Diane Fox explores the encounter - the returned animal gaze that holds the viewer in communication. But is communication effectively achieved through the naturalistic artifice of natural history dioramas?

Text by Diane Fox
The term diorama, derived from the Greek “dia” (through) and “orama,” (to see), was first coined by the French scenic painter, physicien, and inventor of the daguerreotype L.J.M. Daguerre and his co-worker Charles-Marie Bouton in 1821. (1) It referred to large sheets of transparent fabric painted with realistic images on both sides that were designed to be viewed from a distance through a framing device that hide the paintings’ vanishing points. When Daguerre’s first diorama opened in Paris in July 1822 there were two paintings, one by Daguerre and the other by Bouton. One showed an interior and the other a landscape. When sunlight was redirected with mirrors and shone through the cloth it produced changing effects transforming day into night, winter into summer, thus heightening its illusion of reality. Though at first these dioramas consisted only of painted curtains, as their popularity waned, Daguerre began to introduce 3 dimensional elements into the foreground of the scene, at one time going so far as to add a live goat. (2) This use of 3 dimensional elements combined with painted backgrounds continued in the form of panoramas and cycloramas, which sprang up in the early 19th century all over Europe. Panoramic paintings showed a “wide, all-encompassing view” on a curved surface. Cycloramas went a step further, totally surrounding the viewer with building sized paintings hung in a circle with three dimensional foregrounds and figures. These were viewed from the inside and usually depicted battle scenes. Cycloramas were “making news as popular and educational forms of entertainment” at the same time as Carl Akeley, working for the Milwaukee Public Museum; created the first known habitat diorama in 1889. (3) This diorama, The Muskrat Group, “was prepared as the first in a series of groups representing the fur-bearing animals of Wisconsin. The diorama is still on view today at the Milwaukee Public Museum. (2) Akeley’s total habitat diorama set the standard for museum exhibit techniques and became known in museum circles as the “Milwaukee Style.” (2)

Before Carl Akeley’s creation for the Milwaukee Public Museum, taxidermy was typically arranged in glass cases and mounted on walls. The collection of animals for display dates as far back as the Renaissance. These collections displayed the collected objects of aristocrats who were among the few with means to travel. (2) Many of these types of displays exist to this day. In 2005 I had the opportunity to photograph at the Specola Museum in Florence, Italy. This natural history museum founded by the Medici family in 1774 had a similar purpose to later natural history museums in that its function was to educate scientists, physicians and the public to the wonders of nature. Though most well known for its collection of anatomic waxes, it also served to house the Medici’s collection of natural curiosities, fossils, plants and animals.

There were a few exceptions to this type of display that may be considered forerunners of Akeley’s total habitat dioramas. British taxidermist, Walter Potter, was creating scenes of anthropomorphized animals engaged in human activity for his Bramber Museum in 1880. Entertaining “Dime Museums” featured living people posed in front of painted scenery. (3) Charles Wilson Peale, an artist and early pioneer in taxidermy and museum display, created America’s first natural history museum in 1786 in Philadelphia. His displays were unusual, as he tried to “accurately re-create living creatures with his art and painted skies and landscapes on the backs of the cases displaying his taxidermy specimens.” (2) The collection disappeared from public view when it was sold in 1846.

However, it is Akeley who is credited as the father of the total habitat diorama and for making taxidermy into an art form. Prior to Akeley’s methods, of mounting animals, their skins were simply stuffed with a variety of materials, most often wood or straw shavings. Akeley’s method, still used to mount specimens today, was rigorous and precise, beginning with photos, drawings, anatomical casts and detailed measurements of the animal taken in the field. When back at the museum, a rough armature was made, using the animal’s real skull and bones. The body of the animal was then modelled in clay onto the armature, using the field measurements, the body casts and photography. From this carefully crafted sculpture, a plaster cast was made and coated with warm glue. Strips of muslin were laid onto the glue and carefully worked into the mold. Thin layers of paper-mache with wire cast reinforcement were worked into the mold and shellacked to make it impervious to water. The whole piece was then immersed in water, melting the glue so that the cast could be easily lifted from the mold. It was only then that the skin of the animal was mounted onto the completed substrate. (2) It is interesting to consider the amount of craft and skill that goes into each of the animals within a habitat diorama. As museum taxidermist David Schwendeman says “As long as we work in clay, it’s art,” “But once we cover our work with a skin it becomes mere taxidermy.” (2)

Akeley left the Public Museum soon after creating The Muskrat Group and brought his methods and talent first to Chicago’s Field Museum and later to New York’s American Museum of Natural History. (4) An avid conservationist and naturalist, Akeley worked to conserve the environments to which he travelled by bringing knowledge of them to the public through his dioramas. His greatest passion was for the wildlife of Africa and the Akeley Hall of African Mammals in New York stands today as a testament to this fact.
Another artist, who had a great affect on the beauty and craft of the habitat diorama, is J. Perry Wilson who worked with Akeley at the American Museum from 1934-1957. One of the most respected diorama painters, Wilson devised a system of transferring the background image of the diorama onto its curved surface to minimize the amount of distortion of perspective. A successful diorama must be able to be viewed from the height of a child as well as an adult. If the horizon line is placed too high, the horizon appears to go up on each end, if too low, it appears to go down. (3) Wilson's method used a mathematical formula to transfer the background image onto a curved grid based on the optimum viewpoint. Wilson described his work with the Latin phrase, *ars celare artum*, or “art to conceal art.” (2)

The experience of the diorama places the audience into a moment within nature. It is a discovery, an adventure, a glimpse within a realm of existence of which we are rarely a part. The more beautifully crafted the diorama, the more heightened its sense of reality, the greater connection the observer has to the life represented within the frame. If we, who can observe nature closely by flipping to the Nature Channel can look at these dioramas with amazement, imagine the affect they had on an audience new to viewing worlds outside their immediate surroundings and to the invention of photography itself.

Since the 19th Century, “diorama” has come to mean “a miniature or full-sized model environment in which figures, stuffed wildlife or other objects are arranged in a naturalistic setting with a painted background.” As such, dioramas could be regarded as a form of installation art, as they combine physical features arranged in a real space with painted or photographic illusions of an even deeper space.

Contemporary artists have taken the form of the diorama a step further, constructing imaginary spaces and fictional situations. While the originators of the diorama strove to heighten its sense of reality, many contemporary artists have used the medium’s format to
comment on its artificiality or hyper reality.

My interest in photographing dioramas grew from an image I took on vacation in Ann Arbor. While visiting the Exhibit Museum of Natural History at the University of Michigan, I came across a small, strange diorama in a rounded case. This diorama showed an underwater view of a pond. What drew my eye was how poorly it was constructed. The plastic at the top, representing the surface of the water was bent and a harsh light shone through it. A plastic looking frog was stuck up into the water’s surface, its head obscured from view, its legs dangling. I took the shot, thinking the image would show me what my eyes were seeing, but a much different image resulted. This photograph transformed the imperfectly modelled diorama into a magical underwater space. My interest was piqued and when I next had the opportunity to photograph in a natural history museum, this time at the State Park in Morrow Bay, California, I engaged the dioramas with much more concentrated focus. Once again I was surprised, both by the seamless transition between the foreground elements and the painted background and by the hint of life seen in the taxidermy.

There is an obvious disconnect between the experience represented within a diorama’s case and its reality. I became more aware of this dichotomy the longer I trained my eye on various dioramas. It was the lines between the real and the unreal; the version of life portrayed and the actuality of death; the inherent beauty of the animals within their fabricated environment and the understanding of its invention; that first found me both attracted and repelled.

What happened as I continued to photograph, was that both my interest in and respect for the dioramas began to broaden, as I made more discoveries through the lens. It is these growing interests that lead me to begin researching the diorama’s history and grew into an appreciation for both its craft and its mission.

I am of course, not the first photographer to train their eye on the diorama. The most well known artist to do so is the Japanese photographer, Hiroshi
Sugimoto. When he first arrived in the New York in 1974, Sugimoto visited the American Museum of Natural History. Sugimoto relates, “I made a curious discovery while looking at the exhibition of animal dioramas: the stuffed animals positioned before painted backdrops looked utterly fake, yet by taking a quick peek with one eye closed, all perspective vanished, and suddenly they looked very real. I had found a way to see the world as a camera does. However fake the subject, once photographed, it’s as good as real.” (4) For the haunting body of work that followed, “Diorama,” Sugimoto used a large format camera. The complete clarity of the image worked to both transform the diorama into a convincing representation of reality and to reveal its artificiality. In the mid-seventies, Richard Ross photographed within various natural history museums for his body of work, Museology. Many of Ross’s photographs approach the natural history museum in a very different way, clearly showing us disparate edges and the fabrication of the animals positioned within the frame. Ross states, “I was new to photography but understood the practice to be an illusion of space and time, rather than reality....or a certain reality. When I stood in front of a diorama, created by Ackley, the idea was pretty similar. The diorama itself was an illusion of space and time. When the two merged, in panoramic format, and things flattened, it was difficult to see the illusion and there was a different level of credibility that I could control by moving in or out from the scenario. I also was interested in the glass as a transparent membrane. On one side was reality, on the other illusion, similar to how we view TV. We don’t describe ‘I saw a TV show about nurses and doctors’...rather ”I saw Greys Anatomy last night.’ The membrane is taken away and people refer to the shows as reality. In the dioramas we are more conscious of it. It comes down to how omnipotent we can be when we see the animals in proximate space and leave them undisturbed. The successful illusions are so fantastic, because they make us invisible gods.”

Another contemporary photographer, Gregory Crewdson, constructs his own large-scale dioramas to create psychologically haunting images. Where Sugimoto strives to breath life into the taxidermied animals, Crewdson’s living inhabitants appear more dead than alive. They present a narrative which comments on suburbia, showing his audience a familiar place now transformed and unsafe. (5) Foxes and other animals walk the streets or lurk outside your door. A woman floats lifeless within her living room. These images “draw our attention to acts of both looking in and being watched,” placing us in a venerable relationship with nature. (5)

Another artist, Harri Kallio explored the hypothetical and the real in his body of work, “The Dodo and Mauritius Island.” He first constructed museum quality fabrications of the extinct dodo bird based on the scientific literature, bones, and paintings. (6) The birds were then photographed in their last known habitat, Mauritius Island, further enriching the illusion.

Each of these examples offers evidence of the significance of working within a series. With each situation there are new discoveries and knowledge that you can bring to the images that follow. The next opportunity for me to photograph within a natural history museum took place when I came to the American Museum of Natural History, © Richard Ross
The beauty of the Akeley’s dioramas mesmerized me and several of my photographs from that shoot simply reflect the elegance of the displays through my reframing of the diorama through the lens. It was not until I turned a corner within the museum and that saw this reflection of a gorilla and human skeleton on the glass of the chimpanzee’s case, that I came to a new way to realize my own vision for the work. Not only did the reflection extend the meaning of the image, but also the chimpanzee’s concentrated gaze into the camera’s lens breathed life into its taxidermied body. Another image from that shoot is of this desperate looking weasel surrounded by his or her obviously deceased brethren. Through her worried gaze she seems to ask, “Will I be next?”

I have had the opportunity over the past few years to photograph in several museums in the US as well as abroad. I have made it a point to visit all the museums that include Carl Akeley’s dioramas, The Field Museum in Chicago, the American Museum and the Milwaukee Museum, which I had an opportunity to revisit this past year.

With each new museum I have an opportunity for discovery. What will I choose to include or exclude from the photograph? This image from the Milwaukee Public Museum excludes the three dimensional warrior figures from the rest of the diorama and forces us to meet the eyes of the attacking painted tribesmen. The fact that the tribesmen are obviously painted gives the audience an immediate clue into its unreality. A photograph shot from the left edge of the same diorama shows a very different view of the scene, placing the audience into the position of a warrior facing a charging lion. This image from the Bremen Museum in Bremen Germany also establishes a relationship between the painted background and the taxidermied buffalo, with only a hint of a spear’s point on the right to let the viewer know another attacker lies beyond the frame. In this photograph from Chicago’s Field Museum, the camera’s low point of view brings us dangerously close to being trampled.

Point of view must also be considered in relationship to the animal’s gaze. The more directly the animal looks into the eye of the viewer, the more alive they become. This can give us a warm feeling at first, as in the shot of these donkeys or make us immediately alarmed as when we are confronted with this screaming...
money or placed in the path of these stampeding buffalo. Either way, we are eventually brought to the reality of their lifelessness.

While the majority of time I have worked to heighten the illusion of reality, at least at first glance, at other times I have chosen to divulge more information, revealing aspects of the museum’s constructed environment. When the photograph can create a tension between an illusionary, naturalistic space and its reality as an artificial construction, it is able to employ what I find so compelling about the natural history diorama.

Although I still view the chimpanzee image from the American Museum as my most surprising reflection, I am always looking for the relationships I can draw between the diorama and what is reflected on its glass. I find the discovery of reflections compelling, as they push beyond a reframing of the constructed scene to the creation of a new image entirely. This image of zebras from the Carnegie Museum in Pitts. shows a slice of much larger diorama. The reflection was created because of the turn of the glass case. In this image from the Bremen Museum, the animal on the left of the frame gazing at the winter foxes is merely a reflection from another case. These ducks, from the Field Museum, gaze in on themselves, while this gazelle from Bremen racing to escape its aggressor, prepares to leap a reflected fence.

The photographer, Baldwin Lee, once told me that every photograph has a size in which it works best. When contemplating how to display these images, I thought about that statement and decided that these particular photographs needed to be large. How else could to viewer truly confront the animals within their displays? The larger the animals were within the image, the more life seemed to emerge from their stuffed bodies. In the case of these mice shot in Museo Civico di Zoologia in Rome, Italy, though, the scale was surprising in another way, since the mice actually became larger.
than life. Reinforcing the concept further lead me to print all the images the same size, 23.5 x 35 and to frame them without a mat in shadow box frames with small brass plaques engraved with the name of the museum and its location. When displayed in a gallery, the frames mimic the experience of viewing the cases within the natural history museum.

Though I have photographed within natural history museums for several years, my interest in them continues to grow and expand. I began this process not realizing the complexity of the artistic vision and craft of the diorama artists, nor understanding that their mission was to enhance our understanding of and appreciation for nature in order to move us to conserve its life and beauty. Certainly in this day and time that is an important message to hear.

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