

## Does evolution explain human nature? Except where it matters.

*Simon Conway Morris*

As I write this essay, my fingers hold a pen and my eyes scan the page — fingers that have evolved from fins, eyes that have developed from little more than pigmented spots. We may walk tall, but we cast a long evolutionary shadow. At the same time, my ears are distracted by bird-song from the yard outside. But why should I bother to waste my time listening to the birds? Why, indeed, should I be interested if three separate families of birds — songbirds, parrots, and hummingbirds — all evolved song independently, and why should I care that the manner in which some birds learn to sing is strikingly similar to the way that language emerges from babble in children?

The answer is that I am naturally curious and also that I appreciate beauty. The evolution of bird-song is not only a striking example of evolutionary convergence — that is, of unrelated organisms arriving at very much the same biological solution — but it has a much wider importance. It is an indication that at least some outcomes of the Darwinian process are more likely than others and, in some cases perhaps, are actually inevitable. The capacity for song points to even more striking similarities between birds and mammals in terms of overall cognitive capacity, not least with respect to play and the manufacture of tools. All of these developments have occurred independently and by the process of evolution.

So why quibble with the standard Darwinian formulation? Is it not obvious that the roots of human behavior and cultural sophistication lie in the rich loam of our evolutionary past? We are but a hair's breadth from our animal cousins. Such is evident in terms of their cognitive world (which many believe encompasses, at least in apes and some birds, a theory of mind), their capacity for self-recognition in mirrors, and the glimmerings among them not just of culture and its transmission but of crafted tools and even traits of personality. So what is the problem?

At one level, there is none. It would be strange if my fingers and eyes were to have an evolutionary origin but not my capacity to speak, to empathize, and even to deal with simple abstractions like numbers. And yet, though we may be just a hair's breadth away from a chimp — not to mention a crow, a dolphin, an elephant, and even an octopus — we humans are still utterly and stupendously different. A seamless extrapolation from one species to another? That is what Darwin proposed, but pinning down how the glaring gaps — most obviously, language — were actually bridged remains almost entirely obscure.

Should we look, then, to human exceptionalism, to a freak mutation that suddenly propelled us into new worlds? It is possible, of course, but there is not a shred of evidence for it. Could it just be an illusion? Perhaps we think we are different, but the animals themselves know better. Is that credible? Not really. So profound is the gulf between us and the chimps that they might as well live in the Andromeda galaxy. Have you seen a chimp make a fire, let alone go to the library?

The late David Stove, an Australian philosopher, wrote a wonderful book entitled *Darwinian Fairytales*. How dare anybody use a word like “fairytales” in the same breath as the venerated Darwin? (See how the cage housing the ultra-Darwinists rocks and shudders, the occupants hurling themselves against the bars with cries of outrage.) But Stove was emphatically not a creationist or even a theist, let alone a Christian. And he had no quarrel with evolution. For him, the question was not where we came from but who we are now. In a piercing critique, he dismantled the Darwinian pieties purporting to show why we are so extraordinarily altruistic (not to mention our love of animals), demolished the absurdities of genetic determinism, exploded the naiveties of sociobiology, and laid waste the myth that we are “just another species.”

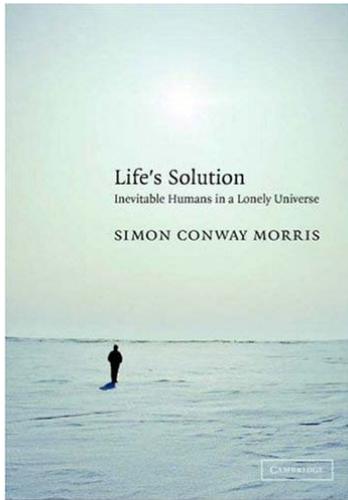
But how did we come to be so different, in fact, so very odd? I would propose a radical alternative. We live in a world riddled with symbols and symbolic expression — a place where people kill for principle or engage in reckless altruism, where thousands cheer their teams while others choose monastic isolation. Our societies buzz with chatter, friendship, and laughter, but they are also haunted by terrible, reflective silences, echoing back through history for hundreds of years.

Somehow we have intuited the ineffable, matters that defy precise description but still resonate at the deepest levels. The world of myth is not just a set of superior fairy stories but rather an attempt to use language to describe our cosmic engagement. Is all this striving after ultimate meaning a massive delusion, a gigantic wish-fulfillment? Is this what happens when the brain gets too big: the puzzled and frightened ape stumbles across comprehension and just as suddenly realizes that his existence is entirely meaningless? Could our symbol-rich world be of interest only to a pitiless nihilist? I do not think so.

Suppose that the moral structure, the ethical voice, the heart-wrenching aesthetic, the haunting intuition that certain places are holy, the endless yearning for a world made good are not the fantasies of a deracinated ape but rather are signposts to deep realities in which our destiny may be involved. Suppose that evolution is like a search engine, always seeking the best solution. From this perspective, it is hardly surprising that scattered across the evolutionary landscape, among the grunts and howls, the dawning intelligence and the scarcely articulated emotions, we do indeed see the flickerings of ourselves.

The real question of how we came to be who we are does not revolve around a process of creeping Darwinian emergence, whereby the various components drifted together into a human whole with distinctive and (let us be honest) very odd powers all of its own. Rather it is a true story of discovery, of first detecting and then entering and finally enjoying entirely new worlds that were waiting for us all the time. We could not

have arrived where we are except by evolution, and this is where we need to be. As rational creatures we now not only know evolution but we know how to transcend it.



Simon Conway Morris is a professor of evolutionary paleobiology at the University of Cambridge and a Fellow of St. John's College. Elected to the Royal Society in 1990, he is the author, most recently, of *Life's Solution: Inevitable Humans in a Lonely Universe* .