

= Cultural depictions of dinosaurs =

Cultural depictions of dinosaurs have been numerous since the word dinosaur was coined in 1842 . The dinosaurs featured in books , films , television programs , artwork , and other media have been used for both education and entertainment . The depictions range from the realistic , as in the television documentaries of the 1990s and first decade of the 21st century , or the fantastic , as in the monster movies of the 1950s and 1960s .

The growth in interest in dinosaurs since the Dinosaur Renaissance has been accompanied by depictions made by artists working with ideas at the leading edge of dinosaur science , presenting lively dinosaurs and feathered dinosaurs as these concepts were first being considered . Cultural depictions of dinosaurs have been an important means of translating scientific discoveries to the public .

Cultural depictions have also created or reinforced misconceptions about dinosaurs and other prehistoric animals , such as inaccurately and anachronistically portraying a sort of " prehistoric world " where many kinds of extinct animals (from the Permian animal Dimetrodon to mammoths and cavemen) lived together , and dinosaurs living lives of constant combat .

Other misconceptions reinforced by cultural depictions came from a scientific consensus that has now been overturned , such as the alternate usage of dinosaur to describe something that is maladapted or obsolete , or dinosaurs as slow and unintelligent .

= = History of depictions = =

= = = Early human history to 1900 : Early depictions = = =

The classical folklorist Adrienne Mayor has proposed that the griffin of mythology is based on dinosaur skeletons found in the Gobi Desert . She noted that griffins were said to inhabit the Scythian steppes that reached from the modern Ukraine to central Asia . Mayor draws a connection to Protoceratops , a frilled dinosaur that was commonly found in the Gobi . This dinosaur has features associated with griffins : they share sharp beaks , four legs , claws , similar size , and large eyes (or eye sockets in the case of the fossils) , and the neck frill of Protoceratops , with large open holes , is consistent with descriptions of large ears or wings . However , the palaeontologist Mark Witton notes that the suggestion ignores pre @-@ Mycenaean accounts , and has not found favour with archaeologists including N. Wyatt and T.F. Tartaron .

The scientific study of dinosaurs began in the 1820s of England . In 1842 , Richard Owen coined the term dinosaur , which under his vision were elephantine reptiles . An ambitious scientist who used dinosaurs and other fossils to promote his beliefs , Owen was the driving force for the Crystal Palace dinosaur sculptures , the first large @-@ scale dinosaur reconstructions that were accessible to the public (1854) . These sculptures , which can still be seen today , immortalized a very early stage in the perception of dinosaurs .

The Crystal Palace sculptures were successful enough that Benjamin Waterhouse Hawkins , Owen 's collaborator , sold models of his sculptures and planned a second exhibition , Paleozoic Museum , for Central Park in Manhattan in the late 1860s ; it was never completed due to the interference of local politics and " Boss " William Marcy Tweed .

In the same period , dinosaurs first appeared in popular literature , with a passing mention of an Owen @-@ style Megalosaurus in Charles Dickens 's Bleak House (1852 ? 1853) . However , depictions of dinosaurs were rare in the 19th century , possibly due to incomplete knowledge . Despite the well @-@ publicized " Bone Wars " of the late 19th century between the American palaeontologists Edward Drinker Cope and Othniel Charles Marsh , dinosaurs were not yet ingrained in culture . Marsh , although a pioneer of skeletal reconstructions , did not support putting mounted skeletons on display , and derided the Crystal Palace sculptures .

= = = 1900 to the 1930s : New media = = =

As study caught up to the wealth of new material from western North America , and venues for depictions proliferated , dinosaurs gained in popularity . The paintings of Charles R. Knight were the first influential representations of these finds . Knight worked extensively with the American Museum of Natural History and its director , Henry Fairfield Osborn , who wanted to use dinosaurs and other prehistoric animals to promote his museum and his ideas on evolution .

Knight 's work , found in museums around the country , helped popularize dinosaurs and influenced generations of paleoartists . Interestingly , his early work showing fighting " Laelaps " (= *Dryptosaurus*) depicted dinosaurs as much more lively than they would be presented for much of the 20th century . At the same time , improvements in casting allowed dinosaur skeletons to be reproduced and shipped across the world for display in far @-@ flung museums , bringing them to the attention of a wider audience ; *Diplodocus* was the first such dinosaur reproduced in this way .

Dinosaurs began appearing in films soon after the introduction of cinema , the first being the good @-@ natured animated *Gertie the Dinosaur* in 1914 . However , lovable dinosaurs were quickly replaced by monsters as moviemakers recognized the potential of huge frightening monsters . D. W. Griffith in 1914 's *Brute Force* provided the first example of a threatening cinematic dinosaur , a *Ceratosaurus* who menaced cavemen . This film enshrined the fiction that dinosaurs and early humans lived together , and set up the cliché that dinosaurs were bloodthirsty and attacked anything that moved .

The now @-@ common trope of dinosaurs existing in isolated locations in today 's world appeared at the same time , with Arthur Conan Doyle 's 1912 book *The Lost World* and the works of Edgar Rice Burroughs as pioneers . *The Lost World* crossed into the movies in 1925 , setting heights for special effects and attempts at scientific accuracy . It is unusual , even today , for attempting to portray dinosaurs as something other than monsters that spent their lives in combat .

The stop @-@ motion techniques of Willis O 'Brien went on to bring dinosaurs to life in the 1933 film *King Kong* , which merged the tropes of dinosaur combat and dinosaurs in a lost world . His protégé Ray Harryhausen would continue to refine this method , but most later dinosaurs movies until the advent of CGI would eschew such expensive effects for cheaper methods , such as humans in dinosaur suits , modern reptiles enlarged by cinematography , and reptiles with dinosaur decorations . Dinosaur depictions diversified in the 1930s , spreading to newspaper comic strips in *Alley Oop* and to advertising for *Sinclair Oil* .

== The 1930s to 1970s : Moribund dinosaurs to renaissance ==

The Great Depression and World War II combined to sink the study of dinosaurs into a decades @-@ long lull . Scientists considered dinosaurs a group of unrelated animals that left no descendants , and dinosaurs were presented as stupid , slow , stuck in swamps , and doomed to extinction . Scientific dinosaur artwork , primarily from Rudolph F. Zallinger and Zdeněk Burian , reflected and reinforced the conception of dinosaurs as slow and static (one artistic quirk that became commonplace in representations of Mesozoic landscapes , the presence of a volcano , was a hallmark of Zallinger 's) . From such ideas came the alternate definition of ' dinosaur ' as something out of date .

Films of the time typically used dinosaurs as monsters , with the added element of atomic fears in the early Cold War . Thus , *The Beast from 20 @, @ 000 Fathoms* (1953) and *Godzilla* (1954 ; American release 1956) portray monstrous dinosaur @-@ like prehistoric reptiles that go on rampages after being awakened by atomic bomb tests . An alternative appears in Disney 's animated *Fantasia* (1940) , in its *The Rite of Spring* sequence , which attempted to portray dinosaurs with some scientific accuracy (although it has the common error of showing prehistoric animals from many different time periods living at the same time) .

In 1956 , Oliver Butterworth authored a children 's book , *The Enormous Egg* . The book and a movie adaptation televised in 1968 by the NBC Children 's Theatre tell the story of a boy who finds an enormous egg laid by a hen that hatches a baby *Triceratops* . The dinosaur , named Uncle Beazley , becomes too big , so the boy brings him to the Smithsonian Institution in Washington ,

D.C. Beasley is first kept at National Museum of Natural History , but is eventually transferred to the National Zoo 's Elephant House because there is a law against stabling large animals in the District of Columbia .

Dinosaurs gained a home in television in the 1960s animated sitcom The Flintstones , in another example of dinosaurs shown as coexisting with humans (for comedic effect in this case) . Dinosaurs also entered comic books in this period in such series as Tor and Turok , where prehistoric humans fought anachronistic dinosaurs . For those wanting more scientific accounts of dinosaurs , there were the first nontechnical dinosaur books . Ned Colbert ? s The Dinosaur Book (1945) was the first such book , and its status as the only such book for many years made Colbert an important figure for the coming generations of paleontologists and dinosaur enthusiasts .

In the 1960s , paleontologist John Ostrom began work on the theropod Deinonychus . His findings , which were expanded upon by his student Robert T. Bakker , contributed to the Dinosaur Renaissance , a revolution in the study of dinosaurs . Of particular importance were a reevaluation of the origin of birds that showed them to be closely related to coelurosaurian dinosaurs , reappraisal of dinosaur physiology that suggested they weren ? t the sluggish cold @-@ blooded animals they ? d long been assumed to be , and a recognition that dinosaurs formed a natural group .

Soon thereafter came new evidence on dinosaur social behavior , with nests of Maiasaura suggesting parental care . These findings were reflected in the work of a new generation of paleoartists . One milestone was Sarah Landry 's feathered dinosaur in Bakker 's 1975 Scientific American article , Dinosaur Renaissance .

Louis Paul Jonas created the first full sized dinosaur sculptures for the 1964 New York World 's Fair in the " Dinoland " area , which was sponsored by the Sinclair Oil Corporation , whose logo featured a dinosaur . Jonas consulted with paleontologists Barnum Brown , Edwin H. Colbert and John Ostrom in order to create nine sculptures that were as accurate as possible . After the Fair closed , the dinosaur models toured the country on flatbed trailers as part of a company advertising campaign . Most of the statues are now on display at various museums and parks .

In 1967 , the Sinclair Oil Corporation gave one of its dinosaurs , a fiberglass model of a Triceratops , to the Smithsonian Institution . The model , which appeared in the The Enormous Egg television movie in 1968 as Uncle Beasley , is now on display at the National Zoo . From the 1970s to 1994 , the statue was located on the National Mall in front of the National Museum of Natural History . (Some sources state that the Kentucky Science Center in Louisville (formerly named the " Louisville Museum of Natural History and Science " and the " Louisville Science Center ") now owns the Triceratops model) .

= = = The 1980s to the present : Dinosaurs reconsidered = = =

The reevaluation of dinosaurs spurred public interest , with the new generation of paleoartists quick to respond . Artists such as Mark Hallett , Doug Henderson , John Gurche , Gregory S. Paul , William Stout , and Bob Walters illustrated the new findings in response to the demand .

By the latter half of the 1980s and into the 1990s , other media were showing the influence of the increased popularity , with diverse depictions aimed at a variety of ages and interests .

In 1990 the Smithsonian Institution 's National Museum of Natural History in Washington , D.C. , featured an exhibition of dinosaur sculpture by Jim Gary that drew more visitors than any of its previous exhibits . His Twentieth Century Dinosaurs , popular since the 1960s , began being featured in textbooks , encyclopedias , and videos as well as later , by the likes of National Geographic , in their publications for children in 1975 .

For preschoolers , there was the educational television show Barney & Friends starting in 1992 ; their older siblings had the 1988 animated movie The Land Before Time and its increasing line of direct to video sequels (12 by 2008) . Dinosaurs , a television sitcom , parodied humans and other television shows . Of particular note is Michael Crichton ? s 1990 novel , Jurassic Park , the popularity of which led to a series of films and other media . The first of these , Jurassic Park , married advanced CGI with advances in scientific knowledge of dinosaurs . Dinosaur was the most

expensive movie in 2000 , but was a box office success . The falling cost of computer generated effects also has recently allowed the increased production of documentaries for television ; the award winning 1999 BBC series Walking with Dinosaurs , the 2001 When Dinosaurs Roamed America , the 2009 Animal Armageddon , and the 2011 Planet Dinosaur are notable examples .

In April 2016 , a proposal was submitted to the Unicode committee to encode three pictures of heads of three dinosaur species considered exemplary as emoji .

= = Public perception of dinosaurs = =

The popular ideals of dinosaurs have many misconceptions , reinforced by films , books , comics , television shows , and even theme parks . Typical errors include : prehistoric humans living with dinosaurs ; dinosaurs as monsters that did little else but fight ; the portrayal of a kind of " prehistoric world " where all prehistoric animals are shown to exist ; dinosaurs as all large ; dinosaurs as stupid and slow ; dinosaurs as being lizard like and all scaled (non feathered) ; the inclusion of many prehistoric animals (such as Dimetrodon , ichthyosaurs , mosasaurs , pterosaurs , and plesiosaurs) as dinosaurs ; and dinosaurs as failures .

Reports in the news media of dinosaur finds and dinosaur science are often inaccurate and sensationalistic , and popular dinosaur books usually lag scientific understanding . Dinosaur toys and models are often inaccurate , packaged indiscriminately with other prehistoric animals , or have fictitious additions like the large sharp teeth in some rubber Triceratops toys .

The pejorative use of " dinosaur " as something behind the times has been applied to people , styles , and ideas that are perceived to be out of date , and on the wane . For example , members of the punk movement derided the " progressive " bands that preceded them as " dinosaur bands " .

However , some popular depicitors have strived for accuracy and presented up to date information ; Michael Crichton and Bill Watterson (of Calvin and Hobbes) are two recent examples . Paleoartists and illustrators in particular have kept up with research . Popular conceptions of dinosaurs have also been important in stimulating the interest and imagination of young people , and have been responsible for introducing many who would later become paleontologists to the field . In addition , popular depictions have the freedom to be more imaginative and speculative than technical works .

= = = Usage = = =

The typical use of dinosaurs in popular culture has been as vicious monsters . There are several distinct genres of dinosaur depictions commonly used : " lost worlds " on modern Earth ; time travel stories ; educational works for children ; prehistoric world stories (often with cavemen) ; and dinosaurs running amok in the modern world .

= = = Appeal = = =

The appeal of dinosaurs , as suggested by author , researcher , and dinosaur enthusiast Donald F. Glut , has multiple factors . Dinosaurs were " monsters , " yet are safely extinct , allowing for vicarious thrills . They appeal to the imagination , and there are many ways to approach them intellectually . Finally , they appeal to adults nostalgic for what they enjoyed as children . Children have been particularly drawn to dinosaurs over the years .