

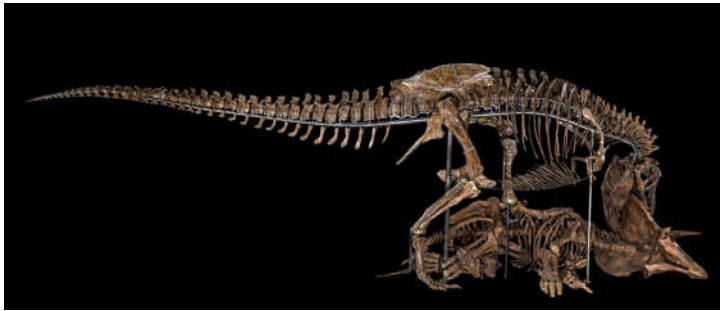
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<https://www.wsj.com/articles/david-h-koch-hall-of-fossils-review-a-too-shallow-treatment-of-deep-time-11565724172>

EXHIBITION REVIEW

‘David H. Koch Hall of Fossils’ Review: A Too Shallow Treatment of Deep Time

The newly renovated display at the Smithsonian National Museum of Natural History is filled with fascinating dinosaurs, but the story it tells is confusing and unfocused.



A Tyrannosaurus rex attacking a fallen Triceratops horridus PHOTO: SMITHSONIAN INSTITUTION

By *Edward Rothstein*

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Washington

What do we want from dinosaurs and other fossilized bones? Perhaps too much. Thomas Jefferson displayed remnants of an American mastodon in the White House as if offering a primal foundation for the new nation. Andrew Carnegie sponsored excavations that led to the discovery (and naming) of the *Diplodocus carnegii*—a monument to his reach. Dinosaurs were Darwinian masters of the Mesozoic era for some 160 million years and looked the part; their bones still seem repositories of power.

In recent decades, dinosaurs have also evolved. They have been tamed in children’s books, softened by avian feathers, and have reclaimed lost terrain with a vengeance in the “Jurassic Park” movies. And always, they have reflected our fears and desires. But now they appear in a new incarnation—along with eons of companions—in which our fears and desires become the center of attention.

Before it closed for renovation in 2014, the fossil hall of the Smithsonian National Museum of Natural History was one of the most popular galleries in the world, judging from the eight million visits the museum attracted the previous year. The new hall, which opened in June, has 31,000 square feet, more than 700 fossil specimens, 13 videos and eight touch screens. It cost \$110 million—\$70 million in federal funds, and \$35 million of the \$40 million exhibition cost donated by David H. Koch, for whom the

hall is now named.



An installation view of the exhibition PHOTO: LUCIA MARTINO/SMITHSONIAN INSTITUTION

To fully understand its new approach, think of the traditional diorama: We peer through glass to see vividly realized habitats—idealized visions of nature. There

are no human footprints, only creaturely life and the primeval earth. Dinosaur mounts in recent decades still present dramatic tableaux—in the new hall, a massive *Tyrannosaurus rex* is about to rip the head off a fallen *Triceratops horridus*—but pretense is gone. These are skeletons going at each other—not even skeletons, because many bones are shaded casts. The result is not idealized nature, but stagings of hypotheses; we are part of the story. There are “realistic” dioramas here, but they have the size and impact of doll houses.

David H. Koch Hall of Fossils—Deep Time

National Museum of Natural History

In fact, in this hall we loom large over everything—conceptually if not literally. The hall’s subtitle, “Deep Time,” is an allusion to an immense time scale: The history of *homo sapiens*—some 300,000 years—is a sliver in life’s 3.7 billion-year

history. But the Smithsonian chronicles history in *reverse*. The choice is bizarre. Evolution becomes incomprehensible. We begin with *homo sapiens* and proceed backward to single-cell organisms. It is as if humanity were casting its shadow back over the past.

And into the future. *Homo sapiens* dominates this exhibition just as its mastery over other species and of nature itself has recently led some scientists (and the exhibition) to call this the Anthropocene age. But here, humanity is not evolution’s consummation; instead, it heralds catastrophe. The first major skeleton displayed here is a composite cast of an American mastodon—right near a brass statue of an Ice Age human, hunting it.

“Many large land animals,” we read, “went extinct after modern humans arrived.” In North America, 74% of species over 110 pounds disappeared starting around 14,000 years ago. In South America, 82% disappeared; in Australasia, 97%. Humanity, the



A Megaloceros, often known as the 'Irish Elk,' which is the Smithsonian's oldest mounted fossil skeleton PHOTO: SMITHSONIAN INSTITUTION

exhibition notes, is associated with habitat loss, disease, pesticides, overfishing and, more recently, climate change. The past 70,000 years are labeled “Mass Extinction in the Making.”



Detail of the show's T. rex PHOTO: SMITHSONIAN INSTITUTION

Climate change is the apotheosis of the Anthropocene. So the exhibition has a mission. “Exploring Earth’s deep past,” we are told, “helps us understand our world today and plan a sustainable future.” This is why the hall emphasizes “mass extinctions.” The end-Permian extinction took place 252 million years ago and may have been caused by a million years of volcanic eruptions in Siberia. Ninety percent of marine life was wiped out. Another extinction may have made homo sapiens possible. Sixty-six million years ago a six-mile-wide asteroid slammed into the earth, causing tsunamis, acid rain and global cooling.

It killed off dinosaurs—except for birds. After a few million years, the climate stabilized, and mammals found new opportunities.

As for the rest of the fossil hall, it is exasperating. There is more information than can readily be absorbed, but you have to work too hard (and backward) to shape a narrative. So much space is devoted to the Anthropocene notion that fossil displays are crammed. Immense specimens are hemmed in by vitrines, glare and competing images. So much money has been spent, so much expertise applied, yet the hall never evokes a sense of wonder.



'David H. Koch Hall of Fossils—Deep Time' at the National Museum of Natural History PHOTO: LUCIA MARTINO/SMITHSONIAN INSTITUTION

Its main concerns lie elsewhere. But how valid are comparisons between past cataclysms and future ones, presumably caused by climate change? How does understanding deep time help “plan a sustainable future”? Films here show contemporary fix-its like leaving soil untilled or planning for flood waters. Interactive displays urge young people to “make a difference.” Create “music about environmental justice,” is one suggestion. Or: “Plant a garden in your community.” Such are the lessons of deep time.

As for climate change, it is largely unexplored, a threat amplified by implication. We are meant to be disturbed. But it is more disturbing that this hall— like so many other science museums—is sacrificing so much on a hortatory altar. It is a deformation of deep time that leaves us in shallow waters.

—*Mr. Rothstein is the Journal's Critic at Large.*

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