

DR GOODALL: Thank you very much, and good evening, your Royal Highnesses, Lords, Ladies, gentlemen, everybody, members of the human race. And let me begin by reminding us that we humans are not alone on this planet, and therefore to give you a greeting that you would hear if you came with me to Gombe National Park or indeed any of the countries where chimpanzees still roam. [Gives pant hoot] "Hello! this is me!"

I want to start by going back to the beginning - how did this journey of mine start? It started in England in 1934, between the two world wars. From the earliest age, I am told, as soon as I could crawl and take an interest in my surroundings, it was always animals, animals, animals. And what I want to emphasise is how lucky I was to have the mother that I had. Because it was the wise way that she raised me, I think, that's enabled me to be where I am today. She always supported what I was interested in. When I was just five years old, we went to stay on a farm in the country and as we lived in London, this was really exciting, and I remember it very well. It was in the days when farms were farms, and animals were out in the fields and not shut in intensive enclosures. I was given a job - to help collect the hens' eggs. The hens were free to peck around in the farmyard but they were supposed to lay their eggs in little henhouses, about 5 feet high. So I was collecting the eggs and putting them in my little basket and apparently I was asking everybody, "But where does the egg come out of the hen?" Because I couldn't see a hole the size of an egg. No one answered to my satisfaction. I distinctly remember seeing a hen walking up the little plank that led to one of the henhouses and I thought, "Ah, she is going to lay an egg" and I crawled after her. Big mistake! Giving squawks of what I suppose were fear, she flew out. And although I was only five, I remember thinking, "This is not a good place, I won't see a hen lay an egg here, it's frightening" and going into an empty henhouse - and waiting. And apparently I waited for about four hours. My family didn't know where I was, and you can imagine that my mother was really worried. Her young child had disappeared, it was getting dark, yet when she saw me running towards the house with my eyes shining, instead of getting mad at me - how dare I go off like that? she sat down to hear the wonderful story of how a hen lays an egg. If you look back with hindsight, doesn't my behaviour illustrate the making of a little scientist? The curiosity, asking questions, not getting the right answer, deciding you must find out for yourself, making a mistake, not giving up, and learning patience. If I had had a different kind of mother, all of that might have been crushed. And that's why I say maybe, but for her, I wouldn't be here now.

And it was the same throughout my childhood. I loved books, we didn't have television back then, as many of you will remember - and I do a lot of talking to children in schools and they cannot imagine a world without television or the internet - but many of us here do remember that world. It was in a way a more peaceful world. At any rate, I spent a lot of time in second-hand book shops because we had very little spare money for books. I remember one day finding this little book and I just had enough money saved up to buy it. It was called "Tarzan of the Apes" and I have it to this day. I took it home to The Birches, and I took it up my favourite tree, a beech tree (which is still there) and I read it from cover to cover. Of course I fell madly in love with this glorious lord of the jungle who was doing what I wanted to do, living with the animals. And what did he do? He married the wrong Jane!

That was when my dream began: I would grow up, go to Africa, live with animals and write books about them. Everybody laughed at me, World War II was raging in Europe, we had little money, Africa was still the dark continent. I would never get there? But my mother didn't laugh. She said, "Jane, if you really want something and you work hard and you take advantage of opportunity and you don't give up, you will find a way". I won't go into the details of how I got to Africa, how I got a letter from a schoolfriend, and saved up money working as a waitress and finally, having saved enough for a return fare, setting off on the Kenya Castle as it was cheaper than to go by boat. Then arriving in Kenya, staying with my friend, getting a job in Nairobi, hearing about the late Louis Leakey, the famous paleontologist, going to see him in the National History Museum in Nairobi of which he was curator. I remember him asking me so many questions about the stuffed animals and birds and things and because I had gone on reading books about Africa, because I had spent hours in the National History Museum when I had a job in London, I could answer a lot of them and that was what led to him giving me this extraordinary opportunity of going to live with and learn about not any animal but the one most like us, the chimpanzee.

It was hard to find the necessary money for this project because I had no degree - I hadn't been to college as we couldn't afford it. But Leakey managed to get funding for six months. And so eventually there I am in Gombe National Park, with my little notebook and my binoculars. The biggest problem was that the chimpanzees had never seen a white ape before - which is what I was and they would take one look and vanish into the undergrowth! But eventually, because I never tried to get too close too quickly, they began to calm down and one of them, whom I named David Greybeard - he had a beautiful grey beard - actually came into my camp and stole some bananas. I asked my cook to leave some out each day, and he began to lose his fear. Then he became, in a way, my ambassador to the other chimpanzees. So that if he was in a group that was ready to run away as they usually did, he would sit there calmly. The others looked from him to me and presumably thought, "Well, she can't be so dangerous after all".

But time was passing and the money was running out and I knew if I didn't see something exciting before that happened, that would be the end of the study. Just in time - it was at the beginning of the fifth month - it happened. I was going through the forest one day, it was a bit cold and wet, when I saw a chimpanzee crouched over the golden soil of a termite mound and looking through my binoculars I saw a hand reach out and pick a piece of grass, push it down into the termite mound, pull it carefully out. Then the chimpanzee ate the termites off with his lips. Then he picked a leafy twig and used it after stripping off the leaves. It was David Greybeard and he was not only using grass as a tool but by modifying that twig, he was *making* a tool - and up until then it had been thought that humans and only humans used and made tools. So that was the breakthrough, that was when National Geographic decided they would fund this seemingly crazy study, and I could settle back and really relax and learn about the chimpanzees". And it was as if David Greybeard introduced me to his friends in the forest. Some of those whose names became so famous, thanks to National Geographic, with their magazine articles and documentaries. There was old Flo and her daughter Fifi, and sons Figan and Faben. Mike, Mr Worzle, Olly, Passion - and all the others.

So we now look back at research over more than 50 years. The study at Gombe which I began in 1960 is still continuing with a team of researchers and we are still learning new things about these extraordinary relatives of ours. And when I say relatives I mean this – the composition of the DNA of chimpanzees and humans differs by only just over 1%. It's the same with the structure of the blood and the immune system. And if you take the two brains, and put them side by side, although ours is bigger the anatomy is almost identical. And so it's not really surprising to find that the intellectual capabilities of chimpanzees are far more like ours than we thought back in 1960. It was strange to me, as I got to learn more about what was going on in the world, to find that in some countries such as the United States, chimpanzees were used in medical research. They were used because their bodies were so like ours that the scientists believed that they could find cures and vaccines for diseases which otherwise were uniquely human, because other animals couldn't be infected with them. But science seemed so reluctant to believe in some of the other similarities such as the intellectual abilities of chimpanzees. We now know that they can do complex tasks using computers. They can learn more than 400 of the signs of the American Sign Language, as used by the deaf. And much more.

Also, as I learned during my years with the chimpanzees out in the forest, they have distinct personalities, each one is as different from the other as we are from each other. Many of the postures and gestures of their non-verbal communication are the same or very similar to ours such as kissing, embracing, patting one another, holding hands, swaggering, shaking the fist. And all these are done in the same context that we typically do them and clearly have similar meaning.

I was always fascinated by the relationship between family members and because I was able to continue the study year after year, joined eventually by other students, we learned that the bonds between mother and child, and between siblings are strong and enduring. The female has her first child when she is about 13 in the wild and then only one child every five years or so until she is about 50 years old. But it's rare for a female to have more than three offspring survive to full maturity and so they are not overpopulating their environment as we are today on this planet.

There is a long period of childhood dependency on the mother - when a new baby is born the older child doesn't go off on its own but remains emotionally dependent on the mother for at least another 3 years and continues to return and travel with her even when adult. So the bonds between mother and child get stronger and also those between brothers and sisters. These relationships can last throughout a life of anything up to 60 years, in the wild. Of special interest - there are good mothers and bad mothers, as there are in human society. The offspring of the good mothers - who are protective and above all supportive - tend to do better when they grow up in their society, the males will attain a higher rank and the females will be better and more successful mothers. What about the male? There are no long term sexual relationships between adult males and females – a female may be mated by most or all of the males of her society when receptive. Only recently have we been able to determine which male has fathered which infant. We collect fecal samples from all individuals and send them off for DNA profiling.

And so the study continues. It was a big shock to me to find that chimpanzees – like us – have a dark side to their nature. I thought they were so like us but rather nicer. But eventually we learned that they can

be violent and brutal. This is shown in the interactions between neighbouring communities. There is a kind of primitive war and a chimpanzee may be attacked by groups of males and left to die of wounds. But, again like ourselves, chimpanzees show characteristics of love and compassion and even true altruism. When a mother dies leaving an orphan infant it will be looked after by an older brother or sister and if the child is three years or older there is a good chance that he or she may survive (before that, they are dependent on their mother's milk). On one occasion a three year old orphan had no siblings. We did not think he would make it. But to our amazement he was adopted and cared for and protected by a 12 year-old unrelated adolescent male. And we know that this happens in other places too.

And then there is chimpanzee culture. One definition of human culture is behaviour that is passed from one generation to the next through observation, imitation and practice. We have seen how infants watch adults and imitate their behaviour during their long childhood, (which we think is important for them, as for our children, because the brain is elastic and learning can take place more easily) . This is particularly obvious when infants watch their mothers using tools, then try to do the same. We now know there are different tool using behaviours in different chimp societies across Africa and they appear to be passed down, through this observation, imitation and practice. So we can say that chimpanzees have primitive cultures.

It's pretty clear, isn't it, that there is no sharp line dividing us from the rest of the animal kingdom, as was commonly believed in 1960. When Louis Leakey found me a place at Cambridge University, he said, "There's no time for a BA, you have to go straight for a PhD in ethology", (I didn't even know what that was - it's the study of behaviour). When I got to Cambridge I was told by some eminent scientists that I had done my study in quite the wrong way. I should have given the chimpanzees numbers, and not names, and I couldn't talk about them having personalities, or minds capable of thought, and certainly not emotions as these were all attributes unique to our own species. Some people commented, "But Jane, you said you were in awe of these professors, you had never been to university, why didn't you change how you did your study, to make it more scientific?" And I said: because I was really lucky as a child, I had a wonderful teacher, who taught me that the scientists were wrong. And that was my dog, Rusty! I'm quite sure many of you who have shared your life in a meaningful way with an animal will agree that they have personalities, that they are capable of some kind of thinking, and certainly that they can feel happy or sad or angry and so on..

Fortunately I had a wonderful supervisor, Professor Robert Hinde, and he taught me how to write up my research in such a way that I didn't bring down the ire of the scientific community on my head and I got my PhD. And gradually it became more widely admitted among ethologists that we are not the only beings on the planet with personalities, minds and feelings.

I've talked a lot about the similarities between us and chimpanzees, but what about the differences? You don't have chimpanzees gathering in a beautiful place like this chapel, delivering and listening to lectures. Then, think of the architecture of Windsor Castle and the Chapel. It's fantastic. And the stained glass of the windows. And the glorious way that the ceilings soar up. Chimpanzees cannot create anything like all this. We humans have even sent a rocket up to Mars, the red planet, which opened and

a little robot crawled out, which is still crawling about on Mars, taking photographs and sending them back to us.

So the biggest difference, I believe, between us and our closest relatives, the chimpanzees and the other apes, is this explosive development of our intellect. So then, here's the question: if we are -and surely we are - the most intellectual species that ever has walked on this planet, how come we're destroying our planet our only home? The photographs from Mars make it quite clear we really don't have an option of going to live there, and the moon is just a piece of dead rock and Venus is too hot. Yet we're destroying this beautiful planet, that has nurtured us and our ancestors, going back to the people who built this place, and even before. I'll come back to what I think the answer is presently, but it's a question that we need to think about. How come we're destroying the planet?

Why did I leave Gombe? It was my paradise, my dream as a child had come more than true, I was living with the most amazing species of animal, I was writing books, I was learning how to analyse data, which I loved. I was writing scientific papers. I was doing some teaching. So why did I leave? I went to a conference, in 1986, that brought together, for the first time, all the people who studied chimpanzees across Africa along with some who studied them, non-invasively, in captivity. We had one session on conservation, and it was a total shock to see that everywhere where chimps were being studied, the forests were disappearing, chimpanzee numbers were dropping, human populations were growing. And it was a complete shock to see that in some captive situations, like medical research laboratories, our closest relatives were in five foot by five foot prisons, and they might be there for 30 or 40 years. Their crime? being so like us. I went to that conference as a scientist, happy with my fantastic life, but I left as an activist. I don't remember any conscious decision - I always liken it to St Paul on the road to Damascus. It was just like that. I went in to that conference as a scientist, I came out as an activist. Initially I began travelling in Africa to the different chimpanzee range countries and talking about how amazing the chimpanzees are and at the same time learning what was happening on the ground. There was the beginning of the bush meat trade, that is the *commercial* hunting of wild animals for food. And the snaring of wildlife. And learning about the destruction of the forest leading to desertification and shrinking supplies of freshwater. But I was also learning about so many of the problems faced by the Africans themselves. Learning about the horrific poverty, and the disease, and the ethnic violence and the growing populations so many of which, seemed to me to be related to the aftermath of colonialism, and often today to the practices of some of the big multinationals. So often, it seemed to me, people from outside came in to rob Africans of their natural resources. So often this left many people poorer and only a few people richer. So I thought, well, I had better start travelling also in Europe, and North America, and increasingly in Asia.

And so I began travelling around the world, 300 days a year, and finding out so many of the other things that we humans were doing that were harming the planet. The so-called conventional farming – intensive farming. The spreading of poisons, the chemical fertilisers, pesticides and herbicides on our fields. Learning about the poisoning of the air and the leaching of the poisons from the soil down into the streams, rivers and lakes and thus into the sea. The dead zones in the ocean. Learning about the loss of biodiversity.

Finding out about climate change, finding out about greenhouse gases, the reckless burning of fossil fuel, the methane gas that I'm told is much more vicious greenhouse gas than CO₂. CO₂ released by the cutting down of the forest, as well as the burning fossil fuels and other such things and a lot of methane produced by the intensive farming of animals. So even if we don't care about the cruelty involved in intensive farming, if we start thinking about all the methane gas that is produced, the flatulence or whatever you want to call it and realising too, as the Surgeon General of the UK announced, just before I left on my last trip to America, I read part of his speech, in which he said, if you go to hospital today in the UK, it's dicing with death, you have a very good chance of dying, why? Because the bacteria are building up resistance to antibiotics faster and faster and one of the reasons is that to keep the animals alive in these terrible conditions, they are routinely fed antibiotics and so this is leading to this resistance, people dying from a scratch on the finger. And at the end of his speech, he said, "More than 50 per cent of the antibiotics in this country go to animals and we need to do something about it".

And at the same time realising that there are three major problems underlying everything else: crippling poverty on the one hand, unsustainable lifestyles on the other (which every one of us in this room is guilty of, every one of us), and the growing human population. You know, we are on a planet of finite resources and we are using them up very fast and ever faster, as more people are born, and as whole societies are rising up into a new middle class, which is wanting more of these vanishing natural resources.

So as we think of all of these problems, is it really surprising that as I travelled the globe I found so many young people, in all continents who seemed to have lost hope. They were university students, some high school students, young people out in their first jobs. A lot of them were just apathetic, but some were depressed, very depressed, and some of them were angry, even violent. When I began talking to them they all said more or less the same thing, "we feel this way because we feel you've compromised our future. And there's nothing we can do about it".

Well, have we compromised the future of our young people? I have grandchildren. And as I'm travelling there's scarcely a day that I don't meet some little child. I look at them, and I think how we've harmed this planet since I was that age, and I feel a deep sense of - I don't know what it is - shame of our species, anger, desperation. We *have* compromised their future. You hear this saying, "We haven't inherited this planet from our parents, we've borrowed it from our children", but we haven't been borrowing, we've been stealing. And we're still stealing.

Don't we care about our children? Of course we do. So our behaviour is irrational. I said I would come back to the question: how come we, as the most intellectual species, are destroying the planet? It's as though we've lost a certain wisdom attributed to many of the indigenous people - make a decision only after asking yourself, "how will this affect our people generations ahead?" And so often today, isn't it true that we make decisions based on, "How will it affect me, *now*?", or affect the next shareholders' meeting? Questions of this sort come into our mind and we make our decisions accordingly. I believe we are losing the old wisdom because of a disconnect between our amazingly clever brain that can send rockets to Mars, and the human heart, meaning love and compassion. And only, I believe, if brain and heart are equally involved in decision making can we achieve our true human potential.

There are people on this planet - and I am sure you all know some - who are truly amazing, people who most definitely go through life with head joined to heart and who make wise decisions. And who behave in the sort of way that we should like every human being on the planet to behave - what a wonderful planet it would be if we all did. So how do we connect head and heart? I believe the answer lies with the youth. When I met all these young people who seemed to have lost hope I thought, well, yes, we have compromised their future but it's not too late to start turning things around. And so I started, back in 1991, the programme that we call Roots & Shoots. This is very strong in the UK, thanks in large part to Tara Golshan our Roots & Shoots country director. It all began with 12 high school students on the verandah of my house in Dar-es-Salaam. They were upset about certain things going on around them. One of them was worried about street children. One of them was very concerned about the dynamiting of the coral reef for fishing. One of them was angry at the government for not prosecuting the poachers who were killing elephants and lions in the national parks, and so on. And they wanted me to do something about it. I told them that it would be more effective, perhaps, if they themselves tried to do something about it. Eventually this resulted in our Roots & Shoots programme. It is youth driven, and involves young people getting together, talking over the problems they are concerned about, and then saying, "Okay, this is what we care about, can we do something about it, and if so what?" Every group chooses three different kinds of project between them: One to help people, one to help animals, and one to help the environment that we all share.

The programme that began with those 12 students in 1991 gradually spread across the country, and it's now in over 130 countries with members from preschool, very strong representation in high school and university - and everything in between. We even have programmes in retirement homes and prisons. It's making a difference. We work in the inner city. We work in the rural areas. We work with the rich, we work with the poor, and we try to bring them together. And when people say to me, "Dr Jane, how do you have the energy to travel around the world as you do?" well, it's because everywhere I go there are young people with shining eyes, wanting to tell Dr Jane what they have been doing to make the world a better place. And I could talk for a very long time about what they are doing. One seems particularly relevant as I stand here, in Windsor Castle. It concerns a group at a school in St Helen's. They made one of these boxes that you make for insects, to give insects a refuge - they have them for bees and all kinds of other insects, and it's important because we are harming our insects with our pesticides and so forth. This was so big and so spacious

that it became known as Buggingham Palace! and the story was picked up by National Geographic and became quite famous. Then there is a group of college students in Bristol and they decided they would tackle the problem of elderly people who get very upset because they can't walk their dogs, and the dogs in the shelters that really need exercise. So the students take it in turns to go and look after the dogs. There is one story I have to tell about a 13 year old girl in South Africa. She wanted to start a group of Roots & Shoots in her school, but they said they could not do that. She really wanted to do something so she decided to become a 'group' of one. So she got up very early once a week, when stray dogs at the shelter, who had not been claimed, had to be euthanized - because there are so many stray dogs in Johannesburg. She decided to spend at least 10 minutes with each dog that was going to be killed, so it died knowing love. That's a tough thing to do for a child of 13.

One of the themes running throughout Roots & Shoots is "Let's learn to live in peace and harmony with each other, between religions, between cultures, between nations and also between us and Mother Earth, us and the planet. Let's try and reconnect as many people as possible with the natural world, so that their hearts will open, and they will sense and feel what's around them, and be better people for it". One of the more recent groups started in the Democratic Republic of Congo, in the east where all the violence is, and where we have a wonderful project director, Dario Merlo. One day the children came to him, and said "that hill (pointing to Mount Goma) used to be sacred, it used to be covered in forest and now it is bare and we want to put trees back there". That's the way children think – that they can do anything. So Dario first got many seedlings donated. Then he had to go and get permission from the military for the children to go and plant trees. He was told that the children would have to be accompanied by soldiers just to check on what they were doing. So here are these children, maybe 20 of them, with their little seedlings and their spades and four soldiers with rifles. The soldiers stand around and the kids begin making holes and planting trees. It is very hot and after about 20 minutes one little girl was really struggling to dig in the stony ground. Then one of the soldiers put his gun up against the tree and went to help her, and after 35 or 40 minutes, all the soldiers had laid down their guns and they were all helping the children to plant trees. For me this is a very symbolic story. It is because of Roots & Shoots that Kofi Annan asked me to be a UN Messenger of Peace, because it is very much about breaking down the barriers that we build between us and others. The main message of Roots & Shoots is a message for all of us: every single one of us makes a difference every single day. We make certain choices - what we buy, eat, wear and so on. And if millions of people make the right little choices, collectively you start moving towards the kind of planet that we will not be ashamed to leave to our children.

It is because of the youth that I have the most reason for hope for the future, because when young people understand the problems and are empowered to take action, when we listen to them, and help them and support them in their actions (and of course guide them, especially the younger ones), then their energy, their commitment, their determination, their persistence is incredible. How can you give up when you are surrounded by that kind of positive attitude. So that's one of my reasons for hope.

There's a reason for the name Roots & Shoots. Could you could all imagine a big and beautiful tree - I'm thinking of the beech tree in my garden, which is still there though much bigger than when I was a child. When my beech tree began to grow, it was a little tiny seed - you all know a beech nut - small roots appeared and a little shoot. Pick it up, so small, so fragile, so seemingly weak, and yet, those little roots to reach the water can work through rocks and eventually push them aside and that little shoot, to reach the sun light, can work through cracks in a brick wall and eventually knock it down. So think of the rocks and the walls as all the problems, environmental and social, that we inflict on this planet, and on each other. And on other life forms. And then you see there is hope: hundreds and thousands of young people helped by all of us who care, all around the planet, can break through and make this a better world for all living things. So Roots & Shoots really is my greatest reason for hope.

Another reason for hope is our brain, which is truly amazing. I have already mentioned how we put a robot on Mars. The other evening I was giving a talk in California and we were all outside. I happened to look up, and there was this beautiful full moon. I was actually talking about hope and the human brain

at that moment, and I said: "look, just look up there. We all know that people landed on the moon. I remember the television coverage when the astronauts walked on the moon. But now" I said to the audience, just look up at the moon and say to yourself, 'Wow! a man walked up there, we put a man up there. We actually put a man up there. How amazing is that?' " And one woman came up to me afterwards and she said: "you know, I had lost all hope but when you said that about the moon, my hope came back and I will do my bit."

So now that we are finally beginning to realise that we honestly are in a bad situation with regard to the state of the planet, the human brain is working hard on the problem. So many wonderful innovations are emerging of ways that will allow us to lead lives in greater harmony with the natural world. And we're making decisions in our own lives also that enable us to live in greater harmony with the planet. So I think the human brain is tremendously important tool and is a very important part of my hope for the future. A brain used wisely, and linked to the heart.

And then there's the resilience of nature. And that is truly amazing and we are learning more about it all the time. In 1993 I flew over the tiny Gombe National Park in a small plane. I looked down on a patch of beautiful forest that was Gombe and all around there were bare hills. Bare hills that, in 1960 and even 1970, had been covered in forest. I was shocked. As I looked down it was very obvious that there were more people living there than the land could support. They were too poor to buy food from elsewhere so they were really struggling to survive. That is when I said to myself: how can we even try to protect these chimpanzees when people are living in such dire poverty? And that led to our TACARE programme, that works to improve the lives of the people in a holistic way. Of course we mainly concentrate on communities living around wilderness areas. We didn't go marching in as a bunch of arrogant white people telling the villagers: "Well, we're really sorry you've made such a mess of your life, these are the things we can do to help you put it right ". No, we sent a group of skilled local Tanzanians into the villages and they sat down with the people, they listened to them and asked them what they thought we could do to make their lives better. And so we started helping them produce more food, not using more space but returning fertility to over-used farm land - without the use of chemicals. And to provide better education for their children and better health facilities by working closely with the local Tanzanian authorities. Gradually we gained the support and trust of the people and began introducing other programmes such as micro credit. I swear by micro credit. It's made such a difference in the lives of so many. I think Muhammad Yunus is one of the great people of our time and has done as much or more for the poorest of the poor than anyone else in the last 50 years. Our micro credit programme is particularly aimed at women, helping them start small environmentally sustainable projects. And we provide scholarships for girls to help them stay on in school (in poor families it's mostly the boys who get this opportunity). As women become better educated and empowered so family size tends to drop and there is less suffering, less misery.

In Tanzania villages are required by law to put 10% of their land into conservation status. Because the villagers now completely trust us, they sat down with our mapping experts and, working from high resolution maps, agreed put their conserved lands in such a way that they have formed a buffer around Gombe National Park. Now, ten years later, the trees have grown back, some of them are already 30-foot high, and the chimps now have three to four times more space than they had ten years ago, not

more space than when I arrived, but more space than they had ten years ago. In addition there's the beginning of a leafy corridor from Gombe towards other remnant chimpanzee groups to the south. This is very important as the Gombe chimps had become genetically isolated. To our delight the first female from outside, definitely not a Gombe chimpanzee, joined the Gombe community in June. This was exciting, proving that the corridor can work.

It is possible for chimpanzees and humans to live in harmony, it is possible for small scale family farming to feed the people. It is possible to help them develop their coffee projects and their tree nurseries for fast growing species for firewood and so forth. And they are now living in a very different situation than they were, so we began with a small European Union grant, in 1994, and we are now in - with 12 villages, and we are now in 52 villages, we have moved way down south, so around Gombe we restored the forest, down in the south, we are protecting the forest that is still there. And the people are all living better lives. So we've been able to replicate this programme in five other African countries and it's working everywhere. So the resilience of nature, in the tropics, is incredible. A bare hill can become a small forest in ten years, that's pretty remarkable, but there are other amazing projects which I'm learning more and more about. Where destroyed ecosystems are coming back, where filthy dirty poisoned rivers are being cleaned. Where lakes, once again, have fish in them. Animals on the brink the extinction can be given another chance: there are certain biologists, zoologists, members of the public, who say to themselves 'I'm not going to let this animal become extinct' – and they succeed. There are many animals on the planet today that wouldn't be there if it wasn't for these people.

And this is my final reason for hope, the indomitable human spirit, the people who tackle seemingly impossible tasks and won't give up. I think of Nelson Mandela, 23 years in prison, 17 of those years in hard physical labour, and somehow he retained an amazing ability to forgive and led his nation out of the evil of apartheid without a bloodbath. Oh yes, South Africa has many problems but there wasn't the bloodbath that many of us predicted. And these amazingly inspirational people, they're all around, some of them are icons, like Nelson Mandela, Martin Luther King. For me personally, I think of Winston Churchill, because it did seem bleak when England – at least the south coast at Bournemouth where I was - was protected from the might of the German army by just a little bit of scaffolding and some barbed wire. But there was Churchill telling us that we would fight them on the beaches and in the fields and whatever it took, which I think gave us the spirit to carry through, it gave us hope. And these extraordinary people are not all icons – many are seemingly ordinary people, living ordinary lives, but overcoming seemingly insuperable problems. Social problems. Go and talk to some of the immigrants. One, perhaps, has managed to open a little shop, he sells you a newspaper with a smile. Learn his story and you may be left thinking, "How on earth did he and his little family manage to overcome all that they had to overcome, having arrived here with almost no money? Probably having encountered prejudices. And yet they're smiling at us".

It is this indomitable human spirit that was so well illustrated in the Paralympics. I'm sure many of you watched the television coverage. Maybe some of you were lucky enough to be there. You couldn't watch those athletes, some of whom had overcome the most unbelievable physical disabilities, and not feel: this is what we can do. This is what we can be. This is what the human is capable of. It was very, very inspiring.

I carry this little guy around with me (holding up a stuffed toy monkey). He is my mascot, given to me 20 years ago for my birthday by a man, Gary Haun, who thought he was giving me a stuffed chimpanzee. Gary was in the US Marines and he went blind during an accident. He was 21 years old and suddenly he was plunged into a frightening black world. He was learning to live in this new world, he couldn't see at all, black world, and he is learning to live in this new frightening black world when he met a magician, and decided, "I'm going to learn magic". Everybody said, Gary you can't be a magician if you can't see. And he said, "Well, I can try". And he's so good that the children he performs for don't realize he is blind. He arranges all his props beforehand. And at the end he will tell them and say, "you know, things may go wrong in your life, because we never know, but if they do, don't give up, there's always a way forward". He does scuba diving and climbs mountains and even does skydiving - I think it's crazy when people jump out of a plane when they can see, but jumping out when you can't see, into a black void He is an extraordinary man. Anyway, this is Mr H. When I made Gary hold his tail, proof he is not a chimpanzee. Gary said, "oh well, take him where you go and you know I'm with you in spirit". So Mr H has been with me to 57 countries and because I tell people that when they touch him, the inspiration rubs off, I would say he has been touched by at least 4 million people in 20 years. He is very famous. He does get washed. He is not unhygienic! And he travels with me.

Well, the last thing I would say then is that none of us can do anything alone. The Jane Goodall Institute is in 28 countries now, and in each of these countries there is a team of dedicated staff and volunteers who share the passion for making a difference in this world. They share my conviction that if we take action, if we believe in ourselves, if we believe that we can make a difference every day, if we make the right choices, if we work to help each other and the environment, then we can turn things around. I couldn't do what I do if it wasn't for these amazing people some of whom are with me today, part of the JGI family. Tara Golshan, director of the Roots & Shoots programme in the UK; Mary Lewis who has played a key role for so many years – I couldn't manage without her; Andrew Gibbs, who is advising me on strategic planning and how we can grow; Simon Marsh is treasurer on our board; and Tariq is so filled with ideas and helping us in many ways to spread our message around the globe. And let me thank too everybody here who has worked so hard to make it possible for me to be here this evening, and share my message with you. I hope that some of you will find out a bit more about what we do, because the more people we get together who feel the same, the quicker we can move in the direction that we need to move, if we care about our children, and grandchildren, and theirs - as we do. Just imagine, if we could get a critical mass of young people around the world who understand that we need money to live but we shouldn't live for money, of young people who understand that people of different cultures, different religions, different nationalities, underneath we're all the same, we have the same human heart, we have the same emotions, we grieve, we laugh, we have fun, and we weep. So let's work together to get this critical mass of young people and give them hope for the future. Because if they lose hope, there is no future for the planet.

Thank you so much for letting me be here, in this beautiful space, and listening, I hope we meet again. Thank you.

WARDEN: Your Royal Highnesses, Mr Dean, distinguished guests, ladies and gentlemen. As Warden of the House it is my great pleasure to say a few words in response to this evening's lecture. I am sure you will agree that everything Dr Jane Goodall has said this evening bears witness to the fact that her life is driven by purpose. Imagine that first encounter with chimpanzees in Africa in the 1960s. Imagine the moment when she saw those two chimpanzees fashioning tools, to fish and to look for termites. In that instant, the distinction between humans and the animal kingdom was redefined. I think inevitably of Shakespeare's Caliban, that "freckled whelp, hagborn", whose treatment at the hands of the other characters in *The Tempest* is one of oppression, subjugation, even incomprehension, as the dichotomy between nature and nurture is played out before us. Indeed, he becomes a metaphor for our treatment not only of other species but for the treatment we make of our very planet. Many of you will have seen the recent coverage of the conference hosted by their Royal Highnesses the Prince of Wales and the Duke of Cambridge where both appealed for an end to the poaching of endangered species. Such work is and has been Dr Jane Goodall's life. Tonight we have had a privileged glimpse into that life. We leave this lecture reassured that for all the earth's troubles, so many of them the fault of human inhabitants, our capacity for hope remains undiminished. Nature is resilient. Young people are determined. The human spirit is indomitable. By seeking to understand our planet and all its inhabitants, we can honour the creation narrative of the first book of Moses, the book known as Genesis. That Genesis which tells of beginnings does so by giving humankind a genuine responsibility for the created order. If we honour that responsibility, we can assure future generations that theirs is a planet to cherish and to enjoy. In Caliban's words: "Be not afeard; the isle is full of noises, sounds and sweet airs that give delight and hurt not." Dr Jane Goodall, you have given us much to think about. St George's House is a place dedicated to nurturing wisdom. We are privileged to be able to host consultations across a broad range of subjects. Your lecture has encouraged us to extend that diversity. For that, and for much else, we are grateful to you, indeed there are many people here tonight who help us in a wide variety of ways, they help us to bring to reality the vision of the House, and we are grateful to you all. But before we adjourn to Denton's Commons for our reception, let us acknowledge that if nurturing wisdom is at the heart of what we do, then we are certainly wiser for having heard our speaker's words this evening. Thank you very much indeed.