THE MAN BEHIND THE MEME

An interview with Richard Dawkins.

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The meme man.

Richard Dawkins, champion of Darwinism and scourge of religion, is a courtly and attractive man, although not much given to humor. If one finds oneself smiling frequently in the presence of this Oxford don—who was recently voted Britain's No. 1 public intellectual—it is out of sheer enjoyment at his gift for rendering the most subtle evolutionary ideas absolutely lucid.

The other week, Dawkins was in New York to promote his book The Ancestor's Tale. I had the chance to chat with him for an hour or so in the lobby of his hotel, as a particularly noisome soft-jazz Muzak system droned in the background.

Dawkins' new book doesn't push a thesis about evolution, the way his earlier ones did. Instead, it lays out a set of facts about the history of life on Earth in a particularly clever order. The guiding conceit (inspired by the Canterbury Tales) is that of a pilgrimage heading backward in time to the very origin of life. Along the way, we humans meet up with other modern species at various points where we share a common ancestor. Surprisingly, it turns out that there are only 39 such rendezvous points. The first lies 6 million years in the past, when we encounter chimpanzees and bonobos (who themselves had already joined up at a common ancestry point a mere 2 million

years ago). The last is where we meet up with bacteria at the pilgrimage's ultimate goal, the beginning of life. At each rendezvous point, one of the pilgrim species with whom we join forces tells a tale that illustrates some principle of evolution.

These tales are terrifically entertaining. At rendezvous 16, for example, some 310 million years in the past, we humans and the other mammal species meet up with thousands of bird and reptile species at a common ancestor. One of them gets to hold forth, and so we hear—execrable pun!—the Peacock's Tale. It turns out to be about sexual selection, and largely about humans.

"Why did humans lose their body hair? Why did they start walking on their hind legs? Why did they develop big brains? I think that the answer to all three questions is sexual selection," Dawkins said. Hairlessness advertises your health to potential mates, he explained. The less hair you have on your body, the less real estate you make available to lice and other ectoparasites. Of course, it was worth keeping the hair on our heads to protect against sunstroke, which can be very dangerous in Africa, where we evolved. As for the hair in our armpits and pubic regions, that was probably retained because it helps disseminate "pheromones," airborne scent signals that still play a bigger role in our sex lives than most of us realize. (It occurred to me that becoming hairless also meant we didn't have to spend all our leisure grooming one another to remove lice, like other primates, thereby freeing up time to create capitalism. But I kept this thought to myself.)

"Sexual selection works as a kind of amplifier, causing small and perhaps arbitrary trends to get exaggerated in a runaway fashion," Dawkins continued. "It's still a Darwinian process, but it's one that allows for contingent extravagance."

The word "contingent" made me prick up my ears. Did Dawkins think that the development of a large-brained species like us was an accident, one that probably wouldn't be repeated if the tape of evolution were rewound and replayed? Shades of Stephen Gould!

"That's one of the questions that I deal with in the last chapter of my book," he said. "The very large brain that humans have, plus the things that go along with it—language, art, science—seemed to have

evolved only once. The eye, by contrast, independently evolved 40 times. So, if you were to 'replay' evolution, the eye would almost certainly appear again, whereas the big brain probably wouldn't."

Dawkins didn't turn out to be very far apart from the late Stephen Jay Gould on this issue. So, why did they always seem to be at loggerheads? Gould, like Dawkins, was brilliant at explaining Darwinian thought to the masses. Also like Dawkins, he was a sworn enemy of creationism and other forms of anti-Darwinian nonsense. As far as I could see, the biggest difference between the two was that Gould considered himself a Darwinian "pluralist." He thought that natural selection operated at many levels in the biological hierarchy: not just at the level of genes and organisms, but also at the "higher" level of species and entire ecosystems. For example, competition at the species level-called "species selection" by those who believe in it—would favor those species that spawned lots of daughter species. Dawkins, by contrast, seemed convinced that natural selection among genes was the only game in town; hence the title of his first big book, The Selfish Gene. For this, Gould denounced him as a "Darwinian fundamentalist." I asked Dawkins if he still believed that competition among genes accounted for everything that's interesting about evolution.

"The devil is in the phrase, 'everything that's interesting,' " he said. "Steve was very interested in diversity, but other biologists are more interested in adaptation—in looking at an organism and asking, what's the good of this or that feature? It's very seldom, I suspect, that an animal is the way it is because of species selection. If you want to explain why Africa has one set of antelopes rather than another, the answer might involve species selection. But if you want to know why a species of antelope has a horn that's curvy rather than straight, the explanation is going to be found at a more basic level."

But Gould would surely have conceded that, I said. Where was the real disagreement?

"I suppose it's really a matter of emphasis," he replied. "For me, the level at which natural selection causes the phenomenon of adaptation is the level of the replicator—the gene."

Another kind of selfish replicator to which Dawkins has called attention are "memes"—things like ideas, fashions, tunes, and so forth that multiply by leaping from mind to mind. When Dawkins introduced the meme concept a couple of decades ago, hopes were raised that the evolution of culture, or even of the human mind, might be explained as a sort of Darwinian competition among memes. But little has come of this project, even if the word "meme" does continue to get tossed around quite a bit by pretentious intellectuals. I asked Dawkins if he had cooled on the meme idea over the years.

"My enthusiasm for it was never, ever as a contribution to the study of human culture," he said. "It was always intended to be a way of dramatizing the idea that a Darwinian replicator doesn't have to be a gene. It can be a computer virus. Or a meme. The point is that a good replicator is just a replicator that spreads, regardless of its material form."

At this point, Dawkins' wife, the actress Lalla Ward, shimmered into the lobby to collect him. One could not help noticing that, in her radiant blondness, she is even more attractive than her husband. Book tours are hard work, so I regretfully relinquished the celebrated author. Still, I could not forbear asking one more question as he walked away.

"You've called religion a 'dangerous collective delusion' and a 'malignant infection,' " I said. "Don't you think you're underplaying it a bit?"

Dawkins turned, smiled a small fox smile, and said, "Yes!"

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