CHAPTER 2
Zoo Metamorphoses

This chapter explores the nature and development of zoological gardens, and the various processes involved in the display of captured animals as well as the social and cultural reactions of these displays. A background to the National Zoological Gardens of South Africa will also be investigated as the chosen site.
Throughout history, terms such as ‘animal collections’, ‘menageries’ and ‘zoological gardens’, have been coined to reflect mankind’s curiosity regarding the animal world and our dominion thereof (Koebner 1994:13).

Since wild animals were first held in captivity, zoological gardens have undergone many transformations based on our changing understanding. Unfortunately, countless zoos still exist today that resemble the menageries and collections of the Middle Ages, where animals live in inhumanely conditions in confined cages and enclosures with little to no regard for their wellbeing (Koebner 1994:19). In the Twenty-First Century, these zoos are a disgrace and should no longer be in existence. Looking further than simply the manner in which zoos exhibit animals, the greatest indication of a zoo’s quality is through how the animals are cared for and treated, how the zoo effectively contributes to conservation, and equally important, what it teaches the public about wildlife and conservation thereof. The best zoos are centres of learning for researchers, biologists, geneticists, veterinarians, as well as the public (Koebner 1994:19).

Becoming ‘conservation centres’ is the next evolutionary stage for zoos. Recently, several international zoos have been renamed as “Wildlife Conservation Centres” with the purpose of providing good care, meeting their missions of conservation, educating the public about the necessity of protecting ecosystems and wildlife and providing homes for animals that are extinct in the wild and unable to survive without positive human intervention (Koebner 1994:19). Zoos should be designed as sanctuaries for wildlife, putting the needs of animals always first, and second for viewers visiting.

**Figure 2.1**
A graphical representation of how animals are viewed by humans today (Author 2016).
Figure 2.2
The Royal Menagerie: An illustration of the zoo within the Tower in 1816, England.
Earliest collections

Human beings, and animals such as elephants, rhinoceros and whales, have all evolved over millions of years to occupy their special niches and roles on earth. The story and evolution of zoos has been re-adapted over time by history, philosophy, anthropology, and of course, architecture scholars. History reveals that all great civilisations held animals in captivity for display in wealthy cities. Initially, collecting animals was a privilege only of kings and potentates, who desired exotic creatures as treasures for their personal enjoyment. These ‘collections’ became more organised over time. However little thought or consideration was bestowed upon the animals and their needs. Animals were confined in cages designed for viewing rather than comfort (Koebner 1994:55).

The earliest known animal collection recorded belonged to Queen Hatshepsut, around 1500 B.C in Egypt (Koebner 1994:55). The collection was discovered during excavations near Hierakonpolis, one of Egypt’s greatest urban centres. Remains of elephants, baboons, hippos and wildcats were discovered in the ancient city’s elite cemetery (Doc Zone, 2016).

Garden of Intelligence

Wen Wang, Emperor of the earliest Chinese Dynasty (Zhou Dynasty, 1027 - 221 B.C.) named his animal collection the “Garden of Intelligence”. This garden was used as a place to both study and learn the remarkable and unknown marvels of nature and the animal kingdom at the time (Koebner 1994:56).

These types of early animal collections represented great wealth and power of rulers, as exotic and dangerous animals were kept under their dominion. These collections also provided study and research opportunities to better understand nature and discover if domestication of animals for the benefit of humans was possible (Koebner 1994:55).

The Colosseum

During Roman times, 27 B.C. - 476 A.D., the captivity and display of animals for pure human entertainment and embellishment had fully peaked. Through the power and control of wild animals, Roman leaders were able to demonstrate their supremacy. In the Colosseum, a great deal of animals died fighting either each other or gladiators. Unarmed, defenceless people were often thrown to the lions as punishment. Many of these animals used in combat were either bred in captivity or captured from the wild, to be used as a constant supply for these bloody spectacles (Koebner 1994:56). The Colosseum was equipped with cages to house the wild beasts which were starved before any fights. These spectacles were finally banned in the fifth century.

Figure 2.3 Animals being forced to fight each other and against gladiators in the Colosseum.
Menageries

Until the eighteenth century, animals kept on display were only to be seen and enjoyed by nobility and those in power. However, as the nobility lost control, animal collections became accessible to the public as well. These more organised collections were renamed as ‘menageries’, defined as collections of wild animals in cages.

Animals in menageries were still viewed as mere curiosities, with little regard to their health and needs (Koebner 1994:58). These cages provided the animals with no privacy or space to escape being observed.

Henry III continued his grandfather’s tradition of collecting animals when he became king of England (1216-1272) and relocated the royal residence to the Tower of London. He erected what is now known as the “Royal Menagerie”, which housed animals in cages to be displayed outside the Tower. In 1254, he received an elephant as a gift from Louis IX of France, the first of its kind to be transported to England.

A special elephant house was built under his commission; in keeping with the tradition of small cages of menageries, the house was just big enough for the elephant to fit into.

During the Renaissance period in the late 1400s, a large menagerie was established in Florence. At the time, animals were considered as creatures of nobility and beauty. Lions and wolves appeared on family emblem designs and used as models for paintings. Leonardo da Vinci kept many animals used as models which appeared in his works of art (Koebner 1994:59).

One of the finest considered menageries belonged to Akbar the Great (1542-1605), the third Mogul emperor of India. Before his passing, he had five thousand elephants and one thousand camels in his possession. Animal fights were strictly forbidden under his rule, as he had great admiration for the exotic animals kept under his protection (Koebner 1994:59).

Figure 2.4 Akbar the Great’s menagerie of exotic animals in India.
Zoological Gardens

 Origins

At the start of the nineteenth century, the development of large urban areas initiated the preservation of natural, green spaces for recreational parks. Protecting natural areas became a growing concern and the thirst for scientific knowledge and understanding of wildlife advanced (Koebner 1994:60).

The origin of the word “zoo” originated from the Ancient Greek word “zoion”, translates to “living being”. “Zoology”, the study of living things developed thereafter, including the evolution of the zoological park and garden (Koebner, 1994).

Animal collections, menageries and zoological gardens, being various displays of animals in captivity, have evolved and changed significantly over the years to reflect current culture and society worldwide. Today, zoological gardens continue to evolve into ‘conservation centres’ in order to meet the requirements and standards of current times acceptable in the twenty first century (Koebner, 1994).

Figure 2.5 The Elephant and Rhino House drawings by Hugh Casson, London Zoo, 1965. Figure 2.6 Next page Left to Right: Floor plan of the Elephant and Rhino House, London Zoo. Figure 2.7 Photograph of the Elephant and Rhino House.
Conservation Centres

The next evolutionary step for Zoological Gardens

Introduction

With their origins founded in royal collections, menageries and circuses, zoological gardens need to evolve once more in order to effectively meet the needs of animals and the critical state of the earth today. Many zoos across the world have progressed towards what is now termed as “conservation centres” (Koebner 1994: 61).

Previously, status, recreation and economics were the primary drivers for these animal collections. However, today most zoos seek international accreditation from the Association of Zoos and Aquariums (AZA) and assign resources towards research, conservation, protecting biodiversity and ecosystems.

As conservation centres, a zoo’s primary objective should be the wellbeing and welfare of all the creatures in its care, as well as the improvement of their lives and natural surroundings. This necessary evolution is still far from being realised unfortunately (Ludlum & Hill, 2015).

Zoos are valuable as they contain an overview of various animals and ecosystems found on earth. A necessary provision needed to be made by zoo professionals for the future is protecting ‘keystone’ species. Most of these large animals, including mammals, carnivores and herbivores, are seriously threatened with extinction in the possible future.

Animals such as elephants, rhinos and tigers require large volumes of space and habitats to thrive. As a result of this, they help support other animal and plant life. If elephants were to be hunted and poached entirely to extinction, consequences will arise that impact upon other animals that have evolved to live alongside elephants. The elephants become the representatives for their habitats; the “keystone” (Koebner 1994:123).
“In the end, we will conserve only what we love. We will love only what we understand. We will understand only what we are taught.”

– Baba Dioum, Senegalese conservationist.
Figure 2.8 Image representing Endangered Species Worldwide as per the IUCN Red List (Author, 2016).
**Theme:** Taxonomic  
**Subject:** Diversity of Species  
**Concerns:** Species husbandry, Species propagation  
**Exhibitry:** Cages

**Theme:** Ecological  
**Subject:** Habitats of animals, Behavioural biology  
**Concerns:** Species management, Professional development  
**Exhibitry:** Dioramas

**Theme:** Environmental  
**Subject:** Ecosystems, Survival of species  
**Concerns:** Holistic conservation, Organisation networks  
**Exhibitry:** Immersion exhibits

*Figure 2.9 Diagram representing Rabb's concept of the linear evolution of zoos (Author, 2016).*
The evolution of zoos concept was put forward by George Rabb, the former head of Brookfield Zoo. This concept involved the future of zoos, with an anticipated greater focus and devotion to wildlife conservation. In many ways, several institutions United States specifically, are already achieving these goals. Most AZA accredited zoos are primarily focused on core issues of wildlife conservation, safeguarding ecosystems and biodiversity and contributing to research (Hill, 2014). Conservation is becoming the central focus for several zoos. As conservation centres, zoos need to address sustainable relationships of people, animals and nature, communicate the values and importance of preserving biodiversity and ecosystems, and practice conservation ethic with all operations. These operations should be linked to the survival and management of species populations in the wild threatened with extinction. Zoos should adopt immersion exhibits to actively involve visitors to understand the environmental predicaments of wild animals. These experiences are conducive in creating awareness and strong conservation messages which relate to issues of poaching and habitat destruction (IUDZG & CBSG, 1993).

Zoos, while seeking accreditation, need to actively cooperate with the world zoo network and other conservation institutions working in conjunction with “The World Zoo Conservation Strategy”, published Fund for Nature (WWF) in 1980. The World Zoo Conservation Strategy encapsulates the present viewpoints of zoos as being a “living document” that has the potential to evolve and change over time as research, knowledge and philosophies concerning conservation are further defined (IUDZG & CBSG, 1993).

“Evolution of Zoo Concept”

The evolution of zoos over the past hundred years up to now has undergone a paramount transformation with the changing of cultural beliefs and knowledge. Zoos as we know evolved from royal collections, menagerie and circuses. In the twenty-first Century however, it is curious to contemplate what the next phase for zoos will be.

When considering what the next evolutionary state or transformation of zoos may be, many people and zoo critics firmly believe that zoos should cease to exist indefinitely; that keeping animals in captivity, and the ethical concerns thereof, surpass any other concerns. Furthermore, they believe these concerns far outweigh other moral dilemmas associated with protecting species and safeguarding the earth’s rich genetic heritage. The author disagrees.

Today, animal populations in the wild are currently and will continue facing unimaginable crises and life-threatening challenges brought about by significant human changes to their environments. For this reason, zoos should continue to exist to bring these severe issues to light. Zoos should therefore “exist as a moral imperative” and provide refuge and a resting place for animals against a gathering storm (Hill, 2014). This forms the crux of the project’s intentions.

Wildlife rehabilitation centres are devoted to treating injured, sick or orphaned wild species to recovery, in order to increase their chance of survival when returned to the wild. In the past, these centres disregarded visitors, considering them as nuisances. Accommodating visitors was associated with the so thought less important of the four goals – being that of recreation and entertainment. Now however, these centres are realising their potential for providing unique public education and awareness to the importance of wildlife conservation. These wildlife rehabilitation centres are committed to the care and management of wildlife and population numbers thereof. Today’s AZA accredited zoos focus on four goals of ‘recreation, education, conservation and research’ which distinguishes them from other zoos and institutions (Hill, 2014).
During the Middle Ages, artists had known of the existence of elephants having heard stories and descriptions from other travellers. Various paintings and illustrations were done based on these descriptions, despite the artists having never actually seen an elephant (Sunny Skyz, 2016).