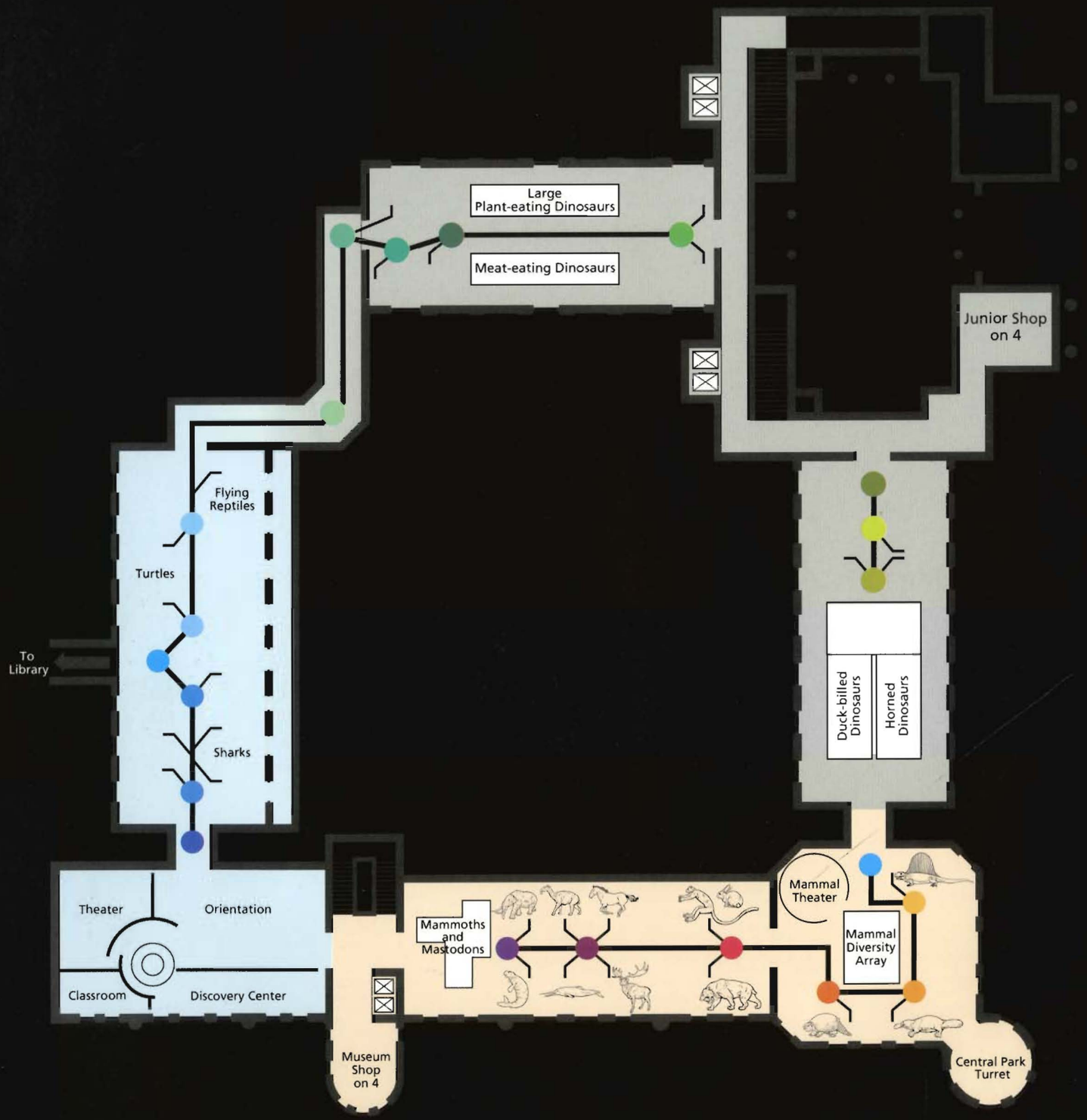
ACTIVATING PUBLIC SPACE *to echo a museum's message and provoke multiple levels of response.* ■ In our recent work for the American Museum of Natural History and the United States Holocaust Memorial Museum, we have experimented with ways to activate the total environment, including pathways and transitional spaces, in service of the interpretive experience and communications goals. We look for architectural and environmental metaphors for the key pedagogical concepts behind an exhibition, so that space traditionally left neutral is given voice. This approach casts a broader informational net to engage the receptivities of different visitors. We feel the results are seen in people's sense of immersion, attention span, and enhanced memory of their experience, provoking them to discuss the exhibit with others and engage in activities such as reading more on the subject, visiting related sites, or becoming more involved with the museum. ■ **AMERICAN MUSEUM OF NATURAL HISTORY—THE MAMMAL HALLS** The Lila Acheson Wallace Wing of Mammals and Their Extinct Relatives opened in May 1994, and comprises the first third of our renovation of the Museum's renowned fossil collections. The renovation, to be completed in 1996, will unite the Museum's mammal and primitive-vertebrate holdings with its world-famous dinosaur collection in a sequence of six light-filled halls on the building's entire top floor. ■ The process of planning, designing, and constructing the halls entailed the rearrangement and reinterpretation of the collection to reflect a current approach to understanding vertebrate evolution—which differs greatly from the views held when the collection was last organized. It also aims to involve the visitor by emphasizing that scientific knowledge is not a fixed plateau from which to view prehistory—but a great detective game. ■ The Museum expressed several essential goals that called for broad, strategic design responses. These became governing principles of our design work — and they are among the first qualities of the exhibition that visitors notice. ■ *Creating a Spatial Metaphor.* As Dr. Lowell Dingus, Project Director, AMNH, describes the process, "The breakthrough in our thinking about these halls occurred early in the development of our plans. We were wrestling with how to make these halls different from all the others. Both of us had been around to visit many contemporary exhibits about evolutionary history, and although each had its distinctive and creative elements, they basically revolved around the same organizing principle—a walk through time. In order to break out of this mold and provide our exhibition with a distinctive signature, we'd have to come up with a different way of presenting the information. But how? We hit upon the idea that people are naturally interested in their family history, especially in a country of immigrants like the United States. In a very real sense, evolutionary history simply represents an extrapolation of one's family history, no matter what kind of organism you are. So, we decided to see if we could take the basic concept of a family tree and spatially expand it . . ." ■ This family tree, or cladogram, thus became the main circulation path and alcoves, so that visitors actually walk and

ACTIVATING SPACE Visitors to the new mammal halls may walk the black terrazzo path in the exhibit halls for a highlighted tour of evolution—activating the circulation space itself, space that has traditionally been left neutral. Scientist Stephen Jay Gould wrote: ". . . They have created this new icon at gigantic scale, so that we can perambulate along the tree of life and absorb the new scheme viscerally by walking, rather than only conceptually by reading."


Mammals whose foot has a
HOOF
belong to a group called ungulates.
pigs, deer, cattle,
and their relatives
ARTIODACTYLS

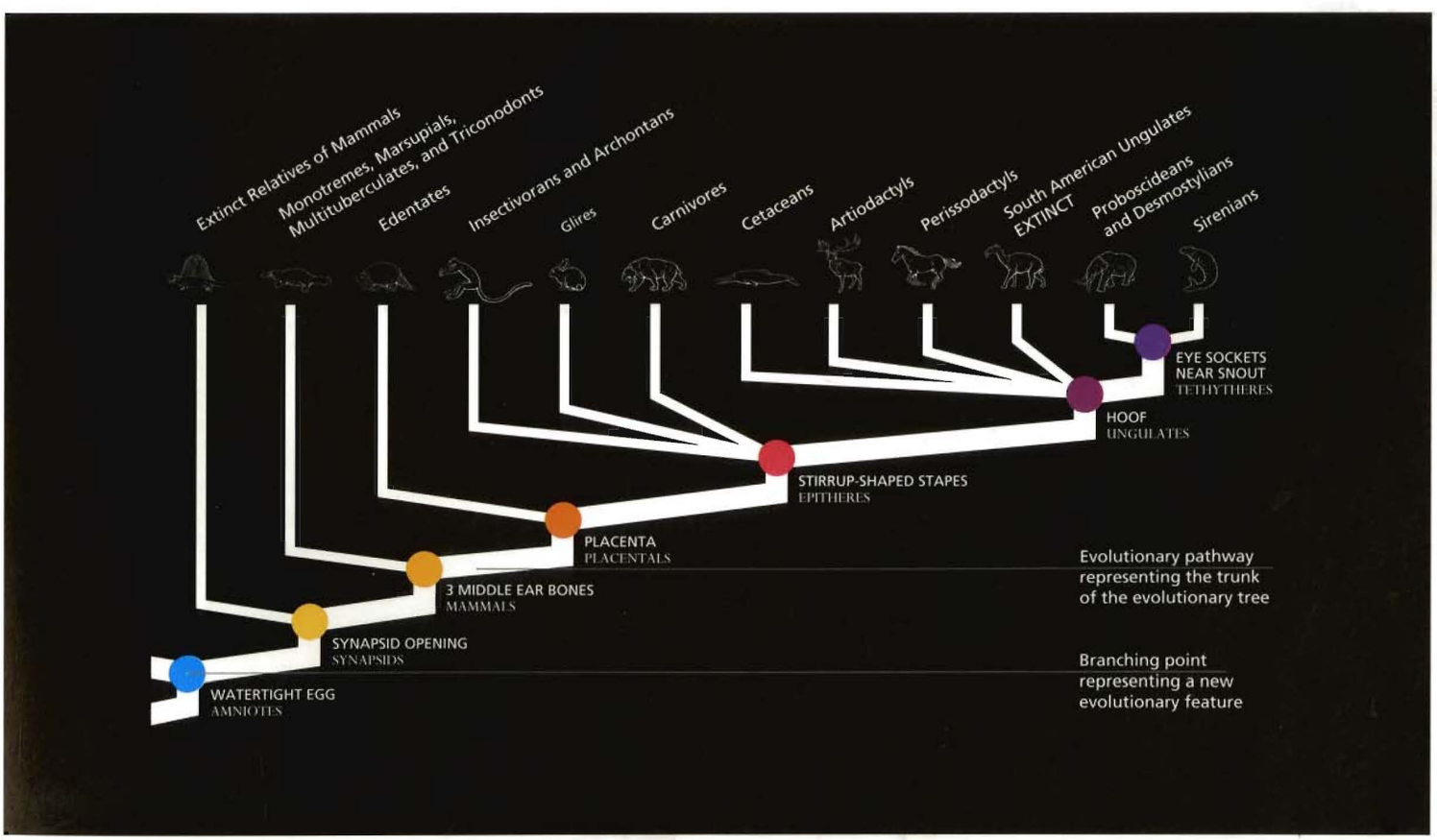
The extent of the Museum's renowned fossil collection permits a comprehensive story of evolution on earth to be told, using lively mounts and a minimum of barriers. Wire frames are used to fill in the bodies of animals where the complete fossil record is lacking.


PLACENTA


Large
Plant-eating Dinosaurs
Meat-eating Dinosaurs
Junior Shop
on 4
Flying
Reptiles
Turtles
To
Library
Sharks
Duck-billed
Dinosaurs
Horned
Dinosaurs
Theater
Orientation
Classroom
Discovery Center
Mammoths
and
Mastodons
Mammal
Theater
Mammal
Diversity
Array
Museum
Shop
on 4
Central Park
Turret

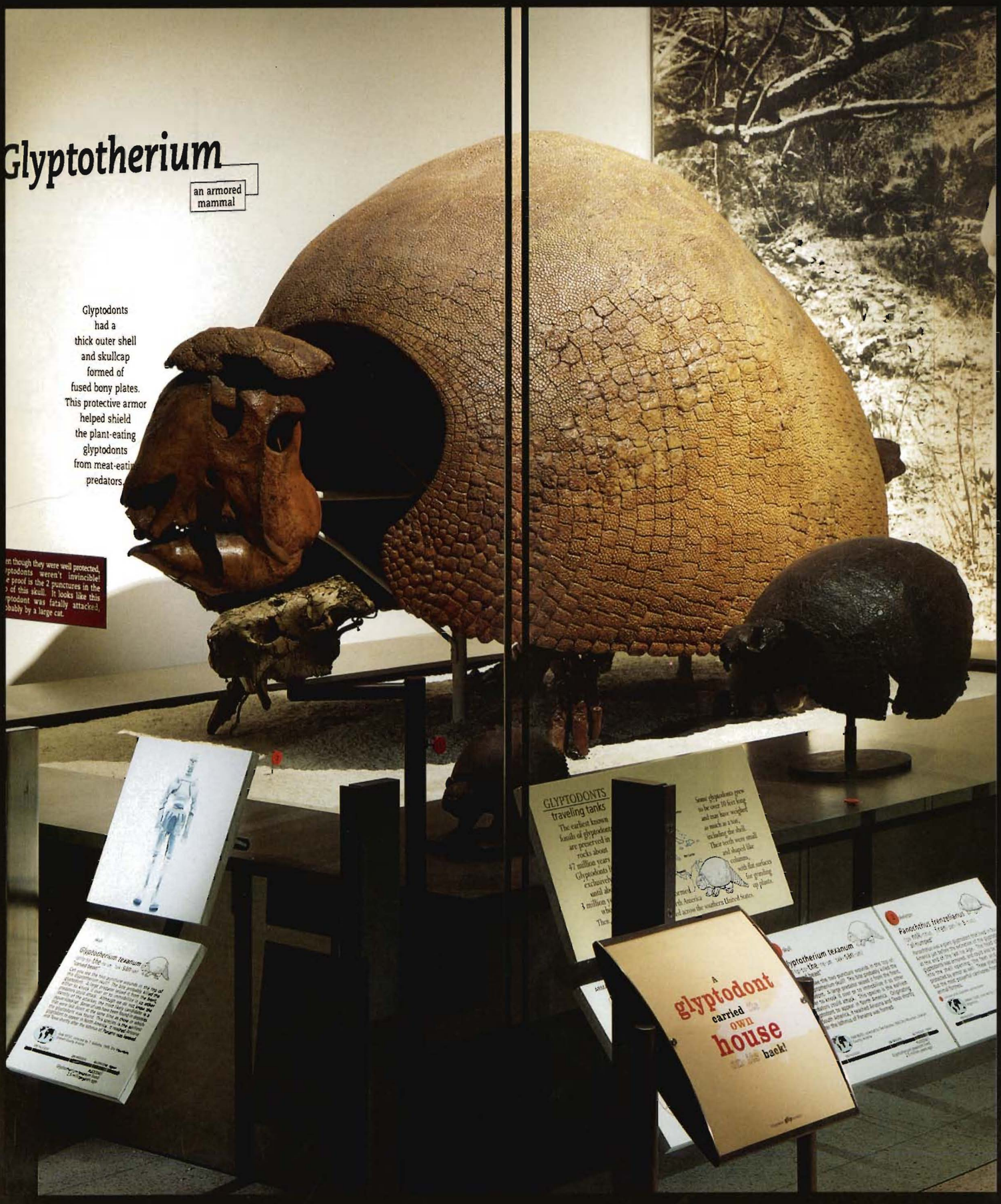
experience a branching system as they learn about one. This was one way of activating public space (circulation space) that would otherwise be neutral, harnessing it in support of the exhibition's message. ■ *Linking Great Collections in an Interpretive Loop.* The Museum was planning to redo its fourth-floor mammal halls, but it was clear that the nearby dinosaur halls needed updating as well; and primitive vertebrates were consigned to an alcove where only a fraction of the collection could be displayed. Because of the longtime presence of a library on the fourth floor, there had been no thought that these great evolutionary stories could come into a more dynamic relationship, spatially and interpretively. ■ During masterplanning, we realized that the library, which needed renovation anyway, could be moved to expanded space in a new building—freeing the top floor for a truly big story of vertebrate evolution. As the Museum was already committed to some renovation, we proposed adding primitive vertebrates to the program and uniting them with the dinosaurs and mammals by means of a circulation loop through the whole fourth floor. Next year visitors will be able to tour the world of vertebrate paleontology, from early fish to much closer ancestors, and perceive relationships with greater immediacy and clarity. ■ *The Architecture as a Hidden Asset.* The Museum was aware of the dim and fusty ambiance of its former fossil halls, which tended to make visitors feel like fossils, too. To match the new interpretation, the institution wanted a new look. ■ As we began to

ACTIVATING A DIAGRAM The scientific diagram depicts the nodes and branching pattern of evolutionary characteristics (below). It was transformed into the actual layout of the exhibit hall, with the nodes as stations on the main path and animal fossils as illustrative exhibits along the sides (opposite, lower right). A walking loop through the entire fourth floor was created for visitors to experience the full story of evolution from fish to mammals.



analyze the architecture underlying the old exhibits, it was a bit like finding happiness in one's own backyard. We realized that the original 19th-century grandeur of the halls—buried beneath a century's build-up of confining, light-blocking renovations—would be a beautiful metaphor for the grand adventure of evolutionary science. The restored Victorian volumes and details aptly refer to the time when museums were getting started—when scientists and patrons sought to impart the spirit of a great quest to the public and to students. At the same time, by keeping these soaring spaces airy, light-filled, and free of casework, we make reference to the new scientific approach. ■ *The Specimen as the Star.* The curators were concerned that the installation techniques never upstage the specimens, which should be observed as freely as possible. This concern about visual access to the fossil skeletons is one we more than took to heart. We sought a physical design that would be transparent, so that one's first impression on entering could be the beauty of the fossil skeletons and the perception that the circulation path forms a diagram. Buried structure in the floor supports the minimal glass barriers, and groups of specimens on open platforms were installed where possible. The colors and materials—stone, steel and glass—are quiet and harmonious. There is actually a wealth of graphics and text, but they are compressed into small packages and discreet places, so that one can soak up information without interrupting a primary visual dialogue with the collection. ■ **CREDITS:** Photographs: © Scott Frances/Esto; Editorial assistance: Peter Morais and Cheryl Filsinger.

UNIFYING SPACE AND SCIENCE The 19th-century architectural grandeur of the renovated halls became "a metaphor for the grand adventure of evolutionary science." Minimal casework allows maximum access to the skeletons—the stars of the exhibit.


Glyptotherium
an armored mammal
Glyptodonts had a thick outer shell and skullcap formed of fused bony plates. This protective armor helped shield the plant-eating glyptodonts from meat-eati predators.
an though they were well protected, yptodonts weren't invincible! e proof is the 2 punctures in the of this skull. It looks like this yptodont was fatally attacked, obably by a large cat.
GLYPTODONTS
traveling tanks
A glyptodont carried its own house on its back!

The Museum's well-known, beloved dinosaurs are presented in relation to their evolutionary nodes in the second phase of the renovation. These nodes encourage awareness that evolution is not a strict timeline, but more like a puzzle of shared characteristics.


Theropod dinosaurs include all saurischians except sauropods and their early relatives. The advanced feature of theropods is a
3-TOED
hind
FOOT
The central 3 toes are large,
while the first and fifth toes are small or absent.

The Museum's grand, historic architecture, "buried beneath a century's build-up of confining, light-blocking renovations," enhances the hall's progressive methods of evolution interpretation in airy, light-filled spaces atop the American Museum of Natural History.


allosaurs and tyrannosaurs
CARNOSAURS
ANURANS