# Just-so evolution story

A review of
Anarchy Evolution: Faith,
Science, and Bad Religion in
a World Without God
by Greg Graffin and
Steve Olson
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Professor Graffin teaches life sciences and paleontology at UCLA. He has a Ph.D. in zoology from Cornell University, and his major advisor was the well known atheistic evolutionist William Provine. His co-author, Steve Olson, is a science writer, the author of Mapping Human History: Genes, Race, and Our Common Origins, and a consultant for the National Academy of Sciences and Scientific American Magazine.

This work was partly autobiographical and partly apologetic for evolution. Graffin recounts his journey from a theist to an atheist, noting that evolution played an important role in his conversion. He openly admits the implications of his belief in evolution, writing, "I am a staunch monist who feels perfectly content being part of a chaotic, unpredictable unfolding of organic events that began billions of years ago" (p. 109).

He argues that the reason so many people believe in God is that they are ignorant about the facts for evolution. This problem, he says, is partly because scientists "have not been very good at communicating their explanations [of evolution] to the general public, but if scientific explanations [for the origin of life] were more widely known, fewer people might claim to be 'spiritual' [religious]" (p. 109). He recognizes that Darwin's evolutionary theory had "turned natural theology on its head", and its

"... explanation of the biological differences between species

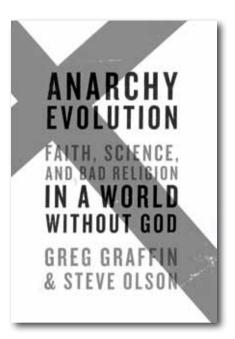
showed how natural processes could produce all of the species on earth without the need for divine intervention. The hand, for instance, is not a device constructed by God to meet the needs of humans. It is rather a modification, over millions of generations, of the fin *Tiktaalik* (or *Tiktaalik*'s close relative) used to push itself out of the water. The role of God in the pageant of nature was reduced to irrelevance after the publication of Darwin's *Origin of Species*" (p. 38).

He adds that evolution has "had a profound effect on the way people view the world" and that in

"... the middle of the nineteenth century, it can safely be said that most biologists were religious believers. Darwin himself prepared for the ministry at Cambridge .... Even after Darwin made his evolutionary ideas public, there was considerable reluctance to explore their implications fully. As the Scottish writer Thomas Carlyle once said to the English biologist Thomas Huxley, 'If my progenitor was an ape, I will thank you, Mr. Huxley, to be polite enough not to mention it" (p. 38).

As a professor of biology, Graffin writes that he does not openly promote atheism when he teaches undergraduates, but during his lectures about Charles Darwin he does mention

"Darwin's decisive reasons for abandoning theism. Far more important is his theorizing about biological phenomena. The focus of students' attention at the introductory level, where I teach, should be on the processes and interrelationships found in nature. The debate over whether species are specially created by a deity has only a secondary significance, and there simply isn't time to discuss it in introductory biology class. I am, however, happy to share my opinions ... . Darwin showed that human beings are a part of



nature. Though we have unique characteristics, we are no more exalted or advanced than other species. (After all, all species are unique.) When students understand the logic of this conclusion, it tends to shake their confidence in humanity's privileged position as God's favorite creation. Or at least they are encouraged to think more carefully about their beliefs and suppositions" (p. 111).

## His Ph.D. thesis

For his Ph.D. thesis, Graffin completed a sociological survey of eminent scientists' religious beliefs. Graffin, in his thesis, recognized that theistic evolution was an oxymoron, and that an irreconcilable contradiction existed between evolution and theism (p. 45). In his survey of scientists, he also "asked the evolutionary biologists about their views on the relationship between evolution and religion." Graffin admitted, based on previous polls, that he had some expectations that the majority would be atheists, and therefore "expected them to recognize that religion and science are mutually exclusive" because "religion makes many claims about the natural world". He included examples from the Bible, such as these: the "Bible states that a great flood destroyed everything on

earth, that the sun stood still, that Jesus was born of a virgin mother, and that the dead came back to life" (p. 45).

Graffin acknowledges that some of these claims are "clearly meant to be taken literally", as supported by the fact that "much Christian theology rests on their veracity" (p. 45). He reports that he was surprised by the answers of his subjects, noting that the

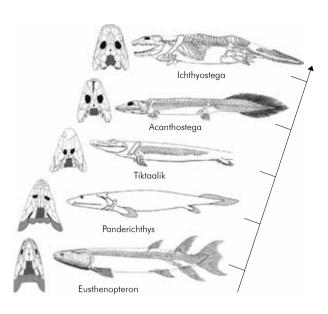
"... majority of the evolutionary biologists (72 percent) said that religion is a social phenomenon that has developed with the biological evolution of our species. In other words, they see religion as part of our culture. They do not necessarily see it

conflicting with science" (p. 45).

This answer, Graffin writes, is not intellectually honest and Darwinists "... appear to be more concerned about remaining in the good graces of the public than they are about responsibly exploring the implications of their worldview. It may be possible to compartmentalize science and religion so that they seem not to conflict. But avoiding potential conflict between science and religion by not asking the tough questions sidesteps the confrontational spirit of scientific investigation" (pp. 45-46).

He concludes that the reason people become atheists is not only that they get indoctrinated by evolution in the schools, the media, and in books, but because "many young adults raised in strongly religious households eventually give up their belief in God" due to asking questions such as:

"Why can't women become priests? How could God influence events in the physical world? Why does God allow so much human suffering? A gap begins to widen between their worldviews and those of the religious believers around them. They may begin to



**Figure 1.** Graffin believes the human hand was not constructed by God but is simply a modification, over millions of generations, of the fin of *Tiktaalik*. But recent findings have demoted the transitional status of this fossil since four-legged animals have been dated to "18 million years earlier".

question the premises on which their faith previously was built. Many of these individuals suffer rejection from their parents and friends, yet they persist in their search for the truth. Many find their way to what is essentially a naturalist worldview, in which they use the human power of discovery to learn what exists in the world outside their own heads and what is a figment of their imagination. To me, these are stories of great courage and persistence in the face of daunting opposition" (p. 108).

This discussion indicates very little knowledge of either Church History or Christian theology.

### His problems with evolution

Ironically Graffin has clear objections to Orthodox Darwinism, especially natural selection, noting that "Evolution does not tend toward perfection. It depends as much—if not more—on cooperation and random chance as on competition" (p. 17). He devotes a whole chapter, Chapter 3, titled "The False Idol of Natural Selection" to this problem (p. 51). The chapter is best summarized by his mentor, William B. Provine, who

wrote that "Natural selection does not act on anything, nor does it select (for or against), force, maximize, create, modify, shape, operate, drive, favor, maintain, push, or adjust. Natural selection does nothing" (p. 51).

Graffin adds that, as he's studied nature he has concluded that natural selection is wrong, or far from the whole story, noting that evolution usually includes "... a description of natural selection and its role in the diversification of species. These accounts provide a mechanism for evolution and assume that the proffered explanation covers it all. But over the years I have become more and more dissatisfied with natural selection as an

explanation for all evolutionary change. And since I believe that dogma must be challenged wherever it is found—whether in religion, science, or music—I have spent time exploring the ideas of the iconoclasts who have examined natural selection critically. The result is a picture of evolution quite different from the standard textbook account" (p. 59).

An example of his concern is that many existing life traits have little to do with survival. For example, anthropologists have for decades attributed certain physical characteristics to natural selection, which research has documented are due to other factors. Some examples he gives are that evolutionists

"... have speculated that the epicanthic fold of the eyes in eastern Asians evolved to protect their Ice Age ancestors from the glare of the sun off blinding snowfields. Or they have said that the short, squat stature of pygmies was an adaptation to the equatorial heat of Africa (while ignoring the fact that tall, lean Africans lived just a few hundred miles away). In actuality, almost all of these speculations have turned out to be unjustified

and unverifiable just-so stories. Recent studies have shown that most of our physical features have changed more or less randomly as modern humans spread from our eastern African homeland into the rest of the world" (p. 71).

He adds that from his research he has concluded that many traits in humans and other mammals are

> "... more a product of human sexual selection [due to culture] than of natural selection ... traits are perpetuated simply because people find them attractive. The same process could apply to height. body size, body shape, and other human characteristics. All sorts of cultural factors affect perceptions of human traits, which means that culture can have a big influence on human evolution ... the genes just follow along. What's more, the same process could occur in many other species. Birds, for instance. constantly engage in displays of their plumage and singing to attract the females ... If choice is involved there are many factors that might play a role in causing a female to be attracted to certain behavioral and physical traits. Sometimes the seemingly fittest males just don't do it for a choosy female. And without successful reproduction, an organism's fitness is zero" (pp. 70-71).

# The moral problems of Darwinism

Graffin also deals with the implications and moral problems of Darwinism by avoiding or rationalizing them, such as the following:

"Evolution does not have a direction. It is anarchic, yet out of this anarchy have come biological entities of great sophistication and beauty. Many of our most important human features are not adaptations to prehistoric environments, and humans are far from evolution's crowning achievement" (p. 17).

Graffin does not seem to realize that 'anarchy' (random chance and chaos) cannot produce "great

sophistication and beauty" in life; only intelligence and design can do so. He concludes, "there is no ultimate reason for our existence" (p. 4), and he believes that "the universe is made up of only four things: space, time, matter, and energy—and that's it" (p. 6). Graffin recognizes that the moral implications of this are as follows:

"By abandoning the idea that an intelligent designer created us, we can wake with each dawn and say, 'What's done is done. Now how can I make the best of the here and now?' Life is never static. Despite catastrophic tragedies, life has persisted in evolving new varieties of unimaginable forms. I find comfort in the narrative of evolutionary history. When I create, I feel that I am a participant in the grand pageant of life, a part of the ongoing creative engine of the universe. I don't know if that feeling is enough to replace the solace of religion in the lives of most people, but it is for me" (p. 251).

While working on his Ph.D. he also interviewed in depth twelve prominent evolutionary biologists. One, George Williams, concluded "If it's natural behavior, it's bad, it's evil", and his Ph.D. adviser, Provine, admitted "Evolution is not my friend ... Evolution cares nothing about me. Meaning in my life comes from people who care about me" (p. 27). Graffin added that

"I can't go so far as to characterize evolution as evil. Evolution is simply the way the biological world works, whether we like it or not. And once the reality of evolution is accepted, it has a strange and forbidding beauty. It occurs over time periods beyond human comprehension. It has created organisms of fantastic complexity" (p. 27).

## His just-so evolution story

After Graffin explains why he rejected creation in total and natural selection as a major explanation for evolution, he details his evidence

for evolution. It is evident, though, that his 'evidence' is what Stephen Jay Gould calls Just-So-Stories. For example, he writes that "More than a billion years ago, one single-celled organism began living inside another single-celled organism. This mutualistic relationship was so successful that today the cells in every multicellular organism are descended from this innovative ancestor." This idea, called endosymbiosis, is very problematic; a concern Graffin ignores. He continues, adding that

"... before 375 million years ago, a species of fish began to spend more time on land, possibly in search of prey or to escape the dangerous predators of Paleozoic seas. That fishlike vertebrate was the ancestor of every four-limbed land animal that has ever existed, including us. Beginning around 100,000 years ago, a small group of gracefully built, exceptionally brainy humans began to expand outward from their homeland in eastern Africa into territories occupied by other groups of humans, including the Neanderthals in Europe and a species of humans named Homo erectus in Asia. Today all humans are descended from that small group of eastern Africans while the Neanderthals and Homo erectus died out long ago. At each transition, the ancestral populations anticipated nothing about consequences of their actions. They were simply reacting to the environmental conditions of the time. Yet they set in motion profound changes that remade the world" (pp. 26–27).

He cites no scientific evidence for this hypothetical story, and little exists, as has been well documented both in this journal as well as in the secular scientific journals.

### References

 Demick, D., Mitochondria—created to energize us, J. Creation 20(3):10–12, 2006; creation com/mito.