

Charles R. Knight: The Artist Who Saw through Time

BY RICHARD MILNER



Charles R. Knight (1874-1953) was born in Brooklyn and, despite spending most of his life in Manhattan, painted thousands of animals from the farthest reaches of the Earth. Today he is best remembered as the father of “paleoart,” who opened a window into prehistoric times. Beginning in the 1890s, he dominated that genre for almost half a century, creating vistas of long-vanished animals and landscapes no human has ever beheld.

During Knight’s childhood, fossil excavations in the American West were not only the stuff of sensational newspaper stories, but were also rapidly expanding our knowledge of Earth’s prehistoric past. From 1877 to 1892, the “Bone Wars” waged by paleontologists Edward Drinker Cope and Othniel C. Marsh ultimately filled museums back east with the skeletons of stegosaurus, apatosaurus, and their kin. Eventually Knight brought those bones to life with his drawings, paintings, and murals for New York City’s American Museum of Natural History and Chicago’s Field Museum.

His depictions appeared in such major magazines as *The Century*, *Popular Science*, and *National Geographic* and were endlessly reproduced in books, toys, and comic books, and also on the silver screen. The paleontologist Stephen Jay Gould (1941-2002) opined that Knight had greater influence in establishing what extinct animals looked like than any scientist ever did: “Not since the Lord himself showed his stuff to Ezekiel in the valley of dry bones had anyone shown such grace and skill in the reconstruction of animals from disarticulated skeletons,” Gould wrote. Knight “painted all the canonical figures of dinosaurs that fire our fear and imagination to this day.”

RIGHT PLACE, RIGHT TIME

Knight did not grow up drawing dinosaurs, as many children do today, because no one yet knew how they looked. Instead, the boy was fascinated by living animals. He recalled that his father would often read him uplifting bedtime stories. One night, Charlie piped up, “Father, I’m tired of hearing about Jesus. Tell me about elephants.” Soon he was copying animals out of the



Charles R. Knight painting early humans ambushing a woolly mammoth, c. 1930s.
Photo colorized by Viktor Deak, 2012



dictionary and from illustrated bestiaries. Knight wasn’t satisfied with copying, however, finding it more rewarding to draw from life. Though Brooklyn once had its share of forests and wildlife, by Knight’s day they were long gone. But he was able to find inspiration at Manhattan’s new American Museum of Natural History, and in the city’s zoos. His insistence on drawing from living animals became a lifelong principle. “I never make any direct use of photographs and I could not consent to do so,” Knight wrote, partly because he never wished to share credit

“Bushman,” Male Gorilla, Lincoln Park Zoo, Chicago

c. 1940s, Conté crayon on paper,
approx. 14 x 10 in.

Location unknown



Leaping Laelaps

1897, Gouache on board, approx. 12 x 15 in.
 American Museum of Natural History, New York City

with a photographer. “I use a photograph merely as a reminder of the real thing.” Instead, each of his drawings (he sketched some 800 living species) captures the personality of an individual, rather than a “typical,” representative of the species.

By 16, Knight was earning a living selling animal illustrations to many magazines, and he landed his first and only salaried job, at the J&R Lamb Studio, a stained-glass company in Greenwich Village. Not surprisingly, the firm assigned him church window designs that included Biblically symbolic animals such as lions, eagles, pelicans, and wolves.

Knight developed his artistic talent despite the fact that when he was 6, his right eye had been severely damaged by a pebble thrown by another child. This, he wrote later, imposed “a great deal of extra work upon my left eye, which was already both near-sighted and astigmatic to a marked degree.” As he reached young adulthood, Knight became increasingly unable to distinguish distant objects clearly, and he knew that his eyesight was failing. It continued to deteriorate — exacerbated later by cataracts — so that for much of his life, Knight was legally blind. Somehow he persevered, refused to call attention to his handicap, and produced some of his greatest murals when he could barely see at all — a feat of astounding courage. He became totally blind roughly two years before his death.

In 1877, the American Museum of Natural History opened at its present location on Central Park West. Knight’s father’s employer, the banker J.P. Morgan, was the museum’s treasurer and gave the Knights privileged access there. Behind the scenes, the taxidermists and exhibition builders were impressed with the youngster’s drawings and allowed him to observe their preparation of carcasses for mounting. This time in their labs and workrooms provided him with an informal introduction to the science of comparative anatomy.



Bengal Tiger and Peacock

1928, Oil on canvas, 45 x 60 in.

On view through April 27 at Kokoon Arts Gallery, Cleveland (wgsproductions.com)



Knight's head of an African elephant on the north façade of the old Elephant House at the Bronx Zoo
 1906, Stone carved after a plaster cast of the clay original, approx. 81 x 40 in.
 Bronx Zoo Wildlife Conservation Park
 Photo: Viktor Deak, 2011

When he was 20, Knight learned that Dr. Jacob Wortman of the fossil department was seeking someone “who might make him a drawing of a pre-historic animal.” After studying its fossilized bones and speaking at length with the paleontologist, Knight produced an accurate and strikingly lifelike watercolor likeness of the pig-like Elothorium. Knight recalled that this drawing changed his life forever: “Wortman was much pleased with my initial attempt, gave me more work to do, and later I met Henry Fairfield Osborn, then a professor at Columbia who was then taking over the senior position in the department of paleontology.”

The ambitious, autocratic Osborn, who would reign as president of the museum from 1908 to 1933, took Knight under his wing. In 1897, he arranged for Knight to spend a few weeks with his own mentor, the legendary Edward Drinker Cope of the Academy of Natural Sciences in Philadelphia. As suggested above, Cope and his archrival at Yale University, Othniel C. Marsh, had collected more dinosaur bones in the West than all other paleontologists combined.

Now broke and ailing, the reclusive naturalist and his pet Gila monster lived among his rocks, fossils, and books in Philadelphia. Knight visited Cope to absorb some of his brilliant interpretations of the way dinosaurs and other prehistoric creatures looked and behaved. Just a few weeks later, Cope died. The artist began to build on Cope's sketches and ideas in his works, which now focused on reconstructing dinosaur behavior and anatomy. One of the most famous paintings that resulted from Cope's tutelage is *Leaping Laelaps*, which imagines battling carnosaurs as quick, ferocious, and even acrobatic — a different view from the then-conventional view of them as stupid and slow-moving.

Opened in 1899, the New York Zoological Park (better known as the Bronx Zoo) provided a steady stream of living models for Knight to sketch, imported from far-off tropics and tundra around the world. The zoo owed its creation to wealthy businessmen, especially members of the Boone and Crockett Club who took long and wide-ranging hunting expeditions. To their credit, they realized that North America's

Mural of Woolly Mammoths and Reindeer near the Somme River, France (detail)
 1916, Oil on canvas, 2 joined panels (each 108 x 600 in.)
 American Museum of Natural History, New York City





Neohipparion (early horse)

c. 1915, Watercolor, gouache, and pencil
on paper, approx. 9 x 13 in.

American Museum of Natural History, New York City

During a decade's residence in an artists' colony in nearby Bronxville, Knight produced many paintings for the American Museum of Natural History. When Osborn began to commission large murals, Knight found that he needed a separate studio in which to work — one large enough to accommodate 50-foot canvases. Resisting pressures to work inside the museum (where other employees liked to offer unwanted critiques), Knight finally rented a deserted factory in Mount Vernon, New York, in 1916. There he produced the five-panel woolly mammoth mural for the Hall of the Age of Man, which Osborn hailed as his "magnum opus." Ultimately Knight spent close to 30 years painting monumental murals for this museum.

As he developed his method of working, Knight abandoned the taxing procedure of drawing and painting murals on huge canvases on the floor. Instead, he labored over smaller oil sketches measuring about four by three feet. By this time,

he was already legally blind and had to view his work from just inches away. Once approved, the small paintings were then copied by assistants onto the immense wall canvases, employing a grid system for accuracy. Knight would only climb the scaffolding near completion to put in fine details; he could not see them at all from the floor.

Early on, Knight adopted a method that ensured startling realism when he painted shadows for his figures. He started by sculpting miniature models of the mounted fossil skeletons and then added clay muscles and skin. Finally, he would move the finished models outdoors into the sunlight to observe how shadows fell at different times of day, then duplicate those effects in his paintings.

FROM NEW YORK TO CHICAGO

Despite his prodigious output, Knight was an inept and indifferent businessman. With quiet confidence in his own mastery, he stubbornly

wildlife might disappear in their lifetimes — a view shared by founding member Theodore Roosevelt. They resolved to protect and breed wild animals, and thus formed the New York Zoological Society. During Knight's childhood, the American bison had been slaughtered to the point of near extinction as part of a genocidal government policy to starve and control Plains Indian tribes, whose livelihood depended on the great herds. At the Smithsonian Institution's National Zoological Park in Washington, D.C., Knight sketched a bison bull, and in 1901 his image was engraved on a ten-dollar note — now a prized collectible known as the "Buffalo Bill." (Later a U.S. postage stamp featured the same image.) In 1905, a small group including Osborn and Roosevelt founded the American Bison Society at the Bronx Zoo, where they established a breeding herd and soon began shipping bison back to preserves in various Western states. Today, 600,000 buffalo live there, many of them descendants of that tiny herd in the Bronx.

The main purpose of the New York Zoological Society was to create an innovative park where mammals and birds would live comfortably in spacious pens and "flying cages." Founding director William T. Hornaday promised that the zoo would extend special services to artists: "... there is to be a studio in the lion house. Here, under a glass roof, artists may sit at all times. Such animals as they may wish will be brought in to them."

Around the turn of the century, many artists were employed in creating public pieces as part of the City Beautiful Movement, which sought to inspire visitors to American cities' museums, courthouses, zoos, and civic centers. Knight was commissioned to produce sculpted heads of an African elephant, a rhinoceros, and zebras on buildings at the Bronx Zoo, where they can still be seen today.

Sabre-Tooth Cat (Smilodon)

1909, Oil on canvas, approx. 18 x 30 in.

American Museum of Natural History, New York City





Snowbound

1911, Oil on canvas, 26 x 20 in.

On extended loan to the Staten Island Museum, New York City

According to the account passed down to the artist's granddaughter, Rhoda Knight Kalt, he turned down the commission and returned immediately to New York, where his daughter Lucy, then in her mid-20s, became furious. She immediately headed to Chicago and confronted the trustees: "Don't you realize that when it comes to prehistoric murals, you have turned away the modern Rembrandt?" "Young lady," came their chastened reply, "please go back to New York and tell your father that he can paint the halls any way he wishes."

Thus, after a lifetime in debt, Knight finally scored in 1926 — a commission of \$139,000 to design and paint the Field's Dinosaur Hall. At first, Osborn resented that Knight had taken his artistry elsewhere, but eventually wished him well. Knight produced 28 paintings for the Field Museum over the next four years.

Lucy's intervention had saved the day, yet the family's rejoicing was comparatively short-lived. Knight promptly turned over most of his earnings to a conservative businessman to invest. Unfortunately, that man was a Republican who feared that the inauguration of Franklin Delano Roosevelt in 1933 would usher in a socialist regime, so he sold all of Knight's holdings at bargain prices. The artist's wife, Annie, was devastated and took to her bed with depression. When she begged her husband to confront his friend about recouping some of the money, he replied, "I'm too busy to get involved in money disputes. I have to paint."

In 1927, the anthropologist Henry Field (a nephew of the museum's president) invited Knight and his family to join him at the Paleolithic caves in Les Eyzies, France, and Altamira, Spain. There, during the last Ice Age, 17,000 years ago, skilled artists had drawn now-extinct mammoths, reindeer, horses, and rhinoceroses on the walls. Knight had previously researched their imagery and created the American Museum of Natural History's mural of the Cro-Magnon painters of Font-de-Gaume, France. Still, reading about them was a far cry from standing where they had stood, or overlooking the river valley where mammoths had come to drink.

That tour of ancient wall art, conducted by the prehistorian Abbé Henri Breuil, only deepened Knight's appreciation for our Paleolithic ancestors. As a teenager, he had been caught in New York City's deadly blizzard of 1888, a trauma he never forgot. As he contemplated the hardships that early humans endured during the Ice Age, he empathized with them, sometimes to the point of tears. And, of course, Knight was amazed by their skill at drawing animals. Indeed, from these cave walls he copied the mounds of fat atop the mammoths' heads, along with the prominent shoulder humps — soft features that the animals' bones had not revealed back at the museum. He trusted the accuracy of the Paleolithic painters' observations. After all, they were also naturalist-artists, very much like himself. ■

maintained his independence — at considerable cost to his bank account and peace of mind. More than once, he exhausted himself completing major murals for the museum, only to wind up in debt.

Knight also had to deal with Osborn's unrelenting attempts to control his art. He welcomed the director's corrections regarding scientific accuracy, and sometimes even regarding color and composition. But he absolutely would not tolerate Osborn inviting other artists and consultants to review his work. A conflict arose in 1925 over Osborn's plans to launch a new Dinosaur Hall; Knight refused to do its sketches piecemeal, insisting that the hall be designed as a single work of art. When Osborn could not raise the necessary funds, Knight decided to seek work elsewhere. The possibility of a commission to create a series of murals and paintings for the new Dinosaur Hall at Chicago's Field Museum provided an unexpectedly lucrative opportunity.

Desperate to get out of debt, Knight met with the museum trustees in Chicago. But just when he thought his worries were over, a few of his prospective sponsors suddenly morphed into art directors, their only qualification being the purse strings they held. The "decorative" and "mysterious" hues that Knight had proposed were too muted and dreamlike, they said, so he would need to brighten his palette.

RICHARD MILNER is an author, anthropologist, and lyricist based in New York City. His 180-page biography, *Charles R. Knight: The Artist Who Saw Through Time*, was published by Abrams last year. For details, visit darwinlive.com and <http://tinyurl.com/a9e7o65>. On May 9, Milner will give a free lecture about Knight at the Yale Peabody Museum of Natural History in New Haven; in addition, the artist's granddaughter, Rhoda Knight Kalt, will share reminiscences of her grandfather.

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