



Dragons: A History

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The Basic Questions

Across most of the world, most peoples have traditions of monsters who are like giant winged land reptiles, of lizard or snake kind, or like giant water serpents. It may be that there is a genuinely ancient collective human memory at work here. Our ancestors in Africa would have had to deal with big poisonous snakes, big constricting snakes, large birds of prey, and crocodiles. Moreover, venomous or crushing snakes are the only dangerous animal that every single inhabited continent has in common. Monsters of the sort I have just described are a compound of all those primordial natural hazards.

Two areas in that world, however, have made such creatures especially prominent in art and story: Europe and the Far East, especially China. The nature of the dragon is however very different in each. European dragons are super-predators, who take up residence near a human community and eat the people and their livestock. Their functional role is then to get killed by heroes. Chinese dragons look like elongated versions of European dragons, with lizard bodies, four legs, clawed feet, fangs and wings – but otherwise have nothing in common with them. They are friendly and beneficial to humans if treated with respect, do not breathe fire, and inhabit water of all kinds. They exist in harmony with the natural magnetic energies of the earth, as reflected in the Chinese art of feng shui.

I therefore have two questions to answer in this talk: why did Europeans believe in dragons so much, and why are European dragons so nasty and Chinese dragons so nice?

Types of European Dragon

There are two main kinds of European dragon in popular folklore and medieval literature. One is the fire-drake, a reptile with wings, a horned or crested head, a spined tail and fiery breath. It is the classic dragon of medieval heraldry, chronicles, and romances, also of J. R. R. Tolkien, C. S. Lewis, and J. K. Rowling. The other is the worm or cold-drake, a huge snake which spits venom or breathes poisonous gas and can sometimes crush with its coils.

There are however many other kinds of dragon that appear in European folklore, literature, and heraldry. One worth mentioning here is the basilisk or cockatrice. There is a thoroughly misleading description of one in *Harry Potter and the Chamber of Secrets*, where it takes the form of a gigantic serpent. The classic medieval basilisk was a winged snake only a few feet long. It was formed from an egg hatched by a toad. What J. K. Rowling got absolutely right was its most famous characteristic: that it kills with its stare.

Types of English Dragon Legend

England has the largest number of dragon legends for a country its size anywhere in the world: sixty-eight in all. They are found all over the country, although some areas are richer than others: Somerset comes top, with eleven. The chief narrative function of English dragons is to get killed, and killing them is a very tough, one-off, activity.

English dragonslayers include five saints, above all the national one, St George. He was possibly a real person, a Roman soldier martyred for his Christian faith. He is first recorded in the sixth century. He first got mixed up with a dragon, however, six hundred years later, during the Crusades. This is because the Crusaders captured Joppa, in Palestine, which was both a cult centre of George and the ancient setting for the story of Perseus and Andromeda. Perseus rescued Andromeda from a sea monster, and his legend got

built into George's, with the sea beast turned into the more familiar European dragon. The Crusaders then brought this story home.

Dragonslayers also include twenty-four knights, but twenty-six commoners, mostly from artisan trades that require skill and independence. Ingenuity was needed to kill a dragon, because its hide could not be pierced by conventional weapons. Methods of dispatching them therefore consisted of getting inside the animal, or stabbing it through the mouth, or poisoning it, or putting on spiked armour on which it would dash and impale itself. This last method was actually one which hedgehogs use against adders, by rolling into spiny balls. At basis dragonkilling legends served two purposes: a monster slaying, which is one of the most primeval kinds of human story, and a heroic howdunnit, in which we find out how good triumphs over a much more powerful evil.

It is also clear that there was a particular boom period in the creation of English dragon legends: between 1350 and 1500, when they got attached to a range of families and communities, were carved in churches and appeared in games and processions. This was because it was the time at which St George was adopted as the national saint, and his legend spread across the country. It is he who is responsible for the exceptional popularity of dragon-slaying in English folklore.

The Ancient Context

Behind all these traditions lay much older precursors. Ancient Greek heroes regularly killed giant serpents, which later translators called dragons. Greeks called them pythons, a word which has remained used for a class of real snakes. The Romans had a mythical class of winged snake, which they called 'draco', the basis for the English word dragon.

There is also a distinctively Norse version of the dragon: the 'lindworm', which is a giant snake like the English or Germanic worm. The Norse kind, however, takes to water when grown, to become the sea serpent or lake monster. The greatest in legend is the Midgard serpent, which encircles the whole earth. Unlike dragons in general, lindworms continue to be sighted right up to the present. In 1894, for example, two of them were reported to have blocked the entrance to the Norwegian fishing village of Ervinken, until a whaling ship arrived to fight them, and they disappeared.

So, What Were Dragons?

Doubtful Explanations

The first matter to settle when answering this question is whether they actually existed, as in the legends. In 1979 a cryptozoologist called Peter Dickinson published a book in which he showed how a fire-drake might have produced hydrogen gas in its stomach by hydrochloric acid, which it burned off through its mouth to descend in flight. After death the acid consumed the body, which is why we have no physical remains. It is hard however to see how stomach acid could do that, and there are no accounts of fire-drakes imploding after death. On the contrary, parts of them were often preserved as trophies.

John Michell popularised a different theory in 1969 by imposing the Chinese view of dragons on the entire world, including England. He suggested that ancient people had shared the belief in energy-bearing lines associated with dragons, crossing the earth, and that dragon-slaying stories represented Christian repression of these pagan traditions. It is however the Chinese belief in benevolent dragons that is anomalous, and the concept of dragon-like creatures as dangerous monsters is found across Europe and the Middle East long before Christianity.

It is also sometimes suggested that dragons were simply metaphors for predatory human beings: after all, the Romans had dragon standards and the Vikings, famously, dragon figureheads to their ships. Both groups ravaged lands and demanded tribute. The trouble here is that Romans and Vikings used the dragon as a symbol for ferocity because the concept of such a creature already existed. Moreover, a solitary animal predator is not a good metaphor for an armed band of humans.

Plausible But Marginal Explanations

Medieval chronicles abound in references to fiery dragons seen flying high in the air, and some have thought that these were sightings of meteors and comets. Ancient and medieval skies were certainly very bright, with so little human lighting to dim them, and such freak meteorology could indeed account for these records.

It is also possible that some historically recorded dragons were misidentified real animals. Crocodiles can grow up to thirty feet in length and weigh three tons. A dragon exhibited at Durham in 1569 was one of these, and some local medieval accounts of dragons probably refer to them. The dragon of St Leonard's Forest, Sussex, reported in a pamphlet of 1614, was a huge serpent that reared up when approached, killed humans and dogs with its bite, ate rabbits and vanished when winter came. This sounds like an escaped king cobra or black mamba.

Other dragon lore can be explained by accidents of natural history. Hens are sometimes born with deficient oestrogen and develop the physical characteristics of cocks. Sometimes the hormonal balance sorts itself out and the animal then lays eggs. In pre-modern societies hens often suffer from round worms, which get from the bird into its eggs. When such an egg was opened, the writhing worm would be revealed: a new-born basilisk, which was – it may be remembered- hatched from an egg laid by a cock.

All these factors credibly explain certain dragon legends, or classes of reference to dragons. They all, however, presuppose an existing idea. You don't see a meteor, and think it is a flying, fire-breathing monster, unless you already believe in such beasts. To get to the real roots of the idea of the dragon, we are going to have to dig deeper.

The Origins of the Firedrake

One piece of tidying up which can now be implemented is to suggest an origin for the most distinctive and classic form of European dragon, the firedrake, which is not known elsewhere in the world. This is because it is distinctively Christian, and comes from the best-read book of medieval and early modern Europeans, the Bible.

The relevant passage is the Book of Job, chapter 41, where God himself speaks, and describes a beast called a leviathan, which has a scaly skin impervious to weapons, terrible teeth, fiery breath, and convulses the sea. From the seventeenth century most educated opinion has proposed that this is actually a sperm whale. The plume of water from its blowhole could easily be mistaken for smoke, which suggested fiery breath. Apart from the wings, which could be added to explain how the animal moved between land and sea, this is a textbook firedrake. Leviathans are mentioned elsewhere in the Old Testament as the most terrifying of animals. No wonder the firedrake became the classic European dragon once the continent converted to Christianity.

The Contemporary Western Dragon

Another loose end that needs to be tied at this point is that dragons are once again really big business in fantasy literature and screenplays. What is really striking about these is that most regard dragons as a good thing: as essentially intelligent and sensitive beasts that can be allies of humans.

In particular, the 1970s threw up a new sort of hero or heroine, the dragon-rider, who treats the beasts both as steeds and as companions. This was originally the creation of an Irishwoman living in America, Ann McCaffrey, who loved horses and turned dragons into flying equivalents, in her imagined world of Pern.

Her initiative however fitted into a much broader cultural shift, whereby the physical form of the classic European dragon, the firedrake, has been combined with the spiritual form of the classic benevolent Chinese dragon. This redemptive blending suits a Western world that is kinder and greener and doesn't have to worry any longer about predators. It has taken place, logically enough, in America, the nation which is both the current cultural leader of the globe and lies midway between Europe and the Far East.

The Fundamental Aspects of the Dragon Concept

The Alpha Predator

European dragons occupy a very special animal relationship with humanity: that which the American eco-journalist David Quammen has called the 'alpha-predator'. Lethal flesh-eating beasts were part of the ecological matrix within which or species evolved. To all early humanity, and to traditional peoples up till almost the present, they were a familiar kind of misfortune. Among the earliest forms of human self-awareness must have been the consciousness of being meat. Even in the most modern and well-protected societies, 'zoological melodrama', or 'predator pornography', whether it be "Jaws", "Alien", "Lake Placid" or "Jurassic Park", is a well-established form of entertainment. An alpha predator, however, is not just any animal that eats humans. It is a solitary hunter, which makes a one-to-one relationship with its prey. Predators that hunt in packs do not qualify, but a rogue member of a pack species, like a lone wolf, does.

Elephants kill more people per year than any other mammal, but they don't qualify, because they don't eat their victims.

The very real human fear of predators meant that a good lord or chief in a traditional human society was expected to guard its members against animal as well as human foes. The greater the legendary hero, the most spectacular the predator against which he was matched. The greatest heroes of their respective peoples, the Greek Heracles and the Anglo-Saxon Beowulf, were serial killers of monsters.

It also matters that human societies tend to have room for only one alpha-predator in their imaginative space. Across most of the Old World, *the* predator of human symbolic choice was the lion. Ancient Asian and African rulers were expected to be lion-killers, who stood in for foreign human foes if none were available. Other predators took over where lions did not exist. For example in Asia outside lion country where the tiger stood in, and in West Africa where the leopard did. In lands with no big cats, the bear is the alpha predator, and where there are no big land animals at all, the crocodile or shark take over.

In medieval Europe, however, real alpha predators were missing. Big cats disappeared from the whole of it in ancient times. The lion became associated with royalty, because of its lordly appearance and flamboyant behaviour, and literature made it a symbol of courage and regality. Bears were rare, and not a menace. Europeans therefore had an imaginative need for an alpha predator that was even more powerful than the lion and could be treated as a symbol of evil as well as ferocity. The dragon filled that conceptual gap. This does however invite the question of why Europeans thought that the dragon was more native to their lands than the lion, so it could be given the job.

The Reality of Water Monsters

There is absolutely no evidence for dragon-like creatures surviving on land in Europe during historic times. Things get a lot more complex, however, as soon as we hit deep water. Whereas nobody claims nowadays to see fire-drakes, cold-drakes or basilisks, lake and sea monsters are regularly reported across the world, including Britain. We do have some good candidates for those among real creatures. One is the ribbon fish, which is a rare species of eel that often grows to more than twenty feet, and has red spines running down its back, which rise to a crest on its head. In addition, natural decomposition of carcasses can turn even well-known maritime species into fabulous beasts. In 1977 the Japanese Museum of Natural Science identified photographs of a huge corpse trawled up off New Zealand as showing a prehistoric plesiosaur. Only when tissues from the body were studied was it proved to be a badly rotted blue shark. Many reports of sea serpents were probably produced by giant squids, with fifty-foot tentacles that could easily be mistaken for parts of a huge serpent, especially if dismembered and floating on the water.

Having said that, however, we still have two puzzles. The first is that there are simply no known animals that correspond to some of the detailed descriptions of sea and lake monsters provided by observers over the centuries. The other is that we are still no nearer to finding real animals which correspond to the European land dragons, so prominent in tradition. I suggest that we find them in the earth, and that they were indeed once-living monsters, but long and safely dead.

The Fossil Factor

Since humans first acquired their capacity for reasoning, they will have noticed that huge bones are found in rocks, often of creatures with sharp teeth, huge jaws and horns. Such beasts were clearly no longer around. To societies before the sciences of geology and palaeontology, and the concept of evolution, developed, the obvious explanation was that they had been killed by heroes.

In the case of dragons, we can be more specific. Every time that a relic of a historic dragon has been preserved, it turns out to be a long-extinct animal. One of the most famous was the skull preserved at Klagenfurt, Austria, of a dragon allegedly killed by a duke of Austria. It is that of a woolly rhinoceros. Caves in Austria traditionally claimed as the lairs of fabled dragons turned out to contain the bones of giant Ice Age bears. The head of the dragon of Kilve, Somerset, was preserved, and is that of one of the Jurassic marine reptiles called ichthyosaurs. Somerset may be richer in dragon legends than other counties because its rocks are so rich in the remains of ichthyosaurs and plesiosaurs.

We can be a lot surer of all this now because of the work of Adrienne Mayor, a classicist who knows palaeontology. She points out that ancient literature is full of references to giant bones, and that where these are superimposed on each other, they may have given rise to tales of hybrid beasts such as centaurs and chimeras. She has pointed to the fact that the Central Asian homeland of the fabulous beasts that the Greeks called griffins, half eagle and half lion, is full of fossils of beaked dinosaurs, which look very like

griffins. She also drew attention to a famous description of dragons in a Roman biography of the philosopher Apollonius of Tyana, which was repeated as factual until the seventeenth century. It tells of how the sage visited northern India and found two species of serpentine monster, one smooth-headed and the other crested. One kind had a jewel in the centre of its skull. Mayor pointed out that Apollonius's journey would have taken him past the Siwalik Hills, which are full of bones of large extinct crocodiles and mammals. The rocks there form crystals, and these often grow inside the larger fossil skulls. She noted that the Greek traveller Herodotus wrote that giant flying serpents lived in the Egyptian desert. That desert is the location for fossils of the enormous sail-backed predatory dinosaur *Spinosaurus aegypticus*, which is the super nasty of Stephen Spielberg's film *Jurassic Park III*. Even more certain is the alleged discovery of the skeleton of the monster slain by Perseus to rescue Andromeda, which was dug up at Joppa in ancient times and brought to Rome. It had a forty-foot backbone and was clearly some prehistoric beast.

It is notable that Europe and China, lands of dragon lore par excellence, are both exceptionally rich in fossil-bearing rocks. Chinese fossils have been called 'dragons' bones' since records begin. The Chinese, however, did not need to turn dragons into alpha predators, because they already had a very effective one all over their home turf, the tiger.

Conclusion

In answer to the question of what dragons were, and whence they came, I would propose a three-stage model of development. First there is the basic human fear of alpha predators, generating a mythology of them, linked to an equally basic fear of big reptiles. Then there is the visual evidence provided by fossils and the sightings of sea beasts such as the giant squid. Finally there is the development of distinctive regional traditions such as the benevolent energy-embodying Chinese dragon and the Christian fire-drake. I rest my case.

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