

# THE NEW YORKER

OUR FAR-FLUNG CORRESPONDENTS

## SWINGERS

*Bonobos are celebrated as peace-loving, matriarchal, and sexually liberated. Are they?*

by Ian Parker

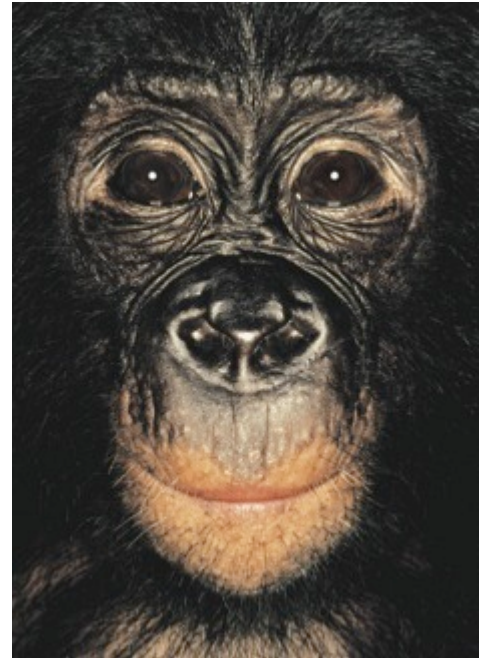
JULY 30, 2007

On a Saturday evening a few months ago, a fund-raiser was held in a downtown Manhattan yoga studio to benefit the bonobo, a species of African ape that is very similar to—but, some say, far nicer than—the chimpanzee. A flyer for the event depicted a bonobo sitting in the crook of a tree, a superimposed guitar in its left hand, alongside the message “Save the Hippie Chimps!” An audience of young, shoeless people sat cross-legged on a polished wooden floor, listening to Indian-accented music and eating snacks prepared by Bonobo’s, a restaurant on Twenty-third Street that serves raw vegetarian food. According to the restaurant’s take-out menu, “Wild bonobos are happy, pleasure-loving creatures whose lifestyle is dictated by instinct and Mother Nature.”

The event was arranged by the Bonobo Conservation Initiative, an organization based in Washington, D.C., which works in the Democratic Republic of Congo to protect bonobo habitats and to combat illegal trading in bush meat. Sally Jewell Coxe, the group’s founder and president, stood to make a short presentation. She showed slides of bonobos, including one captioned “MAKE LOVE NOT WAR,” and said that the apes, which she described as “bisexual,” engaged in various kinds of sexual activity in order to defuse conflict and maintain a tranquil society. There was applause. “Bonobos are into peace and love and harmony,”

Coxe said, then joked, “They might even have been the first ape to discover marijuana.” Images of bonobos were projected onto the wall behind her: they looked like chimpanzees but had longer hair, flatter faces, pinker lips, smaller ears, narrower bodies, and, one might say, more gravitas—a chimpanzee’s arched brow looks goofy, but a bonobo’s low, straight brow sets the face in what is easy to read as earnest contemplativeness.

I spoke to a tall man in his forties who went by the single name Wind, and who had driven from his home in North Carolina to sing at the event. He was a musician and a former practitioner of “metaphysical counselling,” which he also referred to as clairvoyance. He said that he had encountered bonobos a few years ago at Georgia State University, at the invitation of Sue Savage-Rumbaugh, a primatologist known for experiments that test the language-learning abilities of bonobos. (During one of Wind’s several visits to G.S.U., Peter Gabriel, the British pop star, was also there; Gabriel played a keyboard, another keyboard was put in front of a bonobo, and Wind played flutes and a small drum.) Bonobos are remarkable, Wind told me, for being capable of “unconditional love.” They were “tolerant, patient, forgiving, and supportive of one another.” Chimps, by contrast, led brutish lives of “aggression, ego, and plotting.” As for humans, they had some innate stock of bonobo temperament, but they too often behaved like chimps. (The chimp-bonobo division is strongly felt by devotees of the latter. Wind told me that he once wore a chimpanzee T-shirt to a bonobo event, and “got shit for it.”)



It was Wind's turn to perform. "Help Gaia and Gaia will help you," he chanted into a microphone, in a booming voice that made people jump. "Help bonobo and bonobo will help you."

In recent years, the bonobo has found a strange niche in the popular imagination, based largely on its reputation for peacefulness and promiscuity. The *Washington Post* recently described the species as copulating "incessantly"; the *Times* claimed that the bonobo "stands out from the chest-thumping masses as an example of amicability, sensitivity and, well, humaneness"; a PBS wildlife film began with the words "Where chimpanzees fight and murder, bonobos are peacemakers. And, unlike chimps, it's not the bonobo males but the females who have the power." The Kinsey Institute claims on its Web site that "every bonobo—female, male, infant, high or low status—seeks and responds to kisses." And, in Los Angeles, a sex adviser named Susan Block promotes what she calls "The Bonobo Way" on public-access television. (In brief: "Pleasure eases pain; good sex defuses tension; love lessens violence; you can't very well fight a war while you're having an orgasm.") In newspaper columns and on the Internet, bonobos are routinely described as creatures that shun violence and live in egalitarian or female-dominated communities; more rarely, they are said to avoid meat. These behaviors are thought to be somehow linked to their unquenchable sexual appetites, often expressed in the missionary position. And because the bonobo is the "closest relative" of humans, its comportment is said to instruct us in the fundamentals of human nature. To underscore the bonobo's status as a signpost species—a guide to human virtue, or at least modern dating—it is said to walk upright. (The *Encyclopædia Britannica* depicts the species in a bipedal pose, like a chimpanzee in a sitcom.)

This pop image of the bonobo—equal parts dolphin, Dalai Lama, and Warren Beatty—has flourished largely in the absence of the animal itself, which was recognized as a species less than a century ago. Two hundred or so bonobos are kept in captivity around the world; but, despite being one of just four species of great ape, along with orangutans, gorillas, and chimpanzees, the wild bonobo has received comparatively little scientific scrutiny. It is one of the oddities of the bonobo world—and a source of frustration to some—that Frans de Waal, of Emory University, the high-profile Dutch primatologist and writer, who is the most frequently quoted authority on the species, has never seen a wild bonobo.

Attempts to study bonobos in their habitat began only in the nineteen-seventies, and those efforts have always been intermittent, because of geography and politics. Wild bonobos, which are endangered (estimates of their number range from six thousand to a hundred thousand), keep themselves out of view, in dense and inaccessible rain forests, and only in the Democratic Republic of Congo, where, in the past decade, more than three million people have died in civil and regional conflicts. For several years around the turn of the millennium, when fighting in Congo was at its most intense, field observation of bonobos came to a halt.

In recent years, however, some Congolese and overseas observers have returned to the forest, and to the hot, damp work of sneaking up on reticent apes. The most prominent scientist among them is Gottfried Hohmann, a research associate at the Max Planck Institute for Evolutionary Anthropology, in Leipzig, Germany. He has been visiting Congo off and on since 1989. When I first called Hohmann, two years ago, he didn't immediately embrace the idea of taking a reporter on a field trip. But we continued to talk, and in the week after attending the bonobo fund-raiser in New York I flew to meet Hohmann in Kinshasa, Congo's capital. A few days later, I was talking with him and two of his colleagues in the shade of an aircraft hangar in Kinshasa's airport for charter flights, waiting for a plane to fly us to the forest.

It was a hot morning. We sat on plastic garden chairs, looking out over a runway undisturbed by aircraft. The airport seemed half-ruined. Families were living in one hangar, and laundry hung to dry over makeshift shelters. A vender came by with local newspapers, which were filled with fears of renewed political violence. European embassies had been sending cautionary text messages to their resident nationals.

Hohmann is a lean, serious, blue-eyed man in his mid-fifties. He has a reputation for professional fortitude, but also for chilliness. One bonobo researcher told me that he was "very difficult to work with," and there were harsher judgments, too. He lives in Leipzig with Barbara Fruth, his wife and frequent scientific collaborator, and their three young children. Three or four times a year, he flies to Kinshasa, where he charts a light plane operated by an American-based missionary group. The plane takes him into the world's second-largest rain forest, in the Congo Basin, and puts him within hiking distance of a study site called Lui Kotal, where he has worked since 2002. When Hohmann first came to Congo—then Zaire—he operated from a site that could be reached only by sweating upriver for a week in a motorized canoe. "People

think it's entertaining, but it's not," he told me, as we waited. "It's so slow. So hard." He added, "You always think there's going to be something round the next bend, but there never is." He is an orderly man who has learned how to withstand disorder, an impatient man who has reached some accommodation with endless delay.

Hohmann makes only short visits to Lui Kotal, but the camp is run in his absence by Congolese staff members on rotation from the nearest village, and by foreign research students or volunteers. Two new camp recruits were joining Hohmann on this flight: Andrew Fowler, a tough-looking Londoner in his forties, was an experienced chimpanzee field worker with a Ph.D.; Ryan Matthews was a languid Canadian-American of thirty who had answered an online advertisement to be Lui Kotal's camp manager, for three hundred euros a month. We had all met for the first time a few days earlier, in a café in the least lawless neighborhood of Kinshasa, where Hohmann had flatly noted that, of all the overseas visitors he had invited to Lui Kotal over the years, only one had ever wanted to return. Fowler and Matthews were a bit wary of Hohmann, and so was I. We had exchanged small talk over a pink tablecloth, establishing, first, that the British say "bo-noh-bo"; Americans, "bahn-obo"; and Germans something in between.

Fowler and Matthews had just taken their last shower before Christmas. They would be camping for at least nine months, detached from their previous lives except for access, once or twice a week, to brief e-mails. Fowler, emanating self-reliance, was impatient for the exile to come; he had brought little more than a penknife and a copy of "The Seven Pillars of Wisdom." Matthews was carrying more. As we discovered over time, his equipment included a fur hat, a leather-bound photo album, an inflatable sofa, and goggles decorated with glitter. Matthews is a devotee of the annual Burning Man festival, in the Nevada desert, and this, apparently, had informed his African preparations.

Matthews would be keeping accounts and ordering supplies. Fowler's long-term plan was to find a postdoctoral research topic about bonobos, but his daily duty, on this trip, was to be a "habituator"—someone able to find the community of thirty or so bonobos known to live near the camp, and stay within sight of them as they moved from place to place, with the idea that future researchers might be able to observe them for more than a few seconds at a time. Fowler called it "chimp-bothering." (Watching bonobos, I understood, is not like ornithology; there's no pretense that you're not there.) It gave an insight into the pace of bonobo studies to realize that, nearly five years after Hohmann first reached Lui Kotal, this process of habituation and identification—upon which serious research depends—remained unfinished.

"There's a satisfaction for a scientist to come home at night with his notebook filled," Hohmann said with a shrug. "The most happy people are always the ecologists. They go to the forest, and the trees are not running away." He and his colleagues were still "racing through the dark, trying to get I.D.s," and most of the interesting bonobo questions were still unanswered. Is male aggression kept in check by females? Why do females give birth only every five to seven years, despite frequent sexual activity? In the far distance, such lines of inquiry may converge at an understanding of bonobo evolution, Hohmann said, and, beyond, the origins of human beings. "It's a long path, and, because it's long, there are few people who do it. If it was quicker and easier? There are hundreds of people working with baboons and lemurs, so it's not so easy to find your niche. A student working with bonobos can close his eyes and pick a topic, and it *can't* be wrong."

We finally boarded a tiny plane. Our pilot was a middle-aged American with a straight back and a large mustache. As we took off, Matthews was speaking on a cell phone to his mother, in New Jersey—enjoying the final moments of reception before it was lost for the rest of the year. The Congo River was beneath us as we rose through patches of low clouds. Suddenly, the plane seemed to fill with clouds, as if clouds were made of a dense white mist that could drift between airplane seats. The pilot turned to look—the fog seemed to be coming from the rear of the cabin—and then glanced at Hohmann, whose seat was alongside his. "Is that O.K.?" the pilot asked, in the most carefree tone imaginable. Hohmann said it was, explaining that liquid nitrogen, imported to freeze bonobo urine, must have been forced out of its canister by the change in air pressure. Meanwhile, Matthews told his mother, "The plane seems to be filling with smoke," at which point his phone dropped the call.

We flew inland, to the east. The Congo River looped away to the north. Bonobos live only south of the river. (Accordingly, they have been called "left-bank chimps.") The evolutionary tree looks like this: if the trunk is the common ape ancestor and the treetop is the present day, then the lowest—that is, the earliest—branch leads to the modern orangutan. That may have been about sixteen million years ago. The next-highest branch, around eight million years ago, leads to the gorilla; then, six million years ago, the human branch. The remaining branch divides once more, perhaps two

million years ago. And this last split was presumably connected to a geographical separation: chimpanzees evolved north of the Congo River, bonobos to the south. Chimpanzees came to inhabit far-flung landscapes that had various tree densities; bonobos largely stayed in thick, gloomy forest. (Chimpanzees had to compete for resources with gorillas; but bonobos never saw another ape—one theory argues that this richer environment, by allowing bonobos to move and feed together as a leisurely group, led to the evolution of reduced rancor.) From the plane, we first looked down on a flat landscape of grassland dotted with patches of trees; this slowly became forest dotted with grassland patches; and then all we could see was a crush of trees barely making way for the occasional scribble of a Congo tributary.

After three hours, we landed at a dirt airstrip in a field of tall grass and taller termite mounds. There were no buildings in sight. We were just south of the equator, five hundred miles from Kinshasa, and three hundred miles from the nearest road used by cars—in a part of the continent connected by waterways or by trails running through the forest from village to village, good for pedestrians and the occasional old bicycle. The plane left, and the airstrip's only infrastructure—a sunshade made of a sheet of blue plastic tied at each corner to a rough wooden post—was dismantled in seconds, and taken away.

Joseph Etike, a quizzical-looking man in his thirties who is Hohmann's local manager, organized porters to carry our liquid nitrogen and our inflatable sofa. We first walked for an hour to Lompole, a village of thirty houses made of baked-earth bricks and thatched roofs, and stopped at Etike's home. "People were amazed when Gottfried first came to the village, and asked about the bonobos," Etike recalled, standing beside his front door. (He spoke in French, his second language.) "They'd never heard of such a thing." His salary was reflected in his wardrobe: he was dressed in jeans and sneakers, while his neighbors wore flip-flops and battered shorts and Pokémon T-shirts. I asked Etike how local people had historically thought of the bonobo. "It depends on the family," he said. "In mine, there was a story that my great-great-grandfather became lost in the forest and was found by a bonobo, and it showed him the path. So my family never hunted them." But the tradition was somehow not fully impressed on Joseph as a boy, and when he was seventeen someone gave him bonobo meat, to his mother's regret. How did it taste? "Like antelope," he said. "No. Like elephant meat."

One afternoon in 1928, Harold Coolidge, a Harvard zoologist, was picking through a storage tray of ape bones in a museum near Brussels. He examined a skull identified as belonging to a juvenile chimpanzee from the Belgian Congo, and was surprised to see that the bones of the skull's dome were fused. In a young chimpanzee (and in a young human, too), these bones are not joined but can shift in relation to one another, like broken ice on a pond. He had to be holding an adult head, but it was not a chimpanzee's. Several similar skulls lay nearby.

Coolidge knew that this was an important discovery. But he was incautious; when the museum's director passed by, Coolidge mentioned the skull. The director, in turn, alerted Ernst Schwarz, a German anatomist who was already aware that there were differences between apes on either side of the Congo. And, as Coolidge later wrote, "in a flash Schwarz grabbed a pencil and paper," and published an article that named a new subspecies, *Pan satyrus paniscus*, or pygmy chimpanzee. This was the animal that eventually became known as the bonobo. (In fact, bonobos are barely smaller than chimpanzees, except for their heads; but Schwarz had seen only a head.) "I had been taxonomically scooped," Coolidge wrote. He had the lesser honor of elevating *Pan paniscus* to the status of full species, in 1933.

Live bonobos had already been seen outside Congo, but they, too, had been misidentified as chimps. At the turn of the century, the Antwerp zoo held at least one. Robert Yerkes, a founder of modern primatology, briefly owned a bonobo. In 1923, he bought two young apes, and called one Chim and the other Panzee. In "Almost Human," published two years later, he noted that they looked and behaved quite differently. Panzee was timid, dumb, and foul-tempered. "Her resentment and anger were readily aroused and she was quick to give them expression with hands and teeth," Yerkes wrote. Chim was a joy: equable and eager for new experiences. "Seldom daunted, he treated the mysteries of life as philosophically as any man." Moreover, he was a "genius." Yerkes's description, coupled with later study of Chim's remains, made it plain that he was *Pan paniscus*: bonobos had a good reputation even before they had a name. (Panzee was a chimpanzee; but, in defense of that species, her peevishness was probably connected to a tuberculosis infection.) Chim died in 1924, before his species was recognized.

For decades, "pygmy chimpanzee" remained the common term for these apes, even after "bonobo" was first proposed,

in a 1954 paper by Eduard Tratz, an Austrian zoologist, and Heinz Heck, the director of the Munich zoo. (They suggested, incorrectly, that “bonobo” was an indigenous word; they may have been led astray by Bolobo, a town on the south bank of the Congo River. In the area where Hohmann works, the species is called *edza*.) In the thirties, that zoo had three members of *Pan paniscus*, and Heck and Tratz had studied them. By the time their paper, the first based on detailed observations of bonobo behavior, was published, the specimens were dead, allegedly killed by stress during Allied air raids. (The deaths have been cited as evidence of a bonobo’s innate sensitivity; the zoo’s brute chimpanzees survived.) As Frans de Waal has noted, Heck and Tratz’s pioneering insights—they wrote that bonobos were less violent than chimps, for example—did not become general scientific knowledge, and had to be rediscovered.

Twenty years passed before anyone attempted to study bonobos in the wild. In 1972, Arthur Horn, a doctoral candidate in physical anthropology at Yale, was encouraged by his department to travel alone to Zaire; on the shore of Lake Tumba, three hundred miles northwest of Kinshasa, he embarked on the first bonobo field study. “The idea was to gather all the information about how bonobos lived, what they did—something like Jane Goodall,” Horn told me. Goodall was already famous for her long-term study of chimpanzees in Gombe, Tanzania, and for her poise in the films made about her by the National Geographic Society and others. Thanks, in part, to her work, the chimpanzee had taken on the role of model species for humans—the instructive nearest neighbor, the best living hint of our past and our potential. (That role had previously been held, at different times, by the gorilla and the savanna baboon.) At this time, Goodall had confidence that chimpanzees were “by and large, rather ‘nicer’ than us.”

Horn’s attempt to follow Goodall’s model was thwarted. He spent two years in Africa, during which time he observed bonobos for a total of about six hours. “And, when I did see them, as soon as they saw me they were gone,” he told me.

In 1974, not long after Horn left Africa, Goodall witnessed the start of what she came to call the Four-Year War in Gombe. A chimpanzee population split into two, and, over time, one group wiped out the other, in gory episodes of territorial attack and cannibalism. Chimp aggression was already recognized by science, but chimp warfare was not. “I struggled to come to terms with this new knowledge,” Goodall later wrote. She would wake in the night, haunted by the memory of witnessing a female chimpanzee gorging on the flesh of an infant, “her mouth smeared with blood like some grotesque vampire from the legends of childhood.”

Reports of this behavior found a place in a long-running debate about the fundamentals of human nature—a debate, in short, about whether people were nasty or nice. Were humans savage but for the constructs of civil society (Thomas Hobbes)? Or were they civil but for the corruptions of society (Jean-Jacques Rousseau)? It had not taken warring chimps to suggest some element of biological inheritance in human behavior, including aggression: the case had been made, in its most popular recent form, by Desmond Morris, in “The Naked Ape,” his 1967 best-seller. But if chimpanzees had once pointed the way toward a tetchy but less than menacing common ancestor, they could no longer do so: Goodall had documented bloodlust in our closest relative. According to Richard Wrangham, a primatologist at Harvard and the author, with Dale Peterson, of “Demonic Males” (1996), the Gombe killings “made credible the idea that our warring tendencies go back into our prehuman past. They made us a little less special.”

Meanwhile, bonobo studies began to gain momentum. Other scientists followed Horn into the Congo Basin, and they set up two primary field sites. One, at Lomako, three hundred miles northeast of Lake Tumba, came to be used by Randall Susman, of Stony Brook University, and his students. Further to the east, Takayoshi Kano, of Kyoto University, in Japan, made a survey of bonobo habitats on foot and on bicycle, and in 1974 he set up a site at the edge of a village called Wamba. Early data from Wamba became better known than Lomako’s: the Japanese spent more time at their site and saw more bonobos. Susman, however, can take credit for the first bonobo book: he edited a collection of papers given at the first bonobo symposium, in Atlanta, in 1982.

In the winter of 1983-84, in an exploration that was less gruelling but as influential as any field research, Frans de Waal turned his attention from chimps to bonobos, and spent several months observing and videotaping ten bonobos in the San Diego Zoo. He had recently published “Chimpanzee Politics: Power and Sex Among Apes” (1982), to great acclaim, and, as de Waal recently recalled, “Most people I talked to at the time would say, ‘Why would you do bonobos if you can do real, big chimpanzees?’ ” Among the papers that drew on his studies in San Diego, one was particularly noticed in the academy. In “Tension Regulation and Nonreproductive Functions of Sex in Captive Bonobos,” de Waal reported that these apes seemed to be having more sex, and more kinds of sex, than was really necessary. He recorded

seventeen brief episodes of oral sex and four hundred and twenty equally brief episodes of face-to-face mounting. He also saw forty-three instances of kissing, some involving “extensive tongue-tongue contact.”

In the late nineteen-eighties, Gottfried Hohmann was an ambitious scientist in his thirties; he spent nearly three years in southern India, researching vocal communication in macaques and langurs. “But it was difficult then to get funding for India,” Hohmann told me. “And the bonobo thing was just heating up. Frans’s paper really affected everyone” in the scientific community. “Tongue-kissing apes? You can’t come up with a better story. Then people said to me, ‘We want you to go in the field.’” Hohmann ran his hand back and forth over his head. “So,” he said.

We were sitting on a wooden bench at the edge of a forest clearing barely larger than a basketball court, talking against a constant screech—an insect tinnitus that the ear never quite processed into silence. Trees rose a hundred feet all around, giving the impression that we had fallen to the bottom of a well. Two days after our plane touched down, we had reached Lui Kotal. In the intervening hours, which were inarguably more challenging for the three newcomers than for Hohmann, we had first camped in a violent rainstorm, then followed some unflagging porters on a trail that led through the hot, soupy air of the forest, and along waist-high streams that flowed over mud. We had then camped again, before crossing a fast-flowing river in an unsteady canoe.

Now, at five in the afternoon, the light at Lui Kotal was beginning to fade. People who work there make do with little sun—and with a horizon that is directly overhead. Around us, the wall of vegetation was solid except where broken by paths: one led back to the village; another led into that part of the forest where Hohmann and his team have permission to roam—an area, six miles by five, whose boundaries are streams and rivers. In the clearing stood a dozen structures with thatched roofs and no walls. Some of these sheltered tents; a larger one was a kitchen, where an open fire was burning; and another was built over a long wooden table, beside which hung a 2006 Audubon Society calendar that had been neatly converted—with glue, paper, and an extravagant superfluity of time—into a 2007 calendar. At the table sat two young American volunteers who were not many weeks away from seeing the calendar’s images repeat. Pale, skinny men in their twenties, wearing wild beards, they looked like they needed rescuing from kidnappers. Three others were less feral, and had been in the camp for a shorter time: a young British woman volunteer, an Austrian woman who had recently graduated from the University of Vienna, and a Swiss Ph.D. student attached to the Max Planck Institute.

Hohmann, shirtless, was in an easy mood, knowing that much of the logistical and political business of the trip was now done. Before leaving the village, I’d seen something of a bonobo researcher’s extended duties. The men of Lompole had convened around him, their arms crossed and hands tucked into their armpits. Hohmann remained seated and silent as an angry debate began—as Hohmann described it, between villagers who were unhappy about the original deal that compensated the village for having to stop hunting around Lui Kotal (this had involved a bulk gift of corrugated iron, to be used for roofs) and those who worked directly for the project and saw the greater advantage in stability and employment. Hohmann had finally got up and delivered a forceful speech in Lingala, Congo’s national language. He finished with a moment of theatre: he loomed over his main antagonist, wagging his finger. “It’s good to remind him now and then how short he is,” Hohmann later said, smiling.

By 1989, Hohmann told me, he had read enough bonobo literature to be tempted to visit Zaire. Even if one left aside French kissing, he said, “the bonobo allured me. I thought, *This* is a species.” By then, thanks to field and captive studies, a picture of bonobo society had begun to emerge, and some peculiar chimpanzee-bonobo dichotomies had been described. Besides looking and sounding different from chimpanzees (bonobos let out high whoops that can seem restrained alongside chimpanzee yelling), bonobos seemed to order their lives without the hierarchical fury and violence of chimpanzees. (“With bonobos, everything is peaceful,” Takeshi Furuichi, a Japanese researcher who worked with Kano at Wamba, told me. “When I see bonobos, they seem to be enjoying their lives. When I see chimpanzees, I am very, very sorry for them, especially for the high-ranking males. They really have to pay attention.”) In captivity, at least, male bonobos never ganged up on females, although the reverse sometimes occurred. The bonds among females seemed to be stronger than among male chimpanzees, and this was perhaps reinforced by sexual activity, by momentary episodes of frottage that bonobo experts refer to as “genito-genital rubbing,” or “g-g rubbing.” And, unusually, the females were said to be sexually receptive to males even at times when there was no chance of conception.

“We said, ‘We have to answer: Why is it like this?’” Hohmann said. “The males, the physically superior animals, do

not dominate the females, the inferior animals? The males, the genetically closely related part of any bonobo group, do not cooperate, but the females, who are not related, do cooperate? It is not only different from chimpanzees but it violates the rules of social ecology.”

Hohmann flew to Zaire and eventually set up a small camp in Lomako Forest, a few miles from the original Stony Brook site. His memory is that Susman’s camp had been unused for years, but Susman told me that it was still active, and that Hohmann was graceless in the way that he took over the forest. And although Hohmann said that he worked with a new community of bonobos, Susman said that Hohmann inherited bonobos that were already habituated, and failed to acknowledge this research advantage. Whatever the truth, the distrust seems typical of the field. The challenges of bonobo research call for chimpanzee vigor, and this leads to animosities. Susman told me that Hohmann was the kind of man who, “if he was sitting by the side of the road and needed a filter for his Land Rover, people would drive right by. Even if they had five extra filters in the trunk.”

When a researcher has access to a species about which little is known, and whose every gesture seems to echo a human gesture, and whose eyes meet a human gaze, there is a temptation simply to stare, until you have seen enough to tell a story. That is how Hohmann judged the work of Dian Fossey, who made long-term observations of gorillas in Rwanda, and the work of Jane Goodall, at least at the start of her career. “They lived with the apes and for the apes,” he said. “It was ‘Let’s see what I’m going to get. I enjoy it anyway, so whatever I get is fine.’ ” And this is how Hohmann regarded the Japanese researchers, for all their perseverance. The Wamba site had produced a lot of data on social and sexual relations, and Kano published a book about bonobos, which concluded with the suggestion that bonobos illuminated the evolution of human love. But “what the Japanese produced was not really satisfying,” Hohmann said. “It was narrative and descriptive. They are not setting out with a question. They want to *understand* bonobos.” Moreover, the Japanese initially lured bonobos with food, as Goodall had lured chimpanzees. This was more than habituation. At Wamba, bonobos ate sugarcane at a field planted for them. The primatological term is “provisioning”; Hohmann calls it opening a restaurant. (As an example of the possibly distorting impact of provisioning, Hohmann noted that the Wamba females had far shorter intervals between births than those at Lomako.)

Hohmann’s first stay at Lomako lasted thirteen months. Halfway through, Barbara Fruth, a German Ph.D. student, flew to join him; they eventually married. (Up until then, “I was not thinking of having a family,” Hohmann said. “I was just doing what I did. I said, ‘I don’t have the time, and who’s crazy enough to join me?’ ”) Hohmann and Fruth flew back and forth between Germany and Lomako, and the bonobos eventually became so habituated that they would sometimes fall asleep in front of their observers. The Max Planck Institute is not a university; it supports an academic life that many professors elsewhere would find enviable—one of long-term funding and no undergraduates. Hohmann was able to publish slowly. Though not immune to the charms of ape-watching, he was at pains to set himself precise research goals. How did bonobos build nests? How did they share food? As one of his colleagues described it, Hohmann wanted to avoid being dirtied by the stain of primatology—a discipline regarded by some in biology as being afflicted by personality cults and overextrapolation. The big bonobo picture might one day emerge, but it would happen only after the rigorous testing of hypotheses in the forest. When a publisher asked Hohmann for a bonobo book, he responded that it was too soon. “Gottfried’s one of those people who don’t want to risk being criticized, so they make absolutely certain that they’ve completely nailed everything down before they publish,” Richard Wrangham told me, with a mixture of respect and impatience.

In 1997, not long after the birth of their first child, Hohmann and Fruth decided to live in Congo full time. They leased a house in Basankusu, the nearest town to Lomako with an airstrip. Hohmann had already picked up the keys when civil war intervened. The troops of Laurent Kabila, the rebel leader and future President, were at that time making a long traverse from west to east—they eventually reached Kinshasa, and President Mobutu Sese Seko fled. One day, when Hohmann was at Lomako without his wife, soldiers from the government side turned up and gave him a day to leave. “They wanted to get everyone out of the area who might help the rebels,” Hohmann said. (Around the same time, the Japanese researchers abandoned Wamba.) Hohmann took only what he could carry. On his way back to Kinshasa, he was interrogated as a suspected spy.

**T**he bonobo fell out of the view of scientists at the very moment that the public discovered an interest. In 1991,

*National Geographic* sent Frans Lanting, a Dutch photographer, to photograph bonobos at Wamba. “At the time, there were no pictures of bonobos in the wild,” Lanting recently told me. “Or, at least, no professional documentation.” On his assignment, Lanting contracted cerebral malaria. But he was stirred by his encounter with the bonobos. “I became sure that the boundaries between apes and humans were very fluid,” he said. “You can’t call them animals. I prefer ‘creatures.’ It was haunting, the way they knew as much about you as you knew about them.” It became his task, he later told Frans de Waal, “to show how close we are to bonobos, and they to us.”

Many of his photographs were sexually explicit. “*National Geographic* found the pictures of sexuality hard to bear,” Lanting said. “That was a place the magazine was not ready to go.” The magazine printed only tame images. Not long after, Lanting contacted de Waal, who had recently taken up a post at Emory, as a professor of primate behavior and a researcher at the Yerkes National Primate Research Center. Agreeing to collaborate, they approached *Geo*, the German magazine. As de Waal recently told me, laughing, “Naturally, *Geo* put two copulating bonobos on the cover.” Not long afterward, *Scientific American* printed an illustrated article. In 1997, the Dutchmen brought out a handsome illustrated book, “Bonobo: The Forgotten Ape.”

By this time, the experiments of Sue Savage-Rumbaugh had drawn the public’s attention to Kanzi, a bonobo said to be unusually skilled at communicating with humans. (Savage-Rumbaugh’s claims for Kanzi have been a source of controversy among linguists.) But de Waal’s book established the reputation of the species in the mass media. Lanting’s photographs, since widely republished, showed bonobos lounging at Wamba’s sugarcane field, trying yoga stretches, and engaging in various kinds of sexual contact. A few pictures showed bonobos up on two feet. (As a caption noted, these upright bonobos were handling something edible and out of the ordinary—cut sugarcane, for example—suggesting a pose dictated by avidity, like a man bent over a table in a pie-eating contest.) In his text, de Waal interviewed field researchers, including Hohmann, and was fastidious at the level of historical and scientific detail. But his rhetoric was richly flavored, and emphasized a sharp contrast between bonobos and chimpanzees. “The chimpanzee resolves sexual issues with power,” he wrote. “The bonobo resolves power issues with sex.” (“If chimpanzees are from Mars, bonobos must be from Venus,” de Waal wrote on a later occasion.) Bonobos were more “elegant” than chimpanzees, he said, and their backs appeared to straighten “better” than those of chimpanzees: “Even chimpanzees would have to admit that bonobos have more style.”

In a recent conversation, de Waal told me, “The bonobo is female-dominated, doesn’t have warfare, doesn’t have hunting. And it has all this sex going on, which is problematic to talk about—it’s almost as if people wanted to shove the bonobo under the table.” “The Forgotten Ape” presented itself as a European tonic to American prudishness and the vested interests of chimpanzee scientists. The bonobo was gentle, horny, and—de Waal did not quite say it—Dutch. Bonobos, he argued, had been neglected by science because they inspired embarrassment. They were “sexy,” de Waal wrote (he often uses that word where others might say “sexual”), and they challenged established, bloody accounts of human origins. The bonobo was no less a relative of humans than the chimpanzee, de Waal noted, and its behavior was bound to overthrow “established notions about where we came from and what our behavioral potential is.”

Though de Waal stopped short of placing bonobos in a state of blissful serenity (he acknowledged a degree of bonobo aggression), he certainly left a reader thinking that these animals knew how to live. He wrote, “Who could have imagined a close relative of ours in which female alliances intimidate males, sexual behavior is as rich as ours, different groups do not fight but mingle, mothers take on a central role, and the greatest intellectual achievement is not tool use but sensitivity to others?”

The appeal of de Waal’s vision is obvious. Where, at the end of the twentieth century, could an optimist turn for reassurance about the foundations of human nature? The sixties were over. Goodall’s chimpanzees had gone to war. Scholars such as Lawrence Keeley, the author of “War Before Civilization” (1996), were excavating the role of warfare in our prehistoric past. And, as Wrangham and Peterson noted in “Demonic Males,” various nonindustrialized societies that were once seen as intrinsically peaceful had come to disappoint. Margaret Mead’s 1928 account of a South Pacific idyll, “Coming of Age in Samoa,” had been largely debunked by Derek Freeman, in 1983. The people identified as “the Gentle Tasaday”—the Philippine forest-dwellers made famous, in part, by Charles Lindbergh—had been redrawn as a small, odd community rather than as an isolated ancient tribe whose mores were illustrative. “The Harmless People,” as Elizabeth Marshall Thomas referred to the hunter-gatherers she studied in southern Africa, had turned out to have a murder rate higher than any American city. Although the picture was by no means accepted universally, it had become possible to see

a clear line of thuggery from ape ancestry to human prehistory and on to Srebrenica. But, if de Waal's findings were true, there was at least a hint of respite from the idea of ineluctable human aggression. If chimpanzees are from Hobbes, bonobos must be from Rousseau.

De Waal, who was described by *Time* earlier this year as one of the hundred influential people who "shape our world," effectively became the champion—soft-spoken, baggy-eyed, and mustachioed—of what he called the "hippies of the primate world," in lectures and interviews, and in subsequent books. In "Our Inner Ape: A Leading Primatologist Explains Why We Are Who We Are" (2005), he wrote that bonobos and chimpanzees were "as different as night and day." There had been, perhaps, a vacancy for a Jane Goodall figure to represent the bonobo in the broader culture, but neither Hohmann nor Kano had occupied it; Hohmann was too dour, and Kano was not fluent in English. Besides, the bonobo was beyond the reach of all but the most determined and best-financed television crew. After 1997, that Goodall role—at least, in a reduced form—fell to de Waal, though his research was limited to bonobos in captivity. At the time of the book's publication, de Waal told me, he could sense that not everyone in the world of bonobo research was thrilled for him, "even though I think I did a lot of good for their work. I respect the field workers for what they do, but they're not the best communicators." He laughed. "Someone had to do it. I have cordial relationships with almost all of them, but there were some hard feelings. It was 'Why is he doing this and why am I *not* doing this?'"

De Waal went on, "People have taken off with the word 'bonobo,' and that's fine with me"—although he acknowledged that the identification has sometimes been excessive. "Those who learn about bonobos fall too much in love, like in the gay or feminist community. All of a sudden, here we have a politically correct primate, at which point I have to get into the opposite role, and calm them down: bonobos are not *always* nice to each other."

**A**t the Lui Kotal camp, which Hohmann started five years after being expelled from Lomako, the people who were not tracking apes spent the morning under the Audubon calendar, as the temperature and the humidity rose. Ryan Matthews put out solar panels, to charge a car battery powering a laptop that dispatched e-mail through an uncertain satellite connection. Or, in a storage hut, he arranged precious cans of sardines into a supermarket pyramid. We sometimes heard the sneezelike call of a black mangabey monkey. For lunch, we ate cassava in its local form, a long, cold, gray tube of boiled dough—a single gnocco grown to the size of a dachshund. A radio brought news of gunfire and rocket attacks in Kinshasa: Jean-Pierre Bemba, the defeated opposition candidate in last year's Presidential elections, had ignored a deadline to disarm his militia, and hundreds had been killed in street fighting. The airport that we had used had been attacked. The Congolese camp members—including, at any time, two bonobo field workers, a cook, an assistant cook, and a fisherman, working on commission—were largely pro-Bemba, or, at least, anti-government, a view expressed at times as nostalgia for the rule of Mobutu Sese Seko. Once, they sang a celebratory Mobutu song that they had learned as schoolchildren.

"It was so easy for Frans to charm everyone," Hohmann said of de Waal one afternoon. "He had the big stories. We don't have the big stories. Often, we have to say, 'No, bonobos can be terribly boring. Watch a bonobo and there are days when you don't see anything—just sleeping and eating and defecating. There's no sex, there's no food-sharing.'" During our first days in camp, the bonobos had been elusive. "Right now, bonobos are not vocalizing," Hohmann said. "They're just there. And if you go to a zoo, if you give them some food, there's a frenzy. It's so different."

Captivity can have a striking impact on animal behavior. As Craig Stanford, a primatologist at the University of Southern California, recently put it, "Stuck together, bored out of their minds—what is there to do except eat and have sex?" De Waal has argued that, even if captive bonobo behavior is somewhat skewed, it can still be usefully contrasted with the behavior of captive chimpanzees; he has even written that "only captive studies control for environmental conditions and thereby provide conclusive data on interspecific differences." Stanford's reply is that "different animals respond very differently to captivity."

In the wild, bonobos live in communities of a few dozen. They move around in smaller groups during the day, in the pattern of a bus-tour group let loose at a tourist attraction, then gather together each night, to build new treetop nests of bent and half-broken branches. But they stay in the same neighborhood for a lifetime. When Hohmann found bonobos on his first visit to Lui Kotal, he could be confident that he would find the same animals in subsequent years. On this trip, the bonobos had been seen, but they were keeping to the very farthest end of Hohmann's twenty-thousand-acre slice of

forest: a two-hour walk away. (“They are just so beautiful,” Andrew Fowler, the British habituator, said, after seeing them for the first time. “I can’t put it any other way.”) There was talk of setting up a satellite camp at that end—a couple of tents in a small clearing—but weighing against the plan was the apparently serious risk of attack by elephants. (Forest elephants headed an impressive lineup of local terrors, above leopards, falling trees, driver ants, and the green mambas that were sometimes seen on forest paths.) So the existing arrangement continued: two or three people would go into the forest and hope to follow bonobos to their nest site at night; the following day, two or three others would reach that same point before dawn.

When I went out one morning with Hohmann and Martin Surbeck, the Swiss Ph.D. student, the hike began at a quarter to four, and there were stars in the sky. We walked on a springy path—layers of decaying leaves on sand. I wore a head torch that lit up thick, attic-like dust and, at one moment, a bat that flew into my face. We stepped over fallen tree trunks in various states of decay, which sprouted different kinds of fungus; after an hour or so, we reached one on which local poachers had carved a graffiti message. Poachers, whose smoked-bonobo carcasses can fetch five dollars each in Kinshasa’s markets, have often been seen in the forest, and their gunfire often heard. Their livelihood was disrupted last year when Jonas Eriksson, a Swedish researcher on a visit to Lui Kotal, burned down their forest encampment. I was later given a translation of the graffiti: “JONAS: VAGINA OF YOUR MOTHER.”

Hohmann stopped walking at half past five, at a point he knew to be within a few hundred feet of where the bonobos had nested. Bonobos sleep on their backs—“maybe holding to a branch with just one foot, and the rest of the body looking very relaxed,” Hohmann had said, adding that “nest-building is the only thing that sets great apes aside from all other primates.” (He speculates that the REM-rich sleep that nests allow may have contributed to the evolution of big brains.) We would hear the bonobos when they woke. When we turned off our flashlights, there was a hint of light in the sky, enough to illuminate Surbeck using garden clippers to cut a branch from a tree and snip it into a Y shape about four feet long; he tied a black plastic bag across the forked end, to create a tool that hinted at a lacrosse stick but was designed to catch bonobo urine as it dripped from treetops. Surbeck’s dissertation was on male behavior: he would measure testosterone levels in the urine of various bonobos, in the hope that power structures not easily detected by observation would reveal themselves. (If an evidently high-ranking male had relatively low testosterone, for example, that might say something about the power he was drawing from his mother. A male bonobo typically has a lifelong alliance with its mother.)

There was a rustle of leaves in the high branches, like a downdraft of wind. To walk toward the sound, we had to leave the trail, and Surbeck cut a path through the undergrowth, again using clippers, which allowed for progress that was quieter, if less cinematic, than a swinging machete. We stopped after a few minutes. I looked upward through binoculars and, not long afterward, removed the lens caps. The half-light reduced the forest to blacks and dark greens, but a hundred feet up I could see a bonobo sitting silently in the fork of a branch. Its black fur had an acrylic sheen. It was eating the tree’s small, hard fruit; as it chewed, it let the casing of each fruit fall from the corner of its mouth. The debris from this and other bonobos dropped onto dead leaves on the forest floor, making the sound of a rain shower just getting under way.

In the same tree, a skinny bonobo infant walked a few feet from its mother, then returned and clambered, wriggling, into the mother’s arms—and then did the same thing again. And there were glimpses, through branches, of other unhurried bonobos, as they scratched a knee, or glanced down at us, unimpressed, or stretched themselves out like artists’ models. Hohmann had plucked a large, rattling leaf from a forest-floor shrub that forms a key part of the bonobo diet, and he began to shred it slowly, as if eating it: bonobo researchers aim to present themselves as animals nonchalantly feeding rather than creepily stalking. He and Surbeck made solemn, urgent notes in their waterproof notebooks, and whispered to one another. They were by now aware of some twenty bonobos above us, and could identify many by name (Olga, Paulo, Camillo). A fact not emphasized in wildlife films is that ape identification is frequently done by zoomed-in inspection of genitals. A lot of the conversation at Lui Kotal’s dinner table dealt with scrotal shading or the shape of a female bonobo’s pink sexual swelling. (“This one is like chewing gum spit out,” Caroline Deimel, the Austrian, once said of a female.)

At about six-thirty, the bonobos started moving down the trees—not with monkey abandon but branch by branch, with a final thud as they dropped onto the forest floor. Then they walked away, on all fours, looking far tougher—and more lean and muscular—than any zoo bonobo. An infant lay spread-eagled on the back of its mother, in a posture that

the scientific literature sweetly describes as “jockey style.” (A bonobo’s arms are shorter than a chimpanzee’s, and its back is horizontal when it walks. A chimpanzee slopes to the rear.) As the last of the bonobos strolled off, we lost sight of them: the undergrowth stopped our view at a few feet. We walked in the direction they seemed to have gone, and hoped to hear a call, or the sound of moving branches. Hohmann told me that bonobos sometimes gave away their position by flatulence. The forest was by now hot, and looked like a display captioned “SNAKES” in a natural-history museum: plants pulled at our clothes, trees crumbled to dust, and the ground gave way to mud.

We heard a sudden high screech ahead—“*Whah, whah!*”—and then saw, coming back in our direction, a reddish blur immediately followed by black. We heard the gallop of hands and feet on the ground, and a squeal. Hohmann told me in a whisper that we had seen a rare thing—a bonobo in pursuit of a duiker, a tiny antelope. “We were very close to seeing hunting,” he said. “Very close.” The bonobo had lost the race, Hohmann said, but if it had laid a hand on the duiker in its first lunge the results would have been bloody. Hohmann has witnessed a number of kills, and the dismembering, nearly always by females, that follows. Bonobos start with the abdomen; they eat the intestines first, in a process that can leave a duiker alive for a long while after it has been captured.

**F**or a purportedly peaceful animal, a bonobo can be surprisingly intemperate. Jeroen Stevens is a young Belgian biologist who has spent thousands of hours studying captive bonobos in European zoos. I met him last year at the Planckendael Zoo, near Antwerp. “I once saw five female bonobos attack a male in Apenheul, in Holland,” he said. “They were gnawing on his toes. I’d already seen bonobos with digits missing, but I’d thought they would have been bitten off like a dog would bite. But they really *chew*. There was flesh between their teeth. Now, that’s something to counter the idea of”—Stevens used a high, mocking voice—“‘Oh, I’m a bonobo, and I love *everyone*.’”

Stevens went on to recall a bonobo in the Stuttgart Zoo whose penis had been bitten off by a female. (He might also have mentioned keepers at the Columbus and San Diego zoos who both lost bits of fingers. In the latter instance, the local paper’s generous headline was “APE RETURNS FINGERTIP TO KEEPER.”) “Zoos don’t know what to do,” Stevens said. “They, too, believe that bonobos are less aggressive than chimps, which is why zoos want to *have* them. But, as soon as you have a group of bonobos, after a while you have this really violent aggression. I think if zoos had bonobos in big enough groups”—more like wild bonobos—“you would even see them killing.” In Stevens’s opinion, bonobos are “very tense. People usually say they’re relaxed. I find the opposite. Chimps are more laid-back. But, if I say I like chimps more than I like bonobos, my colleagues think I’m crazy.”

At Lui Kotal, not long after we had followed the bonobos for half a day, and seen a duiker run for its life, Hohmann recalled what he described as a “murder story.” A few years ago, he said, he was watching a young female bonobo sitting on a branch with its baby. A male, perhaps the father of the baby, jumped onto the branch, in apparent provocation. The female lunged at the male, which fell to the ground. Other females jumped down onto the male, in a scene of frenzied violence. “It went on for thirty minutes,” Hohmann said. “It was terribly scary. We didn’t know what was going to happen. Shrieking all the time. Just bonobos on the ground. After thirty minutes, they all went back up into the tree. It was hard to recognize them, their hair all on end and their faces changed. They were really different.” Hohmann said that he had looked closely at the scene of the attack, where the vegetation had been torn and flattened. “We saw fur, but no skin, and no blood. And he was gone.” During the following year, Hohmann and his colleagues tried to find the male, but it was not seen again. Although Hohmann has never published an account of the episode, for lack of anything but circumstantial evidence, his view is that the male bonobo suffered fatal injuries.

On another occasion, Hohmann thinks that he came close to seeing infanticide, which is also generally ruled to be beyond the bonobo’s behavioral repertoire. A newborn was taken from its mother by another female; Hohmann saw the mother a day later. This female was carrying its baby again, but the baby was dead. “Now it becomes a criminal story,” Hohmann said, in a mock-legal tone. “What could have happened? This is all we have, the facts. My story is the unknown female carried the baby but didn’t feed it and it died.” Hohmann has made only an oblique reference to this incident in print.

These tales of violence do not recast the bonobo as a brute. (Nor does new evidence, from Lui Kotal, that bonobos hunt and eat other primates.) But such accounts can be placed alongside other challenges to claims of sharp differences between bonobos and chimpanzees. For example, a study published in 2001 in the *American Journal of Primatology*

asked, “Are Bonobos Really More Bipedal Than Chimpanzees?” The answer was no.

The bonobo of the modern popular imagination has something of the quality of a pre-scientific great ape, from the era before live specimens were widely known in Europe. An Englishman of the early eighteenth century would have had no argument with the thought of an upright ape, passing silent judgment on mankind, and driven by an uncontrolled libido. But during my conversation with Jeroen Stevens, in Belgium, he glanced into the zoo enclosure, where a number of hefty bonobos were daubing excrement on the walls, and said, “These bonobos are from Mars. There are many days when there is no sex. We’re running out of adolescents.” (As de Waal noted, the oldest bonobo in his San Diego study was about fourteen, which is young adulthood; all but one episode of oral sex there involved juveniles; these bonobos also accounted for almost all of the kissing.)

Craig Stanford, in a 1997 study that questioned various alleged bonobo-chimpanzee dichotomies, wrote, “Female bonobos do not mate more frequently or significantly less cyclically than chimpanzees.” He also reported that male chimpanzees in the wild actually copulated more often than male bonobos. De Waal is unimpressed by Stanford’s analysis. “He counted only heterosexual sex,” he told me. “But if you include all the homosexual sex then it’s actually quite different.” When I asked Hohmann about the bonobo sex at Lui Kotal, he said, “It’s nothing that really strikes me.” Certainly, he and his team observe female “g-g rubbing,” which is not seen in chimpanzees, and needs to be explained. “But does it have anything to do with sex?” Hohmann asked. “Probably not. Of course, they use the genitals, but is it erotic behavior or a greeting gesture that is completely detached from sexual behavior?”

A hug? “A hug can be highly sexual or two leaders meeting at the airport. It’s a gesture, nothing else. It depends on the context.”

At Lui Kotal, the question of dominance was also less certain than one might think. When I’d spoken to de Waal, he had said, unequivocally, that bonobo societies were dominated by females. But, in Hohmann’s cautious mind, the question is still undecided. Data from wild bonobos are still slight, and science still needs to explain the physical superiority of males: why would evolution leave that extra bulk in place, if no use was made of it? Female spotted hyenas dominate male hyenas, but they have the muscle to go with the life style (and, for good measure, penises). “Why hasn’t this levelled out in bonobos?” Hohmann asked. “Perhaps sometimes it *is* important” for the males to be stronger. “We haven’t seen accounts of bonobos and leopards. We don’t know what protective role males can play.” Perhaps, Hohmann went on, males exercise power in ways we cannot see: “Do the males step back and say to the females, ‘I’m not competing with you, you go ahead and eat?’” The term “male deference” has been used to describe some monkey behavior. De Waal scoffs: “Maybe the bonobo males are chivalrous! We all had a big chuckle about that.”

Hohmann mentioned a recent experiment that he had done in the Frankfurt zoo. A colony of bonobos was put on a reduced-calorie diet, for the purpose of measuring hormones in their urine at different moments in their fast. It was not a behavioral experiment, but it was hard not to notice the actions of one meek male. “This is a male that in the past has been badly mutilated by the females,” Hohmann said. “They bit off fingers and toes, and he really had a hard life.” This male had always been shut out at feeding time. Now, as his diet continued, he discovered aggression. “For the first time, he pushed away some low-ranking females,” Hohmann said. He successfully fought for food. He became bold and demanding. A single hungry animal is not a scientific sample, but the episode showed that this male’s subservience was, if not exactly a personal choice, one of at least two behavioral options.

The media still regularly ask Frans de Waal about bonobos; and he still uses the species as a stick to beat what he scorns as “vener theory”—the thought that human morality is no more than a veneer of restraint laid over a vicious, animal core. Some of his colleagues in primatology admit to impatience with his position—and with the broader bonobo cult that flattens a complex animal into a caricature of Edenic good humor. “Frans has got all the best intentions, in all sorts of ways, but there is this sense in which this polarizing of chimps and bonobos can be taken too far,” Richard Wrangham said. Hohmann concurred: “There are certainly some points where we are in agreement; and there are other points where I say, ‘No, Frans, you should go to Lomako or Lui Kotal, and watch bonobos, and then you’d know better.’” He went on, “Frans enjoyed the luxury of being able to say field work is senseless. When you see wild bonobos, some things that he has emphasized and stretched are much more modest; the sex stuff, for example. But other things are even more spectacular. He hasn’t seen meat-sharing, he has never seen hunting.”

“I think Frans had free rein to say anything he wanted about bonobos for about ten years,” Stanford told me. “He’s a

great scientist, but because he's worked only in captive settings this gives you a blindered view of primates. I think he took a simplistic approach, and, because he published very widely on it and writes very nice popular books, it's become the conventional wisdom. We had this large body of evidence on chimps, then suddenly there were these other animals that were very chimplike physically but seemed to be very different behaviorally. Instead of saying, 'These are variations on a theme,' it became point-counterpoint." He added, "Scientific ideas exist in a marketplace, just as every other product does."

**A**t the long table in the center of the camp, I showed Hohmann the "Save the Hippie Chimps!" flyer from the Manhattan benefit. He was listening on headphones to Mozart's Requiem; he glanced at the card, and put it to one side. Then, despite himself, he laughed and picked it up again, taking off the headphones. "Well," he said.

We were at Lui Kotal for three weeks. "If you stay here, the hours become days, become months," Martin Surbeck said. "It all melts." We had two visitors: a Congolese official who, joined by a guard carrying an AK-47, walked from a town twenty-five miles away to cast an eye over the camp and accept a cash consideration. He stayed for twenty-four hours; every hour, his digital wristwatch spoke the time, in French, in a woman's voice—"Il est deux heures."

I saw the bonobos only one other time. I was in the forest with Brigham Whitman, one of the two bearded Americans, when we heard a burst of screeching. In a whisper, Whitman pointed out Dante, a senior male, sitting on a low branch. "He's one of the usual suspects," Whitman said. "Balls hanging out, that's his pose." Whitman ran through Dante's distinguishing characteristics: "He's very old—perhaps thirty—and missing most of his right index finger. His lips are cracked and his face is weathered, but his eyes are vibrant. He has large white nipples. His toes are extremely fat and huge, and his belly hair is redder." He was the oldest male. "Dante just gets his spot and he doesn't move. He just sits and eats."

We followed Dante and a dozen others throughout the afternoon. They climbed down from trees, walked, and climbed back up. Small, non-stinging bees congregated in the space between our eyeballs and the lenses of our binoculars. In the late afternoon, Dante and others climbed the highest trees I had seen in the forest. It was almost dark at the forest floor, but the sun caught the tops of the trees, and Dante, a hundred and fifty feet up, gazed west, his hair looking as if he'd just taken off Darth Vader's helmet, his expression grave.

**I**n the lobby of the Grand Hotel in Kinshasa, the Easter display was a collection of dazed live rabbits and chicks corralled by a low white wicker fence. At an outdoor bar, the city's diplomatic classes gave each other long-lasting handshakes while their children raced around a deep, square swimming pool. I sat with Gottfried Hohmann; we had hiked out of Lui Kotal together the day before. As we left the half-light of the forest to reach the first golden patch of savanna, and the first open sky, it had been hard not to feel evolutionary stirrings, to feel oneself speeding through an "Ascent of Man" illustration, knuckles lifting from the ground.

By the pool, Hohmann talked about a Bavarian childhood collecting lizards and reading Konrad Lorenz. He was glad to be going home. He has none of the fondness for Congo that he once had for India. Still, he will keep returning until retirement. He said that in Germany, when he eats dinner with friends who work on faster-breeding, more conveniently placed animals, "I think, Oh, they live in a different world! People say, 'You're *still* . . . ?' I say, 'Yes. Still.' This big picture of the bonobo is a puzzle, with a few pieces filled, and these big white patches. This is still something that attracts me. This piece fits, this doesn't fit, turning things around, trying to close things."

Because of Hohmann's disdain for premature theories, and his data-collecting earnestness, it had sometimes been possible to forget that he is still driving toward an eventual glimpse of the big picture—and that this picture includes human beings. Humans, chimpanzees, and bonobos share a common ancestor. Was this creature bonobo-like, as Hohmann suspects? Did the ancestral forest environment select for male docility, and did *Homo* and the chimpanzee then both dump that behavior, independently, as they evolved in less bountiful environments? The modern bonobo holds the answer, Hohmann said; in time, its behavior will start to illuminate such characteristics as relationships between men and women, the purpose of aggression, and the costs and benefits of male bonding.

At Lui Kotal, there were no rocks in the sandy earth, and the smallest pebble on a riverbed had the allure of precious metal. It is not a place for fossil hunters; the biological past is revealed only in the present. "What makes humans and nonhuman primates different?" Hohmann said. "To nail this down, you have to know how these nonhuman primates

behave. We have to measure what we can see today. We can use this as a reference for the time that has passed. There will be no other way to do this. And this is what puts urgency into it: because there is no doubt that, in a hundred years, there won't be great apes in the wild. It would be blind to look away from that. In a hundred years, the forest will be gone. We have to do it now. This forest is the very, very last stronghold. This is all we have." ♦

PHOTOGRAPH: JAMES MOLLISON / CHRIS BOOT LTD

---