## After Eden: The Evolution of Human Domination

Kirkpatrick Sale

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All who have considered in the classroom, on the page, or at their desk, the record of life on this planet, may well agree with paleontologist Geerat J. Vermeij that there is "far more to the history of life than a mere parade of long names and dates of fossil plants and animals . . . ." Even the most no-nonsense, data-driven scientist and even the most cynical, text-bound postmodernist must wonder privately, in their heart of hearts, "What the (expletive deleted) does it mean?"

We would agree, would we not, with Vermeij, that the "characteristics, ways of life, and biological surroundings of organisms also changed over the course of earth history"? The known record of life from 3.5 billion years ago—faint traces of micro-organisms—to today with the heavy stamp of life's myriad forms, announces with increasing rapidity: change, change, change. With what outcome? Vermeij does not hesitate, with "the result that the world became an increasingly risky place in which to live" (1987: xii).

This too, we would agree upon, would we not? But wait. Consider that since the glory days of the Enlightenment, we have accepted the charge to make the world a better place. E. B. Tylor, the Englishman that many cite as the "Father of Anthropology," wrote in the triumphal days of Victorian science: "It is our happiness to live . . . [at the time] when the . . . gates of discovery and reform stand open at the widest." Consequently and without hesitation, he instructed us to expose the remains of "harmful superstition" and to impress on the mind of man "the doctrine of development" (1958[ 1873]:539).

Such bold confidence did not stop at the end of the 19th century. As recently as the early 1960s, the zeal to improve the lot of all found voice in Kennedy's "Alliance for Progress" and Johnson's "Civil Rights Crusade" and "War on Poverty." But the 1960s have long since turned into the 1980s and worse. And, today, to speak of progress has the speaker quickly scorned as being, of all things, naïve—a sin greater than Judas'.

Thus, it is not surprising, is it, that the theme of Kirkpatrick Sale's *After Eden: The Evolution of Human Domination* lies not in the glorification of the species but in its condemnation: "Modern humans . . . have left not one ecosystem on . . . earth free" of their domination. They "have transformed more than half of the land on the planet for their own use." They have consumed "a vast array of plant, animal, and mineral resources often to depletion . . . ." and they have no regard to their sustainability (2006:3). Certainly, Sale is not first to arrive at such a gloomy assessment, but he may be among the few to lodge the cause of such mayhem in our actual evolutionary trajectory.

All right, let us look. First, his credentials. He is a mature scholar, author of, to mention only three, *Dwellers in the Land: The Bioregional Vision, The Conquest of Paradise: Christopher Columbus and the Columbian Legacy,* and *The Fire of His Genius: Robert Fulton and the American Dream.* Clearly, we have here not a Milford Wolpoff, not a Dean Falk, or even a C. Loring Brace, but we have, by his own admission, a historian.

He justifies crossing over into paleoanthropology in this manner—as a general historian he can be more objective than partisan scientists grinding their handaxes preparatory to pushing their particular agendas. He thus has "a freedom to roam over the whole paleological [sic] record and the many disciplines involved in its production with an objective and creative perspective that only an outsider with a historical analysis could bring" (p. 5). Do you believe that? Probably not. But turf wars get nasty fast, so let us grant him his case that an outsider trained in a different discipline may see nuances that an insider schooled in the field might not. Besides I, a humanistic anthropologist, am also, even as we speak, reviewing the fossil record looking for its secret(s) with the purpose of presenting to the Society, no doubt, with fear and trembling, an understanding of what we humans are up to.

Speaking of humans, Sale restricts the term to *Homo sapiens*. He does credit *H. erectus* with being the progenitor of both anatomically modern humans and Neandertals, the split between the two dating back to 250 kya. Despite his claim of "outsider objectivity," he is part of the anti-Neandertal crowd and dismisses that centuries-spanning, sturdy-slayer of Pleistocene megafauna as a loser.

Appropriately for a book about domination, he begins his account of us, in the most narrow sense of the word, with a bang. The eruption of Indonesia's Mt. Toba at 71 kya brought forth a volcanic winter. The ejecta from the volcano lowered temperatures as much as 25 degrees Fahrnheit worldwide, and more in the higher latitudes.

The existing hominid populations confronted this dark, cold world variously. *H. erectus*, although they had met nature's challenges for over a million years, in the face of this catastrophe, dwindled to a remnant population in the Far East; *H. neanderthalensis* huddled in their European caves awaiting the arrival of their more sophisticated kin; but in Africa where anatomically modern humans had wandered about since at least 150 kya, *H. sapiens* vigorously met the challenge with a greatly expanded tool inventory, a rapacious psychology, and a calculating mind. The *body* of previously anatomically modern humans found itself, to its delight no doubt, glowing with *culture*. The evidence

for this great transformation came to light, Sale notes, in excavations at Blombos Cave in southern Africa, where a team led by Christopher Henshilwood found a sophisticated blade tool technology that ushered in the systemic exploitation of large mammals. This occurred at 70 kya ago, coincident, for all practical purposes, with the onset of the volcanic winter.

Challenged by the onset of volcanic winter, we became efficient slayers of the life forms around us. It was not that we had "an innate fondness for bloodshed" (p. 20), and indeed evidence today suggests we have a reluctance to kill, Sale notes, but the urgency to survive in a dark and dangerous world drove us to bury that reluctance deeply in our psyches and the effort in suppression fueled our souls with its irrational heat that inevitably exploded with consequences we struggle with until this day.

Here, Sale lays out his most telling observation. Beginning ca. 71 kya and reaching its presence state by the Upper Paleolithic, humanity increasingly distanced itself from other life forms, and consequently found itself viewing other animals objectively, as objects to be exploited for human welfare. His critical observation reminds me of Thomas Huxley's "the question of question" (1902: 77). What is our place in nature? Are we in nature or outside of it? Cousin to the gorilla and sibling to the chimp, where do we stand in nature's scheme?

This central feature in our lives, the "question of questions," has its beginning traced by Sale back to our adaptive response to the darkness of the volcanic winter produced by Mt. Toba's enormous self-destruction. Propelled by the need to survive we launched forth upon the planet to become the most wide-spread and the most dominating species the world has ever known.

Many would concur that the evidence of our impact is all around us.

"Some 2,000 species of Pacific Island birds . . . have gone extinct since human colonization. Roughly 20 of the 297 known mussel and claim species and 40 of about 950 fishes have perished in North America in the past century. On average, one extinction happens somewhere on earth every twenty minutes" (Levin and Levin 2002).

But Sale affirms, true today, true in the Pleistocene! This is his extraordinary claim. We humans hunted the Pleistocene megafauna both in Europe and in the New World to extinction. He weighs the evidence that climate change caused the decline, but he insists that, by the late Pleistocene, our technology, our social organization, and our psyches become so craftily organized that "the human hand seems primarily culpable" for the decimation (p. 87).

Other attributes of our lives, Sale implies, are derivative of our voracious hunger. Take Upper Paleolithic cave art, for example. These beautiful, charming displays come from our urge to slaughter. In his review of the poetic of animals flicking in the torches' light in the depths of the caves' interiors he finds that their purpose is the transformation of human fear and insignificance into "human might and meaning" and while the details of the ritual acts

performed in the present of this magnificent art escape us "they all involve some form of human effort to have control oven nature, to extend human domination . . ." (p. 61) over the planet.

Although hunting got us into our objective mode, where nature becomes an it, and thus made ready for control, agriculture augmented human power. With plant cultivation and animal husbandry came landscape modification—molding the earth to suit our human appetite—with the outcome being as if "we were declaring war" on the world (p. 98). Here, Sale cites Jared Diamond, whom he identifies as a "somber academic" and a "physiologist at UCLA School of Medicine" who concluded in his book, Guns, Germs, and Steel, that agriculture was the "worst mistake in the history of human race" (p. 99). Here, I wonder, and hopefully you do too, whatever happened to V. Gordon Childe and "Neolithic Revolution"? Domination of earth, Sale concludes in his chapter on origins and consequences of agriculture "can come only at a price . . .the price may well be despoliation of the earth . . . and the decimation of the species itself" (p. 104).

It is here that Sale fires one from left field. The curve is entitled "The Erectus Alternative." Having dismissed H. erectus earlier, he brings them back to explain how they learned to live in nature, not over nature. Citing Klein, The Human Career, as his source, he describes H. erectus as originating in Africa some 1.8 mya, giving birth, separately, to Neandertal and *H. sapiens*, and then continuing on in Asia to 30 kya. Having given a good account of what we might infer about *H. erectus*, he then argues that we can complete our picture of *H. erectus* society by using ethnographic accounts of living hunters and gatherers, such as the Mbuti and ¡Kung of Africa, the Andaman Islanders of the Indian Ocean, the Batek of Malaysia, the Kogi of South America, and others, to reconstruct the *H. erectus* way of life! Can't you hear Papa Franz and the Boasians turning over in their graves! Not only is the extrapolation of contemporary indigenous life to prehistoric life questionable, H. erectus is not even the same species as these hunter-gatherer groups!

At any rate, the *H. erectus* alternative of living within nature's perimeters provides us the wisdom to reconsider our destructive behavior and to attempt a "throughgoing reinterpretation of nature" (p. 129). To accomplish this, we must abandon our *anthro*pocentric view for a broader *bio*centric consideration of nature and our place, smaller no doubt, in it. Thus, to avoid our civilization from crashing down on our head, we must seek "the wisdom of the Erectus and skill of the Sapiens . . . to survive" (p. 138).

There is much to say positive about this historian's interpretation of the hominid record. Critically, he underscores our human propensity to live in an objective world, and he does so in a flowing, friendly writing style that provokes admiration and applause. He carefully documents his way through the paleoanthropological literature in his accounting of our evolution. Yet, I find two serious flaws in his presentation.

The emphasis on *our* domination of planet seems misguided and incomplete. Sale criticizes an anthropocentric

reading of record, but that is exactly the position that he takes in his exclusive focus on the species *H. sapiens*. True, there are few areas on the planet untouched and unstained by humans. But the great expansion of the species was and is part of an immense ecological movement that contains thousands if not millions of other species. These, of course, include the familiar domesticated plants and animals, yet even these may escape our control by becoming feral and wreak their own special brand of havoc. Then, there are all who have found human environment to their liking and these range from Passer domesticus, the "English sparrow," to the Escherichia coli bacteria to the HIV virus. Without a doubt, any complete chronicling of this vast ecological network is beyond the reach of any single writer. Yet if we want to see ourselves within nature, rather than out or over nature, that is precisely the task.

The second flaw is that Sale's intense focus on *H. sapi*ens leads the reader to conclude that culture is an exclusive feature of that H. sapiens. True, Sale speaks of H. erectus as having a kinder, gentler version of culture, but that makes culture the sole property of the genus Homo. (Of course, Sale is not the only one to make *that* equation.) More critically, Sale derives our ability of seeing nature and ourselves in the objective mode from the action of killing, i.e., hunting. Perhaps it is time to say, with Agustin Fuentes (2004), that the human story "is not all sex and violence". Also, I suspect hunting and all its consequences are derivative of a more fundamental dilemma, which is us. In this I follow Terrance Deacon (and Roy Rappaport) in calculating that symbol-communication—a facility much larger than language per se-comes to us through ritual, and that, furthermore, symbol-communication initially developing among the australopthicines turned hominid anatomy into humanity.

To address the last point I can do not more here than to quote from Deacon: "It is simply not possible to understand human anatomy, human neurobiology, or human psychology without recognizing they have been shaped by . . . symbolic reference" (1997: 410). The implication here is that symbol-communication stands not apart from nature but is intertwined with the very life process itself.

Symbol-communication by its very nature puts us at least one dimension from realty. Thus, whatever benefits it

brings, symbol-communication makes deceit a ubiquitous feature in human society. No matter how convincingly or how sincerely male hominids "told" their spouses they would return with meat in hand, how could the spouses believe they would not turn the meat over to first alluring females they met? To counteract that deceit, the australopithecines hit upon the transforming miracle of ritual. Ritual engages all the channels of communication available to the species, physical display, experiential engagement, monosyllabic grunts and whoops, and symbolic metaphors that play out what they deny. The performance of ritual together carries us away to another realm where truth is always beauty and beauty is always truth. And sometimes ritual actually works! It guarantees what we say and do is what we say and do. That is its miracle.

Without a doubt, Sale has gone down the path of the fossil record to the point where Vermeij found that the world was an increasingly dangerous place to be. The trip has carried him through much technical literature with skill and verve and he presents his journey in adroitly pleasant prose. Yet, his obsession with domination has stuck him in misguided mud out of which he cannot climb. True, our record of unholy power is plentiful. And today is no exception.

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