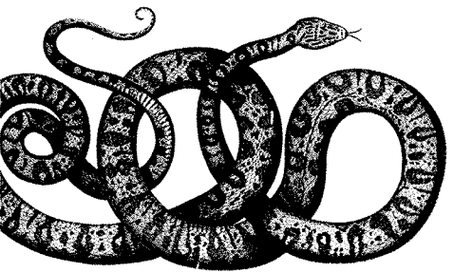

exhaustible curiosity goes without saying; what
k a wonder is its passion…nothing less than a
ymn. Who would have thought scholarship
uld be so ardent or so poignant?'

HOWARD JACOBSON

winner of the Man Booker Prize

s have always told stories about who we are
came from. In this enchanting book, Stephen
uts this ancient story into historical, literary,
ntext, helping to illuminate how we humans
e chosen to think about ourselves'

SEAN CARROLL

or of *The Big Picture: On the Origins*
e, Meaning, and the Universe Itself

earned, lively book, which should engage all
sted in the history of our imagination and the
vings of faith, poetics, and philosophy'

ROWAN WILLIAMS

rmer Archbishop of Canterbury

HISTORY

SBN 978-1-847-92272-4

781847 922724 90000

FSC

THE RISE AND FALL OF ADAM & EVE

STEPHEN GREENBLATT

THE RISE AND FALL OF ADAM & EVE

STEPHEN GREENBLATT

BODLEY HEAD

ALSO BY STEPHEN GREENBLATT

The Swerve: How the World Became Modern

Shakespeare's Freedom

Will in the World: How Shakespeare Became Shakespeare

Hamlet in Purgatory

Practicing New Historicism (with Catherine Gallagher)

Marvelous Possessions: The Wonder of the New World

Learning to Curse: Essays in Early Modern Culture

Shakespearean Negotiations: The Circulation of Social Energy in Renaissance England

Renaissance Self-Fashioning: From More to Shakespeare

Sir Walter Ralegh: The Renaissance Man and His Roles

Three Modern Satirists: Waugh, Orwell, and Huxley

EDITED BY STEPHEN GREENBLATT

Shakespeare's Montaigne: The Florio Translation of the Essays (with Peter G. Platt)

Religio Medici and Urne-Buriall (with Ramie Targoff)

Cultural Mobility: A Manifesto

The Norton Anthology of English Literature (general editor)

The Norton Shakespeare (general editor)

New World Encounters

Redrawing the Boundaries: The Transformation of English and American Literary Studies

Representing the English Renaissance

Allegory and Representation

The RISE and FALL of ADAM and EVE

STEPHEN GREENBLATT

THE BODLEY HEAD
LONDON

published his more radical pieces during his lifetime, he might have lost some of his readers, but he would not have lost his life or even his livelihood.

This decisive change may be traced to the work that had been done, for more than two centuries, by Bayle and Voltaire and by the whole Enlightenment project that they bravely advanced. But it may be traced as well to the scientific discoveries represented by the creature that, in Twain's fantasy, appeared just in time to delay the Fall: the pterodactyl. Dinosaurs helped to destroy the Garden of Eden.

14

Darwin's Doubts

Darwinism is not incompatible with belief in God, but it is certainly incompatible with belief in Adam and Eve. Nothing in *The Descent of Man*, published in 1871, allowed for even the remotest possibility that our species originated in the form of two exemplary, fresh-minted humans at home in a paradisal garden. Darwin had already made public his evolutionary theory in his 1859 *The Origin of Species*. Written for nonspecialists, the book had had an enormous impact, but it had deliberately left humans out of the enormous range of species it discussed. It was possible for contemporary readers to take in the persuasiveness of the scientific argument for natural selection but to hold on to the notion that somehow humans were exempt from the biological processes that governed the struggle for life among all other creatures.

After 1871, there was no longer any doubt that Darwin himself shared the conclusions that his followers had already been drawing from the enormous mass of data that he had patiently collected and from the brilliant overarching theory that made sense of this data. There was no exemption for humans.

Paradise was not lost; it had never existed. Humans did not have their origins in the peaceable kingdom. They were never blessed with

perfect health and abundance, a life without competition, suffering, and death. No doubt there were fat times, when food was plentiful, but those times would never last indefinitely, and our most distant forebears always had to share the bounty with other creatures whose needs were as exigent as theirs. Danger was rarely far off, and if they managed to hold the major predators at bay, they still had to reckon with army ants and intestinal parasites, toothaches, broken arms, and cancer. If circumstances were just right, human life could be extraordinarily sweet, but nothing in the whole vast landscape that Darwin surveyed suggested that there had ever been a magical time or place where all our needs were happily met.

As a species, humans were neither unique nor created once-for-all. Except in our dreams or fantasies, we could not possibly have emerged as fully formed adults, ready to speak, take care of ourselves, and reproduce. The particular kind of primate that we have become evolved over a vast span of time from extinct types of humans who shared many of our physical features: upright posture; walking on two feet; hands distinct from feet in form and function; small upper and lower canines; a chin. Exactly how and when this happened is still very much an open question.

Modern humans have particular qualities that mark us out as distinct—above all, language, moral consciousness, and the capacity to reason. But Darwin insisted that even these qualities were different in degree, not in kind, from those possessed by other animals to which our species is related. We exist in continuity not only with hominids—the primates, including chimpanzees, gorillas, and orangutans, whom we obviously closely resemble—but also with many other species. Recognizing this continuity did not, he thought, necessarily require specialized knowledge of the behavior of exotic animals; it could be grasped by looking attentively at birds and at dogs.

It is not surprising that Darwin, who tempered his scientific daring with a canny sense of what his contemporaries could bear, held off

disclosing the full implications of what he had discovered. He had at home, in the person of his pious wife, an articulate and urgent witness to how upsetting his theories were. In the introduction to *The Descent of Man*, he wrote that for years he had collected notes on human origins, "without any intention of publishing on the subject, but rather with the determination not to publish, as I thought that I should thus only add to the prejudices against my views." Readers of *The Origin of Species* could always draw their own conclusions, but he had not intended to articulate them in print.

Even when he overcame his reservations and made his work public, Darwin was careful to make no mention at all of the Bible story—the story of the creation, the Garden of Eden, and the Fall of Man—whose claim to literal truth he knew that he was decisively destroying. The names of Adam and Eve do not appear anywhere in the work. But his theory of evolution grappled with the very questions that motivated the Genesis account of human origins: Where did humans come from? Why must we labor with such pain to survive and to reproduce? What is the shaping role of desire—the desire for particular individuals or features of individuals that Darwin termed "sexual selection"—in the long-term development of the species? Why do we suffer and die? Above all, Darwin and his successors attempted to account for the human inheritance of ancient drives, compulsions, and desires. Even when those drives are manifestly dangerous, even when they impel us toward actions that are violent, pathological, and self-destructive, they prove extremely difficult to surmount. It is as if our ancestors had passed along to us, through some hidden mechanism, a suite of experiences, accommodations, and choices that they had made in the remotest time and that remain active within us, despite the fact that our circumstances have radically changed.

As the heirs to this very problematical inheritance, we may become aware of at least some of the most harmful impulses and distance ourselves from them. But we cannot by any means always do so; in the

course of a lifetime, we are almost certainly going to succumb, probably on many occasions. And what we succumb to is not, for the most part, *learned* behavior; it is what we have inherited from birth, before our distinct personalities in our distinct cultural settings have been formed and before we have acquired the capacity to reason. Those personalities and settings interact with this inheritance, and our reason can struggle against its most destructive urgings, but it can never be simply erased. We bear responsibility for our actions—we are not automata—but at the same time our freedom is severely constrained and compromised.

The interpreters of Genesis, particularly after Augustine, understood this whole legacy as punishment, consequent on the original sin of the first humans and our loss of Eden. But for Darwin there was no Eden. What we receive from our archaic forebears are not divine chastisements, but rather the living traces of successful accommodations our species made to the world over tens of thousands of years. Hence our sexual division of labor, our craving for sugar and animal fat, our mastery of fire, and our capacity for extreme violence take their place alongside our subtle social skills, our toolmaking, our expressive powers in language and imagery, all of which contributed to survival in a harsh, dangerous environment.

If for the Bible the ceaseless exhausting work that humans have to do in order to find enough to eat—ranging from rooting in the ground for tubers to the agricultural revolution that enabled us to cultivate, plant, and harvest our food—is the consequence of transgression, for Darwin it is a necessary achievement. If for the author of Genesis the pain human females experience in childbirth is one of the curses laid upon sinful Eve, for evolutionary biology it is a successful biological trade-off. That is, it is the price we pay for the combination of the maximum size of the pelvis in a creature that is bipedal and the minimal size of the skull in a newborn that allows our species to possess exceptionally large brains. Being able to stand upright on two legs

enabled our species to see over the savanna grasses, to cover substantial distances in search of food, and to free our arms to throw projectiles. Possessing a large brain enabled us to develop a range of skills essential to survive and prosper, despite our relative lack of strength, sharp teeth, thick skin, and so forth. For Darwin these human traits are not penalties in consequence of transgression, but rather the essential, life-bearing gifts of random mutation and of skills acquired over vast tracts of time.

The number of generations that this evolutionary process required corresponded not to the relatively paltry succession of "begats" recorded in the Bible but rather to the scale found in an ancient pagan theory of human origins that Darwin certainly knew but that he was careful not to mention in *The Descent of Man*. That theory, which had deeply influenced his grandfather, Erasmus Darwin, held that humans must have originated not all at once in a purpose-built garden but in a primitive struggle for survival.

Genesis envisioned the early existence of the dominant species as orderly as well as easy. Even the prohibited fruit was, in its way, reassuring, for it signaled that the world had laws and a lawgiver. By contrast, Darwin's massive data and his overarching theory confirmed the pagan intuition that our earliest ancestors had no divine guidance, no assurance that their species would endure, no God-given laws, and no innate sense of order, morality, and justice. Social life as we know it, a life governed by a dense web of rules, agreements, and mutual understandings, was not a given but a gradual achievement.

In *On the Nature of Things*, Lucretius admired the ways that the earliest humans accommodated themselves to the harshness of the natural world and, in doing so, began to change their own nature. We would not have lasted long as a species, he wrote, had we not learned to modify our crudest instincts, to develop protective technologies, and to form social bonds. Fashioning clothing from skins, building huts, and mastering fire weakened our ancestors physically—

"It was then that human beings first began to lose their toughness: the use of fire rendered their shivering bodies less able to endure the cold beneath the pavilion of the sky"—and at the same time enabled them to begin to live together, to foster the young, and to protect the weaker members of the group. It was in this formative stage of social life that we developed one of our crucial species characteristics, the ability to speak.

This ability had nothing to do with the power of any one figure to create language and impose it on the world. As if he had read or at least heard a version of the Hebrew myth, Lucretius wrote flatly that "the hypothesis that in those early times someone assigned names to things, and that people learned their first words from him, is preposterous." Impressive as it is, our linguistic ability is continuous with the signification through variable sounds that we can observe in innumerable animals around us. A stallion's neighing in desire is distinct from its whinnying in fear; there are birds that change their raucous notes with the weather; fierce watchdogs snarl in menace, but "when they begin to lick their pups tenderly with their tongue, or when they cuff them with their paws and, snapping at them with checked teeth, pretend gently to swallow them, the whining they make as they fondle them is a very different sound from the howls they give when left alone to guard the house."

Lucretius's observations from the natural world strikingly anticipated what Darwin brought in such massive detail to support his overarching theory of natural selection: random mutations, a ceaseless struggle for existence, innumerable extinctions, the shared life of animals, slow cognitive growth, a history without purpose extending over an unimaginable expanse of time. Thanks to the indefatigable research of Darwin and his allies, these ideas no longer seemed like archaic philosophical speculations; they had begun to take on the status of scientific truth. And with them Adam and Eve, once so real as to be almost tangible, receded into the filmiest of daydreams.

It was chalk, curiously enough, that played a critical role in this history. For what made Darwin's theory of human origins seem entirely plausible—after centuries in which Lucretius was ridiculed for advancing strikingly similar ideas—were scientific advances in geology that brought a new sense of the immense age of the earth and with it a timescale that allowed for evolution's innumerable experiments. For English geologists like Charles Lyell, the celebrated White Cliffs of Dover served as Exhibit A: the familiar soft white porous rock, they showed, was formed by sedimentation that took tens of millions of years. A careful examination of the shape of this landscape, of the chalk, flint, and marl with which it is composed, of the fossils that may be found in it, leads to an inescapable and very unsettling conclusion: these are the consequence of geological events—sedimentations, displacements, upheavings, fractures—most of which occurred in what Lyell termed the Eocene Epoch, lasting from 56 to 33.9 million years ago.

There was, Lyell argued in the 1830s, no sign of progress in the long, long history of the earth, no indication of providential design, no record of a universal flood that destroyed all living things save those that had found refuge on the ark. The same processes that had been at work in the most distant past were at work now. And the overall rate of geological change was always the same.

A pious Christian, Lyell struggled to hold on to his faith in the light of what he had come to understand. But it was immensely difficult to do so. There was certainly no question of maintaining any longer a literal belief in the six days of creation and the Garden of Eden. It had been difficult enough to hold on to the biblical story in the wake of the scientific discoveries that began to unsettle the world from the sixteenth century onward. Copernicus had displaced the earth from the center of the universe; the telescope disclosed the existence of untold multitudes of worlds; medical anatomies unveiled the inner workings of the body; the microscope revealed the hidden recesses of matter. Each of these had required major efforts to reconcile with traditional tenets.

But geology was a nightmare for the faithful. Fossils, such as seashells found far from the sea and bones that belonged to no known animal, had long been a conundrum, but they had been explained away by arguing that they were nature's "sports," or that they had been deposited on mountaintops and in deserts by Noah's Flood, or by citing the biblical references to giants roaming the earth in its earliest days, or even by speculating on the enormous size of the first humans. Denis Henrion, a French mathematician born at the end of the sixteenth century, used fossil bones to estimate Adam's height at 123 feet 9 inches, Eve's at 118 feet 9 inches. But the deep time disclosed by eighteenth- and nineteenth-century geology made these explanations seem absurd.

In 1857 the distinguished English naturalist Philip Gosse—inventor, among other things, of the first seawater aquarium—published a book entitled *Omphalos,* the Greek word for navel. A fundamentalist lay preacher and Bible teacher, Gosse had been deeply unnerved by Lyell's *Principles of Geology,* which made the biblical time scheme seem childish. It was always possible to interpret that time scheme in symbolic ways by positing that each of the "days" in Genesis represented a much vaster temporal horizon. But Gosse understood the perils of this path toward allegory. He was committed, as to this day fundamentalism remains committed, to the literal interpretation of scriptures that had first been championed by Augustine.

The subtitle to Gosse's book was *An Attempt to Untie the Geological Knot,* that is, to acknowledge the force of the geological record and at the same time to hold on to his faith. His solution was simple and, or so he thought, ingenious. All living things, he observed, have built into them the signs of their development and history. This is true of the rings of a tree, the deposits of calcium carbonate that make up a seashell, the overlapping scales on a fish. These signs are detectable even in the youngest, most newly hatched of these creatures, and they are certainly detectable in humans as well.

Gosse then turned to "the newly-created form of our first progenitor, the primal Head of the Human Race." To conjure him up properly and to distinguish him from all the beasts that perish, he quoted—as if he were citing an eyewitness—John Milton:

> Of far nobler shape, erect and tall,
> Godlike erect, with native honor clad,
> In naked majesty, as lord of all.

Gosse let his eyes slowly survey this first human, and, describing in loving detail what he saw, he compiled what he called a physiologist's report.

The human was evidently a fine specimen whose features—"the perfected dentition, the beard, the deepened voice, the prominent larynx," and the like—all pointed to a man between twenty-five and thirty years old. But though we must conclude from the infallible words of the Bible that God created Adam at precisely this age, and not as an infant, Gosse noticed something strange: "What means this curious depression in the centre of the abdomen, and the corrugated knob which occupies the cavity?" This is, he answered exuberantly, "the NAVEL."

Adam *must* have had a navel; he would not otherwise have looked right, let alone perfect. All great painters—Van Eyck, Michelangelo, Raphael, and the like—depict him with one. But the navel, of course, is a sign of a past, a link to the mother, that Adam did not have. This means that God created Adam with a perfectly formed, scientifically convincing trace of a history that never existed. And now, Gosse declared, like a lawyer who knew that he had proved his case, we can at last understand those fossils, those vast sedimentary deposits, those marks of ancient cataclysms, those agonizingly slow glacial transformations, that geologists study. The geologists' findings are in their way perfectly correct; what they fail to understand is simply that the evidence was planted by God on the first day of creation.

Poor Gosse. His book was received with ridicule and contempt that dogged him for the rest of his long life. His contemporaries were emphatically not prepared to believe that God, as the Victorian writer Charles Kingsley put it, had "written on the rocks one enormous and superfluous lie for all mankind." The navel would not, as Gosse had hoped, serve as life support for a dying Adam and Eve.

Only two years after the debacle of *Omphalos,* Charles Darwin triumphantly published his *Origin of Species.* Darwin was fifty, but the book had long been in gestation, at least since the time that he had returned at the age of twenty-six from almost five fateful years circumnavigating the globe as a naturalist aboard the HMS *Beagle,* under the command of captain Robert FitzRoy. Darwin had taken a number of favorite books with him for his long sea voyage, foremost among them *Paradise Lost.* But the book that had the most far-reaching influence upon him was Lyell's *Principles of Geology,* which FitzRoy presented to him before they set sail. First on the Cape Verde islands and then on the coast and in the interior of South America, Darwin repeatedly saw confirmation of many of Lyell's key theories and began passionately to collect supporting evidence in the form of fossils and rock samples.

It was not only the immense age of the earth that struck Darwin, along with the fact that geological change could therefore happen at an almost unimaginably slow pace; it was also the realization that living species were not immune from this same slow process of change. It was difficult to track the transformations; the evidence was elusive, fragmentary, and enigmatic. "Following out Lyell's metaphor," Darwin wrote, "I look at the natural geological record, as a history of the world imperfectly kept, and written in a changing dialect." Of this vast history only the last volume has survived, and of this volume "only here and there a short chapter has been preserved; and of each page, only here and there a few lines." Nevertheless, enough of the record had survived to make it impossible to believe that "in the beginning" all the species on earth were created by God once and for all.

The crisis came to a head even before Darwin set foot on the Galápagos Islands and encountered the evidence that would lead to the theory of natural selection. The *Beagle* was carrying back to Tierra del Fuego three hostages who had been seized on a previous expedition, more than a year before, and brought to England. The hostages—called by the crew Jemmy Button, Fuegia Basket, and York Minster—had been nominally Christianized. Dressed in English clothes, they had become familiar companions during the months at sea. The young naturalist must have looked up at them repeatedly when he wanted to rest his eyes from the pages of *The Principles of Geology.* He chatted with them—Jemmy Button, short, fat, and merry, was the universal favorite—and learned something about their reception in England, where they were treated as celebrities and received by King William IV and his wife Queen Adelaide. They were living proof of the malleability of even the most primitive humans.

Hence perhaps the intensity of the young Darwin's shock when he witnessed the Yaghan people to whom the kidnapped converts, in their gloves and well-polished shoes, were being returned. Years later he still recalled with a shudder the effect that the sight had on him:

> The astonishment which I felt on first seeing a party of Fuegians on a wild and broken shore will never be forgotten by me, for the reflection at once rushed into my mind—such were our ancestors. These men were absolutely naked and bedaubed with paint, their long hair was tangled, their mouths frothed with excitement, and their expression was wild, startled, and distrustful. They possessed hardly any arts, and like wild animals lived on what they could catch; they had no government, and were merciless to every one not of their own small tribe.

"Such were our ancestors."

After three years in English captivity, Jemmy Button at first seemed

diffident, disoriented, and ashamed of his own countrymen. But as the weeks passed, while the English explored, mapped, and collected samples, he was evidently absorbed again into the world from which he had been torn. Before the *Beagle* sailed on, Darwin encountered him for the last time and was amazed at what he saw. "We had left him plump, fat, clean, and well-dressed," he wrote; now he was "a thin, haggard savage, with long disordered hair, and naked, except a bit of blanket round his waist." Pained by this spectacle, Captain Fitzroy brought him aboard the *Beagle* and offered him the chance to return to England. Jemmy refused. In the evening, Darwin and the others saw what they took to be the reason for this otherwise inexplicable refusal: "his young and nice-looking wife."

For many years Darwin did not allow himself to articulate in public the full implications of this encounter. *The Descent of Man* was not published until four decades after he witnessed the Fuegians. But they at once haunted him and fortified his willingness to pursue the implications of the theory of evolution to its logical conclusion. That conclusion—that we were descended from ape-like ancestors—was widely viewed as a shameful insult to human dignity. For millennia humans had told themselves that they were the heirs to a perfect man and woman who had been made by God and had once lived harmoniously in the Earthly Paradise. Of course, the Fall had introduced sin and death into the world, but we could dream of an eventual recovery of our lost perfection and take pride in our glorious lineage. What Darwin saw for himself in Patagonia made him less inclined to cling to this pride of origin and less ashamed to recognize the actual line of descent. "He who has seen a savage in his native land," he wrote, "will not feel much shame, if forced to acknowledge that the blood of some more humble creature flows in his veins."

Darwin's critics called him the "Monkey Man" and excoriated him for besmirching our ancestry. But Darwin held his ground:

> For my own part I would as soon be descended from that heroic little monkey, who braved his dreaded enemy in order to save the life of his keeper, or from that old baboon, who descending from the mountains, carried away in triumph his young comrade from a crowd of astonished dogs—as from a savage who delights to torture his enemies, offers up bloody sacrifices, practices infanticide without remorse, treats his wives like slaves, knows no decency, and is haunted by the grossest superstitions.

The legacy of this response—a bold insistence on humanity's primate inheritance braided together with a deep-seated Victorian belief in a cultural hierarchy among human populations—has haunted evolutionary biologists ever since.

THE FALL OF ADAM AND EVE—at least among virtually the entire scientific community—signaled a shift toward a different conception of human origins. The conception called into question an entire structure of thought, a structure based upon the collective project of conferring on the figures in Genesis the vividness of real people. But the persistence of the belief in Adam and Eve's literal existence suggests something more than the atavistic clinging to a discredited fiction. The story of Adam and Eve was the precipitate of a very long, complex creative endeavor and has been teased out, in all of its implications, for thousands of years by people who have found it thought-provoking, compelling, and morally instructive. In doing so they were guided by specialized labors of great creative artists and thinkers who invested themselves deeply in the imaginary figures. The account of Lucy and our other hominid forebears is recent, murky, and in effect primitive. That this account of human origins happens to be true, according to our best scientific lights, does not in itself make it good to think with.

On the contrary, its difficulty, its uncertainties, its resistance to narrative coherence, makes it one of the great challenges of our age.

The difficulty, apparent from the beginning, has led to repeated attempts to impose a satisfying plot of one kind or another on Darwinism. Some followers imagined natural selection as a triumphal progress toward higher and higher forms of life, culminating of course in our own species. The predestined dominion granted by God to the humans in Genesis was simply granted now by evolution. Others used Herbert Spencer's famous characterization of natural selection as "the survival of the fittest" to serve as a brief for free-market competition in a capitalist economy. Still others, led by Darwin's cousin Francis Galton, saw in the theory a justification for eugenics, the attempt to perfect the human race by ridding it of "undesirables." That sinister enterprise, drawing upon the German biologist Ernst Haeckel's views on race and evolution, had its demonic expression with the Nazis.

Each of these and related variations on Darwinian themes has been exposed as a betrayal of Darwin and a fatal distortion of the massive scientific evidence that has accumulated in the wake of his generative insights. There is no progress in evolution, no march toward perfection. The concept of evolutionary "fitness," from which the phrase "survival of the fittest" was derived, need have nothing to do with competition, let alone with particular economic systems or with warfare. And genetics has undone rather than underscored the whole notion of "race" as an evolutionary principle.

But the attempt to find a narrative in evolution, however much that narrative distorts the evidence, is in large part a consequence of the unsettling absence of a plot, an aesthetic shape, in Darwin's overarching vision. In his old age, he himself brooded on what had happened to him. "Up to the age of thirty, or beyond it," he recalled in the brief autobiography he wrote for his children,

> poetry of many kinds, such as the works of Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley, gave me great pleasure, and even as a schoolboy I took intense delight in Shakespeare, especially in the historical plays.

These authors, familiar from his childhood, were among his principal companions during the round-the-world voyage on the *Beagle*. Milton in particular was with him, an intimate presence, when Darwin said farewell to Jemmy Button and Fuegia Basket, or dug in the limestone cliffs of South America for fossils, or measured the beaks of the Galápagos finches.

Yet though his imagination may have been shaped by *Paradise Lost* and *Henry IV*—and, for that matter, by the paintings and music that he loved—the stupendous theory he began slowly to formulate as the *Beagle* made its way across the Pacific ultimately changed everything in his mental universe. "Now for many years," he reflected, "I cannot endure to read a line of poetry: I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me."

Darwin was not proud of this nausea and did not commend it to his children. "The loss of these tastes," he told them, "is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character." But he was honest enough to acknowledge it, and he struggled to understand how it had come about. It had, he believed, something to do with his particular enterprise as a scientist, the work with which he had been absorbed for decades, ceaselessly amassing evidence and assessing its significance: "My mind," he wrote, "seems to have become a kind of machine for grinding general laws out of large collections of facts, but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive."

I have no solution to what baffled Darwin himself, but the problem

returns us to the continuing life of the story of Adam and Eve. For many people today, including me, that story is a myth. The long, tangled history from archaic speculation to dogma, from dogma to literal truth, from literal to real, from real to mortal, from mortal to fraudulent, has ended in fiction. The Enlightenment has done its work, and our understanding of human origins has been freed from the grip of a once-potent delusion. The naked man and woman in the garden with the strange trees and the talking snake have returned to the sphere of the imagination from which they originally emerged. But that return does not destroy their fascination or render them worthless. Our existence would in fact be diminished without them. They remain a powerful, even indispensable, way to think about innocence, temptation, and moral choice, about cleaving to a beloved partner, about work and sex and death. They are unforgettable embodiments at once of human responsibility and of human vulnerability. They convey with exceptional vividness the possibility of deliberately choosing in the pursuit of knowledge to disobey the highest authority or, alternatively, the possibility of being seduced into making a foolish choice whose catastrophic consequences will be felt for all time. They hold open the dream of a return somehow, someday, to a bliss that has been lost. They have the life—the peculiar, intense, magical reality—of literature.

Epilogue

In the Forest of Eden

On an uncomfortably hot and humid February morning, three of us—the evolutionary biologist Melissa Emery Thompson, the field assistant John Sunday, and I—had already walked for almost an hour in search of the chimpanzees that lived somewhere in this part of Uganda's enormous Kibale National Park. Researchers from the scientific field station where I was staying, the Kibale Chimpanzee Project, had seen them nest near here last night, John assured me, and we would almost certainly find them. The local chimpanzees, called the Kanyawara group, after the nearest village, would not run away from us, as apes in the wild ordinarily would. A team of scientists, led by the evolutionary biologist Richard Wrangham, has been observing them intensively for almost thirty years. In the first weeks, Wrangham told me, he did not see them at all; it was months before he began tentatively to name them; and four years passed before they were comfortable on the ground with the scientists nearby. But over time these apes very slowly became accustomed to the presence of humans.

I looked up for nests they might have made on the top branches, but I could detect no signs of them. The density and the enormous