

THE CHIMPANZEE—A LIVING BRIDGE
BETWEEN MAN AND BEAST

Jane Goodall

It is still hard for me to believe that, from among so many, I have been selected as a Kyoto Prize laureate. It is such a great honor. All I can say is that I am utterly committed to making the very best possible use of this great opportunity. For this is an honor that will increase my credibility around the world; and, with its extraordinarily generous financial gift, make it possible for me to do things that I could not have done before.

I want to start by paying tribute to the tremendous contribution that my colleagues in Japan have made to our understanding of monkeys and apes. Japanese scientists were the very first to make a real commitment to studying and learning from non-human primates. Dr. Imanishi, who began studies of your Japanese monkeys in 1948, may truly be considered the Father of Primatology. And, through his first students, Dr. Itani and Dr. Kawai, he founded the great school of Japanese primatology. Dr. Imanishi and Dr. Itani initiated research into chimpanzee behavior in Tanzania in 1961 and since 1965, Dr. Nishida has maintained a research center in the Mahale Mountains, just 100 miles from my own study site at Gombe. These two efforts, Mahale and Gombe, stand as the longest studies of chimpanzee groups anywhere. And other Japanese primatologists—such as Dr. Sugiyama—are observing and helping to conserve chimpanzees in many other parts of Africa. I want to share the honor of this prize with all of them.

People often ask how it all began for me—why did I start my study of chimpanzees 30 years ago? When I was a child I had two dreams: I wanted to live among and learn about animals, especially animals in Africa, and I wanted to write books about them. How fortunate I have been. There are not too many people who can stand up, halfway through their adult life, knowing that their childhood dreams have been realized. And how lucky I was, too, in having a truly wonderful and supportive mother. She never said to me: “Jane, you are stupid. Girls don't do things like that” (although, of course, in those days, girls didn't!). But she used to say: “If that's what

you really want, then, if you work hard enough and take advantage of opportunities, you'll get to Africa in the end.”

My dream began to come true when I had a letter from a school friend whose parents had moved to Kenya. Why didn't I go for a visit, she asked. Without a moment's hesitation I gave up my wonderful but very poorly paid job at a documentary film studio in London, went home and worked as a waitress, saving up my wages and my tips, until, at last, I was able to buy a return ticket on a boat to Africa.

After I had been there a short while someone said, “If you're interested in animals you should meet Leakey.” That was the late Louis Leakey, the well known paleontologist. I made an appointment to see him instantly. He asked all manner of difficult questions about all manner of different animals. He took me out a few times into the national park. And then he offered me a job as his assistant at the natural history museum. And eventually, to cut a long story short, he managed to find enough money for me to begin the study of the chimpanzees of Gombe.

And so I have been privileged to spend 30 years living among and learning about animals who are just as fascinating and almost as complex as human beings. It is because chimpanzees are so fascinating, and because they are our closest living relatives that I, and my Japanese colleagues, are still studying them. And we still have a great deal to learn. Even after 30 years we continue to observe new behaviors at Gombe, and it is the same, after 25 years, at Mahale.

Let me start by taking you with me on a short journey through my 30 years at Gombe and introduce you to just a few of the vivid and unique chimpanzee personalities I have known over the years. Because, just like each human, each chimpanzee is very much an individual. And each one has his or her own unique life history.

When I first got to Gombe my main difficulty was that the chimpanzees were so shy. Even if I was 500 meters away they ran off when they saw me. But gradually, because I wore the same colored clothes, and didn't try to get too close too quickly they realized that the peculiar white-skinned ape was not, after all, so frightening. They came to accept me and, in the end, to trust me absolutely.

And even during those first difficult months, there was always the wonder of the forest. There was so much to see and learn about. I was where I wanted to be most of all in the world. And I discovered the great peace that comes from unity with nature.

When I am alone in the forest I have similar feelings of tranquility and acceptance of life as when I am quiet in one of your beautiful temples.

The first chimpanzee who came to trust me was David Greybeard. A very special chimpanzee. He was calm and gentle. I shall never forget the day when, for the very first time, he took a banana from my hand. He helped to open the door for me into the chimpanzees' world—because the others noticed his lack of fear and became less fearful themselves.

Chimpanzees live in a male-dominated society. In the early 60s Goliath, David Greybeard's close companion, was top-ranking male. He maintained his position partly because of his courageous disposition, and partly by means of his spectacular charging display. During such a performance the male runs across the ground, slapping and stamping with his feet, hurling rocks and dragging branches. He leaps up to sway the vegetation, a ferocious scowl on his face. In other words he makes himself look larger and more dangerous than he may really be and can often intimidate his rivals without having to risk an actual fight.

In 1964 Goliath was challenged by Mike. Mike was a low-ranking male at the start of the year and, like Goliath, small in stature. But he was very highly motivated to better his social position. The way he deposed Goliath was dramatic. He began to use empty kerosene cans from my camp in his charging displays. He actually learned to keep as many as three ahead of him, kicking and hitting them as he ran. These performances were very intimidating to the other males, almost all of whom, at that time, were higher ranking than Mike. When he charged towards them they usually fled—then gathered around him to pay their respects. Within four months he had attained his goal and become the new top-ranked or alpha male of his community.

Mike reigned for six years. At the end of this time he was looking old. He was defeated by a much younger, heavier and more aggressive male, Humphrey, during a single fight. But Humphrey lacked the intelligence, the social skills, to maintain his position for long. One and a half years later he was defeated by the highly intelligent Figan.

Figan, like Mike and Goliath before him, was a small chimpanzee. And he, like Mike, got to the top because he was intelligent, highly motivated, and very socially skillful. Figan made use of the close supportive relationship that he developed with his elder brother. Faben, crippled during an epidemic of polio, nevertheless learned to

perform spectacular upright displays. And Figan almost never challenged the bigger Humphrey unless Faben was nearby. Then the brothers would display as a team—and, as the months went by, Humphrey became increasingly tense and nervous and Figan increasingly self-confident. Until, in 1973, Figan defeated Humphrey in a surprise attack and took over the coveted alpha position—a position that he retained for 10 years.

Why is it that some males exert so much energy into bettering and maintaining their position in the hierarchy while others—like Jomeo here, the heaviest individual we have known at Gombe—seem quite uninterested in such matters? Part of the answer must lie in their genetic inheritance. But, without doubt, part lies also in the kind of mothering they receive, their position in the family, the sex of their elder siblings (if they have any), and other kinds of early experience. Figan's mother, Flo, was already elderly when first I knew her in the early 60s. She was a protective mother, and an aggressive and assertive female, top in the female hierarchy. Figan was her second son, backed and supported by both his mother and elder brother during all his childhood squabbles. Thus, he acquired early the kind of self-confidence that we have come to associate with high rank.

Fifi, Flo's third offspring, was supported not only by her mother, but often by one or the other of her big brothers also. And, like Figan, she grew up to become a high-ranking and assertive female. Her first child, Freud, was born, when she was about 13 years old in 1971. His grandmother was still alive, and Fifi still spent most of her time with old Flo.

When Freud was two years old, Flo died. Fifi's young brother, Flint, had developed an abnormal dependency on his ancient mother—mainly because she had been too old to wean him properly. Even at eight years old he was still sharing her nest at night, still trying to ride her back. And so, when she died, Flint, it seemed, was unable to survive without her. He became very depressed. He refused most food and avoided other chimpanzees. In this state of grieving, his immune system weakened, he fell sick and died—just a few weeks after the death of his mother.

Fifi, however, went from strength to strength. Like Flo before her, Fifi was an efficient, protective, tolerant and affectionate mother. Freud developed into a large and healthy child. When he was just five years old, and weaned, his young brother, Frodo was born. Freud was fascinated by the infant and, as soon as Fifi permitted, spent much

time grooming, playing with and carrying his little brother. And Frodo, for his part, developed precociously—for he was always watching and imitating his elder sibling. When Frodo was five years old, Fifi, like clockwork, gave birth again, this time to daughter Fanni. And Frodo delighted in playing with and carrying his small sister. So did Freud even though, by this time, he was ten years old and spending a good deal of time away from his family, traveling with the adult males. And so the friendly, supportive bonds between the family members were continually strengthened.

Today Fifi has five offspring. Fanni has a young sister, Flossi. And the baby of the family is little Faustino.

Fifi is an unusually successful mother. She has lost none of her infants to date, and three of her offspring are reproductively mature. She should become a grandmother any day now. Yet she is only about 32 years old, she could give birth to two more infants during the 15 or so years left to her.

Most females have a much less spectacular reproductive career. This is Pallas. She was a wonderful, attentive, and playful mother. But she had terribly bad luck. Her first child got sick and died when he was three years old. Soon after that she adopted a five-year-old female, Skosha, whose mother had died. Skosha's mother was probably Pallas's sister—if so, Pallas was Skosha's biological aunt.

Soon after adopting Skosha, Pallas gave birth. But the baby vanished when he was just a few weeks old. We do not know what happened to him. After about a year Pallas gave birth again, to an enchanting infant whom we named Kristal. Anyone who did not know the facts would have thought that this was a normal family—a mother with two dependent offspring. Skosha was just like one of the family.

And then, when Kristal was five years old—the age Skosha was when she lost her mother—Pallas became very sick and died. And it was touching to see how Skosha, eleven years old, tried to look after little Kristal. But it seemed that she was too immature, too unsure of herself, to provide Kristal with the security she had lost when her mother died. The two orphans wandered about together and, as the weeks went by, Kristal became increasingly lethargic and eventually, about six months after her mother's death, Kristal got sick and died also. And so Pallas left no youngsters to carry on her line.

I have always been most fascinated by the mother-child relationship. What I have learned from the chimpanzees, both in the wild and in captivity, has convinced me

that the nature of early experience, in particularly the personality and child raising techniques of the mother, are of crucial importance in the development of adult personality and behavior. And I firmly believe this is equally true, if not more so, for our own children.

When my son was born in 1967 I felt that it was very important that I spend a great deal of time with him. And I had watched the great enjoyment that chimpanzee mothers get from interacting with their infants, and I wanted to enjoy being with my son in the same way. And so, although I continued to live at Gombe, and direct the research, I more or less stopped my own studies during the first five years of his life. I have never regretted that decision.

It is impossible to spend much time with chimpanzees without being struck by the many ways in which their behavior resembles ours.

The long period of childhood dependency on the mother is important for chimpanzees, as it is for humans, as a time for learning. Close, affectionate, supportive bonds are formed between members of a chimpanzee family, and sometimes between non-related individuals, that may persist throughout life.

There are striking similarities in the non-verbal communication patterns of chimpanzees and humans. In both our species friendly physical contact plays an important role in maintaining social harmony. And this almost certainly stems from the long years of childhood when the mother is always close by to calm and reassure her hurt or frightened child. And as he spends longer away from her, he seeks the same kind of reassurance from other familiar members of his community. Chimpanzees, like humans, kiss, hold hands, embrace one another. And we perform these actions in very similar contexts.

Two chimpanzees, suddenly excited as they see unexpected food, kiss and fling their arms around each other.

A frightened female seeks reassurance from contact with an adult male.

Reuniting after a separation, two chimpanzees may kiss. And after a successful hunt (when, incidentally, chimpanzees may show quite sophisticated cooperation) the possessor of meat may share his prey with those who, with outstretched hands, cluster around to beg.

Threatening gestures in chimpanzee society may look much like some of ours. The waving of arms, the bipedal swagger. Adult males do sometimes attack their

subordinates, but these attacks are usually brief, and afterwards, when the victim approaches and crouches in submission, the aggressor usually reassures him (or her) with gentle patting on the back, or an embrace or kiss. And so, for the most part, relationships between community members are relaxed and friendly.

Not so when it comes to interactions between neighboring communities. We now know that chimpanzees can be brutal in their treatment of strangers. The adult males regularly patrol the boundaries of their territory. They move silently and cautiously, keeping close together. If they spy a member of the neighboring community they may give chase, particularly if the victim is a fully adult female. And if they catch her they may perpetrate gang attacks, five or more males attacking all together or one after another. These assaults result in severe wounding and this may lead to death. Like humans, chimpanzees have a dark side to their natures. Indeed, during one four-year period the males of our main study group waged a primitive war against individuals of a small neighboring community, attacking them one by one until none were left. And what of chimpanzees' emotions? Almost everyone who has worked closely with these apes is convinced that they share with us feelings that are similar to those that we describe as happiness or contentment, sorrow and despair.

Finally, chimpanzees show many intellectual abilities that we used to believe were unique to man. They can reason, and solve simple problems. Wild chimpanzees use more objects as tools, for more purposes, than any other creature except ourselves. The tools used most often at Gombe are twigs or grass stems for capturing termites (white ants). They also use sticks, leaves, and rocks for various purposes, even as weapons. A very significant discovery is that chimpanzees in different parts of Africa show different cultural traditions. For example, the chimpanzees at Mahale, studied since 1966 by Dr. Nishida and his team, spend much time fishing for carpenter ants with twigs. There are many of these ants at Gombe, but the chimpanzees do not eat them. But the Gombe chimpanzees regularly feast on the vicious biting driver ants, using long, peeled sticks. These ants are ignored at Mahale. And in West Africa some of the chimpanzee populations studied use a hammer and anvil technique to crack open hard shelled nuts. You can see these skills demonstrated by the wonderful chimpanzee group at your Tama Zoo in Tokyo. Young chimpanzees learn the different traditions of their group by observing, imitating and practicing, just as young human children do.

Chimpanzees have excellent memories. They can plan for the immediate

future—as when they select a tool for use on a termite mound that is some distance away, and out of sight. And researchers in some laboratories, such as Dr. Matsuzawa and his female chimpanzee Ei, have demonstrated that these apes can understand many complex concepts—such as abstract symbols in communication. In America, chimpanzees have been taught 300 or more signs of the sign language used by the deaf. They can put these together in novel combinations—and can even invent signs when necessary.

The plight of our closest relatives in the wild is grim. At the turn of the century chimpanzees roamed over 25 countries in their hundreds of thousands. Today there are 250,000 at most. They are only found in reasonably large numbers in four countries in the central part of their range. They are disappearing because their forest habitat is being destroyed. Clear cut for cultivation, logged by timber merchants from the developed world. In many African countries chimpanzees are shot for meat. And even where they are not, mothers are killed, selectively, so that their babies may be taken. Many of these babies die before they can be sold: they die of wounds or shock. Those that survive the trauma of capture are typically crammed into tiny crates or baskets, their wrists and ankles bound with rope or wire. At the end of a nightmare journey the infant may be delivered to a dealer. Conditions in dealer camps are notoriously poor, and there is seldom anyone who understands the needs of a small chimpanzee—they are the same as those of a human infant: milk and, above all, comfort and love. Deprived of these things many more die. Some are bought as pets. For a while they may run free in house and garden. But when they are five or six this freedom usually comes to an end. They are strong and potentially dangerous. They are put in tiny cages—like five year old Socrates. Or chained—Whiskey has been on a two foot chain for over two years. Some of these ex-pets end up in African zoos, like Gregoire in Brazaville. Some are sold to the international entertainment industry, dressed in inappropriate clothes, mocked and beaten into submission. Some are sold to the pharmaceutical or medical laboratories for research.

In some labs the conditions, from the point of view of the chimpanzees, are similar to those experienced by prisoners in concentration camps. In this United States of America government—funded lab in Washington D.C. pairs of infant chimpanzees are stacked in tiny cages, 22 by 22 inches, two feet high, waiting until they are needed for testing hepatitis vaccines.

How sad it is that many scientists who use the living bodies of chimpanzees to try to find out more about human diseases just *because of* their close physiological, biochemical and anatomical similarities to ourselves, have been reluctant to recognize, or at least to admit, that chimpanzees, also like ourselves, are thinking, rational and, above all, feeling beings. It is this blindness that has led to so many abuses—abuses that are shaming to those who commit them. If we must use chimpanzees for learning about human disease, then we must do better than this. And, in fact, there are some labs where conditions are, indeed, much better. Though still not good enough.

For me, visiting these chimpanzees is often like being in a nightmare. Yet I must go—I must see things with my own eyes if I am to help.

The chimpanzees have given me so much over the years: now the time has come when I must try to repay my debt. I must speak out against the cruelties I see—the chimpanzees cannot speak for themselves. And so the Jane Goodall Institute is lobbying for better conditions in labs, organizing workshops and seeking ways to alleviate the boredom of chimpanzees confined in tiny cages. And we are trying to raise funds to build sanctuaries in African countries for at least some of the victims of hunting and poaching, the orphans whose mothers have been shot. And we are trying to raise awareness, increase understanding, world-wide.

An understanding of chimpanzee behavior helps us to understand more about our own place in nature. It is a little humbling. We do not, after all, stand in isolated splendor, separated from the rest of the animal kingdom by an unbridgeable chasm. And in many ways chimpanzees, with their many obvious similarities to ourselves, bridge that supposed gap. And once this has been understood, it is my hope that it will lead to new respect for the other animals with whom we share the planet.

All the same, there is no denying that the human animal actually *is* a very unique being. We are different, in many ways, from our closest relative. For one thing, we have developed a spoken language. This enables us to plan for the distant future, teach our children about things and events not immediately present, and, perhaps most importantly, to discuss ideas, bounce them back and forth so that they take new shape and grow. We have leaped forward, intellectually, until even the brightest chimpanzees are left far behind. People all over the world have developed sets of moral values. And above all—at least, so I believe—we have some measure of control over our own

personal destinies. That is, we have the ability, if we use the power of our minds, to overcome to some extent, the dictates of our biological natures.

It is because of our intellect, and because we have been so successful in propagating our species, that we have destroyed, polluted and overpopulated so much of our once beautiful planet.

The stone age men whose remains Louis Leakey excavated and studied had to fight the natural world in order to survive. Lacking lethal claws or teeth, they used their brains to hunt for food, construct weapons and dwellings. They were few, their tools and weapons simple. But as human intellect became ever more sophisticated, so too did our technology. Our prehistoric forebears lived in harmony with nature only because they lacked the tools and weapons and medicines that would have enabled them to conquer their environment more fully, and reproduce themselves more successfully. It is the same with the so-called “primitive” peoples today. It *seems* that modern, civilized man is more greedy for immediate material benefits than were his forebears—but this is only because he has developed the skills and technology to satisfy his needs. And now, suddenly, we, as a species, have begun to understand how our thoughtless, selfish tendencies are destroying the world around us.

We are the only species that COULD have wreaked such monstrous destruction to the environment. The point is, even though we are, at last, becoming aware of the magnitude of the problem, can we do anything about it? Is there hope?

I believe there is hope. I have great faith in our species. One hundred years ago most ordinary people, asked if they thought there would ever be a time when people could fly, or go to the moon, or talk to each other from Japan to America, or send pictures through space, would have believed it impossible. But we have done all those things—and many more. And so today, faced with the impending total destruction of our world, with our backs to the wall, I believe that, provided we cooperate around the globe, we shall somehow find a way to halt at least some of that destruction. The environment can never be as it was—but we can save some of what is left, heal some of the wounds that we have so thoughtlessly inflicted.

People are becoming aware that we humans are not the only thinking, feeling beings. Everywhere people are beginning to show more concern for non-human animals, to realize that they, like us, feel pain and are capable of experiencing happiness or sadness or fear, that they, like us, deserve to be treated with understanding and

compassion.

To me, cruelty is the worst of human sins. Once we admit that animals are capable of suffering, physically and mentally, cruelty to them must be viewed in the same way as cruelty to humans. Unless we can instill in our society, particularly our children, a respect for *all* life we cannot hope to progress very far towards fulfilling our human potential. Our children are brutalized and insensitized if they are made to pull the spinal cord from a living frog in biology class: it will be that much easier, subsequently, to harm a dog, a chimpanzee—a human. A more humane ethic—a respect for all living things—is desirable not only for the improved well-being of non-human animals, but for our own spiritual development as well. I don't suppose we humans will ever be perfect—but we can surely evolve to a higher moral plane than that on which we flounder today.

The greatest hope for the world—for the environment and for all life—is that more and more people, all around the world, are aware of the problems and want to help, particularly the young people. And what is so important for us all to realize is that each one of us can help. Each one of us can make a difference. I can't tell you what your contribution may be—that is for you to find out in your heart, and act upon in your life.

I want to end with one last story. It is about a chimpanzee in a zoo. His name is Old Man. He spent some years in a biomedical lab and then, when he was no longer useful there, he was put on a man-made island with water around it. With him were three females. They had all been abused by humans. And the story is also about a young man, Marc, who was employed as a keeper.

“Don't go near those brutes” he was told. “They hate people, they'll kill you!”

So, for a while, Marc paddled his little boat towards the island and threw food to the shore. But as the days went by he became more and more fascinated by the chimps. He watched how they became so joyful as he brought their food, embracing and kissing before they ate any. He saw how gentle Old Man was with the one infant that had been born—his infant. “How can I look after these amazing creatures if I don't have some kind of relationship with them?” he thought.

And so he began going closer and closer. One day Old Man took a banana from his hand. And some time later he actually set foot on the shore. And the day came when, for the first time, he and Old Man made contact with each other— Marc groomed him. They had become friends.

Soon after that, Marc accidentally slipped when he was cleaning the island and fell. The infant was startled and to began to scream. The mother at once leapt to defend her child and bit Marc in the neck as he lay face down. The other two females, as chimpanzee females will, rushed to help their friend. One bit his arm, the other his leg. He thought they would kill him.

And what happened? Old Man came charging from the far side of the island—to the aid of his one human friend. He pulled each of the females off Marc and hurled them aside. And he stayed there, keeping them away, while Marc managed to drag himself to the boat and safety.

Some months later, when Marc was out of the hospital, he said to me:

“You know, Jane—there is no question but that Old Man saved my life.”

This is why, for me, this story is so symbolic. If a chimpanzee—and one who has been abused by people—can reach out across this species gap to help a human friend in his time of need, then surely we, with our greater capacity for compassion and understanding, can reach out to the chimpanzees—and other non-human beings—in THEIR time of need. Can't we?"