

# Imagining Darwin's Ethics

*David Quammen*

Drawing ethical conclusions from Darwinian evolutionary theory can be a dangerous exercise, productive of much woozy mischief. This is especially true when the conclusion-drawing is based on willful or careless misperceptions of what Darwinian evolutionary theory actually says. People have been eager to miss the point that it's a descriptive framework explaining what happens and how, not a prescriptive framework stating what *should* happen and how. From the misguided "Social Darwinism" of Herbert Spencer and others in the mid-nineteenth century, to the eugenics of Francis Galton slightly later, to the murderous social engineering of the Nazis in the twentieth, some extrapolations of supposedly "Darwinian" ethics got weird and ugly during the decades after first publication, in 1859, of Darwin's *On the Origin of Species*. That wasn't Charles Darwin's fault. He wrote what he wrote, and from it people saw, heard, and construed what they wanted to. It's happening still, on both the anti-evolution and the pro-evolution sides of the aisle.

The subject of Darwin's own ethics is a separate question. He was a man of rectitude, but not of faith; his rectitude wasn't grounded in piety. He couldn't be called "spiritual" by any stretch of the term. He believed that life is a wondrous phenomenon, yes—a sublime mystery of which the first origin was unknowable to him—but that, once begun, life had proceeded over the ages through a series of transmu-

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tations and bifurcations that are explicable by physical laws. In other words, it had evolved. Those physical laws (if I read him correctly) didn't carry moral valence or imply moral result; they simply were.

Still, without embracing any metaphysical system of morals, Darwin was an ethical man: faithful husband, kind father, loyal friend, conscientious citizen, doting grandfather, gentle patron of worthy causes and needy people. His personal ethics existed alongside his scientific thinking, and sometimes challenged it tensely, rather than deriving from it. Among the many things Darwin taught us, by his life as well as his work, is that a stony agnostic evolutionist, seeing a world of material causes and effects, could nevertheless feel an imperative to be good. And he did. Wearing his scientific hat, he came to the conviction that ethics had evolved naturally in *Homo sapiens*, as an adaptation offering social utility—much as the physiological capacity for speaking complex languages had evolved as a parallel adaptation. You can find some of this in chapter 5 of *The Descent of Man*, published in 1871, where he speculates about the evolution of “moral faculties.” In his personal life, he behaved ethically (at least most of the time) because . . . well, it just seems to have been his inclination, based on character and social conditioning. He was a man of radical ideas and conservative, scrupulous habits. When he died, in 1882, his uneasy but firm reconciliation of materialism and ethical responsibilities remained intact.

Now to the point: What would Charles Darwin say if he came back today and saw the mess that we're making of planet Earth?

All right, “mess” is a vague word, but please note that I don't ask, *What would he say about climate change?* That's putting the question too narrowly. Although anthropogenic climate change is at last getting its due attention, we need to remember that it isn't the biggest ethical and geo-bio-physical crisis we face; it's only a subcategory of the biggest. The biggest, of course, is the crisis of plummeting biological diversity, presently occurring by way of species extinction, the eradication of localized subspecies, the simplification of ecological processes, and the reduction of genetic variation within populations. Stated plainly, in terms so familiar they've begun to seem dreary: we are perpetrating a mass extinction. And as we've all heard before, this event bodes to descend to a superlative nadir of awfulness, commensurate with the five greatest mass extinctions in Earth's history:

the Ordovician, the Devonian, the Permian, the Triassic, and the Cretaceous. We can call this one the Holocene extinction (as some experts have proposed), since that's our present geological epoch. And we shouldn't forget that, unlike all others, the Holocene extinction is attributable not to asteroid impact or catastrophic vulcanism or some other form of external accident, but to the actions of a single earthly species: us. Those actions and their direct effects fall under six major headings: habitat destruction, habitat fragmentation, overharvest (especially on islands and in the oceans), transfer of invasive species from one ecosystem to another, cascades of extinction that tumble through ecosystems, and finally, climate change, yes, because it exacerbates the effects of habitat loss, habitat fragmentation, and invasive species. The combined result of these six trends is so egregious that eons from now, when paleontologists from the planet Tralfamadore arrive to investigate, they will wonder what the hell happened in the late Holocene to life on Earth.

Charles Darwin was gone before the worst of this cataclysm had developed or the eventual dimensions could be foreseen. We don't know what he would say of it. We can only make guesses, based on who he was and what he *did* say.

Extinction, it must be admitted, was not a subject that worried him. He wrote dispassionately of it in *On the Origin of Species*. For instance: "The extinction of old forms is the almost inevitable consequence of the production of new forms." That's from chapter 10, his discussion of how species and higher groups have succeeded one another throughout time. (He wasn't aware, nor was any other scientist in his day, that the fossil record is punctuated by mass extinctions.) He viewed the extinction of species as parallel to the death of individuals: a natural termination making room for others. It was slow and incremental, he thought, like evolution. "Extinction," he said three chapters later, "has played an important part in defining and widening the intervals between the several groups in each class." He meant that it has set diversification into relief, by pruning away intermediate forms. It has made taxonomic classification possible. We can easily draw a line between reptiles and mammals because their common ancestors have long since died away. And again, forty pages later, in his recapitulation: "The extinction of species and of whole

groups of species, which has played so conspicuous a part in the history of the organic world, almost inevitably follows on the principle of natural selection”—that is, *his* cardinal principle—“for old forms will be supplanted by new and improved forms.” Extinction in moderation: he saw it as routine, inevitable, necessary, and good.

What Darwin didn’t consider was that, though speciation occurs slowly and locally, extinction can be widespread and fast. Nor did he foresee that our own species might so dominate the planet, transform its landscapes and its climate, and appropriate its resources that the very conditions necessary for speciation and evolutionary divergence—and thereby the replenishment of diversity—might no longer exist.

Discussing extinction as a natural process, Darwin spoke with his brain. But he also had a heart and a conscience. He had children and, by the time of his death, one precious grandchild. He cared about the shape of the world, including the world his offspring would inherit. His devotion to his subject was emotional as well as scientific, and we can safely assume he would have been saddened, alarmed, maybe outraged, to see the very matter of that subject leaching away. He was a sometime geologist, a sometime paleontologist, but most essentially a biologist: he studied what lives. In his famous concluding passage of *The Origin*, remember, he wrote: “Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows.” And then:

There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.

He wasn’t just talking about the grandeur of an idea. The diversity of life, its beauty and wondrousness, had given focus, meaning, and joy to Darwin’s own life. Surely he would have cared about bequeathing that joy to the future.