

Jane Goodall, the gentle disrupter whose research on chimpanzees redefined what it meant to be human

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Discovering tool use in animals

In her pioneering studies in the lush rainforest of Tanzania's Gombe Stream Game Reserve, now a national park, Goodall noted that the most successful chimp leaders were gentle, caring and familial. Males that tried to rule by asserting their dominance through violence, tyranny and threat did not last.

I also am a primatologist, and Goodall's groundbreaking observations of chimpanzees at Gombe were part of my preliminary studies. She famously recorded chimps taking long pieces of grass and inserting them into termite nests to "fish" for the insects to eat, something no one else had previously observed.

It was the first time an animal had been seen using a tool, a discovery that altered how scientists differentiated between humanity and the rest of the animal kingdom.

Renowned anthropologist Louis Leakey chose Goodall to do this work precisely because she was not formally trained. When she turned up in Leakey's office in Tanzania in 1957, at age 23, Leakey initially hired her as his secretary, but he soon spotted her potential and encouraged her to study chimpanzees. Leakey wanted someone with a completely open mind, something he believed most scientists lost over the course of their formal training.

Because chimps are humans' closest living relatives, Leakey hoped that understanding the animals would provide insights into early humans. In a predominantly male field, he also thought a woman would be more patient and insightful than a male observer. He wasn't wrong.

Six months in, when Goodall wrote up her observations of chimps using tools, Leakey wrote, "Now we must redefine tool, redefine Man, or accept chimpanzees as human."

Goodall spoke of animals as having emotions and cultures, and in the case of chimps, communities that were almost tribal. She also named the chimps she observed, an unheard-of practice at the time, garnering ridicule from scientists who had traditionally numbered their research subjects.

One of her most remarkable observations became known as the Gombe Chimp War. It was a four-year-long conflict in which eight adult males from one community killed all six males of another community, taking over their territory, only to lose it to another, bigger community with even more males.

Confidence in her path

Goodall was persuasive, powerful and determined, and she often advised me not to succumb to people's criticisms. Her path to groundbreaking discoveries did not involve stepping on people or elbowing competitors aside.

Rather, her journey to Africa was motivated by her wonder, her love of animals and a powerful imagination. As a little girl, she was entranced by Edgar Rice Burroughs' 1912 story "Tarzan of the Apes," and she loved to joke that Tarzan married the wrong Jane.

When I was a 23-year-old former NFL cheerleader, with no scientific background at that time, and looked at Goodall's work, I imagined that I, too, could be like her. In large part because of her, I became a primatologist, co-discovered a new species of lemur in Madagascar and have had an amazing life and career, in science and on TV, as a National Geographic explorer.

When it came time to write my own story, I asked Goodall to contribute the introduction. She wrote:

"Mireya Mayor reminds me a little of myself. Like me she loved being with animals when she was a child. And like me she followed her dream until it became a reality."

Storyteller and teacher

Goodall was an incredible storyteller and saw it as the most successful way to help people understand the true nature of animals. With compelling imagery, she shared extraordinary stories about the intelligence of animals, from apes and dolphins to rats and birds, and, of course, the octopus. She inspired me to become a wildlife correspondent for National Geographic so that I could share the stories and plights of endangered animals around the world.

Goodall inspired and advised world leaders, celebrities, scientists and conservationists. She also touched the lives of millions of children.

Through the Jane Goodall Institute, which works to engage people around the world in conservation, she launched Roots & Shoots, a global youth program that operates in more than 60 countries. The program teaches children about connections between people, animals and the environment, and ways to engage locally to help all three.

Along with Goodall's warmth, friendship and wonderful stories, I treasure this comment from her: "The greatest danger to our future is our apathy. Each one of us must take responsibility for our own lives, and above all, show respect and love for living things around us, especially each other."

It's a radical notion from a one-of-a-kind scientist.

This article has been updated to add the date of Goodall's death.

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Jane Goodall and primatologist Mireya Mayor with Mayor's book 'Just Wild Enough,' a memoir aimed at young readers.
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