

Find Feathered Friends

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Feathered Serpents: Myth or Reality?



All birds have feathers, mammals have fur or hair, and reptiles have scales. “But wait!” you exclaim, “what about the pangolin, a mammal with scales?” “And what about Quetzalcoatl, the feathered-serpent of Aztec lore?”

The Biologist replies, “I forgot about the scaly anteater. Thanks for reminding me. Let’s ask the Anthropologist about the feathered serpent.”

Speak to us All-Knowing-One: While all birds have feathers do birds alone have feathers? He replies at length:

Behind every myth and taboo, we look for a rational origin – a kernel of truth that explains why some people don't eat pork, for example. Birds, like reptiles, have scaly scutes ... look at the feet of the nearest available chicken. But might not reptiles also have feathers? Let's look first at the mythology and then for a plausible explanation.

Plumed reptiles figure large in myth and legend the world over. Throughout native North America, the paradoxical feathered serpent rules the world above, the realm of birds, and the underworld where reign the snakes.

A Shoshone elder told me that "Long time ago when animals would talk, the flying rattlesnake rose up and became the Milky Way." A similar story is told of Quetzalcoatl, the Aztec serpent god of earth and sky. And a Hopi potter related that "the coils of clay in the pot are the same as Awanyu, the sacred rattlesnake that is painted on the outside of it." A Paiute shaman said "we had a report of the Flying Rattlesnake over in Johnson's Canyon last year."

Only last, year, a flying snake in the form of a waterspout is said by local Nahuatl people to have risen from the waters of Lake Chapala and inundated Raquet Club and San Juan Cosala.

In China and Japan, the flying dragon is large in ancient and contemporary art and culture. Perhaps as old as the Chinese dragon is the Biblical reference: "Rejoice not...for out of the serpent's root shall come forth a cockatrice, and his fruit shall be a fiery flying serpent." Isaiah 14:29 KJV

The English/French "cockatrice" —a chicken-lizard—is found in the European folklore. See for example Edward Topsell's 1608 publication *The Historie of Serpents*.

The fossil record shows feathered reptiles: "New York...April 25, 2001... A team of Chinese and

American scientists announced today in *Nature* the discovery of a remarkably preserved, 130-million-year-old fossil dinosaur covered from head to tail with downy fluff and primitive feathers. It is the first dinosaur found with its entire body covering intact, providing the best evidence yet that animals developed feathers for warmth before they could fly.” American Museum of Natural History 2001

“Well,” you say, “That was then but this is now. We do not believe that the legend of the feathered serpent comes from a time before humans existed.”

Of course you are right about that, says the Anthropologist. But that does show that such a thing is not only possible but that it has in fact happened. I think that the mythology comes from more recent, and recurring, events. Consider this: Potential feathers are in the DNA of both reptiles and birds and the gene for scales and for feathers is a “snap gene” – up for feather, down for scale.

Here is what evolutionary biologist Alan Feduccia says: “The difference between feathers and scales is very, very small. You can transform bird scutes [the scales on bird feet] into feathers with the application of bone morphogenic protein. So while people imagining models for the evolution of feathers feel that filaments must be an intermediate step between scales and feathers, you really don’t need that stage.” *Discover Magazine* 2003

Some conclude that birds are living dinosaurs and not descended from them. So given the paleontological reality and the genetic potentiality it is not unreasonable to propose that sometimes, rarely, a mutation does occur giving rise to “a cockatrice... a fiery flying serpent” a Quetzalcoatl, or a flying rattler. I would propose therefore, that the widely shared mythology of feathered reptiles is a persistent cultural memory of phenomenal creatures with the characteristics of both bird and reptile. Such animals would be rare, unusual, remarkable, perhaps even abominable, and hence invested with supernatural characteristics.

As myth takes on its own reality, it lives well beyond its empirical foundation. So, my alert bird watching friends, do not be surprised to see Quetzalcoatl or KulKulKan along the Lake or in the Sky Above.