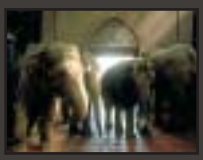
GORILLAS

BEARS

ELEPHANTS



people

The evolution of
a Zoo Exhibit
Design Philosophy

by David Hancocks

An elephant stands alone on a perpetually damp concrete pad,
its feet pitted and sore, its huge head swaying in a mindless retreat
from the craziness of its zoo world into an inner sanctum of its own madness.
A bear shuffles backwards and forwards for hours on end,
rubbing its nose raw on the bars of its cage.
A gorilla, tense and frustrated, sits in a zoo 'habitat'
made entirely of concrete and steel.
Encounters with animals in such predicaments bring
depression or anger to many people, but research shows that
too many others emerge from such zoo encounters
with attitudes of superiority and dominance reconfirmed.

It is interesting that for almost their entire history, zoos sought the services of architects to solve their design problems. It was a task unsuited to the profession, as architects almost invariably produced solutions that focused on the demands of the structure, not the needs of the animal. The creatures inhabited quarters useless to them, in which they endured lives of unimaginable boredom.

Few design tasks are more difficult to get right than zoo exhibits.
They offer a menu of fearsome challenges, full of conflicting demands
from an extraordinary range of clients, from the animals themselves to zoo keepers,
zoo managers, and zoo visitors. Designers must find ways to accommodate the wants
of all these dissimilar clients in designed environments that simulate wild habitats.
It is not surprising that the results so often fail.

About thirty years ago a small team of designers broke that mold. The Seattle firm of Jones & Jones, composed of architects and landscape architects, led a revolution in zoo design at the local Woodland Park Zoo, creating a new paradigm based on ecological awareness, a solid commitment to nature, and a deep respect for the dignity of wild animals.

The purpose of Jones & Jones's zoo work has unceasingly aimed at making humane homes for zoo animals. It has always respected the land and has never failed to attempt to engage the esthetic and intellectual sensibilities of zoo visitors. Thus, the firm has tried to make zoos more meaningful, useful, provocative, beautiful, poetic, and challenging.

Three significant examples of their work selected here, for gorillas, for polar bears, and for elephants—perhaps, because of their size, intelligence and strength, the three most exacting species to design for—reveal much about that philosophy. Each project has broken ground with new ideas and has invented new meanings. Together, these projects show how and why some zoos are moving to a new position of great potential value for a human society that is in danger of losing contact with nature.

GORILLA

In 1978, a new exhibition habitat for gorillas at Seattle's Woodland Park Zoo broke so completely with tradition that other zoo professionals rejected it as an experiment doomed to failure. Working with a very small budget, a design team redeveloped some old grottos at the Zoo into spaces that encouraged the gorillas to engage in natural behaviors and were made to look wild and natural. The land was sculpted into a wild and tumbling landscape in which people and animals could go exploring and perhaps not even find each other.

Most significantly, the landscape treatment on each side of the hidden barriers was identical for human visitors and zoo gorillas, so that people and animals seemed to be sharing the same space. It was a new technique for which Grant Jones coined the term "landscape immersion."

Many zoo professionals, however, scorned the concept. They deemed it wasteful of space, lacking in architectural grandeur, and unnecessary for a public audience who wanted to see zoo animals up close. They prophesied that the gorillas would destroy all the vegetation, fall from the trees and break their necks. Twelve years passed before another zoo copied the idea, but today the concept is firmly established, and the situation for gorillas in many zoos has changed immeasurably. Landscape immersion is now considered essential in zoos from New York to New Zealand, from Singapore to Zurich.

The most fascinating results of the Woodland Park Zoo gorilla exhibit, and the very motive for the experiment, were the behavioral changes of both zoo gorillas and zoo visitors. Within just a few days of departing the big, windowless concrete box, the animals became relaxed and playful in their lushly planted and complex large spaces. People began to walk softly, quietly, and when they turned a bend in the path and discovered a group of gorillas in a green world they stopped, watched wide-eyed, and when they spoke they whispered to each other.

Since the opening of that exhibit, a generation of Seattleites (and several generations of gorillas) have grown up with entirely different attitudes. Woodland Park Zoo visitors now have an understanding of and love for gorillas that is intense and deep. They care about the gorillas and their wild cousins with a passion that could not have taken root without Jones & Jones's landscape designs.

POLAR BEAR

The recently completed Arctic Ring of Life exhibit at Detroit Zoo meets all the same philosophical and design principles as that first landscape immersion exhibit for Woodland Park Zoo's gorillas, while embodying the concept of "cultural resonance," showing the interdependence and connectedness between humans and wildlife around the world.

The essential characteristics of the seasonal extremes of the Arctic are faithfully reproduced in the Ring of Life exhibit. They make a fabulous stage for compelling stories, not only about several animal species of this region—seals, arctic fox, and snowy owl—but about geographical explorations, interconnections between Inuit culture and the extreme ecology of this land, and its two predominant predators—humans and polar bears.

At four-plus acres, it is the world's largest exhibit for polar bears. It is also remarkably complex, composed of an open tundra of wind-stunted grasses and ephemeral wildflowers, saltwater pools fourteen feet deep chilled to 55 degrees, ice caves with ceilings of dripping icicles, and simulated forms of snow and ice. In preparation for this exhibit, the zoo director and project architect headed 2,000 miles north of Detroit for an eight-day journey to the northernmost inhabited point in the Arctic, by dogsled and snowmobile. The result shows itself in the broad scale of the concept and the authenticity of its details.

Detroit Zoo aimed to set new standards for polar bear exhibits and to create a composite physical and social environment to meet the needs of these intelligent and curious bears. The most active areas are the saltwater pools, kept at 55 degrees—ice-cool in Detroit's summer, but warm enough in winter to prevent icing up. Visitors watch both polar bears and seals underwater in the Polar Passage, separated only by a 12-foot-wide tube of 4-inch-thick acrylic.

At the center of the exhibit is the Nunavut Gallery, named after Canada's newly formed Arctic Territory. The gallery interprets the region through the landscape, wildlife, and human culture. It was an imperative of the design that this exhibit be used as a vehicle to promote collaboration with the people of the Nunavut and with local conservation groups. Thus, the Gallery displays not only paintings and sculptures, but also shows videos through which guests can observe polar bears in the wild and learn of their needs as well as learn about the lives of the native peoples. Meanwhile, floor-to-ceiling windows offer underwater views of bears and seals in the world's most unusual interpretive arts space.

Scott Carter, curator of mammals at Detroit Zoo, has said, "If we can't do it right, and simulate an arctic environment, then polar bears shouldn't be in zoos." One cannot but admire and agree with his dictum. Polar bears should not be in zoos unless they can be kept as healthy and active as here, and, surely, unless they can be part of an exhibit that, like this one, so cleverly and sympathetically reveals and explains the ways in which people and animals have learned to coexist and thrive in such a harsh world at the top of the globe.

ELEPHANT

Of all the species typically maintained in zoos, none are more demanding than elephants. Strong, social, and intelligent, their needs have rarely been met in even the smallest degree. Indeed, the history of zoo elephants is full of grief, ignorance, and cruelty. A new exhibit at the Royal Melbourne Zoo, however, promises to be an elephant paradise. Under the guidance of a genius trainer, the Zoo has developed a regime of care that has changed unhealthy elephants into alert, fit, and active animals.

Melbourne Zoo's new exhibit area will perfectly match this quality of care and give the elephants the quality of space that they deserve. The exhibit comprises three interconnected areas that allow a variety of spaces for the elephants. The designers have given equal attention to the land areas, designing a 14-foot-deep pool, devising tree forms that the elephants can push to the ground, places where they can dig for seeded minerals, a variety of gradients to climb and explore, mud wallows, areas of shade and of sun in all seasons, and pathways through forested corridors.

The logic of Melbourne Zoo's senior curator has resulted in a unique feature for this exhibit, whereby the holding quarters for the male and the females are located at opposite ends of the exhibit area. In the wild, the females and young form matriarchal groups with strong social bonds, while male elephants are typically solitary, interacting with the groups only for breeding. This design is a departure from typical elephant exhibits, where the animals live together in unnatural and often stressful situations.

This close attention to the social and behavioral needs of the elephants is also characteristic of Jones & Jones's design approach. The equal amount of thoughtfulness to the public areas and educational opportunities is also typical of their work. Zoo visitors experience a replicated Asian village landscape, including small fields of rice and other crops. In a community hall and classroom on the edge of the "village," people discuss ways of controlling elephants without killing them, while protecting their crops at the same time. It is a universal problem, and this discussion allows zoo visitors to become engaged in debates about a quandary that is intensifying as human populations expand, new economies emerge, and wildlife habitat disappears.

Landscape Immersion and Cultural Resonance are brought together in this exhibit as a richly woven tapestry. The interpretive designer conceived this notion of setting the exhibit within the context of an Asian village that is struggling to find ways to coexist with elephants, as they have done for thousands of years. It sets the stage for an exciting yet poignant experience that aims to make people feel emotionally bonded to elephants and their future.

Visitors can also explore many facets of elephant ecology and a long history of human coexistence, in ways that are sometimes subliminal, sometimes didactic, typically interactive, and always magical. After exploring the village, with its small museum for tourists, its eateries offering Asian specialties, its ruins, and changing festivals of sights and sounds, visitors exit through a massive wall made to look ancient and strong, and enter the jungle forest.

A meandering path takes people into the forest, past huge trees and braided streams. The clever arrangement of three interconnected separate paddocks for the elephants means that there are glimpses of elephants through the trees all around, so that the sense of being surrounded in their world is intensified. While the village portion of the exhibit was largely experiential and intellectual, the forest portion is designed to foster a sensual and emotional bonding with the elephants.

It was a central part of the interpretive thesis that the zoo visitors, having experienced elephants in a powerfully positive way, and having learned of the plight of elephants in Asia today, should now be given opportunities to become personally involved. Aside from improving the lives of elephants and the visitor experience, this exhibit serves a larger purpose.

Specific programs that assist elephants in Asia are promoted here, and web-pages and other contact information about research and conservation activities are disseminated. Collection boxes allow people to give donations on the spot, and they can sign up for more information or take home print-outs of conservation agencies and other organizations that are working to help traditional communities and elephants survive across Asia.

There may be no more important or empowering goal for modern zoos than to build exhibits that connect zoo visitors directly and personally to wild habitat conservation activities and to support for indigenous cultures.

This is a theme that the most progressive zoos will undoubtedly pursue and expand upon. Good zoo design has always aimed to create scenarios and landscapes that made contributions of intelligence and compassion. The goals of the best zoos have always been to improve comprehension of the wonders and beauty of this world, to encourage respect for wild creatures, to help protect nature, and to understand our place in it. When good zoo designers have the opportunity to work in the best zoos, these goals are resolved in wonderful ways.

We help zoos evolve.

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