed, because of activist publications and the nature of the zoo environment, animals embody prisoners, and activists display them as individuals suffering at the hands of an exploitative, profit-hungry institution. Through dialogue that stresses the perceived negative aspects of zoos, animal activists call for the abolishment of zoos and a focus on *ex situ*, or natural habitat, conservation. This, however, is not in the interest of the zoogoer or the zoo itself because moving completely and immediately to *ex situ* conservation would result in the dissolution of zoos as they are known today, thereby dissolving a public space of education. Additionally, this dissolution would pose a problem to animal populations because contemporary zoo based conservation projects are essential to expanding the knowledge bases required for planning *ex situ* conservation. Without zoos, the animals currently housed within would have nowhere to go, and because of habitat and population decline for many wild populations, repopulation programs for multiple species would be impossible to develop, resulting in eventual species extinction—the very thing wildlife conservation seeks to prevent.

At a fundamental level, the tension between animal activist groups, zoogoers, and zoos is almost too easy to find: animal rights groups view zoos as institutions of forced captivity and imprisonment, and zoos obviously do not see themselves as such. Zoos see zoogoers as essential to the growth of conservation projects, but zoogoers don't experience the need to sponsor conservation work at zoos. Zoogoers see animal rights groups as radical entities pushing for the abolishment of their beloved naturalistic spaces, and activists see zoogoers as complicit entities in the wrongdoing of zoos. The tensions appear, at the surface level, to stem from inherent differences in ideologies and goals related to animal care—differences that do contribute to this tension. However, I propose that this tension is not fundamentally due to zoogoer complacency, critical animal rights groups, or negligent zoos, but that this tension is ultimately originates from zoological multiplicity.

Ultimately, animal rights activists, zoo attendees, and zoos are working toward the same general goals: caring for animals, combating habitat and wildlife extinction, encouraging biodiversity, and protecting wildlife. However, because of zoological multiplicity, the commonalities between these groups and their goals are lost because of a current lack of understanding and subsequent ability to communicate across stakeholder groups. This occurs because the zoo animals themselves represent different things to each group, and these facets of multiplicity exist simultaneously. The tension lies in the inability of stakeholder groups to acknowledge and observe this synchrony. Just because a tiger is a big house cat to a zoogoer does not prohibit it from being a prisoner to an animal rights activist. A zoo viewing captive Asian elephants as representatives for their species does not mean that zoogoers can't form emotional connections with the elephant similar to those formed with pets. Zoological multiplicity does not dictate inclusivity or exclusivity of roles, and therein lies the issue.

Currently, zoos, activists, and appreciators perceive zoo animals in different lights, and these perspectives are generally held exclusively by specific groups and do not overlap in the minds of stakeholders. For example, even if they don't actively identify the roles they perceive zoo animals inhabiting, because of the practices they engage in, activists don't see zoo animals as pets or representatives. While the inhabited roles of zoo animals maintain a fluidity, human perceptions of these roles currently do not. Because this state of fluidity and acceptance of multiplicity has not been reached within the human caregivers, it makes it difficult for them to actively care for the animals without anticipating some sort of backlash, intentional or otherwise. Zoos can't push for conservation funding through emotional connection without pushing the zoogoer to see the animals as pets that they are not individually responsible for. Activists can't seek animal liberation without sparking zoogoer outcry and zoo protestations. Thus, until zoological multiplicity, its roots, and its effects can be acknowledged and studied further and collaboratively by human populations including activists, zoogoers, and zoo management, there is a great

amount of unresolved tension in the zoo animal care and appreciation community. If a state of fluidity and understanding of zoological multiplicity can be reached within the human populations, there is potential for better methods of animal care and conservation to be developed.

CONCLUSION AND FUTURE WORK

Having discussed the development and impacts of zoological multiplicity herein, the question remains regarding what is to be done with this information. I sought to show that zoo animals as animals multiple are the source of tension between animal rights activists, zoo patrons, and zoos themselves. This tension develops out of the multiple perceptions of zoo animals by various human groups, and the practices of these groups reinforce these perceptions. By viewing zoo animals as pets, ambassadors, and prisoners simultaneously, zoogoers, zoo management, and animal rights activists are unable to work together cooperatively to reach their common goal: caring for animals. Because the groups involved are generally not aware of zoological multiplicity and its effects, the tension between the groups is impossible to process. The question regarding this situation is simple: What's next?

I would like to think that the answer to this question is also simple: we find more examples of zoological multiplicity and establish its existence concretely in zoos across the United States. By studying the idea of zoological multiplicity further and in more specific terms, it may be possible to relieve some of the tension in the animal care community and formulate a future plan for zoos. One such way is to break down the perceptions that the involved human groups experience, and try to design inclusive practices that explicitly address the needs and ideals of multiple groups. For example, with regard to "adopt an animal" programs, zoos could clearly connect the donation to the wild populations that it would support. So, rather than receiving an adoption certificate for a specific animal at the zoo, the donor could

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receive a certificate detailing that they have adopted an entire wild population and the ways in which their donation will specifically benefit that population. By reshaping animal adoption programs in this way, zoo management would not make an assumption about the perspective of the zoogoer, and the roles of zoo animals as pets and animal ambassadors could be combined in such a way that both the desires of zoogoers and zoo management are met. Additionally, because zoos would be explicitly detailing the way that the donation would support wild populations and *ex situ* conservation efforts, the perspective of the activist of zoo animals as prisoners could be addressed. A major grievance regarding zoos from the activist community is that zoos don't support *ex situ* conservation and non-captive animals through their work, and by clearly defining the relationship between donations and wild populations, zoos would help to alleviate some of the tension between activists and zoos by demonstrating their contributions to *ex situ* projects.⁹³

The management of intergroup tension can be developed in other such ways, and one particularly viable starting place would be through careful examination of zoos on an individual level. A specific study of zoological multiplicity could involve the analysis of a single zoo, associated zoogoer and activist groups, and the practices of these groups. By detailing the ways in which zoological multiplicity affects zoos on an individual basis, the primary sources of tension and their relationship to animal care can be further explored. Additionally, by analyzing one zoo at a time, it would potentially be possible to formulate more effective management plans on a

^{93 &}quot;Zoos," Last Chance for Animals, accessed April 18, 2017,

http://www.lcanimal.org/index.php/campaigns/animals-in-entertainment/zoos.

shorter time scale. Through an in-depth study of the ways in which the practices of management, patron, and activist groups contribute to multiplicity at the targeted zoo of study, it could be possible to reach practical compromises that would support conservation and zoo animals in all of their manifested roles. For this or a similar plan to work, it is necessary for the groups involved to acknowledge and understand the idea of zoological multiplicity, and this understanding comes with time and dissemination of information.

For now, to sum up this investigation, I share the story of Satao II. Satao II was a free-living elephant residing in the Tsavo Conservation Area in southern Kenya. The elephant was a Great Tusker: one of few remaining African elephants with genes that code for elongated tusks that nearly reach the ground. Satao II and the other elephants in the Conservation Area were topics of *ex situ* study and allowed researchers to gain information on African elephant migration and movement patterns, details that are essential to re-release related conservation projects of large mammals such as elephants and rhinos. On a routine research flyover in January 2017, the body of Satao II was found on the reserve with his tusks still intact.⁹⁴ Two poachers were apprehended for killing the beloved elephant with a poison arrow, but his loss was still felt within conservation and elephant communities throughout Kenya and the globe. Satao II met the same fate as Packy, though the situations and contexts were vastly different. Both were essential parts of research operations, both were integral members of pachyderm social groups,

⁹⁴ Sarah Gibbons, "One of Africa's Last Great Tusker Elephants May Have Been Killed by Poachers," *National Geographic News*, March 7, 2017, http://news.nationalgeographic.com/2017/03/africa-tusker-elephant-satao/.

and both were beloved by the humans they interacted with. Still, both remain dead because of preventable causes. Without the acknowledgement and mediation of the tension related to zoological multiplicity, it will not matter if an elephant is dead in Kenya or Oregon, what will matter is the lack of care being afforded to animals by those fighting over how to provide it. Regardless of what role a zoo animal or wild animal embodies to an individual, it must be acknowledged and cared for, otherwise the animal multiple will become an animal extinct.

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