

be. And the comparison between human war and chimpanzee raiding remains unsettling.

But what do the parallels prove? Chimpanzees, however bright they might be, however interesting and clever and entertaining, are animals. Animals don't have art, music, literature, and traditions and systems of ethics and religion and ideals. In short, animals lack human culture. Isn't culture the thing that gives us wings, that frees us from a slavery to passion and the violence of a tooth-and-claw nature? Surely culture makes us who we are. And isn't it obvious that humans show an astonishing variability in their social systems, proof positive that humans can simply "invent," through culture, virtually any reality and style of being and doing they wish?

This sort of question is so important that it compels us to digress from the specific comparison with chimpanzees. We have already touched on the issue. Now we need to consider more directly the question of what makes people tick. One view is that people can freely invent their societies and styles by cultural choice. If that's right, then presumably we ought to find samples of human societies that demonstrate the entire gamut of possibility. Yes, of course, there are repressive, aggressive, bellicose societies. We have already examined several; perhaps we live in one. But there should be peaceful ones, too.

Where are those exceptions to the general rule of human bellicosity, those wonderful places where people are not only at peace with each other and with their neighbors, but also at peace inside, in their own hearts and minds? They are hard to find in the world today. Is it possible that Western civilization has already etched its corrupting influence so far around the globe that our perceptions are now entirely distorted? Perhaps until recently there were many primitive Gardens of Eden, attractive little places where Western culture had not yet dropped its contaminating fruit. In short, have there been genuine human paradises existing until recently, special places where special people absorbed in special cultures constructed their own excellent worlds and simply chose peace and happiness?

5

PARADISE IMAGINED

Main argument: Both biological (genes) and cultural (ideas, needs) determinism are oversimplifications. Nature and nurture are complementary. Not violent paradise in past is being many.

THE SEARCH FOR PARADISE is at once the quest for a real place and a journey to distant islands of the mind, places representing the potential for human perfection. Atlantis. Eden. Elysium. The bower of the Golden Apples. Paradise is a favorite theme of cultures around the world, and the idea has often operated by idealizing the rough reality of an actual landscape. By the time of ancient Rome, for example, the poet Virgil was writing of a mythical paradise for young shepherds in Arcadia, a backwater district of Peloponnesian Greece that, a thousand years earlier, had survived untouched when the rest of the peninsula was overrun by Dorian invaders.

Postclassical Europe developed its own versions of paradise, and by the late Renaissance Europeans were seriously debating whether the newly discovered American continents represented a real-world expression of the ancient fantasy.¹ But by the nineteenth century, much of the American landscape was already tainted by a mundane familiarity, so many people from both sides of the North Atlantic turned their hopes toward the South Pacific, a warmish place still sufficiently remote and unexamined to harbor any number of appealing images. To this day,

visions of a paradise in the South Seas remain alluring motifs in Western popular culture, appearing not just in cheap advertisements promoting escape and romance through island vacations or in B-grade movies but in a serious way in major works of art and literature and even anthropology.

These contemporary images of paradise, no matter how truly or falsely they may represent their subjects, remain important because they project a particular, widely accepted view about human nature. Many of us who have seen the paintings of artists like Paul Gauguin, read authors like Herman Melville, and absorbed the ideas of anthropologists like Margaret Mead, find deeply comforting their evocation of paradise and their notion that human evil is a culturally acquired thing, an arbitrary garment that can be cast off like our winter clothes. It's a seductive vision, and in the hands of these talented figures it has been expressed with drama and conviction. It appeals because it gives the impression that if only we could get things right, we would locate the perfect world. It stimulates us to do good works. It offers hope amid the gloom.

Optimism is a wonderful emotion. But the vision of paradise that comes from the balmy islands of the South Seas is flatly challenged by the ubiquity of warfare and violence across time and space. How could these figures of genius, Gauguin and Melville and Mead, have gotten it so wrong? Or perhaps they were right after all. As we disentangle the arguments that brought them to their own individual but shared images of paradise, we find a remarkable thread unwinding that connects all three. Each found paradise in the same special way. Each imagined paradise as a place without men.

For artist Paul Gauguin, the South Pacific was a place of strong light and high contrast, with rich primary colors and readily available nude models. Gauguin was both a practitioner of French Impressionism and an inheritor of French Romanticism. And in his brilliant oils of Tahiti the artist painted Rousseau's noble savage with light poured and puddled like liquid. The

noble savage was specifically female and vaguely Christian, an Eve of the tropics, produced and reproduced in an entire series of pensive, self-possessed, and yet curiously provocative nudes showing serenity, ease, sexuality, and freedom.

In the painting he considered his masterpiece, entitled *Where do we come from? What are we? Where are we going?* Gauguin summarized most fully and dramatically his romantic vision of paradise. Painted in December of 1897, this massive canvas — four and a half feet high and well over twelve feet wide — presents a pleasing scene of women and girls in repose, clustered in three groups before a stream in a grove of trees, crossed by long shadows and spottily illuminated by a warm and orange light cast from the setting sun. Intermingled with the human figures are contented domestic animals. One girl, preadolescent, mildly androgynous, stands at the center, sun-brightened, her arms raised, poised to pluck a ripe fruit from a tree. But there are shadows on either side. To the right a gloomy pair plans or plots — as if the expulsion from Eden has already begun. To the left a white-haired crone sits, face in hands, her eyes closed. She could be fading toward death. Here is a moment in primitive time when humans and animals lived harmoniously within nature's garden, not yet overcome by sorrow and pain, time and death. It implies that the real-life present moment in Tahiti might somehow represent an existence near, or near enough, to paradise.

"I do believe that not only is this painting worth more than all previous ones but also that I will never do a better one or another like it," Paul Gauguin wrote in a letter to his agent in Paris.² But his contemporaries disagreed. The canvas was nailed inside a wooden crate and shipped to Paris, where it fetched, in a package deal with seven other paintings, 1,000 francs. A disappointing sum. Nowadays, of course, it's worth a bundle. It hangs in Boston's Museum of Fine Arts, testimony to the beauty and power of the romantic vision.³

Back in Tahiti, however, real life was far from romantic. While he was painting *Where do we come from?* Gauguin struggled in a deep depression, overwhelmed by the recent death of

his daughter Aline. As soon as he finished his masterpiece, the artist walked alone into the mountains, took an overdose of arsenic, and lay down to wait for death. But he took too much. So he vomited it up, spent three miserable days staring at the painting from his bed, and then recovered to continue a lonely life of battling an unappreciative public, hostile officials, and unsympathetic compatriots among the island colonials.

Still, there was a paradise — of sorts. When the artist first came to Tahiti, so he claimed in his book, *Noa Noa*, he found sexual opportunity everywhere. The only problem was that, according to the Tahitian men, the adolescent girls and young women of Tahiti wanted to be raped. "I saw many young women with untroubled eyes; I guessed that they wanted to be taken wordlessly, brutally. A desire for rape, as it were. The old men said to me, speaking about one of them: '*Mau tera*.' ('Take this one.') But I was timid and could not bring myself to do it."⁴ He didn't need to. As an exotic and well-connected outsider, the artist himself was a promising catch. He quickly took on an adolescent girl companion, the lovely Titi, whose attentions he treasured for a while. She was a city girl, however, half white and corrupted by too much contact with Europeans, which meant she would "not serve the purpose I had in mind," whatever that was. In the country, where Gauguin soon went, he hoped to find "dozens of them," but, so he worried, "they would have to be taken in Maori style (*mau* = to seize)." His concerns were unnecessary. Before too long a thirteen-year-old girl was given to him by her mother to be his wife. And though he lived in great economic poverty, Gauguin's sex life continued to be rich and arrogantly expressed. He outraged the colonials by decorating his home with startling pornography; and he took a succession of young lovers, though he eventually found it hard to overcome the reluctance of girls put off by his venereal lesions.

Toward the end of 1901, Gauguin was so besieged by the local authorities that he decided to seek, as he wrote, "a simpler country with fewer officials."⁵ He took a boat to the Marquesas Islands, where he bought a small plot of stony land

from a Catholic mission and built on it a modest hut. He died there, impoverished, unhappy, and about to serve a three-month prison sentence for slander, on May 8, 1903.

For Paul Gauguin, then, the reality of life in the South Pacific was difficult and distressing. But the paradise he coated his canvases with remained serene, sultry, and exclusive. For him, the ideal of the South Seas was his own private club undisturbed by the presence of other men, packed with girls and young women who were simultaneously innocent and available. It was an island with only one man in residence: creator and voyeur at once, gazing at an oiled dream of nubile young women and pleasing if naive concepts of a peace in nature.

A generation before Gauguin painted his Tahitian Eves at the edge of paradise, a young American writer named Herman Melville created his own compelling vision of paradise in the South Seas. Whereas Gauguin was to clutch at fame in Tahiti and finish his life bound for jail in the Marquesas, Melville garnered fame through an adventure in the Marquesas and wound up in jail in Tahiti. These days, Herman Melville is famous primarily for his encyclopedic whaling epic, *Moby Dick*. But his book about the Marquesas, *Typee*, was not only Melville's first book, it was his biggest success during his own lifetime and for a half century after, influential not merely as a gripping tale but also as a work of ethnography.⁶

The writer entered the South Pacific as a common seaman aboard a 358-ton whaling vessel, *Acushnet*. The *Acushnet* rounded the horn of South America in April 1841 and by June had traced the western coast as far north as Peru. In pursuit of whales, the ship turned away from the continental edge at Peru, passed through a volcanic archipelago called the Galápagos Islands, and then caught the trade winds out into the deep South Pacific.

Melville's adventure in the Marquesas began soon after the *Acushnet* anchored in Taiohae Bay of Nukuheva, largest island of that group, where he jumped ship. The Marquesas are an ar-

chipelago of ten volcanically formed islands roughly 4,000 miles west of the Galápagos and around 850 miles northeast of Gauguin's Tahiti. They were colonized a century or two before the birth of Christ by Polynesian people sailing east from Samoa across 2,000 miles of open sea to establish patriarchal yet relatively egalitarian societies in which every first-born male was called *haka-iki* — chief — and might potentially acquire high status through war, wealth, or politics. Marquesans lived within small communities separated from each other by geography and a perpetual state of suspicion, hostility, and warfare. Warfare ordinarily amounted to a regular series of clashes, ambushes, and raids for the purpose of acquiring bodies to be eaten ceremonially and also in retaliation for an enemy's ceremonial cannibalism.⁷

That cannibalism, combined with an open and comparatively uninhibited sexuality, made the Marquesans objects of compelling fascination for Westerners. The islands were named by the Spanish, claimed by the French — and then, in 1813, briefly occupied by the Americans in the person of Captain David Porter. Captain Porter, commander of the frigate *Essex*, had been instructed to challenge British shipping in the Atlantic during the War of 1812 but found himself inspired to attack British whalers in the Pacific. In this he succeeded well enough to ensure the later American dominance in Pacific whaling; and by the time it entered Taiohae Bay, Porter's *Essex* trailed in its wake five commandeered and armed British whalers. Captain Porter, who took up residence in the bay to rest his men and refit his makeshift flotilla, found Nukuheva an idyllic spot and the Marquesans inhabiting it ripe for the civilizing effects of colonial dominion. He declared the place an American possession, named it Madison's Island in honor of President Madison, and even plugged a written copy of his declaration into a bottle and buried it there. Porter, though, soon found himself embroiled in intercommunity antagonisms and ultimately concluded it necessary to invade the valley of the strongest and most ferocious people on the island, the Typees, and burn down their villages as

a sort of grand civics lesson. He left Nukuheva two weeks after that shameful attack, never to return.

Porter's brief stay in the Marquesas marked the beginning and end of American political influence there. An American sloop of war, the *USS Vincennes*, did sail into Taiohae Bay in 1829, but the *Vincennes* is significant principally because she carried as a midshipman Herman Melville's cousin Thomas Melville and, as chaplain, a pious man named Charles Stewart. A party that included Stewart and Thomas Melville entered the Typee Valley, and the Reverend Stewart wrote about his experiences there in *A Visit to the South Seas* (1831) as part of an extended plea that the Marquesans, enduring "all the darkness of paganism," desperately needed the "enlightening and regenerating influences of Christianity" that might be provided by Protestant missionaries.⁸

By the time Herman Melville jumped ship in 1842, any American influence on the island, including a few physical remnants from an abortive missionary expedition, had faded, and the natives of Nukuheva were being pacified by five hundred French troops and seven French gunboats anchored in the harbor alongside the *Acushnet*. But the island was large and divided by precipitous ridges and thick vegetation; and to avoid capture and trial for desertion, the young Herman Melville and sailor Richard Tobias Greene quickly slipped out of Taiohae Bay and into the island's high and rugged interior. Coming out after a few difficult days and nights into another valley, the pair, injured, hungry, exhausted, fell into the care of a community of about two thousand islanders, the Typees, who had so far remained relatively isolated and culturally intact (in spite of Captain Porter's 1813 punitive invasion) because they were still regarded by other islanders and Europeans alike as ferocious warriors.

Herman Melville turned twenty-three during the three weeks he lived among the Typees in the latter part of July and early August of 1842.⁹ He left or escaped on August 9 and was picked up by an Australian whaler, the *Lucy Ann*, which took him as far as Tahiti, where he was briefly jailed with some of the

other crew on a questionable mutiny charge before escaping to another whaler. Surely three weeks was not much time to get to know the Typees, but it was long enough for the young Melville to acquire a basic background that, supplemented through reading other travelers' narratives, could be turned into his first book. *Typee* is an imaginative piece of literature in which the rough outlines of a real event have been passed through the mind of an artist. But Melville promoted his manuscript to publishers as a true story, absolute nonfiction. And when the book appeared at last in 1846, the author's preface boldly declared his tale to be strictly "the unvarnished truth."¹⁰

Typee is by no means the unvarnished truth, however, but more a search for answers to the problems raised for Westerners by the discovery of very different human societies in the East. *Where do we come from? What are we? Where are we going?* Paul Gauguin asked those three questions as he painted his great tableau. Melville and his predecessors on Nukuheva, gazing into humanity's mirror and considering the images presented by the exotic, elaborately tattooed, sexually expressive, warring and cannibalistic Marquesans, were forced to ask much the same questions — though framed a little differently. If the Marquesans represented humanity naked and in a precivilized state of nature, then the most obvious question they provoked was: Is humankind naturally evil?

Herman Melville structured *Typee* as a combination of adventure narrative, anthropological study, and political argument. His narrator, Tommo, is a man whose filtered vision shifts and flickers in the complex, anguished process of living among beautiful cannibals and trying to figure out what that exotic experience means. Tommo arrives in the Typee valley equipped to see things through practical and moralizing eyes, and his early anxieties about living among the notorious Typees surely parody the bluff arrogance and paranoid rigidity of earlier American and European commentators. He quickly rejects that limited perspective, however, and decides that the real savages in this world are not innocent South Seas islanders but aggres-

sive Europeans: "The fiend-like skill we display in the invention of all manner of death-dealing weapons, the vindictiveness with which we carry on our wars, and the misery and desolation that follow in their train, are enough of themselves to distinguish the white civilized man as the most ferocious animal on the face of the earth."¹¹ Melville's Tommo begins to conclude that natural man (as typified by the Typees) is innately good and that therefore civilization, not the human heart, is the source of evil. Tommo makes the Typees' valley into a figurative paradise by punctuating his descriptions with overt references to the biblical Eden, and by stressing the beauty and physical perfection of the Typees, their happy innocence, artless simplicity, good-natured laziness, and the physical ease of their life. "The penalty of the Fall presses very lightly upon the valley of Typee," Tommo declares. No one has to garden or plant or hunt. Breadfruit and banana have always grown wild on the island, and a hungry appetite is easily satisfied by the casually outstretched hand.

No snakes. No predatory beasts. No mosquitoes. The South Seas setting of this book is indeed an almost perfect place, close to the biblical Eden. And Tommo uses that vision to suggest that the Western colonial powers, as they take over the island with their bristling gunboats and bible-thumping missionaries, are violating fundamentally a human peace in nature.

The image is powerful and appealing, but it leaves out a critical part of Typee life. In fact, as Tommo well knows, the peace of this Eden is punctuated regularly by intercommunity warfare. "Occasionally I noticed among the men the scars of wounds they had received in battle; sometimes, though very seldom, the loss of a finger, an eye, or an arm, attributable to the same cause."

How to portray a violent society as innocent? Tommo's first solution resembles Paul Gauguin's. Typee warfare was always conducted by the men, and Tommo adroitly focuses his narrative and descriptive powers on the young women. Indeed, the narrator insists he spent much of his time in the company of lovely adolescent girls, especially his own heart's favorite, a

"beauteous nymph" named Fayaway. It is difficult now to reconstruct the actual truth about Typee when Melville was there. We do know that the author exaggerated his time spent in the valley fourfold. We know he overemphasized the ease of life in the valley by suggesting that no one had to labor when in fact the islanders, like other Polynesians, cultivated gardens and planted and tended their food trees. We also know that Melville shaped the geography of the valley to suit his narrator's imaginative needs. He invented, for example, a large lake in which to bathe and lounge on languid afternoons with his female companions, and on which, in one of the book's most memorable tableaux, the lovely Fayaway stood up in a canoe, spread out her loose robe to make a sail, and thereby revealed her naked and natural beauty.

There remained the problem of cannibalism. But only the Typee men ate human flesh; and they ate only the flesh of enemies killed in battle, which made it less reprehensible. Though they were cannibals, in other words, they were basically *nice* cannibals who, according to Tommo, strictly limited this otherwise appalling habit and were "in other respects humane and virtuous."¹²

Paul Gauguin's vision of the South Seas as a type of idyllic human past depended upon an absence of men. He painted Tahitian women and girls almost exclusively, presenting in portrait after portrait the knowing, artful image of a naive, artlessly sexualized Eve. Herman Melville's South Seas paradise also included a romantic place of the mind where lovely adolescent girls lolled around without many clothes on. But Melville's world was more complex, and in the end, the literary artist turned to his male warriors and cannibals and painted them in colors increasingly realistic — and threatening. After all his relaxed lounging, his playing and chatting and swimming with the "nymphs," Tommo, in the book's final few chapters, becomes increasingly concerned about who the Typee men really are, what they are doing — and what they are going to do. Once

Melville's Tommo turns to the men, which Gauguin never does, then the stain of evil starts to appear. First the narrator fears that the physically powerful warriors — themselves tattooed top to bottom, face to fingertip — intend to tattoo him. Then he discovers the ghoulish scraps of a cannibal feast, as well as three shrunken human heads wrapped up and kept in the house where he stays. This progressive discovery of evil in paradise, the violence and cannibalism among Typees, amounts to a realistic dissolution of the romantic vision and explains why, in the end, Melville's narrator chose to leave. He left this wonderful paradise, exemplified by the sexually free and innocent adolescent girls, because he was afraid of being beaten and eaten by the Typee men.

In the book's final scene, Tommo finds himself chased out of paradise by spear-throwing men and fleeing to a whaling boat that has entered Typee Bay to rescue him. Attacked at the last minute by a tomahawk-wielding Typee warrior, Tommo is compelled to smash him viciously with a boat hook. In short, Tommo's own violence mirrors the violence of these South Seas "savages" as he fights to reenter a Western civilization, which, for all its manifest crimes and corruptions, will still buy books about paradise in the South Seas.

If for his readers, the wonderful accounts of lovely, half-naked adolescent girls remained far more evocative than those final references to spear-throwing, tattooed warriors, for Melville himself clearly nature was not peaceful, and natural man was not a noble savage. It is doubly ironic that *Typee* remained for most people a true story, fundamentally an amateur anthropologist's study of Polynesia, until literary scholar Charles Robert Anderson demonstrated in his 1939 book, *Melville in the South Seas*, that the artist had falsified his chronology and borrowed from the writings of his predecessors.

For Herman Melville paradise was a piece of innocence that provided the perfect foil for his angry attacks against over-dressed missionaries and scavenging colonialists. But the young

American writer was not fooled by the romantic abstraction of paradise with which he seduced his readers.

Preceding Herman Melville's *Acushnet* by little more than five years, a ten-gun brig of the British navy converted into a scientific survey ship, the HMS *Beagle*, rounded the horn of South America, moved in fits and starts up the coast as far north as Peru, and turned to wind slowly through the Galápagos Archipelago before catching the trades out into the deep South Pacific — past the Marquesas and bound for a ten-day layover in Tahiti. From there, the *Beagle* cut a wake into the Far East, across the Indian Ocean, around the African Cape, at long last dropping anchor in the English port of Falmouth on October 2, 1836, and disgorging, among many other homesick passengers, three live giant tortoises from the Galápagos Islands and one Charles Darwin.

"Tahiti is a most charming spot," the young Darwin wrote his friend and former teacher at Cambridge, the Reverend John Stevens Henslow. "Everything which former Navigators have written is true. . . . Delicious scenery, climate, manners of the people, are all in harmony."¹³ Harmonious, indeed, but Darwin never imagined the island to be a paradise. However, Darwin's journey to the South Seas was indirectly responsible for others seeing a version of paradise in those islands because his *Origin of Species* would raise new questions about human potential and the possibility of social change. The challenges raised by Darwin's work meant that culturally isolated human communities, including those living on islands in the South Seas, would be revisited in the next century by anthropologists probing for newly sophisticated answers to Gauguin's questions. Among them, and the most influential of all, was anthropology's equivalent to Gauguin and Melville, a brilliant scientist whose conclusions suffered from being tailored to suit her preconceptions: Margaret Mead.

Darwin's *Origin of Species*, published in 1859, convinced most readers that the intricate workings of heritable biological

processes were far more important to human existence, even to human culture, than previously thought. Exactly how biology and culture were related then became a vital question. In England, Darwin's cousin Francis Galton read *Origin* and decided with a burst of enthusiasm that "a great power was at hand wherewith man could transform his nature and destiny."¹⁴ By 1874 Galton had plucked a Shakespearean phrase (from *The Tempest*) that turned the question of where we come from into a stark debate: *Nature* versus *Nurture*. And he, of course, supported nature.

The phrase was catchy, but a gross oversimplification. The reality is that all living organisms are influenced both by their genetic inheritance and by the environment they live in. It is true that in comparisons between two individuals we can often observe the influences of genetic or environmental differences. But only in comparisons can we do so, and even then only by the special trick of keeping either genes or environment constant. Both genes and environment influence hair color, hat size, and how we behave. Unrelated people with equally good nutrition, the same exposure to sun, and even the same hair dye can have differently colored hair. So genes — that is, nature — affects the traits. On the other hand, identical twin sisters can have differently colored hair because of variances in their nutrition, or unequal amounts of time spent in sunshine, or different choices of hair dye. So this second set of comparisons shows the importance of environment — nurture. Hair color is influenced by both nature and nurture, in other words. Those who look for the importance of genes would hold the environment constant and examine the results of a comparison. Those who want to find the influence of nurture, by contrast, would try to find a case where genes seem constant, and then look for differences imposed by experience. Each side can claim its victories, but to contrast those two forces in isolation from each other is absurd. So Galton's dilemma, nature or nurture, was a false one, an intellectual red herring. But it came to have such historical importance we feel it deserves a name of its own: Galton's Error.

History of origin of
Nature vs Nurture
is safe

Francis Galton felt he knew the answer to Gauguin's second question, *What are we?* We are creatures, he thought, directly arisen from nature, products dropped off the conveyor belt of a large Darwinian factory, the intellectual and moral consequence of nature, not nurture. This belief in a simplistic biological determinism he adopted early, and by 1883, after completing an extended study of twins, Galton insisted that he had achieved proof of "the vastly preponderating effects of nature over nurture." The publication in 1900 of Gregor Mendel's astonishing experiments with sweet peas showed how simple physical features of sweet peas could be genetically transmitted from one generation to another. Galton and his followers had little doubt that the more complex features of human behavior would sooner or later be shown to follow the same fundamental pattern, and by 1901 Darwin's cousin had initiated a grand crusade, a movement, he said, "like a missionary society with its missionaries" proceeding with "an enthusiasm to improve the race." The race he referred to was the human one, and Galton's plan for improving it — which he called *eugenics* — would follow the principles used in breeding domestic animals, that is, manipulating the reproduction of individuals to alter a group's gene pool.

Galton's views held alarming social implications, and it wasn't long before they were challenged. While Paul Gauguin painted away in Tahiti, while Gregor Mendel's experiments on sweet peas in an Austrian monastery were being resurrected, while Francis Galton prepared to establish his eugenics movement in Britain, in New York City a man who had read Kant sitting half-starved inside an igloo in the howling Arctic was granted tenure as a full professor of anthropology at Columbia University.

In 1900, with his first major lecture at Columbia, Professor Franz Boas began his lifelong campaign to challenge Galton's style of extreme biological determinism. Boas correctly perceived the danger that biological determinism could turn viciously racist; he correctly regarded culture as far more dynamic

and powerful than the strict Darwinians of his time would have it; and Boas proclaimed his vision that anthropology should apply itself most forcefully to examining the mysteries of culture and its impact on human behavior. Pressed by the increasingly radical assertions from biological determinists of that period, by the 1920s he had declared himself actively searching for a way to distinguish experimentally between the biological and social origins of human behavior: to separate nature from nurture, claiming a "fundamental need," as he wrote in the *American Mercury* in 1924, for some "scientific and detailed investigation of hereditary and environmental conditions."¹⁵

One of his most eager and promising students at Columbia, Margaret Mead, was just then ready to begin her doctoral dissertation, and Boas decided Mead's dissertation ought to focus on adolescence. A demonstration, he felt, that coming of age was in one culture not stressful would indicate that adolescence as an emotional and behavioral entity was far more a product of nurture than of nature. A negative instance would destroy the claim of universality and sway the nature-nurture debate back toward nurture. "Are the disturbances which vex our adolescents," Mead asked rhetorically, referring to American and European teenagers, "due to the nature of adolescence itself or to the civilisation?"¹⁶

To answer that question, Mead followed Melville and Gauguin to the South Pacific. On August 31, 1925, at the age of twenty-three, the young American walked down the gangplank of a Matson cruise ship into the exotic port of Pago Pago, on the island of Tutuila in American Samoa. Her findings from this expedition would capture the imagination of the Western world and galvanize a movement toward cultural relativism. Yet she was later proven extraordinarily wrong in many of her claims about Samoan life.

Samoa is an archipelago of volcanically formed South Seas islands, nine of them inhabited by a single cultural group who call themselves Samoans and speak the Samoan language. Politically, the islands are currently divided between Western

Samoa (four islands, independent since 1962) and American Samoa. Mead would regularly emphasize the remoteness and cultural primitiveness of the islands. But when she arrived in Pago Pago, she entered a Polynesian society that had been Christianized by Protestant missionaries some eighty years before and had been a legal territory of the United States for more than twenty years. Her disembarkation was accompanied by the sounds of the United States navy band and the sights of several American battleships and airplanes; she carried a letter of introduction to the Surgeon General of the American navy and soon enough was given the honor of dining with the admiral of the Pacific fleet.¹⁷

Mead was later to recall that "through the nine months" she spent in Samoa, she "gathered many detailed facts" about "all the girls of three little villages" on the remote island of Ta'u. "Speaking their language, eating their food, sitting barefoot and cross-legged upon the pebbly floor, I did my best to minimise the differences between us."¹⁸

Her readers could easily imagine that she spent nine months, day and night, living in primitive conditions directly with her subjects — but that would be an exaggeration almost as extreme as Herman Melville's claim to have spent four months among the Typees. Margaret Mead actually spent around six months on the island of Ta'u, with approximately three of them devoted to interviewing the girls. Since she arrived in Samoa completely unfamiliar with the Samoan language, she found it necessary to stay in her hotel room in Pago Pago on the main island of Tutuila for at least six weeks while a language teacher came once a day for an hour's lesson.¹⁹ Those brief lessons were inadequate, and, as a further attempt to learn the language, for ten days Mead tried living in a Samoan household not far from Pago Pago. By late October, though, she had decided to leave Tutuila altogether and begin her field work on the more remote Ta'u; on November 9, she was given a lift to that island on a U.S. navy minesweeper. Mead's ten days in a Samoan household on Tu-

tuila had been time enough to convince her that she preferred to live in the Western style. She was very reluctant to stay with Samoans, so she wrote home to Boas, because she feared a "loss of efficiency due to the food and the nervewracking conditions of living with half a dozen people in the same room in a house without walls, always sitting on the floor and sleeping in the constant expectation of having a pig or chicken thrust itself upon one's notice." The only non-Samoan household on Ta'u was located in the U.S. naval pharmaceutical dispensary, where the navy pharmacist, Edward Holt, and his wife and children lived. Mead chose to live with the Holts, who gave her a private room and permission to use a small house in front of the dispensary for conducting her interviews and tests.

She began her research. From three villages on the island, Mead studied in detail fifty girls and young women, including twenty-five who had not begun menstruation and twenty-five who had. The twenty-five adolescents, between fourteen and twenty years old, were her central study group. Her interviews and tests proceeded from mid-November to early March — with significant interruptions caused by a devastating hurricane in January; the arrival of a European shell-collecting expedition in mid-February; and the resumption of mission schooling in late February.

Mead was later to make many sweeping claims about Samoan culture in general, based largely on an expertise acquired during her single nine-month stay — arguing that although no one could be expected to become an expert on complicated European societies in such a short time, Samoan culture was in fact very simple, and "a trained student can master the fundamental structure of a primitive society in a few months."²⁰ That assertion seems, from a modern perspective, presumptuous. It becomes more so when we realize that during Mead's sojourn on Ta'u, all political, economic, religious, and ceremonial decisions were made by councils of men only. She was thus excluded from observing at firsthand many significant aspects of Samoan cul-

tural life. She was forced to rely almost entirely on her adolescent girls for most of her direct information about the wider culture.

Mead left Ta'u in May of 1926 and began her long voyage home. She returned to New York, won a position as assistant curator at the American Museum of Natural History, and within a year, by the spring of 1927, had virtually completed the typescript for her book, *Coming of Age in Samoa: A Psychological Study of Primitive Youth for Western Civilisation*.

Coming of Age, which appeared in 1928, argued a fundamentally simple thesis: Nurture far more than nature wrote the human script. Societies could choose to construct extraordinarily different sets and sequences of behaviors for people to act out almost as freely as individuals can choose the clothes they wear. The proof of this thesis was that Mead had investigated adolescence in the South Seas and found it to be amazingly different from adolescence in the West. While coming of age in the West was a time of "stress and strain,"²¹ in Samoa the same developmental phase was for a girl "the best period of her life." Thus, American-style adolescence was not a universal and inevitable consequence of biologically driven feelings, passions, and behaviors, but rather an unnecessarily painful production of a sexually repressive Western culture.

Growing up in Samoa was "so easy, so simple a matter," Mead wrote in *Coming of Age*, partly because of the "general casualness of the whole society,"²² but mostly because sex was regarded as "a natural, pleasurable thing." In such a relaxed culture, uncorrupted by the repressive influences of Western Protestantism, there was "no room for guilt." Just as Samoan children were raised in a warm but emotionally undemanding and fundamentally permissive style, so the pubescent girl found no restrictions on her inclinations to pursue a broad variety of sexual partners. Adolescence was a wonderful period of free and open sexuality, a time of delightful, lighthearted promiscuity.

Given how successfully the Samoan culture had constructed its sexual attitudes and behaviors, moreover, most psycholo-

gical problems, typical of the "maladjustment which our civilisation has produced,"²³ simply vanished. Jealousy was rarely aroused, for instance. Samoans rarely developed neuroses or marital problems or Oedipus or Electra complexes. As a matter of fact, no Samoan woman was ever frigid and no Samoan man ever became impotent from psychological causes. And, with no particular reason to be unhappy, there was, Mead eventually concluded, virtually no suicide.

In this apparent paradise, the anthropologist continued to inform her readers, the culture had chosen such a satisfactory attitude toward sexuality that rape just about disappeared; adolescent boys were too busy making sure the voracious girls were sexually contented. In *Coming of Age*, Mead was actually somewhat circumspect on the issue, acknowledging that "rape, in the form of violent assault," did occur "occasionally" in Samoa — but it was surely the fault of "contact with white civilization."²⁴ In some of her other writings on the subject, Mead became more certain, asserting at one point that "the idea of forceful rape or of any sexual act to which both participants do not give themselves freely is completely foreign to the Samoan mind." Of course there was, as she candidly admitted in *Coming of Age*, a "peculiar abuse" perpetrated by the *moetotolo*, or sleep crawler. The sleep crawler was a boy or man who would sneak into an adolescent girl's bed when she was expecting her lover in order to trick the girl into having sex with him, to "stealthily" appropriate "favours which are meant for another." In the West, such an act might be regarded as simply one form of rape, but in Samoa, so Mead declared, a sleep crawler merely "complicates and adds zest to the surreptitious love-making." Catching one of these sneaky fellows in the act was "great sport."

Not only had the culture simply eliminated adolescent angst, parental repression, all neuroses, most jealousy, all frigidity and impotence, and most rape, it had also done away with violence: "No implacable gods, swift to anger and strong to punish, disturb the even tenor of their days."²⁵ What warfare there was in Samoa, she wrote elsewhere, had been stylized, merely a

consequence of village squabbles and therefore killing only one or two unlucky people at a time. In fact, Samoans would "never hate enough to want to kill anyone." They are among the "most amiable, least contentious, and most peaceful peoples in the world."

Coming of Age became almost immediately a huge popular success. Many readers, no doubt, were stimulated by Mead's imaginative and mildly titillating word pictures of a free-loving South Seas paradise (or by the bare-breasted beauty and her lover rushing across a beach under a full moon, as featured on the original dust jacket illustration).²⁶ But Franz Boas and his associates and colleagues, students and former students, endeavored to tilt the reception of the book to more elevated levels. A foreword by Boas declared the study to be a "painstaking investigation" confirming "the suspicion long held by anthropologists, that much of what we ascribe to human nature is no more than a reaction to the restraints put upon us by our civilisation."²⁷

Mead herself never returned to Samoa and never altered the text of *Coming of Age*. In a 1961 introduction to the book, she compared her portrait of adolescent girls in the South Seas to the eternal lovers who stand forever as perfect art on the glazed surface of Keats's Grecian urn. Her painting of the Samoan paradise would, she declared, "stand forever true because no truer picture could be made of that which is gone."²⁸

But any number of European explorers, traders, adventurers, missionaries, and government officials had been coming to the islands since 1722. Their written reports regularly contradicted Mead's, as did the observations of several social scientists who came to parts of Samoa subsequently.²⁹ An Australian anthropologist named Derek Freeman, who began his own field work in the archipelago fifteen years after Mead, and who between 1940 and 1981 spent a total of six years living intimately among Samoans, finally published in 1983 the first full analysis and critique of Mead's work, *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*. Freeman's analysis has been characterized, correctly, as a "frontal attack."³⁰

Indeed, the tone of this book is ultimately unforgiving and stridently polemical;³¹ and it suffers from an overly simplistic analysis of the intellectual context of Mead's work. It oversimplifies Boas's stance as an anthropologist, for example, and it appears to exaggerate Mead's influence on the thinking and methodology of subsequent cultural anthropologists.³² But Freeman's more particular assertion, that Mead greatly overgeneralized from a limited set of data, looks correct.

As Freeman reminds us, Margaret Mead did not actually study adolescence in the United States, nor did she review what was known scientifically about adolescence in the West, and so her comparison of the two cultures is weakened by the fact that she provides data for only one. Though Mead never actually studied boys in Samoa, she nonetheless began generalizing, by the 1930s, about the nature of adolescence for them as well. In addition, her study group was far from ideal. Her twenty-five adolescent girls included three who were, according to Mead's own assessment, "deviants" in the sense that they "rejected the traditional choices."³³ In addition to those three, another three were by Mead's description "delinquent." But the fact that six of her group of twenty-five were maladjusted was essentially forgotten.

Adolescence was for both sexes the "age of maximum ease" in Samoa, so Mead wrote in 1937. But in fact, so Freeman points out, police records show the delinquency rates for adolescents in Samoa to be consonant with those of other countries; and the ratio of male to female first offenders in Western Samoa parallels the typical ratio for Western countries: five to one.³⁴

As for the remarkably carefree promiscuity of Samoan girls, Mead's own account indicated that fourteen of the twenty-five pubescent girls in her sample — distinctly over half — were virgins.³⁵ Indeed, the Samoan people are distinguished from some other South Pacific island cultures by having a traditional obsession with virginity, as expressed particularly in the institution of the *taupou*, or ceremonial virgin. Virgins were and are highly valued in Samoa, and thus, reports Freeman, the activities of

an adolescent girl are carefully observed by her brothers, who, should they find her in the company of a potential lover, are likely to berate her, possibly beat her, and assault the boy.

Mead described jealousy as a rare emotion in Samoa, and adultery often not the source of much "fuss." In fact, several historical accounts of Samoa describe jealousy as a frequent and severe emotion and note that the ordinary punishment for adultery was death. The deceived husband was free, by Samoan tradition, to seek revenge on any member of the guilty male's family, while the adulterous wife would likely be punished by the severance of a nose or ear, or the breaking of bones.³⁶

Mead insisted that the occasionally occurring violent rape in Samoa was the result of contact with Western civilization, and she distinguished between forcible rape and the traditional sleep crawling. In fact, both styles of rape were and are common in Samoa. Historical accounts as far back as 1845 describe instances of forcible rape; the first court records for American Samoa, starting in 1900, frequently detail rapes. In the 1920s, when Mead visited the islands, the *Samoa Times* regularly reported rape cases; and jail statistics from the period indicate that rape was the third most common crime on the islands. In the 1950s, government statistics reported rape to be the fifth most common crime. Many forcible rapes in Samoa were adjudicated within the local community, but the cases officially recorded by Samoan police during the late 1960s suggest a rate twice that of the United States and twenty times that of England for the same period.

Mead's generalizations about the peacefulness of Samoan society — no war gods, no wars, little serious contention or hatred or violence, and so on — are all, according to a wealth of historical, anthropological, and contemporary information, wrong.³⁷ Half of the seventy-some main gods in pre-Christian Samoa were war gods. By all accounts, wars in pre-Christian Samoa were common and very bloody. John Williams, a missionary and explorer who visited the islands during the 1830s, observed an eight-month-long war between two regions of Samoa

and described regular battles between hundreds of participants. The victors in this war tore out the hearts of some of their captured enemies; four hundred other captives, including women and children, were burned alive. Williams arrived on the island of Ta'u — where Mead did her study — in 1832 and learned that a major war between Ta'u and the neighboring island Olosega had taken place four months earlier, during which thirty-five men from Ta'u, more than a tenth of the total number of adult men on the island, lost their lives. Indeed, warfare between Ta'u and Olosega was so persistent that a sporadic series of raids and retaliations continued even past the time of Mead's visit.

Though Mead declared the Samoans to be among the "most amiable, least contentious, and most peaceful" of peoples, police records for 1964 to 1966 tell us that Western Samoa had five times the rate of common assault as occurred in the United States during the same period. Police records also indicate Samoan rates of serious assault (assault causing physical injury) to be more than half again the U.S. rate for the same period, almost five times the Australian rate, and eight and a half times the New Zealand rate. Though Mead insisted that Samoans "never hate enough to want to kill anyone," police records and other reliable sources sketch a completely different picture. Western Samoa's murder rate for 1977 was almost half again as high as the U.S. rate during a comparable period, while American Samoa's murder rate was about five and a half times that of the United States.

Margaret Mead was a bold pioneer and a gifted writer with a special talent for bringing academic insights into the public arena. The fundamental lessons of her early work in Samoa — that Western ideas of human possibility were limited, that Western sexuality was too inhibited, that child rearing in the West was rigid and overly authoritarian — were welcomed and taken to heart by the culture at large. A mother herself, Mead adopted breast-feeding on demand after observing the practice during field work in New Guinea, and so she was able to persuade her pediatrician, Dr. Benjamin Spock, that on-demand

feedings would produce happier, healthier children. That message, too, was thoroughly passed on.

Coming of Age in Samoa became a classic, an essential text for introductory courses in the social sciences, the most widely read piece of anthropology in history, and it made its author famous beyond what anyone could have predicted. She spent her life promoting it and the ideas it represented, simultaneously witnessing and encouraging her own apotheosis. Ultimately, she grew into "a symbol of all anthropology," and found herself transmogrified (according to *Time* magazine in 1969) into "Mother to the World." For Mead herself, paradise was Samoa. While Samoa, in turn, became for the general public pristine evidence that culture alone — nurture without nature — scribes its mysterious markings on the blank slate of human character.³⁸ The shortcomings of Mead's Samoan research are no more remarkable than those of any number of dissertation projects past and present; but its astonishing success and its unwitting transformation of a pastoral fantasy into ultimate proof for an extreme position of cultural determinism helped perpetuate for another half century the misleading separation of nurture from nature first suggested by Francis Galton in 1874.

Cultural determinism, as the counter to Galton's biological determinism, leads us to hope and to move practically in a difficult world; but it can also bring us to oversimplify necessarily complex problems and to avoid examining hard realities. It can lead to denial, and the regressive creation of a mythical Arcadia, a golden age, a paradise in the remote tropics, or a perfect time and place somewhere else where most human problems are solved by easy choice and a few basic, often tax-free decisions. As Newt Gingrich, current speaker of the U.S. House of Representatives, expresses the concept: "We had long periods in American history where people didn't get raped, people didn't get murdered, people weren't mugged routinely." Such crimes, the speaker concludes, are therefore entirely "social artifacts of

bad policy."³⁹ Well, not entirely. Even with good policy they are hard to eliminate. We would be foolish to think otherwise.

And what of the real Arcadia in ancient Greece? "Et in Arcadia ego" — I too am in Arcadia — reads the inscription on an anonymous tomb, a sentiment that inspired paintings of heaven by Poussin. Its mountains and fertile valleys had been an inspiration, but in real life Arcadia could not remain the haven from foreign dominance that it was in 1100 B.C. By 500 B.C. Arcadia had joined a military alliance with Sparta in the Peloponnesian League, so that even that vision of paradise fell to the reality of violence. "Et in Arcadia ego"? Yes, we are all in Arcadia, but Arcadia is not paradise. It is a place where wars and other evils continue to threaten and occasionally to happen. There is no such thing as paradise, not in the South Seas, not in southern Greece, not anywhere. There never has been. To find a better world we must look not to a romanticized and dishonest dream forever receding into the primitive past, but to a future that rests on a proper understanding of ourselves.

able that several died from intercommunity violence. This includes both Kahama males (Willy-Wally and Hugh, who disappeared during the period when other Kahama males were attacked) and Kasekela males (Sherry, Faben, Figan, and Humphrey, who disappeared during the period 1975-1982, when Kalande males were raiding into the Kasekela range). The estimate of mortality from aggression therefore ranges from 5 out of 21 (23.8 percent) to 11 out of 21 (52.4 percent).

10. Morgan (1852; 1979).
11. Turney-High (1949; 1991): 112.
12. Turney-High (1949; 1991): 23.
13. Turney-High (1949; 1991): 112.
14. See Manson and Wrangham (1991), note 3; also Ember (1978); and Otterbein (1970).
15. Meggitt (1977): 1.
16. Knauft (1991).
17. Knauft (1991): 391.
18. Ember (1978).
19. Nance (1975).
20. Headland (1992).
21. Eibl-Eibesfeldt (1989): 409.
22. Daly and Wilson (1988).
23. Chagnon (1988): 986. Also Eibl-Eibesfeldt (1989): 417.
24. Chagnon (1988): 986.
25. Quote from Robarchek and Robarchek (1992): 197. Our entire account of the Waorani is based on this article.
26. Robarchek and Robarchek (1992): 205.
27. Otterbein (1970): 20, 21.
28. Robarchek and Robarchek (1992): 192.

5. PARADISE IMAGINED

1. See Marx (1964), especially Chapter 2 (34-72).
2. Gauguin's letter to his agent will be found in Guérin (1974; 1978): 159, 160. The painter had just asked his three questions in the context of a written attack on Catholicism, finally published as "The Catholic Church and Modern Times." See Guérin (1974; 1978): 161-173.

3. Further information on Gauguin and the painting comes from Cachin (1989; 1992).
4. The quoted comments from *Noa Noa* are in Guérin (1974; 1978): 83, 84, and 80.
5. Gauguin's reference to life in the Marquesas is from "Scattered Notes" in Guérin (1974, 1978): 274.
6. For background on the success of *Typee* and problems with publishers and potential publishers, see the Introduction by George Woodcock to Melville (1846; 1972).
7. Walter T. Herbert, Jr. (1980) has provided the best and most complete analysis of the the Marquesans and their place in Melville's imagination. We have relied on Herbert's scholarship throughout this section, starting with the cultural and historical background briefly surveyed here and moving on to the theory that Porter, Stewart, and Melville were examining the Marquesans through the cultural filters of Enlightenment rationalism, Calvinism, and Romanticism.
8. Reverend Stewart as quoted by Herbert (1980): 63.
9. Records show Melville deserted ship on July 9 and took passage on another ship on August 9. Allowing for travel time into Typee valley from Nukuheva harbor would take a few days, up to a week.
10. The quotation from Melville's Preface: Melville (1846; 1972): 34.
11. Who are the real savages? Tommo's diatribe on this matter appears in Melville (1846; 1972): 180. Biblical paradise: 265. Happy innocence, artless simplicity, and good-natured laziness are suggested on pages 211, 253, 236. Lack of predatory beasts or mosquitoes mentioned on pages 286, 285. The quoted remark about battle wounds is from page 247. Material on the "nymphs" and Fayaway will be found on pages 188-192, 133-136, and elsewhere.
12. Tommo's defense of cannibalism is from Melville (1846; 1972): 278. Tommo's desperate assault on the Typee warrior will be found on page 332.
13. As quoted in Bowlby (1990): 170.
14. We rely on Derek Freeman's *Margaret Mead and Samoa* (1983) as well as Adam Kuper's *The Chosen Primate* (1994) for some of the background discussion of the nature-nurture debate; the subsequent critique of Mead's work in Samoa is based on Freeman's research and tempered by reference to Kuper's discussion. The three Galton quotations are from Freeman (1983): 7, 10, 15.

15. Boas's statement of a "fundamental need" in Boas (1924): 164. Boas may have already imagined that adolescence would provide an ideal focus for such an investigation. Before he came to Columbia, the anthropologist had taught for a time at Clark University in Massachusetts until he resigned after a bitter argument with its founder G. Stanley Hall. In an ambitious 1907 book, *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education*, Hall had promoted the theory that the stages of any person's life recapitulate the stages of human culture: from infantile savagery to civilized maturity. The universal agony and ecstasy of adolescence, then, was equivalent to a predictable moment of transition in the march of cultural progress, "suggestive of some ancient period of storm and stress when old moorings were broken and a higher level attained." Hall's claim offered a way to probe the nature-nurture problem. The presumption of a universal human adolescence, a time of inevitable "storm and stress" produced by glandular secretions or some comparable biological machinery, had to be challenged. See Kuper (1994): 180-182.
16. Mead's rhetorical question is from Mead (1928a): 11.
17. The details of her entry into Samoa and the cultural context there are based on Freeman (1982): 65 ff.
18. Mead's quoted insistence on close contact with her subjects: Mead (1928a): 10.
19. Her difficulties with learning the language are summarized in Freeman (1982): 65. In *Letters from the Field, 1925-1975* (1977): 29, Mead describes her fears about living with Samoans.
20. Mead mentions the ease of mastering "the fundamental structure of a primitive society" in Mead (1928a): 8.
21. Summary comparisons of Western and Samoan adolescence are from Mead (1928a): 234 and 38.
22. Comments about the ease of Samoan life and its sexual freedom: Mead (1928a): 198, 201. "No room for guilt": Mead (1940): 96.
23. Remarkable elimination of many psychological problems, mentioned in Mead (1928a): 243, 206, 106, 213, 206, 207, 215, 223 — and "practically no suicide": in Mead (1928b): 487.
24. Her comments on rape are from Mead (1928a): 93; and Mead (1928b): 487. Her remarks on sleep crawling: Mead (1928a): 93 ff.
25. Lack of violence in general: Mead (1928a): 198, 199. And as quoted in Freeman (1983): 90.
26. See Stocking (1989): 246.

27. Boas's foreword: Mead (1928a): xv.
28. Her 1961 remarks are quoted by Freeman (1983): 106.
29. See, for example, Levy (1983): 829. See Stocking (1989): 253, 254.
30. Stocking (1989): 257. See Stocking for a balanced view of the controversy generated by Freeman's attack.
31. Kuper (1994): 193.
32. Levy (1983). Another complaint against Freeman: having come to Samoa fourteen years after Mead, he failed to account for important historical and cultural changes that could have taken place during that time and so "seems unaware" of the significance of "historicity" (Leacock, 1993: 351). This criticism is not so convincing. The fact is that Freeman remains an authoritative source whose own portrait of the islands reasonably considers and tries to accommodate the vexing issue of historical change.
33. Mead's comments on her "deviants" and "delinquents" are from Mead (1928a): 169, 172. Freeman's assessments are from Freeman (1983): 93 and 258.
34. Data on ratio of male to female first offenders: Freeman (1983): 258, 259.
35. Virgins: Mead (1928a): 151. Of the twenty-five, eleven had had at least one heterosexual experience. Although ceremonial virgins were chosen from aristocratic families and given special status, virginity at marriage was through the *taupou* culturally idealized for Samoans of every rank, according to Freeman (1983): 227.
36. Information on Samoan adultery, suicides, rape, and surreptitious rape are provided by Freeman (1983): 104, 220-222, 243-249.
37. On war and its traditions in Samoa, see Freeman (1983): 157-173. Assault and murder rates are mentioned by Freeman on page 164.
38. Mead's apotheosis is described in much greater detail by Freeman (1983): 106, 107.
39. "Gingrich" (1995).

6. A QUESTION OF TEMPERAMENT

1. Dahomey women warriors are mentioned in Harris (1989): 285. For the best consideration of the Dahomey Amazons, see Law (1993).
2. As quoted in Law (1993): 252.
3. Law (1993): 258.
4. Discussion of the formalized male monopoly on warfare is largely

13. KAKAMA'S DOLL

1. Hayes (1951): 80-85.
2. It is possible, though difficult, to infer mental processes. Heyes (1995) gives a good sense of how carefully experiments and observations must be designed.
3. "Brain size" here implies "relative to body size." The relationship between brain and body size is complicated, so that it is still unclear to what extent the fossil record supports the notion of a steady increase in relative brain size. On the whole, most animal species appear to keep the same relative brain size for long periods. See Deacon (1990).
4. Savage-Rumbaugh and Lewin (1994).

BIBLIOGRAPHY

- Adams, David B. 1983. "Why There Are So Few Women Warriors." *Behavior Science Research* 18 (3): 196-212.
- Adler, Freda. 1975. *Sisters in Crime: The Rise of the New Female Criminal*. New York: McGraw-Hill.
- Aiello, Leslie C., and Peter Wheeler. 1995. "The Expensive-tissue Hypothesis: The Brain and the Digestive System in Human and Primate Evolution." *Current Anthropology* 36: 199-221.
- Albert, Bruce. 1989. "Yanomami 'Violence': Inclusive Fitness or Ethnographer's Representation?" *Current Anthropology* 30: 637-640.
- . 1990. "On Yanomami Warfare: A Rejoinder." *Current Anthropology* 31: 558-563.
- Alexander, Richard D. 1987. *The Biology of Moral Systems*. Hawthorne, N.Y.: Aldine de Gruyter.
- Amrane, Djamila. 1982. "Algeria: Anticolonial War." Translated by Richard Stites. In *Female Soldiers — Combatants or Noncombatants? Historical and Contemporary Perspectives*. Edited by Nancy Loring Goldman. Westport, Conn.: Greenwood Press: 123-135.
- Anderson, J. E. 1968. "Late Paleolithic Skeletal Remains from Nubia." In *The Prehistory of Nubia*, vol. 2. Edited by Fred Wendorf. Dallas: Southern Methodist University Press: 996-1040.
- Archer, John. 1988. *The Behavioral Biology of Aggression*. Cambridge: Cambridge University Press.

- . 1994. *Male Violence*. London: Routledge.
- Ardrey, Robert. 1966. *The Territorial Imperative*. New York: Atheneum.
- Arnhart, Larry. 1990. "Aristotle, Chimpanzees and Other Political Animals." *Biology and Social Life* 29 (3): 477-557.
- . 1995. "The New Darwinian Naturalism in Political Theory." *American Political Science Review* 89: 389-400.
- Audenaerde, Thys van den. 1984. "The Tervuren Museum and the Pygmy Chimpanzee." In *The Pygmy Chimpanzee: Evolutionary Biology and Behavior*. Edited by Randall Susman. New York: Plenum Press: 3-12.
- Badrian, Alison, and Noel Badrian. 1984. "Social Organization of *Pan paniscus* in the Lomako Forest, Zaïre." In *The Pygmy Chimpanzee: Evolutionary Biology and Behavior*. Edited by R. L. Susman. New York: Plenum Press: 325-346.
- Badrian, Noel, and Richard Malenky. 1984. "Feeding Ecology of *Pan paniscus* in the Lomako Forest, Zaïre." In *The Pygmy Chimpanzee: Evolutionary Biology and Behavior*. Edited by R. L. Susman. New York: Plenum Press: 275-299.
- Bahuchet, Serge. 1990. "The Aka Pygmies: Hunting and Gathering in the Lobaye Forest." In *Food and Nutrition in the African Rain Forest*. Edited by C. Marcel Hladik, Serge Bahuchet, and Igor de Garine. Paris: UNESCO: 19-23.
- Bailey, Robert C. 1991. *The Behavioral Ecology of Efé Pygmy Men in the Ituri Forest, Zaïre*. Ann Arbor: University of Michigan Press.
- Bailey, Wendy J., and others. 1992. "Reexamination of the African Hominoid Trichotomy with Additional Sequences from the Primate β -Globin Gene Cluster." *Molecular Phylogenetics and Evolution* 1: 97-135.
- Baker, Kate C., and Barbara B. Smuts. 1994. "Social Relationships of Female Chimpanzees: Diversity Between Captive Social Groups." In *Chimpanzee Cultures*. Edited by Richard W. Wrangham and others. Cambridge, Mass.: Harvard University Press: 227-242.
- Barlow, Nora, ed. 1958. *The Autobiography of Charles Darwin, 1809-1882*. New York: Harcourt, Brace.
- Baron, Robert A., and Donn Bryne. 1977. *Social Psychology: Understanding Human Interaction*. Boston: Allyn and Bacon.
- Bartlett, Thad Q., Robert W. Sussman, and James M. Cheverud. 1993. "Infant Killing in Primates: A Review of Observed Cases with Spe-

- cific Reference to the Sexual Selection Hypothesis." *American Anthropologist* 95: 958-990.
- Bartz, Stephan R., and Bert Hölldobler. 1982. "Colony Founding in *Myrmecocystus mimicus* Wheeler (Hymenoptera: Formicidae) and the Evolution of Foundress Associations." *Behavioral Ecology and Sociobiology* 10: 137-147.
- Beck, Melinda. 1995. "Get Me Out of Here." *Newsweek* (May 1): 40-47.
- Belenky, Mary Field, and others. 1986. *Women's Ways of Knowing: The Development of Self, Voice, and Mind*. New York: Basic Books.
- Berberman, David D. 1993. "Sanskritization as Female Oppression in India." In *Sex and Gender Hierarchies*. Edited by Barbara Diane Miller. Cambridge: Cambridge University Press: 366-392.
- Bertram, Brian. 1978. *Pride of Lions*. London: John Dent and Sons.
- Betzig, Laura. 1992. "Roman Polygyny." *Ethology and Sociobiology* 13: 309-349.
- Bigelow, Robert. 1969. *The Dawn Warriors: Man's Evolution Towards Peace*. Boston: Little, Brown.
- Bjorkqvist, Kaj, and Pirkko Niemela. 1992. *Of Mice and Women: Aspects of Female Aggression*. Boston: Academic Press.
- Blake, R. R., and J. S. Mouton. 1962. "The Intergroup Dynamics of Win-Lose Conflict and Problem-solving Collaboration in Union-Management Relations." In *Intergroup Relations and Leadership: Approaches and Research in Industrial, Ethnic, Cultural, and Political Areas*. Edited by Muzafer Sherif. New York: Wiley.
- . 1979. "Intergroup Problem Solving in Organizations: From Theory to Practice." In *The Social Psychology of Intergroup Relations*. Edited by W. G. Austin and S. Worchel. Monterey, Calif.: Brooks/Cole: 19-32.
- Bloom, Anne R. 1982. "Israel: The Longest War." In *Female Soldiers — Combatants or Noncombatants? Historical and Contemporary Perspectives*. Edited by Nancy Loring Goldman. Westport, Conn.: Greenwood Press: 137-162.
- Blumenshine, Robert J., and John A. Cavallo. 1992. "Scavenging and Human Evolution." *Scientific American* (October): 90-96.
- Boas, Franz. 1924. "The Question of Racial Purity." *The American Mercury* 3: 163-169.
- Boehm, Christopher. 1992. "Segmentary 'Warfare' and the Management of Conflict: Comparison of East African Chimpanzees and Patrilineal-patrilocal Humans." In *Coalitions and Alliances in Humans*

- and Other Animals. Edited by A. H. Harcourt and Frans B. M. de Waal. Oxford: Oxford University Press: 137-173.
- Boesch, Christophe. 1994. "Cooperative Hunting in Wild Chimpanzees." *Animal Behaviour* 48: 653-667.
- Boesch, Christophe, and Hedwige Boesch. 1989. "Hunting Behavior of Wild Chimpanzees in the Tai National Park." *American Journal of Physical Anthropology* 78: 547-573.
- Bowlby, John. 1990. *Charles Darwin: A New Life*. New York: W. W. Norton.
- Brain, Charles K. 1988. "New Information from the Swartkrans Cave of Relevance to 'Robust' Australopithecines." In *Evolutionary History of the "Robust" Australopithecines*. Edited by F. E. Grine. Hawthorne, N.Y.: Aldine de Gruyter: 311-324.
- Brewer, M. B. 1979. "The Role of Ethnocentrism in Intergroup Conflict." In *The Social Psychology of Intergroup Relations*. Edited by W. G. Austin and S. Worchel. Monterey, Calif.: Brooks/Cole: 71-84.
- Brewer, Stella. 1978. *The Forest Dwellers*. London: Collins.
- Bribiescas, Richard G. 1996. "Salivary Testosterone Levels Among Aché Hunter-Gatherer Men and a Functional Interpretation of Population Variation in Testosterone Among Adult Males." *Human Nature* (in press).
- Brodie, Fawn. 1946. *No Man Knows My History: The Life of Joseph Smith, the Mormon Prophet*. New York: Alfred A. Knopf.
- Brown, Dee. 1970. *Bury My Heart at Wounded Knee: An Indian History of the American West*. New York: Henry Holt and Company.
- Brown, Roger. 1986. *Social Psychology*, 2nd ed. New York: The Free Press.
- Brownmiller, Susan. 1975. *Against Our Will: Men, Women and Rape*. New York: Fawcett Columbine.
- Broude, G., and S. Greene. 1976. "Cross-Cultural Codes on Twenty Sexual Attitudes and Practices." *Ethnology* 15: 409-429.
- Brunet, Michel, and others. 1995. "The First Australopithecine 2,500 Kilometres West of the Rift Valley, Chad." *Nature* 378: 273-275.
- Buford, Bill. 1992. *Among the Thugs*. New York: W. W. Norton.
- Bullough, Vern L., and Bonnie L. Bullough. 1964. *The History of Prostitution*. New Hyde Park: University Books.
- Burkhart, Kathryn Watterson. 1973. *Women in Prison*. Garden City, N.Y.: Doubleday.
- "Burundi: The Terror Behind the Putsch." 1993. *Africa Confidential* 34 (December 17): 6, 7.

- Caccone, Adalgisa, and Jeffrey R. Powell. 1989. "DNA Divergence Among Hominoids." *Evolution* 43: 925-942.
- Cachin, Françoise. 1989; 1992. *Gauguin: The Quest for Paradise*. New York: Harry N. Abrams.
- Campbell, Anne. 1984. *The Girls in the Gang*. New York: Basil Blackwell.
- . 1990. "Female Participation in Gangs." In *Gangs in America*. Edited by C. Ronald Huff. Newbury Park, Calif.: Sage Publications.
- Cartmill, Matt. 1994. *A View to a Death in the Morning: Hunting and Nature Through History*. Cambridge, Mass.: Harvard University Press.
- Chagnon, Napoleon A. 1988. "Life Histories, Blood Revenge, and Warfare in a Tribal Population." *Science* 239 (February 20): 985-992.
- . 1990. "On Yanomamö Violence: Reply to Albert." *Current Anthropology* 31: 49-53.
- . 1992. *Yanomamö: The Last Days of Eden*. New York: Harcourt Brace Jovanovich.
- Chapman, Colin A., and Frances J. White. 1994. "Nearest Neighbor Distances in Chimpanzees and Bonobos." *Folia Primatologica* 63: 181-191.
- Chapman, Colin A., Frances J. White, and Richard W. Wrangham. 1994. "Party Size in Chimpanzees and Bonobos: A Reevaluation of Theory Based on Two Similarly Forested Sites." In *Chimpanzee Cultures*. Edited by Richard W. Wrangham and others. Cambridge, Mass.: Harvard University Press: 41-58.
- Chapman, Colin A., Richard W. Wrangham, and Lauren J. Chapman. 1995. "Ecological Constraints on Group Size: An Analysis of Spider Monkey and Chimpanzee Subgroups." *Behavioral Ecology and Sociobiology* 36: 59-70.
- Chodorow, Nancy. 1978. *The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender*. Berkeley: University of California Press.
- Clarke, A. Susan, and Sue Boinski. 1995. "Temperament in Nonhuman Primates." *American Journal of Primatology* 37: 103-125.
- Clutton-Brock, Timothy H., James C. Deutsch, and R. J. C. Nefdt. 1993. "The Evolution of Ungulate Leks." *Animal Behaviour* 46: 1121-1138.
- Clutton-Brock, Timothy H., and Geoffrey A. Parker. 1995. "Sexual Coercion in Animal Societies." *Animal Behaviour* 49: 1345-1365.
- Colson, Elizabeth. 1993. "A Note on the Discussions at Mijas." In *Sex*

- and *Gender Hierarchies*. Edited by Barbara Diane Miller. Cambridge: Cambridge University Press: xv-xix.
- Colyn, Marc, and others. 1991. "A Re-appraisal of Palaeoenvironmental History in Central Africa: Evidence for a Major Fluvial Refuge in the Zaïre Basin." *Journal of Biogeography* 18: 403-407.
- "'Comfort Women' Reparations Urged." 1994. *Boston Globe* (November 22): 14.
- Coolidge, Harold J. 1984. "Historical Remarks Bearing on the Discovery of *Pan paniscus*." In *The Pygmy Chimpanzee: Evolutionary Biology and Behavior*. New York: Plenum Press: ix-xiii.
- Cooper, S. M. 1989. "Clan Sizes of Spotted Hyaenas in the Savuti Region of the Chobe National Park, Botswana." *Botswana Notes and Records* 21: 121-133.
- Coppens, Yves. 1994. "East Side Story: The Origin of Humankind." *Scientific American* (May): 88-95.
- Crespi, Bernard J. 1986. "Size Assessment and Alternative Fighting Tactics in *Elaphrothrips tuberculatus* (Insecta: Thysanoptera)." *Animal Behaviour* 34: 1324-35.
- Daly, Martin, and Margo Wilson. 1988. *Homicide*. New York: Aldine de Gruyter.
- Damasio, Antonio R. 1994. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: Grosset/Putnam.
- Dart, Raymond A. 1953. "The Predatory Transition from Ape to Man." *International Anthropological and Linguistic Review* 1 (4): 201-218.
- Darwin, Charles. 1839; 1972. *The Voyage of the Beagle*. New York: New American Library.
- . 1871. *The Descent of Man and Selection in Relation to Sex*, vol. 1. London: John Murray.
- Dastugue, J., and M.-A. de Lumley. 1976. "Les Maladies des Hommes Préhistoriques du Paléolithique et du Mésolithique." In *La Préhistoire Française*, vol. 1. Edited by H. de Lumley. Paris: Centre National de la Recherche Scientifique: 612-622.
- Deacon, Terrence W. 1990. "Rethinking Mammalian Brain Evolution." *American Zoologist* 30: 629-705.
- de Waal, Frans B. M. 1982. *Chimpanzee Politics: Power and Sex Among the Apes*. New York: Harper and Row.
- . 1986. "The Brutal Elimination of a Rival Among Captive Male Chimpanzees." *Ethology and Sociobiology* 7: 237-251.

- . 1988. "The Communicative Repertoire of Captive Bonobos (*Pan paniscus*), Compared to that of Chimpanzees." *Behaviour* 106: 183-251.
- . 1989. *Peacemaking Among Primates*. Cambridge, Mass.: Harvard University Press.
- . 1990. "Sociosexual Behavior Used for Tension Regulation in All Age and Sex Combinations Among Bonobos." In *Pedophilia: Bio-social Dimensions*. Edited by J. R. Feierman. New York: Springer: 378-393.
- Dennett, Daniel C. 1995. *Darwin's Dangerous Idea: Evolution and the Meaning of Life*. New York: Simon and Schuster.
- Dickemann, Mildred. 1979. "The Ecology of Mating Systems in Hypergynous Dowry Societies." *Social Science Information* 18: 163-195.
- Djian, P., and Howard Green. 1989. "Vectorial Expansion of the Involucrin Gene and the Relatedness of Hominoids." *Proceedings of the National Academy of Sciences* 86: 8447-8451.
- Doggett, Maeve E. 1993. *Marriage, Wife-Beating, and the Law in Victorian England*. Columbia, S.C.: University of South Carolina Press.
- du Chaillu, Paul B. 1861. *Explorations and Adventures in Equatorial Africa: With Accounts of the Manners and Customs of the People and of the Chace of the Gorilla, Crocodile, Leopard, Elephant, Hippopotamus, and Other Animals*. London: John Murray.
- Dunham, Elizabeth. 1995. "Bad Girls." *Teen* (August): 52 ff.
- Dworkin, Andrea. 1987. *Intercourse*. New York: The Free Press.
- East, Marion L., and Heribert Hofer. 1991. "Loud-calling in a Female Dominated Mammalian Society. II. Behavioral Contexts and Functions of Whooping of Spotted Hyaenas, *Crocota crocuta*." *Animal Behaviour* 42: 651-669.
- Editors of Time-Life. 1992a. *Mass Murderers*. Alexandria, Va.: Time-Life Books.
- . 1992b. *Serial Killers*. Alexandria, Va.: Time-Life Books.
- Ehrhardt, Anke A., and Susan W. Baker. 1978. "Fetal Androgens, Human Central Nervous System Differentiation, and Behavior Sex Differences." In *Sex Differences in Behavior*. Edited by Richard C. Friedman, Ralph M. Richart, and Raymond L. Vande Wiele. Huntington, N.Y.: Robert E. Krieger: 33-51.
- Eibl-Eibesfeldt, Irenäus. 1989. *Human Ethology*. New York: Aldine de Gruyter.

- Eldredge, Niles. 1982. *The Monkey Business: A Scientist Looks at Creationism*. New York: Washington Square.
- Ember, Carol R. 1978. "Myths About Hunter-Gatherers." *Ethnology* 27: 239-448.
- Esposito, John L. 1991. *Islam: The Straight Path*. Oxford: Oxford University Press.
- Estep, Daniel Q., and Katherine E. M. Bruce. 1981. "The Concept of Rape in Animals: A Critique." *Animal Behaviour* 29: 1272-1273.
- Evans, Robert R. 1969. *Readings in Collective Behavior*. Chicago: Rand McNally.
- Ewald, Paul W. 1985. "Influence of Asymmetries in Resource Quality and Age on Aggression and Dominance in Black-chinned Hummingbirds." *Animal Behaviour* 33: 705-19.
- Federal Bureau of Investigation. 1991. *Crime in the United States: Uniform Crime Reports*. Washington, D.C.: U.S. Government Printing Office.
- "Femme Fatale." 1991. *New York Times* (February 2): 22.
- Finley, Moses I. 1963. *The Ancient Greeks*. Harmondsworth, Middlesex, England: Penguin Books.
- Fisher, Helen. 1992. *Anatomy of Love: The Natural History of Monogamy, Adultery, and Divorce*. New York: W. W. Norton.
- Flowers, Ronald Barri. 1989. *Demographics and Criminality: The Characteristics of Crime in America*. New York: Greenwood Press.
- Foley, Robert. 1987. *Another Unique Species: Patterns in Human Evolutionary Ecology*. Harlow, England: Longman.
- Fortune, Reo F. 1939. "Arapesh Warfare." *American Anthropologist* 41: 22-41.
- Fossey, Dian. 1983. *Gorillas in the Mist*. Boston: Houghton Mifflin.
- Foster, Thomas W. 1975. "Make-Believe Families: A Response of Women and Girls to the Deprivations of Prison." *International Journal of Penology* 3: 71-78.
- Fotheringham, Allan. 1991. "Can Wilt Really Count That High?" *MacLean's* (November 18): 84.
- Frank, Laurence G. 1986. "Social Organization of the Spotted Hyaena (*Crocuta crocuta*). I. Demography." *Animal Behaviour* 35: 1500-1509.
- Frank, Laurence G., Stephen E. Glickman, and Paul Licht. 1991. "Fatal Sibling Aggression, Precocial Development, and Androgens in Neonatal Spotted Hyenas." *Science* 252: 702-704.

- Frank, Laurence G., Mary L. Weidele, and Stephen E. Glickman. 1995. "Masculinization Costs in Hyaenas." *Nature* 377: 584-585.
- Freeman, Derek. 1964. "Human Aggression in Anthropological Perspective." In *The Natural History of Aggression*. Edited by J. D. Carthy and F. J. Ebling. New York: Academic Press: 109-119.
- . 1983. *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*. Cambridge, Mass.: Harvard University Press.
- Friedl, Ernestine. 1975. *Women and Men: An Anthropologist's View*. New York: Holt, Rinehart and Winston.
- Fritz, Mark. 1994. "Confessions from a Massacre." *Boston Globe* (May 16): 1.
- Furuichi, Takeshi. 1987. "Sexual Swelling, Receptivity, and Grouping of Wild Pygmy Chimpanzee Females at Wamba, Zaïre." *Primates* 28: 309-318.
- . 1989. "Social Interactions and the Life History of Female *Pan paniscus* in Wamba, Zaïre." *International Journal of Primatology* 10: 173-197.
- . 1992. "The Prolonged Estrus of Females and Factors Influencing Mating in a Wild Group of Bonobos (*Pan paniscus*) in Wamba, Zaïre." In *Topics in Primatology, vol. 2: Behavior, Ecology and Conservation*. Tokyo: University of Tokyo Press: 179-190.
- Furuichi, Takeshi, and Hiroshi Ihobe. 1994. "Variation in Male Relationships in Bonobos and Chimpanzees." *Behaviour* 130: 211-228.
- Galdikas, Biruté M. F. 1981. "Orangutan Reproduction in the Wild." In *Reproductive Biology of the Great Apes*. Edited by C. E. Graham. New York: Academic Press: 281-299.
- . 1995. *Reflections of Eden: My Years with the Orangutans of Borneo*. New York: Little, Brown.
- Galili, U., and K. Swanson. 1991. "Gene Sequences Suggest Inactivation of alpha-1,3-galactosyltransferase in Catarrhines After the Divergence of Apes from Monkeys." *Proceedings of the National Academy of Sciences* 88: 7401-7404.
- Garrett, Stephanie. 1987. *Gender*. London: Tavistock.
- George, Kenneth M. 1991. "Headhunting, History and Exchange in Upland Sulawesi." *Journal of Asian Studies* 50: 536-564.
- Gewertz, Deborah B. 1981. "A Historical Reconsideration of Female Dominance Among the Cambri of Papua New Guinea." *American Ethnologist* 8: 94-106.

- Gewertz, Deborah B., and Frederick K. Errington. 1991. *Twisted Histories, Altered Contexts: Representing the Chambri in a World System*. Cambridge: Cambridge University Press.
- Giallombardo, Rose. 1966. *Society of Women: A Study of a Women's Prison*. New York: Wiley.
- Gibbs, Nancy R. 1995. "The Blood of Innocents." *Time* (May 1): 57-64.
- Gilligan, Carol. 1982. *In a Different Voice: Psychological Theory and Women's Development*. Cambridge, Mass.: Harvard University Press.
- Gilman, Charlotte Perkins. 1915; 1979. *Herland*. Introduced by Ann J. Lane. New York: Pantheon Books.
- "Gingrich Calls Crimes 'Artifacts of Bad Policy.'" 1995. *Boston Globe* (May 20): 5.
- Gish, Duane T. 1978. *Evolution: The Fossils Say No!* El Cajona, Calif.: Creation Life.
- Gleick, Elizabeth. 1995. "Who Are They?" *Time* (May 1): 44-51.
- Glickman, Stephen E., and others. 1992. "Sexual Differentiation of the Female Spotted Hyaena: One of Nature's Experiments." *Annals of the New York Academy of Sciences* 662: 135-159.
- Goldfoot, D. A., and others. 1980. "Behavioral and Physiological Evidence of Sexual Climax in the Female Stump-tailed Macaque (*Macaca arctoides*)." *Science* 208: 1477-1479.
- Golding, William. 1954. *Lord of the Flies*. New York: Putnam.
- Goldman, Nancy Loring, editor. 1982. *Female Soldiers — Combatants or Noncombatants? Historical and Contemporary Perspectives*. Westport, Conn.: Greenwood Press.
- Gonzales, I. L., and others. 1990. "Ribosomal RNA Sequences and Homoid Phylogeny." *Molecular Biology and Evolution* 7: 203-219.
- Goodall, Jane. 1986. *The Chimpanzees of Gombe: Patterns of Behavior*. Cambridge, Mass.: Harvard University Press.
- . 1990. *Through a Window*. Boston: Houghton Mifflin.
- . 1991. "Unusual Violence in the Overthrow of an Alpha Male Chimpanzee at Gombe." In *Topics in Primatology, Vol. 1: Human Origins*. Edited by Toshisada Nishida and others. Tokyo: University of Tokyo Press: 131-142.
- Goodman, Morris. 1963. "Man's Place in the Phylogeny of the Primates as Reflected by Serum Proteins." In *Classification and Human Evolution*. Edited by S. L. Washburn. Chicago: Aldine: 204-235.
- Gora, JoAnn Gennaro. 1982. *The New Female Criminal: Empirical Reality or Social Myth?* New York: Praeger.

- Gould, Stephen Jay. 1995. "A Sea Horse for All Races." *Natural History* (November): 10-15, 72-75.
- Gowaty, Patricia Adair. 1992. "Evolutionary Biology and Feminism." *Human Nature* 3 (3): 217-249.
- Gray, Patrick, and Linda Wolfe. 1980. "Height and Sexual Dimorphism and Stature Among Human Societies." *American Journal of Physical Anthropology* 53: 441-456.
- Greenfield, Les O. 1992. "Origin of the Human Canine." *Yearbook of Physical Anthropology* 35: 153-185.
- Griesse, Anne Eliot, and Richard Stites. 1982. "Russia: Revolution and War." In *Female Soldiers — Combatants or Noncombatants? Historical and Contemporary Perspectives*. Edited by Nancy Loring Goldman. Westport, Conn.: Greenwood Press: 61-84.
- Griffin, Susan. 1981. *Pornography and Silence: Culture's Revenge Against Nature*. New York: Harper and Row.
- Grine, F. E., ed. 1988. *Robust Australopithecines*. Hawthorne, N.Y.: Aldine de Gruyter.
- Gross, Daniel R. 1975. "Protein Capture and Cultural Development in the Amazon Basin." *American Anthropologist* 77 (3): 526-549.
- Guérin, Daniel, ed. 1974; 1978. *The Writings of a Savage: Paul Gauguin*. Introduced by Wayne Anderson. New York: Viking.
- Gulik, Robert H. van. 1974. *Sexual Life in Ancient China*. London: E. J. Brill.
- Hammer, Joshua. 1994. "Escape from Hell." *Newsweek* (May 16): 34, 35.
- Harrington, Fred. 1987. "The Man Who Cries Wolf." *Natural History* (February): 22-26.
- Harris, Marvin. 1974. *Cows, Pigs, Wars and Witches: The Riddles of Culture*. New York: Random House.
- . 1979a. *Cultural Materialism: The Struggle for a Science of Culture*. New York: Random House.
- . 1979b. "The Yanomamö and the Causes of War in Band and Village Societies." In *Brazil: Anthropological Perspectives*. Edited by M. L. Margolis and W. E. Carter. New York: Columbia University Press: 121-133.
- . 1989. *Our Kind*. New York: Harper Collins.
- Harvey, Paul H., Michael Kavanagh, and Timothy H. Clutton-Brock. 1978. "Canine Tooth Size in Female Primates." *Nature* 276: 817.
- Hatley, Tom, and John Kappelman. 1980. "Bears, Pigs, and Plio-Pleistocene Hominids: A Case for the Exploitation of Belowground Food Resources." *Human Ecology* 8: 371-387.

- Hausfater, Glenn, and Sarah Blaffer Hrdy, eds. 1984. *Infanticide: Comparative and Evolutionary Perspectives*. Hawthorne, N.Y.: Aldine de Gruyter.
- Hayes, Cathy. 1951. *The Ape in Our House*. New York: Harper and Brothers.
- Headland, Thomas N. 1992. *The Tasaday Controversy: Assessing the Evidence*. Washington, D.C.: American Anthropological Association.
- Heise, Lori L., Jacqueline Pitanguy, and Adrienne Germain. 1994. *Violence Against Women: The Hidden Health Burden*. (World Bank Discussion Paper No. 255.) Washington, D.C.: The World Bank.
- Herbert, T. Walter, Jr. 1980. *Marquesan Encounters: Melville and the Meaning of Civilization*. Cambridge, Mass.: Harvard University Press.
- Heyes, C. 1995. "Self-recognition in Primates: Further Reflections Create a Hall of Mirrors." *Animal Behaviour* 50: 1533-1542.
- Hitchens, Christopher. 1993. "Call of the Wilding." *Vanity Fair* (July): 30-35.
- Hladik, C. Marcel, and Annette Hladik. 1990. "Food Resources of the Rain Forest." In *Food and Nutrition in the African Rain Forest*. Edited by C. M. Hladik, S. Bahuchet, and I. de Garine. Paris: UNESCO: 14-18.
- Hofer, Heribert, and Marion L. East. 1993. "The Commuting System of Serengeti Spotted Hyaenas: How a Predator Copes with Migratory Prey. II. Intrusion Pressure and Commuters' Space Use." *Animal Behaviour* 46: 559-574.
- Hohmann, Gottfried, and Barbara Fruth. 1993. "Field Observations on Meat Sharing Among Bonobos (*Pan paniscus*)." *Folia Primatologica* 60: 225-229.
- Hölldobler, Bert. 1976. "Tournaments and Slavery in a Desert Ant." *Science* 192: 912-914.
- . 1981. "Foraging and Spatiotemporal Territories in the Honey Ant *Myrmecocystus mimicus* Wheeler (Hymenoptera: Formicidae)." *Behavioral Ecology and Sociobiology* 9: 301-314.
- Hölldobler, Bert, and Charles J. Lumsden. 1980. "Territorial Strategies in Ants." *Science* 210: 732-739.
- Holloway, Marguerite. 1994. "Trends in Women's Health: A Global View." *Scientific American* (August): 77-83.
- Holmberg, Allan R. 1969. *Nomads of the Long Bow: The Siriono of Eastern Bolivia*. Garden City, N.Y.: Natural History Press.
- Hooff, Jan A. R. A. M. van, and Carel P. van Schaik. 1994. "Male Bonds:

- Affiliative Relationships Among Nonhuman Primate Males." *Behaviour* 130: 309-337.
- Hooks, Bonnie L., and Penny A. Green. 1993. "Cultivating Male Allies: A Focus on Primate Females, Including *Homo sapiens*." *Human Nature* 4 (1).
- Horai, Satoshi, and others. 1992. "Man's Place in Hominoidea Revealed by Mitochondrial DNA Genealogy." *Journal of Molecular Evolution* 35: 32-43.
- . 1995. "Recent African Origin of Modern Humans Revealed by Complete Sequences of Hominoid Mitochondrial DNAs." *Proceedings of the National Academy of Sciences* 92: 532-536.
- Hornblower, Margot. 1993. "The Skin Trade." *Time* (June 21): 45-51.
- Howard, Michael. 1983a. "The Causes of War." In *The Causes of War and Other Essays*. London: Unwin Paper: 7-22.
- . 1983b. *Clausewitz*. Oxford: Oxford University Press.
- Hrdy, Sarah Blaffer. 1981. *The Woman that Never Evolved*. Cambridge, Mass.: Harvard University Press.
- Hrdy, Sarah Blaffer, Charles Janson, and Carel van Schaik. 1995. "Infanticide: Let's Not Throw Out the Baby with the Bathwater." *Evolutionary Anthropology* 3: 151-154.
- Hunt, Kevin D. 1989. "Positional Behavior in *Pan troglodytes* at the Mahale Mountains and the Gombe Stream National Parks, Tanzania." Ph.D. dissertation: University of Michigan, Ann Arbor.
- . 1994. "The Evolution of Human Bipedality: Ecology and Functional Morphology." *Journal of Human Evolution* 26: 183-202.
- Huntingford, Felicity A. 1976. "The Relationship between Intra- and Inter-Specific Aggression." *Animal Behaviour* 24: 485-497.
- Huxley, Thomas H. 1863; 1894. *Man's Place in Nature*. New York: D. Appleton.
- Idani, Gen'ichi. 1991a. "Cases of Inter-unit Group Encounters in Pygmy Chimpanzees at Wamba, Zaïre." In *Primate Today: Proceedings of the XIIIth Congress of the International Primatological Society*. Edited by Akiyoshi Ehara and others. Amsterdam: Elsevier: 235-238.
- . 1991b. "Social Relationships Between Immigrant and Resident Bonobo (*Pan paniscus*) Females at Wamba." *Folia Primatologica* 57: 83-95.
- Ihobe, Hiroshi. 1990. "Interspecific Interactions Between Wild Pygmy Chimpanzees (*Pan paniscus*) and Red Colobus (*Colobus badius*)." *Primates* 31: 109-112.

- . 1992. "Observations on the Meat-eating Behavior of Wild Bonobos (*Pan paniscus*) at Wamba, Republic of Zaïre." *Primates* 33: 247-250.
- Ingrassia, Michele, and Melinda Beck. 1994. "Patterns of Abuse." *Newsweek* (July 4): 26-33.
- Jamison, Paul L. 1978. "Anthropometric Variation." In *Eskimos of Northwestern Alaska*. Edited by P. L. Jamison, S. L. Zegura, and F. A. Milan. Stroudsburg, Penn.: Dowden, Hutchinson, and Ross: 40-78.
- Janson, Charles H., and Michele L. Goldsmith. 1995. "Predicting Group Size in Primates: Foraging Costs and Predation Risks." *Behavioral Ecology* 6 (3): 326-336.
- Jarman, Peter J. 1989. "Sexual Dimorphism in Macropodoidea." In *Kangaroos, Wallabies and Rat-kangaroos*. Edited by G. Grigg, Peter Jarman, and Ian Hume. New South Wales, Australia: Surrey Beatty and Sons: 433-447.
- Jarvis, Jennifer U. M. 1994. "Mammalian Eusociality: A Family Affair." *Trends in Ecology and Evolution* 9: 47-51.
- Jones, Steve, Robert Martin, and David Pilbeam. 1992. *The Cambridge Encyclopaedia of Human Evolution*. Cambridge: Cambridge University Press.
- Jones, Steven. 1994. *The Language of Genes: Solving the Mysteries of Our Genetic Past, Present and Future*. New York: Anchor Books.
- Joubert, Dereck. 1994. "Lions of Darkness." *National Geographic* 186: 35-53.
- Joubert, Dereck, and Beverly Joubert. 1992. *Eternal Enemies*. A film produced by Wildlife Films Botswana.
- Kano, Takayoshi. 1979. "A Pilot Study on the Ecology of Pygmy Chimpanzees *Pan paniscus*." In *The Great Apes*. Edited by D. A. Hamburg and E. R. McCrown. Menlo Park, Calif.: Benjamin/Cummings: 123-136.
- . 1982. "The Social Group of Pygmy Chimpanzees (*Pan paniscus*) of Wamba." *Primates* 23: 171-188.
- . 1990. "The Bonobo's Peaceable Kingdom." *Natural History* (November): 62-71.
- . 1992. *The Last Ape: Pygmy Chimpanzee Behavior and Ecology*. Translated by Evelyn Ono Vineberg. Stanford, Calif.: Stanford University Press.
- Karl, Pierre. 1991. *Animal and Human Aggression*. New York: Oxford University Press.

- Keegan, John. 1993. *A History of Warfare*. New York: Alfred A. Knopf.
- Keeley, Lawrence H. 1996. *War Before Civilization: The Myth of the Peaceful Savage*. Oxford: Oxford University Press.
- Keirans, J. E. 1984. *George Henry Falkiner Nuttall and the Nuttall Tick Catalogue*. Washington, D.C.: U.S. Government Printing Office.
- Kingsley, Susan. 1988. "Physiological Development of Male Orangutans and Gorillas." In *Orang-utan Biology*. Edited by Jeffrey H. Schwartz. Oxford: Oxford University Press: 123-131.
- Kinzey, W. G. 1984. "The Dentition of the Pygmy Chimpanzee, *Pan paniscus*." In *The Pygmy Chimpanzee: Evolutionary Biology and Behavior*. Edited by R. L. Susman. New York: Plenum: 65-88.
- Klare, Hugh J. 1979. *Anatomy of Prison*. Westport, Conn.: Greenwood Press.
- Klein, Richard G. 1989. *The Human Career: Human Biological and Cultural Origins*. Chicago: University of Chicago Press.
- Knauff, Bruce M. 1987. "Reconsidering Violence in Simple Human Societies: Homicide Among the Gebusi of New Guinea." *Current Anthropology* 28: 457-500.
- . 1991. "Violence and Sociality in Human Evolution." *Current Anthropology* 32 (4) (August-October): 391-409.
- Kortlandt, Adriaan. 1972. *New Perspectives on Ape and Human Evolution*. Amsterdam: Stichting voor Psychobiologie.
- . 1993. "The Discovery of the Pygmy Chimpanzee: In 1913!" *Bulletin of the American Society of Primatologists* 17 (1).
- Kruttschnitt, Candace. 1981. "Prison Codes, Inmate Solidarity, and Women: A Reexamination." In *Comparing Female and Male Offenders*. Edited by Marguerite Q. Warren. Beverly Hills, Calif.: Sage Publications: 123-144.
- Kruuk, Hans. 1972. *The Spotted Hyena: A Study of Predation and Social Behavior*. Chicago: University of Chicago Press.
- Kuntz, Tom. 1995. "Rhett and Scarlett: Rough Sex or Rape? Feminists Give a Damn." *New York Times* (February 19): E7.
- Kuper, Adam. 1994. *The Chosen Primate: Human Nature and Cultural Diversity*. Cambridge, Mass.: Harvard University Press.
- Kuroda, Suehisa. 1979. "Grouping of the Pygmy Chimpanzees." *Primates* 20: 161-183.
- Lang, Gretchen. 1994. "Rwandan Mission Provides No Refuge." *Boston Globe* (June 1): 2.
- Las Casas, Bartolomé de. 1542; 1992. *The Devastation of the Indies: A*

- Brief Account*. Translated by H. Briffault. Baltimore, Md.: Johns Hopkins University Press.
- Law, Robin. 1993. "The 'Amazons' of Dahomey." *Paideuma* 39: 246-260.
- Leacock, Eleanor. 1993. "Women in Samoan History: A Further Critique of Derek Freeman." In *Sex and Gender Hierarchies*. Edited by Barbara Diane Miller. Cambridge: Cambridge University Press: 351-365.
- Lee, Richard B. 1979. *The !Kung San: Men, Women, and Work in a Foraging Society*. Cambridge: Cambridge University Press.
- . 1982. "Politics, Sexual and Non-sexual, in an Egalitarian Society." In *Politics and History in Band Societies*. Edited by Eleanor Leacock and Richard Lee. Cambridge: Cambridge University Press: 37-59.
- Leland, John, and others. 1995. "Why the Children?" *Newsweek* (May 1): 48-53.
- Leonard, Eileen B. 1982. *Women, Crime, and Society: A Critique of Theoretical Criminology*. New York: Longman.
- Lerner, Gerda. 1986. *The Creation of Patriarchy*. New York: Oxford University Press.
- Levinson, David. 1989. *Family Violence in Cross-Cultural Perspective*. Newbury Park, Calif.: Sage Publications.
- Levy, Robert I. 1983. "The Attack on Mead." *Science* (May 20): 829-832.
- Lewin, Roger. 1993. *Human Evolution: An Illustrated Introduction*. Oxford: Blackwell Scientific.
- Lorch, Donatella. 1994. "Bodies from Rwanda Cast a Pall on Lakeside Villages in Uganda." *New York Times* (May 28): 1, 5.
- Lorenz, Konrad. 1963; 1966. *On Aggression*. Translated by Marjorie Latzke. London: Methuen.
- MacDonald, Eileen. 1991. "Female Terrorists." *Marie Claire* (July): 47 ff.
- MacKinnon, John. 1971. "The Orang-utan in Sabah Today." *Oryx* 11 (May): 141-91.
- . 1974. "The Behaviour and Ecology of Wild Orang-utans (*Pongo pygmaeus*)." *Animal Behaviour* 22: 3-74.
- Malenky, Richard K., and others. 1994. "The Significance of Terrestrial Herbaceous Foods for Bonobos, Chimpanzees and Gorillas." In *Chimpanzee Cultures*. Edited by Richard W. Wrangham and others. Cambridge, Mass.: Harvard University Press: 59-75.
- Malenky, Richard K., and Richard W. Wrangham. 1994. "A Quantita-

- tive Comparison of Terrestrial Herbaceous Food Consumption by *Pan paniscus* in the Lomako Forest, Zaïre, and *Pan troglodytes* in the Kibale Forest, Uganda." *American Journal of Primatology* 32: 1-12.
- Malina, R. M., and C. Bouchard. 1991. *Growth, Maturation and Physical Activity*. Champaign-Urbana: Human Kinetics Books.
- Mallia, Joseph. 1995. "Militia Is Fighting Mad." *Boston Herald* (April 30): 3.
- Manson, Joseph H., and Richard W. Wrangham. 1991. "Intergroup Aggression in Chimpanzees and Humans." *Current Anthropology* 32 (4): 369-390.
- Marks, Jonathan. 1993. "Hominoid Heterochromatin: Terminal C-Bands as a Complex Genetic Trait Linking Chimpanzee and Gorilla." *American Journal of Physical Anthropology* 90: 237-249.
- Marks, Jonathan, Carl W. Schmid, and Vincent M. Sarich. 1988. "DNA Hybridization as a Guide to Phylogeny: Relationships of the Hominoidea." *Journal of Human Evolution* 17: 769-786.
- Marx, Leo. 1964. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. Oxford: Oxford University Press.
- McHenry, Henry M. 1994. "Behavioral Ecological Implications of Early Hominid Body Size." *Journal of Human Evolution* 27: 77-87.
- Mead, Margaret. 1928a. *Coming of Age in Samoa: A Psychological Study of Primitive Youth for Western Civilization*. New York: William Morrow.
- . 1928b. "The Rôle of the Individual in Samoan Culture." *Journal of the Royal Anthropological Institute* 58: 487.
- . 1935; 1963. *Sex and Temperament in Three Primitive Societies*. New York: William Morrow.
- . 1940. "Social Change and Cultural Surrogates." *Journal of Educational Sociology* 14 (2) (October): 92-109.
- . 1949. *Male and Female: A Study of the Sexes in a Changing World*. New York: William Morrow.
- . 1972. *Blackberry Winter: My Earlier Years*. New York: William Morrow.
- . 1977. *Letters from the Field, 1925-1975*. New York: Harper and Row.
- Mech, L. David. 1977. "Productivity, Mortality and Population Density of Wolves in Northeastern Minnesota." *Journal of Mammalogy* 58: 559-574.

- Meggitt, Mervyn. 1977. *Blood Is Their Argument: Warfare Among the Mae Enga Tribesmen of the New Guinea Highlands*. Palo Alto, Calif.: Mayfield Publishing.
- Melville, Herman. 1846; 1972. *Typee: A Peep at Polynesian Life*. Edited by George Woodcock. London: Penguin.
- Mernissi, Fatima. 1994. *Dreams of Trespass: Tales of a Harem Girlhood*. Reading, Mass.: Addison-Wesley.
- Mesquita, Bruce Bueno de. 1981. *The War Trap*. New Haven: Yale University Press.
- Minderhout, D. T. 1986. "Introductory Texts and Social Sciences Stereotypes." *Anthropology Newsletter* 27 (3): 14-15.
- Mitani, John. 1985. "Mating Behaviour of Male Orangutans in the Kutai Game Reserve, Indonesia." *Animal Behaviour* 33: 392-402.
- Mitchell, Margaret. 1936. *Gone with the Wind*. New York: Macmillan.
- Moore, Jim. 1992. "'Savanna' Chimpanzees." In *Topics in Primatology, vol. 1: Human Origins*. Edited by Toshisada Nishida and others. Tokyo: University of Tokyo Press: 99-118.
- Moorehead, Alan. 1960. *The White Nile*. New York: Harper and Row.
- . 1969. *Darwin and the Beagle*. New York: Harper and Row.
- Morell, Virginia. 1995. "Chimpanzee Outbreak Heats Up Search for Ebola Origin." *Science* 268: 974, 975.
- Morgan, John. 1852; 1979. *The Life and Adventures of William Buckley: Thirty-Two Years a Wanderer Amongst the Aborigines*. Canberra: Australia National University Press.
- Morin, Phillip A., and others. 1994. "Kin Selection, Social Structure, Gene Flow, and the Evolution of Chimpanzee." *Science* 265: 1193-1201.
- Morganthau, Tom, and others. 1995. "The View from the Far Right." *Newsweek* (May 1): 36-39.
- Muroyama, Y., and Y. Sugiyama. 1994. "Grooming Relationships in Two Species of Chimpanzees." In *Chimpanzee Cultures*. Edited by Richard W. Wrangham and others. Cambridge, Mass.: Harvard University Press: 169-180.
- Murray, Martyn G., and Russell Gerrard. 1984. "Conflicts in the Neighbourhood: Models Where Close Relatives Are in Direct Competition." *Journal of Theoretical Biology* 111: 237-46.
- Nance, John. 1975. *The Gentle Tasaday: A Stone Age People in the Philippine Rain Forest*. New York: Harcourt Brace Jovanovich.
- Nash, Robert Jay. 1973. *Bloodletters and Badmen: A Narrative Encyclo-*

- pedia of American Criminals from the Pilgrims to the Present*. New York: M. Evans.
- Nishida, Toshisada, ed. 1990. *The Chimpanzees of the Mahale Mountains: Sexual and Life History Strategies*. Tokyo: University of Tokyo Press.
- Nishida, Toshisada, Mariko Haraiwa-Hasegawa, and Yuko Takahata. 1985. "Group Extinction and Female Transfer in Wild Chimpanzees in the Mahale National Park, Tanzania." *Zeitschrift für Tierpsychologie* 67: 284-301.
- Nishida, Toshisada, and Kenji Kawanaka. 1985. "Within-Group Cannibalism by Adult Male Chimpanzees." *Primates* 26: 274-284.
- Nishida, Toshisada, and others. 1991. "Meat-Sharing as a Coalition Strategy by an Alpha Male Chimpanzee?" In *Topics in Primatology, vol. 1: Human Origins*. Edited by Toshisada Nishida and others. Tokyo: University of Tokyo Press: 159-176.
- Nuttall, George H. F. 1904. *Blood Immunity and Blood Relationship: A Demonstration of Certain Blood-relationships Amongst Animals by Means of the Precipitin Test for Blood*. Cambridge: Cambridge University Press.
- O'Malley, Suzanne. 1993. "Girlz 'n the Hood." *Harper's Bazaar* (October): 238 ff.
- Ortner, Sherry B. 1974. "Is Female to Male as Nature Is to Culture?" In *Woman, Culture and Society*. Edited by Michelle Z. Rosaldo and Louise Lamphere. Stanford, Calif.: Stanford University Press: 67-87.
- Otterbein, Keith F. 1970. *The Evolution of War*. New Haven: HRAF Press.
- Packer, Craig, and Anne Pusey. 1983. "Adaptations of Female Lions to Infanticide by Incoming Males." *American Naturalist* 121: 716-728.
- Pagnozzi, Amy. 1994. "Killer Girls." *Elle* (May): 122-126.
- Palmer, Craig T. 1989a. "Is Rape a Cultural Universal?: A Re-examination of the Ethnographic Data." *Ethnology* 28: 1-16.
- . 1989b. "Rape in Nonhuman Animal Species: Definitions, Evidence, and Implications." *Journal of Sex Research* 26 (3): 355-374.
- . 1991. "Human Rape: Adaptation or By-product?" *Journal of Sex Research* 28 (3): 365-386.
- Parish, A. R. 1993. "Sex and Food Control in the 'Uncommon Chimpanzee': How Bonobo Females Overcome a Phylogenetic Legacy of Male Dominance." *Ethology and Sociobiology* 15 (3): 157-179.

- Parker, Geoffrey A. 1974. "Assessment Strategy and the Evolution of Fighting Behavior." *Journal of Theoretical Biology* 47: 223-243.
- Parker, Gary. 1980. *Creation: The Facts of Life*. El Cajon, Calif.: Creation Life.
- Parmigiani, Stefano, and Frederick S. vom Saal, eds. 1994. *Infanticide and Parental Care*. London: Ettore Majorana Life Sciences Series, Harwood Academic.
- Percival, L., and K. Quinkert. 1987. "Anthropometric Factors." In *Sex Differences in Human Performance*. Edited by Mary Baker. New York: John Wiley and Sons: 121-139.
- Perkins, Roberta, and Garry Bennett. 1985. *Being a Prostitute: Prostitute Women and Prostitute Men*. London: George Allen and Unwin.
- Peters, Charles, and Eileen O'Brien. 1994. "Potential Hominid Plant Foods from Woody Species in Semi-arid Versus Sub-humid Sub-tropical Africa." In *The Digestive System in Mammals: Food and Function*. Edited by D. J. Chivers and P. Langer. Cambridge: Cambridge University Press: 166-192.
- Peterson, Dale, and Jane Goodall. 1993. *Visions of Caliban: On Chimpanzees and People*. Boston: Houghton Mifflin.
- Pierre-Pierre, Garry. 1995. "Two Women Charged with Series of Armed Robberies in Brooklyn." *New York Times* (January 26): B1, B3.
- Pilbeam, David. 1995. "Genetic and Morphological Records of the Hominoida and Hominid Origins: A Synthesis." *Molecular Phylogenetics and Evolution* (in press).
- Plavcan, J. Michael, and others. 1995. *Journal of Human Evolution* 28: 245-276.
- Plavcan, J. Michael, and Carel P. van Schaik. 1992. "Intrasexual Competition and Canine Dimorphism in Anthropoid Primates." *American Journal of Physical Anthropology* 87: 461-477.
- . 1994. "Canine Dimorphism." *Evolutionary Anthropology* 2: 208-214.
- Pollitt, Katha. 1992. "Are Women Morally Superior to Men?" *The Nation* (December 28): 799-807.
- Pollock-Byrne, Jocelyn M. 1990. *Women, Prison, and Crime*. Pacific Grove, Calif.: Brooks/Cole.
- Popp, Joseph, and Irven De Vore. 1979. "Aggressive Competition and Social Dominance Theory." In *The Great Apes*. Edited by D. A. Hamburg and E. R. McCrown. Menlo Park, Calif.: Benjamin/Cummings: 317-338.

- Porter, Roy. 1986. "Rape — Does It Have a Historical Meaning?" In *Rape*. Edited by Sylvana Tomaselli and Roy Porter. Oxford: Basil Blackwell: 216-236.
- Power, Margaret. 1991. *The Egalitarians, Human and Chimpanzee: An Anthropological View of Social Organization*. Cambridge: Cambridge University Press.
- Putnam, Robert. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- Rabbie, Jacob M. 1992. "The Effects of Intragroup Cooperation and Intergroup Competition on In-group Cohesion and Out-group Hostility." In *Coalitions and Alliances in Humans and Other Animals*. Edited by Alexander H. Harcourt and Frans B. M. de Waal. Oxford: Oxford University Press: 175-205.
- Raghavan, Sudarsan, Hassan Shahriar, and Fazal Qureshi. 1994. "Warriors of God." *Newsweek* (August 15): 36, 37.
- Raper, A. F. 1933. *The Tragedy of Lynching*. Durham: University of North Carolina Press.
- "Ready for War: Inside the World of the Paranoid." 1995. *New York Times* (April 30): 1, E5.
- Reichert, Susan E. 1978. "Games Spiders Play: Behavioral Variability in Territorial Disputes." *Behavioral Ecology and Sociobiology* 3: 135-162.
- Reinisch, June Machover, Mary Ziemba-Davis, and Stephanie A. Sanders. 1991. "Hormonal Contributions to Sexual Dimorphic Behavioral Development in Humans." *Psychoneuroendocrinology* 16 (1-3): 213-278.
- Reynolds, Vernon. 1967. *The Apes*. New York: Harper Colophon.
- Richardson, Lewis F. 1960. *The Statistics of Deadly Quarrels*. Pittsburgh: Boxwood.
- "Ricki Lake on Line Two, Mr. Z." 1995. *Time* (July 3): 61.
- Rijksen, Herman D. 1978. *A Field Study of Sumatran Orangutans*. Wageningen, Netherlands: H. Veenman and B. V. Zonen.
- . 1974. "Social Structure in a Wild Orang-utan Population in Sumatra." In *Contemporary Primatology*. Edited by S. Kondo and others. Basel: S. Karger: 373-379.
- Robarchek, Clayton A., and Carole J. Robarchek. 1992. "Cultures of War and Peace: A Comparative Study of Waorani and Semai." In *Aggression and Peacefulness in Humans and Other Primates*. Edited by James Silverberg and J. Patrick Gray. New York: Oxford University Press: 189-213.

- Rodseth, Lars, and others. 1991. "The Human Community as a Primate Society." *Current Anthropology* 32 (3) (June): 221-254.
- Rodman, Peter, and John Mitani. 1987. "Orangutans: Sexual Dimorphism in a Solitary Species." In *Primate Societies*. Edited by Barbara B. Smuts and others. Chicago: Chicago University Press: 146-154.
- Rubenstein, Charles A. 1974. "Polygamy." In *Universal Jewish Encyclopedia*, vol. 8. New York: UJE: 584, 585.
- Ruddick, Sara. 1990. *Maternal Thinking: Toward a Politics of Peace*. New York: Ballantine.
- Ruvolo, Maryellen, and others. 1991. "Resolution of the African Hominoid Trichotomy by Use of a Mitochondrial Gene Sequence." *Proceedings of the National Academy of Sciences* 88: 1570-1574.
- . 1994. "Gene Trees and Hominoid Phylogeny." *Proceedings of the National Academy of Sciences* 91: 8900-8904.
- Sabater Pi, Jorge, and others. 1993. "Behavior of Bonobos (*Pan paniscus*) Following Their Capture of Monkeys in Zaïre." *International Journal of Primatology* 14: 797-804.
- Sanday, Peggy Reeves. 1981. "A Socio-Cultural Context of Rape: A Cross-Cultural Study." *Journal of Social Issues* 37: 5-27.
- . 1986. "Rape and the Silencing of the Feminine." In *Rape*. Edited by Sylvana Tomaselli and Roy Porter. New York: Basil Blackwell: 84-101.
- Sapolsky, Robert M. 1994. *Why Zebras Don't Get Ulcers: A Guide to Stress, Stress-related Diseases, and Coping*. New York: W. H. Freeman.
- Savage, Robert J. G. 1988. "Extinction and the Fossil Mammal Record." In *Extinction and Survival in the Fossil Record*. Edited by G. P. Larwood. Oxford: Clarendon: 319-334.
- Savage-Rumbaugh, Sue, and Roger Lewin. 1994. *Kanzi: The Ape at the Brink of the Human Mind*. New York: Wiley.
- Schaik, Carel van, and Robin Dunbar. 1990. "The Evolution of Monogamy in Large Primates: A New Hypothesis and Some Crucial Tests." *Behaviour* 115: 30-61.
- Schaik, Carel van, and Peter Kappeler. 1993. "Life History, Activity Period and Lemur Social Systems." In *Lemur Social Systems and Their Ecological Basis*. Edited by Peter Kappeler and Jorge Ganzhorn. New York: Plenum Press: 241-260.
- Schaller, George. 1972. *The Serengeti Lion: A Study of Predator-Prey Relations*. Chicago: University of Chicago Press.

- Schwartz, Jeffrey H. 1984. "The Evolutionary Relationships of Man and the Orangutans." *Nature* 308: 501-505.
- . 1987. *The Red Ape: Orang-utans and Human Origins*. Boston: Houghton Mifflin.
- Schwarz, Ernst. 1929. "Das Vorkommen des Schimpansen auf den Linken Congo-Ufer." *Revue de Zoologie et de Botanique Africaines* 16 (4): 425-426.
- Shabad, Steven. 1995. "Beyond the Fringe." *Newsweek* (May 1): 38.
- Shakur, Sanyika. 1993. *Monster: The Autobiography of an L.A. Gang Member*. New York: Atlantic Monthly Press.
- Shea, Brian T. 1983. "Phyletic Size Change and Brain/Body Allometry: A Consideration Based on the African Pongids and Other Primates." *International Journal of Primatology* 4: 33-62.
- . 1984. "Between the Gorilla and the Chimpanzee: A History of Debate Concerning the Existence of the Kooloo-Kamba or Gorilla-like Chimpanzee." *Journal of Ethnobiology* 4: 1-13.
- . 1985. "Ontogenetic Allometry and Scaling: A Discussion Based on Growth and Form of the Skull in African Apes." In *Size and Scaling in Primate Biology*. Edited by William L. Jungers. New York: Plenum: 175-205.
- Sherif, Muzafer, and others. 1961. *Intergroup Conflict and Cooperation: The Robber's Cave Experiment*. Norman, Okla.: University of Oklahoma Book Exchange.
- Short, R. V. 1980. "The Great Apes of Africa." *Journal of Reproductive Fertility*, Supplement 28: 3-11.
- Shostak, Marjorie. 1981. *Nisa: The Life and Words of a !Kung Woman*. Cambridge, Mass.: Harvard University Press.
- Shoumatoff, Alex. 1994. "Flight from Death." *The New Yorker* (June 20): 44-55.
- Sibley, Charles G., and Jon E. Ahlquist. 1983. "The Phylogeny and Classification of Birds Cased on the Data of DNA-DNA Hybridization." In *Current Ornithology*, vol. 1. Edited by R. F. Johnston. New York: Plenum: 245-292.
- . 1984. "The Phylogeny of the Hominid Primates, as Indicated by DNA-DNA Hybridization." *Journal of Molecular Evolution* 20: 2-15.
- Sibley, Charles G., J. A. Comstock, and Jon E. Ahlquist. 1990. "DNA Hybridization Evidence of Hominoid Phylogeny: A Reanalysis of the Data." *Journal of Molecular Evolution* 30: 202-236.

- Sikes, Gini. 1994. "Girls in the 'Hood." *Scholastic Update* (February 11): 20 ff.
- Silk, Joan B. 1993. "Primatological Perspectives on Gender Hierarchies." In *Sex and Gender Hierarchies*. Edited by Barbara Diane Miller. Cambridge: Cambridge University Press: 212-235.
- Sillen, Andrew. 1992. "Strontium-calcium Ratios (Sr/Ca) of *Australopithecus robustus* and Associated Fauna from Swartkrans." *Journal of Human Evolution* 23: 495-516.
- Simmel, Georg. 1969. "The Individual and the Mass." In *Readings in Collective Behavior*, 1st ed. Edited by Robert R. Evans. Chicago: Rand McNally: 39-45.
- Simon, Rita James. 1975. *Women and Crime*. Lexington, Mass.: Lexington Books.
- Small, Melvin, and J. David Singer. 1983. *Resort to Arms: International and Civil Wars, 1816-1980*. Beverly Hills, Calif.: Sage Publications.
- Small, Meredith. 1993. *Female Choices: Sexual Behavior of Female Primates*. Ithaca, N.Y.: Cornell University Press.
- Smith, Robert L. 1984. "Human Sperm Competition." In *Sperm Competition and the Evolution of Animal Mating Systems*. Edited by Robert L. Smith. New York: Academic Press: 601-659.
- Smuts, Barbara B. 1985. *Sex and Friendship in Baboons*. New York: Aldine de Gruyter.
- . 1992. "Male Aggression Against Women: An Evolutionary Perspective." *Human Nature* 3: 1-44.
- . 1995. "The Evolutionary Origins of Patriarchy." *Human Nature*, 1: 1-32.
- Smuts, Barbara B., and Robert W. Smuts. 1993. "Male Aggression and Sexual Coercion of Females in Nonhuman Primates and Other Animals: Evidence and Theoretical Implications." *Advances in the Study of Behavior* 22: 1-63.
- Sorokin, Pitirim A. 1962. *Social and Cultural Dynamics*, vol. 3. New York: Bedminster Press.
- Spaeth, Anthony. 1995. "Engineer of Doom." *Time* (June 12): 57.
- Stanford, Craig B., and others. 1994. "Patterns of Predation by Chimpanzees on Red Colobus Monkeys in Gombe National Park, 1982-1991." *American Journal of Physical Anthropology* 94: 213-228.
- Stanley, Steven M. 1992. "An Ecological Theory for the Origin of Homo." *Paleobiology* 18: 237-257.
- Starin, E. Dawn. 1994. "Philopatry and Affiliation Among Red Colobus." *Behaviour* 130: 253-269.

- Stauffer, John, and Richard Frost. 1976. "Male and Female Interest in Sexually-Oriented Magazines." *Journal of Communication* 26 (Winter): 25-30.
- Stephan, C. W., and W. G. Stephan. 1990. *Two Social Psychologies*, 2nd ed. Belmont, Calif.: Wadsworth.
- Stocking, George W., Jr. 1989. "The Ethnographic Sensibility of the 1920s and the Dualism of the Anthropological Tradition." In *Romantic Motives: Essays on Anthropological Sensibility. History of Anthropology*, vol. 6. Edited by George W. Stocking, Jr. Madison, Wis.: University of Wisconsin Press: 208-276.
- Strier, Karen B. 1992. *Faces in the Forest: The Endangered Muriqui Monkeys of Brazil*. Oxford: Oxford University Press.
- . 1994. "Brotherhoods Among Atelins: Kinship, Affiliation and Competition." *Behaviour* 130: 151-167.
- Sugiyama, Yukimaru. 1988. "Grooming Interactions Among Adult Chimpanzees at Bossou, Guinea, with Special Reference to Social Structure." *International Journal of Primatology* 9: 393-407.
- Sumner, W. G. 1906. *Folkways*. Boston: Ginn.
- Susman, Randall L. 1988. "Hand of *Paranthropus robustus* from Member 1, Swartkrans: Fossil Evidence for Tool Behavior." *Science* 240: 781-784.
- Sussman, Robert W., James M. Cheverud, and Thad Q. Bartlett. 1994. "Infant Killing as an Evolutionary Strategy: Reality or Myth?" *Evolutionary Anthropology*, vol. 3, no. 5: 149-151.
- Swiss, Shana, and Joan E. Giller. 1993. "Rape as a Crime of War: A Medical Perspective." *Journal of the American Medical Association* 270: 612-615.
- Symons, Donald. 1979. *The Evolution of Human Sexuality*. Oxford: Oxford University Press.
- Takahata, Naoyuki. 1995. "A Genetic Perspective on the Origin of Man and His History." *Annual Review of Ecology and Systematics* (in press).
- Tannen, Deborah. 1986. *That's Not What I Meant: How Conversational Style Makes or Breaks Relationships*. New York: William Morrow.
- . 1990. *You Just Don't Understand: Men and Women in Conversation*. New York: William Morrow.
- Tanner, James M. 1978. *Fetus into Man: Physical Growth from Conception to Maturity*. Cambridge, Mass.: Harvard University Press.
- Taylor, Carl S. 1990. *Dangerous Society*. East Lansing, Mich.: Michigan State University Press.

- Tempkin, Jennifer. 1986. "Women, Rape and Law Reform." In *Rape*. Edited by Sylvana Tomaselli and Roy Porter. New York: Basil Blackwell: 16-40.
- Terborgh, John. 1992. *Diversity and the Tropical Rain Forest*. New York: W. H. Freeman.
- Thomas, Evan, and others. 1995. "Cleverness — And Luck." *Newsweek* (May 1): 35.
- Thompson-Handler, Nancy, Richard Malenky, and Gay Reinharz. 1995. *Action Plan for Pan paniscus: Report on Free Ranging Populations and Proposals for Their Preservation*. Milwaukee, Wis.: The Zoological Society of Milwaukee County.
- Thornhill, Randy. 1979. "Male and Female Sexual Selection and the Evolution of Mating Strategies in Insects." In *Sexual Selection and Reproductive Competition in Insects*. Edited by Murray S. Blum and Nancy A. Blum. New York: Academic Press: 81-121.
- . 1980. "Rape in *Panorpa* Scorpionflies and a General Rape Hypothesis." *Animal Behaviour* 28: 52-59.
- Thornhill, Randy, and Nancy W. Thornhill. 1992. "The Evolutionary Psychology of Men's Coercive Sexuality." *Behavior and Brain Sciences* 15: 363-421.
- Thornhill, Randy, Nancy W. Thornhill, and Gerard A. Dizinno. 1986. "The Biology of Rape." In *Rape*. Edited by Sylvana Tomaselli and Roy Porter. New York: Basil Blackwell: 102-121.
- Tiger, Lionel. 1969. *Men in Groups*. New York: Random House.
- . 1987. *The Manufacture of Evil: Ethics, Evolution and the Industrial System*. New York: Harper and Row.
- Tonkinson, Robert. 1988. "Ideology and Domination in Aboriginal Australia: A Western Desert Test Case." In *Hunters and Gatherers 2: Property, Power and Ideology*. Edited by Tim Gold, Davis Riches, and James Woodburn. New York: St. Martin's Press.
- Tratz, E., and H. Heck. 1954. "Der Afrikanische Anthropoide 'Bonobo,' eine neue Menschenaffengattung." *Säugetierkundliche Mitteilungen* 2: 97-101.
- Trinkaus, Erik. 1978. "Hard Times Among the Neanderthals." *Natural History* 87 (10): 58-63.
- Turnbull, Colin M. 1965. *Wayward Servants: The Two Worlds of African Pygmies*. Garden City, N.Y.: Natural History Press.
- . 1982. "The Ritualization of Potential Conflict Between the Sexes Among the Mbuti." In *Politics and History in Band Societies*.

- Edited by Eleanor Leacock and Richard Lee. Cambridge: Cambridge University Press: 133-155.
- Turney-High, Harry H. 1949; 1991. *Primitive War: Its Practice and Concepts*. Columbia, S.C.: University of South Carolina Press.
- Tuten, Jeff M. 1982. "Germany and the World Wars." In *Female Soldiers — Combatants or Noncombatants? Historical and Contemporary Perspectives*. Edited by Nancy Loring Goldman. Westport, Conn.: Greenwood Press: 47-60.
- Tuzin, Donald. 1976. *The Ilahita Arapesh: Dimensions of Unity*. Berkeley: University of California Press.
- . 1980. *The Voice of the Tambarian: Truth and Illusion in Ilahita Arapesh Religion*. Berkeley: University of California Press.
- Ueda, S., and others. 1989. "Nucleotide Sequences of Immunoglobulin-Epsilon Pseudogenes in Man and Apes and Their Phylogenetic Relationships." *Journal of Molecular Biology* 205: 85-90.
- Uehara, Shigeo, and others. 1992. "Characteristics of Predation by the Chimpanzees in the Mahale Mountains National Park, Tanzania." In *Topics in Primatology, Vol. 1: Human Origins*. Tokyo: University of Tokyo Press: 143-158.
- Vincent, Anne. 1985. "Plant Foods in Savanna Environments: A Preliminary Report of Tubers Eaten by the Hadza of Northern Tanzania." *World Archaeology* 17: 131-148.
- Vrba, Elisabeth S. 1988. "Late Pliocene Climatic Events and Hominid Evolution." In *Evolutionary History of the Robust Australopithecines*. Edited by Frederick E. Grine. New York: Aldine de Gruyter: 405-426.
- Walker, Alan. 1981. "Diet and Teeth: Dietary Hypotheses and Human Evolution." *Philosophical Transactions of the Royal Society* 292: 57-64.
- Ward, Ingeborg L. 1978. "Sexual Behavioral Differentiation: Prenatal Hormonal and Environmental Control." In *Sex Differences in Behavior*. Edited by Richard C. Friedman, Ralph M. Richart, and Raymond L. Vande Wiele. Huntington, N.Y.: Robert E. Krieger: 3-17.
- Watson, Catherine. 1994a. "Cry Havoc." *The Independent Magazine* (January 15): 16-20.
- . 1994b. "The Death of Democracy." *Africa Report* (January/February): 26-31.
- Watts, David P. 1989. "Infanticide in Mountain Gorillas: New Cases and a Reconsideration of the Evidence." *Ethology* 81: 1-18.

- . 1994. "The Influence of Male Mating Tactics on Habitat Use in Mountain Gorillas (*Gorilla gorilla beringei*)." *Primates* 35:35-48.
- . 1996. "Comparative Socioecology of Gorillas." In *Great Ape Societies*. Edited by William C. McGrew, Toshisada Nishida, and Linda Marchant. Cambridge: Cambridge University Press.
- Weil, Liz. 1994. "Revenge of the Girl Next Door." *Boston Magazine* (November): 59ff.
- Weiss, Philip. 1995. "Outcasts Digging in for the Apocalypse." *Time* (May 1): 48, 49.
- Weller, Sheila. 1994. "Girls in the Gang: A Nineties Nightmare." *Cosmopolitan* (August): 166 ff.
- Wendorf, Fred. 1968. "Site 117: A Nubian Paleolithic Graveyard near Jebel Sahara, Sudan." In *The Prehistory of Nubia*, vol. 2. Edited by Fred Wendorf. Dallas: Southern Methodist University Press: 954-995.
- Wendorf, Fred, and Romuald Schild. 1986. *The Wadi Kubbania Skeleton: A Late Paleolithic Burial from Southern Egypt. The Prehistory of Wadi Kubbania*, vol. 1. Edited by Angela E. Close. Dallas: Southern Methodist University Press.
- White, Frances J. 1992. "Pygmy Chimpanzee Social Organization: Variation with Party Size and Between Study Sites." *American Journal of Primatology* 26: 203-214.
- White, Tim D., Gen Suwa, and Berhane Asfaw. 1994. "Australopithecus ramidus, a New Species of Early Hominid from Aramis, Ethiopia." *Nature* 371: 306-312.
- . 1995. "Corrigendum to *Australopithecus ramidus*, a New Species of Early Hominid from Aramis, Ethiopia." *Nature* 375: 88.
- Wickler, Wolfgang. 1967. *The Sexual Code: The Social Behavior of Animals and Men*. London: Weidenfeld and Nicolson.
- Williams, S. A., and Morris Goodman. 1989. "A Statistical Test that Supports a Human/Chimpanzee Clade Based on Noncoding DNA Sequence Data." *Molecular Biology and Evolution* 6: 325-330.
- Wilson, Nanci Koser. 1980. "Styles of Doing Time in a Coed Prison: Masculine and Feminine Alternatives." In *Coed Prison*. Edited by John O. Smykla. New York: Human Sciences: 150-171.
- Wilson, T. W. 1986. "Gender Differences in the Inmate Code." *Canadian Journal of Criminology* 28: 297-405.
- Wingfield, John C., Carol S. Whaling, and Peter Marler. 1994. "Communication in Vertebrate Aggression and Reproduction: The Role of

- Hormones." In *The Physiology of Reproduction*, 2nd ed. Edited by E. Knobil and J. D. Neill. New York: Raven: 303-342.
- WoldeGabriel, Giday, and others. 1994. "Ecological and Temporal Placement of Early Pliocene Hominids at Aramis, Ethiopia." *Nature* 371: 330-333.
- Wolf, Katherine, and Steve R. Schulman. 1984. "Male Response to 'Stranger' Females as a Function of Female Reproductive Value Among Chimpanzees." *American Naturalist* 123: 163-174.
- Wolf, Naomi. 1991. *The Beauty Myth: How Images of Beauty Are Used Against Women*. New York: Doubleday.
- . 1993. *Fire with Fire: The New Female Power and How It Will Change the 21st Century*. New York: Random House.
- Wolff, A. 1995. "An Unrivalled Rivalry." *Sports Illustrated* (March 6): 74-84.
- Wolfheim, Jaclyn H. 1983. *Primates of the World: Distribution, Abundance, and Conservation*. Seattle: University of Washington Press.
- Wolpoff, Milford H. 1980. *Paleoanthropology*. New York: Alfred A. Knopf.
- Wood, Bernard. 1994. "The Oldest Hominid Yet." *Nature* 371: 280-281.
- Wrangham, Richard W. 1975. *Behavioral Ecology of Chimpanzees in Gombe National Park, Tanzania*. Cambridge: Cambridge University Ph.D. thesis.
- . 1979. "On the Evolution of Ape Social Systems." *Social Science Information* 18: 335-368.
- . 1981. "Drinking Competition in Vervet Monkeys." *Animal Behaviour* 29: 904-910.
- . 1982. "Ecology and Social Relationships in Two Species of Chimpanzee." In *Ecological Aspects of Social Evolution: Birds and Mammals*. Edited by D. I. Rubenstein and Richard W. Wrangham. Princeton: Princeton University Press: 352-378.
- . 1993. "The Evolution of Sexuality in Chimpanzees and Bonobos." *Human Nature* 4: 47-79.
- Wrangham, Richard W., Adam P. Clark, and Gilbert Isabirye-Basuta. 1992. "Female Social Relationships and Social Organization of the Kibale Forest Chimpanzees." In *Topics in Primatology, Vol. 1: Human Origins*. Edited by Toshisada Nishida and others. Tokyo: University of Tokyo Press: 81-98.
- Wrangham, Richard W., John L. Gittleman, and Colin A. Chapman. 1993. "Constraints on Group Size in Primates and Carnivores:

- Population Density and Day-range as Assays of Exploitation Competition." *Behavioral Ecology and Sociobiology* 32: 199-209.
- Wrangham, Richard W., William C. McGrew, and Frans B. M. de Waal. 1994. "The Challenge of Behavioral Diversity." In *Chimpanzee Cultures*. Edited by Richard W. Wrangham and others. Cambridge, Mass.: Harvard University Press: 1-18.
- Wrangham, Richard W., and others. 1996. "Social Ecology of Kanyawara Chimpanzees: Implications for the THV Hypothesis." In *Great Ape Societies*. Edited by William C. McGrew, Linda F. Marchant, and Toshisada Nishida. Cambridge: Cambridge University Press.
- Wrangham, Richard W., and Emily van Zinnicq Bergmann Riss. 1990. "Rates of Predation on Mammals by Gombe Chimpanzees, 1972-1975." *Primates* 31: 157-170.
- Wrangham, Richard W., and Barbara B. Smuts. 1980. "Sex Differences in the Behavioural Ecology of Chimpanzees in the Gombe National Park, Tanzania." *Journal of Reproduction and Fertility*, Supplement 28: 13-31.
- Wright, Robert. 1994. "Feminists, Meet Mr. Darwin." *The New Republic* (November 28): 34-46.
- Yerkes, Robert M. 1925. *Almost Human*. London: Jonathan Cape.
- Zihlman, Adriene L., and others. 1978. "Pygmy Chimpanzees as a Possible Prototype for the Common Ancestor of Humans, Chimpanzees and Gorillas." *Nature* (London) 275: 744-746.
- Zuckerman, Solly. 1933. *Functional Affinities of Man, Monkeys, and Apes: A Study of the Bearings of Physiology and Behaviour on the Taxonomy and Phylogeny of Lemurs, Monkeys, Apes, and Man*. London: Kegan Paul.

ACKNOWLEDGMENTS

Perhaps the most exciting part of our research was our trip to Zaïre to see bonobos. For help on that journey, we thank several people, including particularly Takayoshi Kano, who provided full and serene hospitality. Dr. Kano allowed us to observe his research and openly shared his observations and conclusions. He and Mrs. Kano shared several pleasant evenings with us at Wamba, while Chie Hashimoto and Evelyn Ono Vineberg took time off from their own pressing research to guide us into the forest. Norbert Likombe Batwafe and Ikenge Justin Lokati also, sensitively and professionally, contributed their time and energy on our behalf; and Karl Ammann was generous and helpful in any number of ways.

In Uganda we are particularly indebted to Linda and Oskar Rothen, Peter Howard, John Kasenene, Lysa Leland, Tom Struhaker; in the forest: Joseph Basigara, Bart Beerlage, Anja Berle, Joseph Byaruhanga, Lauren Chapman, Nancy Lou Conklin, Kiiza Clement, the late Godfrey Etot, Barbara Gault, Jennifer Gradowski, the late George Kagaba, Christopher Katongole, Elisha Karwani, Samuel Mugume, Francis Mugurusi, Christopher Muruuli, the late Joseph Obua, and Peter Tuhairwe.