

Tanya D.: Hi, this is Tanya Domi. Welcome to the Thought Project, recorded at the Graduate Center of the City University of New York. Fostering groundbreaking research and scholarship in the arts, social sciences and sciences. In this space, we talk with faculty and doctoral students about the big thinking and big ideas generating cutting edge research, informing New Yorkers and the world.

Tanya D.: Patricia Chapple Wright is an American primatologist, anthropologist, and conservationist. Wright is best known for her extensive study of social and family interactions of wild lemurs in Madagascar. She established the Institute for the Conservation of Tropical Environments at Stony Brook University. She has worked extensively on conservation and contributed to the establishment of the Ranomafana National Park in Madagascar. She is a distinguished professor of anthropology at Stony Brook University.

Tanya D.: Wright graduated with a PhD in anthropology from the Graduate Center of the City University of New York in 1985. Among her awards, she was named the first woman winner of the Indianapolis Prize for conservation. She was also awarded the National Medal of Honor by the President of Madagascar. And she was also named a John D. and Catherine T. MacArthur fellow, also known as the genius award. She will be awarded the 2018 President's Distinguished Alumni Medal at the Graduate Center's commencement ceremonies today in Lincoln Center.

Tanya D.: Welcome, Professor Wright, to the Thought Project podcast.

Prof. Wright: It's great to be here today.

Tanya D.: First of all, let me extend our congratulations to you on receiving the President's Distinguished Alumni Medal.

Prof. Wright: I feel very honored.

Tanya D.: It's really thrilling to know a woman like yourself, receive not only this recognition, but so much recognition around the world. It seems to me, Patricia Wright, that you've been breaking ground for science, for Primates, and for women your entire life. You started before you earned your PhD at the Graduate Center. When you documented the existence of the Owl monkey, also known as the Night monkey in Peru. How did you get interested in Primates to begin with?

Prof. Wright: That's an interesting question. I've always wanted ... I've always loved animals. Since I was little girl, two years old or so. And so, I wanted to become a biologist, but I didn't know about Primates really because I come from upstate New York where there's a lot of snow and not too many Primates. And then one day, well this is the 60s, you have to understand the background, so this is the 60s, and we had tickets, my husband and I had tickets, to see Jimi Hendrix in the Fillmore East. We were so excited. We got there early and across the street there was a pet store called Fish and [Cheeps 00:03:24] Pet Store. And that is where I fell in

love with the Owl monkey and decided I wanted to find out what it did because I went to the New York public library and there were no books on what this animal did. Nobody had ever studied it before.

Tanya D.: So you looked around, and you figured out, I heard you talking last evening, at the reception and you were talking about well, you've got to get a PhD to have any credibility. You did your research, and you were mentored at the Graduate Center by Warren Glenford Kinzey, a renowned primatologist and John Oates. You earned your PhD ... And when you were rewarded with a post-doc at Duke University, that apparently launched you in your first research in Madagascar where you identified the Bamboo lemur, which scientists believed to be extinct. And while you were there, you didn't stop. You continued and you discovered a new species, the Golden Bamboo lemur. This marked a major turning point in your career. This was a watershed. I mean I was just reading about you. Please share with us, your ... How you came to understand all that you had to learn about protecting a species from extinction from that point on. It seemed to me that the whole world opened up to you at that moment.

Prof. Wright: Well, I was just pretty excited to discover this animal that nobody had ever known about before. But, I wanted to know what it did. I wanted to know about its behavior and its ecology. And then, just as I was settling into my research, came the timber exploiters, and they came, and they started chopping down trees everywhere. They were taking out Ebony and other hardwoods. And I was quite upset, of course, thinking that my incredible animal, that I just discovered is going to go extinct before I had even finished my study.

Prof. Wright: So I went to the capital, and I talked to the ministers, and I talked to the head of the water and forest, and explained that this is an amazing forest with all these amazing lemurs and other animals and they should protect it. And they said to me, "Well, yes. We understand why you think it's important, but making a national park, making a protected area is very expensive and this is Madagascar. One of the poorest countries in the world. We can't possibly get the money to make the maps, to do the infrastructure, all the work that it takes to make a national park, but if you, Dr. Wright, if you get that funding, we'll do everything we can to help you make that park".

Prof. Wright: I was an assistant professor, and I was just a beginning one. And I walked out of that office, and I just stood there and realized that I couldn't do that. I couldn't raise millions of dollars. If I did that, even if I did that, I'd never get tenure because it would take just too much of my time. And then I thought, well, the animal will go extinct if you don't do something. Nobody else is going to do it, and I realized then that I had. That I couldn't ethically not make a national park.

Prof. Wright: So we did work hard and USAID gave me a grant and MacArthur Foundation gave me a grant. Liz Claiborne, a variety of other people, and we made that national park. And they inaugurated it in 1991. And those beautiful Bamboo lemurs are still there and doing very, very well.

Tanya D.: So, tell us a little bit ... It's an amazing story. Clearly you made a believer of yourself to a lot of really important institutions and MacArthur, I'm sure it was really a major door opener. I would say, many people have said to me, "Well, Patricia Wright is really the Jane Goodall of the lemurs". What a distinguished laudatory comment. So, tell us about the Golden Bamboo lemur. Tell us about how these animals interact and organize themselves and ... I don't really know much about how lemurs behave with one another.

Prof. Wright: You know, I didn't know anything either because I had studied of course primatology, but no lemurs were kind of like barely mentioned in my classes and there was a good reason for that. Nobody knew anything about them. So when I started, one of the most important things I found out was that lemurs have females that lead. They're female dominant. It's the females that decide where they're going to go. What they're going to eat. What's going to happen in lives. So-

Tanya D.: So, it's a matriarchal community.

Prof. Wright: Oh yeah. With all the lemurs. All the different species.

Tanya D.: All of them.

Prof. Wright: Yeah, yeah.

Tanya D.: Very interesting.

Prof. Wright: It's very interesting to watch that interaction because male and female lemurs are the same size. So it isn't that, like in baboons, males are twice the size of females and so they have a tendency to really-

Tanya D.: Dominate. Dominate, yes.

Prof. Wright: Dominate over them and they can beat them up if they don't do what they say. In lemurs, that's a little different because they're both the same size. But the males, they obviously know their place. And so they've just followed the females and if they step out of line, which sometimes the young ones do, so if they step out of line, the female lemur will swat them across the face, little slap or maybe a little nip. But she makes sure that, and of course, she has to say a few words too in lemur language, that says, "You're a male, you know you better know your place". So the females go into the fruit trees first and they eat as much they want, and then they leave and then the males go in and get the scraps.

Tanya D.: Interesting. When they have their babies, how big is a litter of lemurs. How many do they have generally?

Prof. Wright: You know there's lots of different kinds of lemurs.

Tanya D.: Okay, okay. You're right. There's many species, I'm sorry. How about the Bamboo lemur?

Prof. Wright: Okay, the Bamboo lemurs have an infant a year usually.

Tanya D.: One infant a year.

Prof. Wright: Yeah, the mother keeps them in a nest, way high in the trees, very hard to see. And then they leave them in the nest and go out and eat bamboo for a while and then come back to nurse them. And then they run out of bamboo in that area so they bring the baby, like a mother cat brings kittens in her mouth-

Tanya D.: Oh, they carry them that way.

Prof. Wright: Transfers them to another nest and she eats all the bamboo in that area and finally the baby is big enough so it can follow the mother around.

Tanya D.: Interesting. There's a hierarchy and it's a matriarchal hierarchy to keep the boys in line.

Prof. Wright: That's right.

Tanya D.: Well, that's a good lesson perhaps for our human species right now.

Prof. Wright: Well, it certainly works for the lemurs. They're doing fine. As far as having infants, some of the bigger ones, like the Indri has one infant every two or three years and the Sifakas, too. So the biggest lemurs don't have an infant a year because it takes long time for a baby lemur to grow up when it has a large body size. But some of those small lemurs, you know there's lemurs that can fit in the palm of your hand.

Tanya D.: Wow.

Prof. Wright: And those lemurs, they have two or three offspring every year. And that's because they're so small. They're tasty little bits for everything. For the snakes and the birds and the Fossa.

Tanya D.: So is it true that a cross species they can really jump or is that just a particular to specific species of lemur. You always see them leaping.

Prof. Wright: Oh, they're such great leapers. Yes. All the species are leapers.

Tanya D.: They're leapers.

Prof. Wright: And the ... They all lived in trees. And they live in trees and the ones that are extinct used to live in trees also.

Tanya D.: So in your national park, do you have like an orphan ... Do you do an orphan rescue or is there anything like that happens?

Prof. Wright: Sometimes we have individuals ... sometimes an animal being hit by a car actually and they will bring them to us to take care of them, and it doesn't happen very often so we don't have lots of orphans, but occasionally.

Tanya D.: You established this national park. The Ranomafana National Park of Madagascar and you did this fairly early in your career, didn't you, 1991. I mean you graduated from here in 1985. You went to the government and said "You really need to do this because they're going to go extinct" and you go to USAID and they ultimately back you. That's pretty remarkable that the United States government recognized the importance. It's not terribly a surprise to me, but the fact that you're a young professor, early in your career and you made the case effectively. You have to learn how to negotiate those relationships. How to position yourself in front of government officials, both Madagascar and U.S. and international. There might have been bilateral government support, maybe from other governments. That must have been an education of and into itself.

Prof. Wright: Yes, they never taught me that in graduate school. So, I had to learn a lot on my feet. Luckily, I had a good background because in the graduate school, the CUNY Graduate School, I worked in an anthropology department. I got my degree in an anthropology department. It was a four field approach. So I learned a lot about cultural anthropology and cultural sensitivity, as well biological anthropology and linguistics and archeology.

Prof. Wright: So I had ... That creates a good learning process where you learn to be a little bit flexible and to be sensitive. So that helped, but nothing could prepare you for the kind of conservation projects that I was starting down. And I learned on my feet and I made mistakes, of course, and I learned. That's important that we learn from our mistakes and I'm very proud because now 1991 was a long time ago, but in all this time we haven't lost any forest and we've earned a lot of friends because having come from an anthropology department, I realized how important people are.

Prof. Wright: And the people around the park, at first, were just afraid of strangers that came from someplace else. I mean Madagascar is the fourth largest island in the world, and has been isolated for a long time, and at that time it was very socialist. It was very important that we gained the faith of those people. The trust really.

Tanya D.: Trust, yes.

Prof. Wright: Trust of those people. We helped out with health and education, reforestation and now we have tourism. So 35,000 tourists come every year to see our lemurs and that really helps the economy.

Tanya D.: And you've employed, you said, what's about 135 people, maybe right now?

Prof. Wright: That's right.

Tanya D.: That's pretty amazing. So you're a major-

Prof. Wright: Those are local people.

Tanya D.: Those are local people. You're a major employer in Madagascar.

Prof. Wright: That's right.

Tanya D.: What have you been surprised about when you look back on these 30 years? Something you would have never imagined.

Prof. Wright: I would never imagine being here and looking back on 30 years of success because during the time when we were creating that park and working with the people and with the animals themselves; I was so busy, I didn't really have a chance to really think about what the future would be.

Prof. Wright: Other surprises that I had was animals, because I ... We have ... It was the female takeovers because yes, we had female dominance and I know from primatology that there's male takeovers of groups, where the males come in and it's like a little bit of a warfare and then they takeover the groups: baboons and other animals. But, I didn't realize you could have female takeovers of groups in lemurs. So that was a total surprise.

Tanya D.: So what does that look like? What is a takeover look like?

Prof. Wright: Okay, so you have a dominant female and her probably her sister or her daughter so you have at least two or three females in a group and they've lived in this group for maybe 10 years or maybe 15 years. I mean, lemurs live a long time, over 30. And then suddenly, one day, it's like a surprise. The first time I observed it. A young female, she must have been four or five years old. Came in from the south and she started to attack the dominant female. The dominant female had an infant which disappeared. We're not sure that the takeover female killed it, but we know that it didn't live through that battle. And she just keep on harassing the adult female until the adult female actually left her group and was injured. I thought she was going to die. And then she was at the periphery of the family or the group and the new female just took over and she became ... The males just started following her. And it was like, okay, all right. And that just happened over a weekend.

Prof. Wright: Now the one that had been ousted was right on the border and I thought she would die, because she didn't eat very much and she didn't go very far for months. And then suddenly, like one day, she took over from another group. So she wasn't done yet. So she took over from this other group and lived there for

another 15 years until the Fossa, which is an animal that eats lemurs, it loves to eat lemurs. It's a kind of mongoose. It looks like a mountain lion. Has claws and everything, but it's actually a mongoose. And it killed her, one day. I think it was January 30th of 2008 to be exact.

Tanya D.: Wow, you remember the date.

Prof. Wright: It was very sad. Well she-

Tanya D.: You must develop a real affection from your witnessing and your study of them.

Prof. Wright: Well, it's like your family. And this was Mother Blue. That was a-

Tanya D.: That was her name.

Prof. Wright: That was her name. I named her Mother Blue when I saw her in 1986, which was the first time and so I was pretty upset when Mother Blue was ousted from group one. But then she became the leader in group three, so everything worked out fine. And I learned that you can't always predict what's going to happen with lemurs. I've studied them for 30 years and they still surprise me.

Tanya D.: That's a very interesting story. If I come out of this podcast today and I tell people about a female takeover, they're going to think I'm calling for a revolution. But, what an interesting observation of their behavior.

Prof. Wright: Females taking over from other females. Taking the power.

Tanya D.: Taking the power. You mentioned to me that you've discovered a lost rainforest.

Prof. Wright: That was a total surprise and that just happened in 2016. I received a telephone call from a woman who said that she had just gotten her degree in ecotourism from Antananarivo; she's Malagasy and that she would like to bring tourism to her hometown. And her hometown was ... I asked where it was and she said, "Ihosy" and I said, "Oh, because Ihosy is the most boring town I've ever been in and why would a tourist want to go there". But she said, "It was farther south that she was thinking about and that there was a cave and there were like seven chambers in the cave and that was very interesting and then there was a forest".

Prof. Wright: I looked on the map and it looked like a very desolate place, almost desert, you know a lot of Madagascar has been destroyed and it's burned every year so that the people can no longer grow crops in these areas. And so I thought, this is one of the areas. So I'm thinking that doesn't sound ... That, I mean, what's she talking about a forest there. So, I went there with a whole team and we found a beautiful rainforest. Pristine rainforest, huge trees in the middle of what seems like the moon and it's a really interesting forest because it's found on quartzite. Quartzite is little pieces of quartz and there's large, large-

Tanya D.: Large deposits of quartzite.

Prof. Wright: Yeah, yeah. And so this forest is kind of protected by cliffs and it's a beautiful rainforest and so I was quite surprised because I didn't expect to find a rainforest there and I didn't fully expect to find rainforest lemurs, which we found nocturnal rainforest lemurs. But then we also found some lemurs from the drier areas of Madagascar in the west and those are called Lemur catta, which I think everybody knows what a Lemur catta is, with their spunky attitudes and their beautiful tail.

Tanya D.: Yes, the ones you see on Twitter.

Prof. Wright: Yeah, those are the ones. And so they are in the rainforest and everything that they do is adapted to being able to be in a dry forest where you can see each other so they do all this tail wagging things that are visible, but the rainforest you can't see any of that so they're acting quite different in the rainforest so that's what we're studying now.

Tanya D.: That's amazing. So there must be a lot of species in this rainforest.

Prof. Wright: It is amazing. I mean we found all kinds of new species. There's a couple species of lemurs that are new to science. We haven't described them yet, but we're about to after doing a molecular biology we know which ones are closer related to. Too, which was a total surprise for me. And we found a new species of chameleons and bats. And do you know what a tardigrade is?

Tanya D.: No, I don't.

Prof. Wright: Oh, okay. Well, it's a little, tiny animal. They're the animals that they sent up to Mars or the Moon or someplace and they survived.

Tanya D.: Really?

Prof. Wright: Yeah, so they're very special. Well, we found 11 species and nine which are new to science.

Tanya D.: That's incredible. Not only have managed to establish a national forest, and you have the lab at Stony Brook, but how did you convince Stony Brook to let you spend a considerable amount of time in Madagascar?

Prof. Wright: Yes, the deal was made in 1991 when I moved to Stony Brook. You know what, I did get a MacArthur fellowship and I think that really did influence things. And when I came to Stony Brook, I made the deal. I didn't want to leave Duke. Duke is a wonderful place, but Stony Brook promised that I would be able to spend half my time in Madagascar and that clinched the deal.

Tanya D.: Of course. Of course, and you must be mentoring students that have gone into the field as well.

Prof. Wright: Yes, I think I've had about 30 graduate students by now and now I've even getting grand-graduate students.

Tanya D.: That's amazing, that's amazing. Patricia Wright, you are an amazing person. This Graduate Center, the City University of New York is so proud of you and all that you've done and contributed to science, to your disciplines, many disciplines. We want to thank you today for being here with us.

Prof. Wright: Well, thank you very much. It's a great honor.

Tanya D.: Thanks for tuning in to the Thought Project and thanks to our guest, the distinguished professor Patricia Chapple Wright.

Tanya D.: The Thought Project was produced in partnership with CUNY TV, located at the Graduate Center in the heart of New York City with production, engineering, and technical assistance by Sarah Fishman and Jack Horowitz. I'm Tanya Domi. Tune in next week.