



Bonobo societies are peaceful and cooperative, unlike chimpanzee societies.

## What Makes Us Human?

Vanessa Woods compares the violence of chimpanzees with the peaceful communities of our other close relatives, the bonobos.

“Give me your passports.” Napoleon is the most gigantic man I have ever seen. I’m not sure he’s the man our hotel sent to guide us through one of the world’s most dangerous airports. I look around. There are no better options and you don’t say no to someone like Napoleon. I hand over our passports.

I sit in the dark hugging my backpack with Brian Hare from the Max Planck Institute and Richard Wrangham from Harvard University. The lights have gone off and it’s unclear whether they will ever come back on.

Half an hour later, Napoleon comes barreling down the corridor with four massive suitcases. “Quick,” he says. “Out.”

He’s a man of few words, but as we bolt through the airport I pry it out of him that he has effectively stolen our baggage from the customs officials who wanted more money. I look around at the security officials with

AK-47s and run faster.

I don’t usually visit airports where you have to steal your own bags and then run like a criminal, but this time I have no choice. We’ve come to study an animal that doesn’t live in any other country – the bonobo.

Bonobos live only in the Democratic Republic of Congo, whose forest basin is roughly three times the size of France. Bonobos are our closest living relative besides chimpanzees, but while chimpanzees have been extensively studied, there is almost no experimental data on bonobos.

We have come to find out what makes us human.

Chimpanzees live in male-dominated societies. They have war, females are beaten, and infants are killed by aggressive males.

However, bonobos live in peaceful societies. There is no war, the females are dominant and they use sex to relieve all kinds of tension.

The question we’re trying to answer

is: how much of us is chimpanzee, how much of us is bonobo, and how much just belongs to us?

Typically, the kind of work we do is usually carried out in biomedical centres. These institutions have played an important role in our knowledge of how the chimpanzee’s mind works. However, a 1997 ban on breeding by the US National Institutes of Health means that laboratory populations of chimpanzees are ageing. Furthermore, there are no bonobos in biomedical centres.

Lola Ya Bonobo sanctuary is a sprawling forest of 30 hectares. It’s the last forest in Kinshasa, and the former weekend villa of one of the world’s richest and cruellest dictators, Mobutu Sese Seko. The sprawling hills fall into a small lake, and on the other side our research subjects emit high-pitched squeals of excitement.

The woman who began it all, Claudine Andre, is a fiery-haired Belgian woman who is passionately devoted to her bonobos. She began rescuing one bonobo, and by the height of civil war in 1997 she had 11 bonobos sleeping in her garage. Hungry soldiers, habitat destruction and the bush meat trade kept the orphans coming, and now Lola has the largest population of captive bonobos in the world.

Claudine has her sights set on the world’s first bonobo release program, but for now she is happy to let researchers come and study her bonobos.

So far, our results have been surprising.

Our day starts with a high-pitched yelping from the nursery in the night building as the substitute mothers arrive to give the infants their baths and milk. It’s an ordeal that has everyone wet but clean. You can smell the infants before they arrive; the mothers rub them all over with coconut oil to keep their hair soft and their skin moisturised.

“Allez, allez,” call the mothers as



Vaginal rubbing between two females.

they walk past our house to a small patch of forest with a giant play area donated by the legendary Brigitte Bardot.

Kabulu is an impish 3-year-old who runs up the stairs to our house and sticks his face in my tea before jumping into my arms. “Eh, Kabulu,” Yvonne scolds, pulling him off me.

With the nursery sorted out, it’s our cue that we can start the day. We carry our equipment down to the night building.

Bandundu, a majestic female, lounges in her hammock. Kikwit is one of those Peter Pan types: he’s an adult male but acts like an infant. He jumps up and down excitedly, nodding his head and spinning in circles.

We lay a six foot red plank down in front of the two bonobos. Kikwit already has his hand outstretched, waiting. Bandundu takes a little more convincing that all this is worth getting out of bed for. Eventually she climbs down from her hammock and we’re ready to start.

I place four pieces of apple in the middle of the plank. Then, Brian and I stand on either end, each holding the end of a rope that is threaded through metal loops on the plank. After a count of three, we throw the rope ends to the

bonobos. Kikwit takes one, Bandundu takes the other and they pull the plank with the food towards them and happily munch on their apple.

Easy, right? The interesting part is, at this same task chimpanzees fall apart.

It’s a test of cooperation. Both partners have to pull the rope at the same time to get the food. If only one partner pulls the rope, it comes unthreaded from the plank.

Chimpanzees have been observed to be fantastic cooperators in the wild. They have organised hunting parties that not only hunt monkeys but other chimpanzees with a sophistication only seen in humans.

So why are bonobos, who have never been observed to cooperate in the wild, able to do the task with such ease?

It’s not that the chimps don’t get it. We’ve done other tests that show not only do chimpanzees understand when they need a partner, they actually remember who is a better partner. In fact, the Ngamba Island chimpanzees are currently the world champions of exactly this cooperation task.

So why are they failing?

The answer is in the detail. Normally there is food on either end. So, when

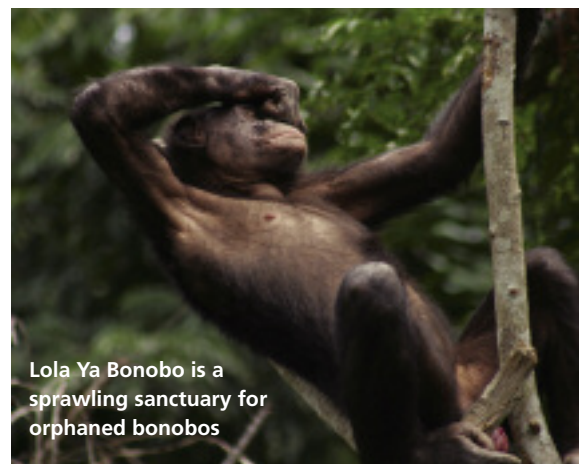
the chimpanzees pull the tray towards them, they each sit on either end and eat their apple.

But when the food is in the middle, someone can hog it. This is when chimpanzee teamwork falls apart. They might pull the tray once or twice, but after a couple of trials where the dominant chimpanzee steals all the food, the partner refuses to continue pulling the rope.

Bonobos, on the other hand, are extremely tolerant. They have more socio-sexual behaviour when they see the food coming (they touch each other’s genitals and mount each other), and they also play more. Two bonobos can chase each other around the room, slapping and laughing for 5 minutes before they’re ready to play the game. The result of all this tension-relieving activity is that they have no problems sharing, and therefore no problems cooperating.

This gives us an interesting insight into our own abilities because humans are possibly the best cooperators on the planet. No matter how much you dislike someone, in most cases you can put aside your differences and work together.

This could be one of the evolutionary reasons for our success. Chimpanzees cooperate in the wild but aren’t tolerant, while bonobos don’t cooperate in the wild and are tolerant. Maybe part of what makes us human is that we cooperate and we’re tolerant.



Lola Ya Bonobo is a sprawling sanctuary for orphaned bonobos



Etumbe calls to her group mates.

It's lunch time and Papa Jean, Mobutu Sese Seko's former chef, has cooked us a three-course meal of samosas, curried chicken, a bittersweet green called *sacca sacca*, and sugar bananas.

After lunch, Henriette brings us Malou, a spunky 5-year-old female bonobo. Malou was confiscated a few months ago at the Charles de Gaulle airport in Paris. Malou, like all the bonobos at Lola, is an orphan. Her parents were killed and eaten, and she was destined to become someone's pet or end up in the entertainment industry.

The pet trade is flourishing, not only in the Middle East but also in Europe and the USA. People captivated by chimpanzees they see in movies such as *Babe* and *Tarzan* are willing to pay up to AUD\$80,000 for an infant chimpanzee or bonobo. Little do they know that most chimpanzees on



Vanessa Woods benefits from some reciprocal grooming.

television are juveniles under 5 years old. After this age, they are stronger than an adult human and must be either controlled with force or locked in cages.

Eventually, chimpanzees are uncontrollable and become dangerous. An adult chimpanzee is five times stronger than Mr Universe. Biting off fingers is the most common assault, but there have been several incidents of serious maiming and death. Most entertainment and pet chimpanzees end up in biomedical facilities or are euthanased.

Little Malou is one of the lucky ones. She is also completely in love with my husband, Brian. She frequently yanks my hair and bites my fingers just to get me away from him. Brian coaxes her over and inserts a thermometer in both ears. There's a large pet pack and I shake it. A recorded cry of a bonobo from Leipzig Zoo resounds through the building. Malou jumps into Brian's arms and he takes her ear temperature again.

The right side of your brain is the one responsible for negative emotions. When you experience a negative emotion, your right ear gets hotter. We're trying to measure whether chimpanzees and bonobos are scared if they hear a stranger.

So far we've found that chimpanzees, even when they are very young, have a negative reaction when they hear the scream of a strange chimpanzee. This makes sense considering that, as a chimpanzee, a stranger is more likely to maim or kill you. Bonobos, on the other hand, have a positive response.

These are only some of the many differences that make bonobos so unique. Unfortunately they have largely been ignored by science because it is so difficult to study them.

Researchers estimate there are as few as 5000 bonobos left in the wild. Their disappearance would be a great loss, because until we understand bonobos we will never fully understand ourselves.

Vanessa Woods is an Australian researcher at the Max Planck Institute for Evolutionary Anthropology's Hominoid Psychology Research Group, and author of *It's Every Monkey for Themselves*. Ten per cent of author profits will go to the bonobo release project.