Notes from the Fourth Floor of the American Museum of Natural History

- Could have used more benches. Much more cramped than the Smithsonian. I also found myself having to move out of the way for pictures more often. It was difficult to enter that trance-like state required for a good time at a museum.
- Design was much more lab-like and space-conscious than the Smithsonian. Very little in the way of interpretive artwork. AMNH is basically, "here's a fossil encased in glass and a highly technical description of what you're looking at. Good luck." Contrast this with the Smithsonian where there are numerous dioramas allowing visitors to imagine dinosaurs in their natural habitat.
- Interestingly, the Smithsonian explicitly assumes children as its audience. See image.



• AMNH had Moshops, a therapsid. Even the Smithsonian didn't go this deep. Permian therapsids are to other fossils what "the Stans" are to other countries. Once you realize they exist, you're like, "how have I never heard of these?" There's something surreal about the Permian megafauna – critters that had every right to be as famous as the dinosaurs but never quite fell into the zeitgeist. Is it a coincidence that the bulk of such fossils come from former Soviet states? They feel like they are from another world.



- The ground sloth display was remarkable. Six separate species all of varying sizes. Smithsonian only manages a Megatherium.
- The last time I visited this museum was in 2009 as a fifth grader. They still seem to be running the "mysterious Deinocheirus arms" gimmick even though it has since been classified as a Therizinosaur. Though the museum has added an overlying correction, the original plaque remains, as does the design of the exhibit.
- The basic design of the dinosaur section that of a split into the "ornithischian" and "saurischian" groups may be outdated per a highly-cited 2017 paper arguing that theropods are closer to ornithischians than they are to sauropods. If accepted by the scientific community, this theory would require a redesign of what is arguably the most important dinosaur museum in the world.
- I'll also note that the T-Rex present in the museum's cladogram is woefully outdated. The upright rather than horizontal posture, the dragging tail, the lack of feathers – this is more consistent with 1950's T-Rex iconography than it is with the modern scientific consensus. See below.



- Unlike the Smithsonian, in which the charismatic late-Cretaceous hadrosaurs are conspicuously absent (e.g. Parasaurolophus, Lambeosaurus), I couldn't think of any missing celebrity dinos at AMNH.
- Possible exception: they did not have anything from the spinosaurus/suchomimus/baryonix group.
- I noticed an unwillingness to bring up Jurassic Park in the interpretive text. Guests would probably learn a lot more if they knew Dilophosaurus, for example, was the thing that ate the fat guy in the first JP movie. Going back to the kid thing from earlier, this museum takes itself more seriously than the Smithsonian. That is, a JP reference in the interpretive text wouldn't be professional. It may also be too *Americanized* a reference for what is ultimately a museum located in a *global* city.
- On the subject of Dilophosaurus it's worth noting that the retractable frill and the poison-shooting ability from Jurassic Park are entirely fictionalized. Upon reflection this is fairly obvious. After all, how could one deduce the presence of such things from just a skull?



- The hanging Deinonychus skeleton was remarkable. One clearly gets a sense from this skeleton that birds are theropods. I also noticed the skeleton shaking slightly as I looked at it. This shaking never stopped, and it didn't seem to vary with the movements of passersby. I couldn't figure out where it was coming from.
- The Protoceratops age series was also remarkable. In fact, I visibly gawked in the museum when I saw it. Here you have *twelve* sequential Protoceratops skulls gradually increasing in size and demonstrating how the creature matures. Again, incredible.
- Some mammal highlights include: Brontotherium, Toxodon, and Diprotodon the latter of which is the largest marsupial to have ever lived (shown below), having filled a niche similar to that of hippos. There was also a Paraceratherium skull and the usual run of elephant relatives. No Uintatherium though, which Smithsonian had. Both Smithsonian and AMNH have a Teleoceras.



• As for the invertebrates – nothing. At least not on the fourth floor. While the Smithsonian focuses on ecosystems, including representatives from all walks of life at a given moment in time, AMNH focuses on cladistics. Perhaps this explains the more sterile, intellectualized vibe of AMNH.