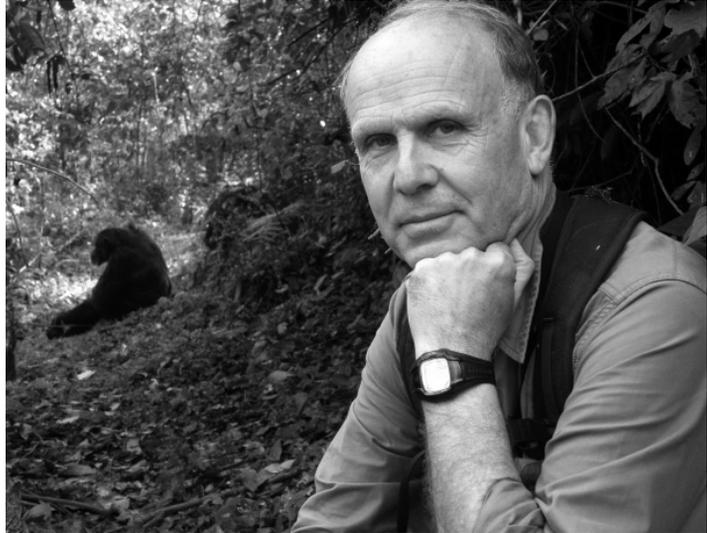


faculty spotlight

Trying to live like a chimp

By Ayse Baybars

The answer to the ever-frustrating question of “Why?” is one that Harvard College Professor Richard Wrangham, Ruth Moore Professor of Biological Anthropology, has been in search of discovering for over a quarter century. Wrangham, the Director of Graduate Studies of the Human Evolutionary Biology departments, studies the Kanyawara chimpanzees of Kibale National Park in Uganda. At Harvard, he has taught HEB 1330: Primate Social Behavior and HEB 1565: Theories of Sexual Coercion with Harvard Law professor Diane L. Rosenfeld, along with other graduate courses. In addition, Wrangham and his wife, Elizabeth Ross, are Currier Housemasters. Despite his busy schedule, Professor Wrangham found the time, one breezy Thursday morning, to sit down with *The Harvard Science Review* and answer a few questions.



Credit: Richard Wrangham

Ayse Baybars (AB): When did you first become interested in primates?

Richard Wrangham (RW): Well, what I really wanted to do was to study carnivores and that was because I was interested in human social evolution, and I thought that the best way to study human social evolution was to think about an animal that ate meat and lived in groups. And, rather inappropriately, I ended up trying to study the social behavior of mongooses, which are not really meat-eaters, but nevertheless they are social creatures. That was in 1971; I had just completed my undergraduate degree in zoology and the result of that attempt was a failure. It was in Uganda and Uganda was falling apart politically. My tutor at Oxford said that his daughter was studying chimpanzees in Tanzania and why didn't I try that? So, knowing nothing about them at all, I dashed off to study chimpanzees.

It was about 2 hours after or maybe 20 minutes after seeing my first chimpanzee that I thought this is totally incredible because I'd watched animals a lot before then and I'd never watched primates, and watching chimpanzees you see very, very quickly the extraordinary similarities in use of gestures, use of facial expressions, the style of social interactions and it makes you fascinated for your life.

AB: Do they ever remind you of people you know?

RW: Oh, I think there was a chimpanzee there called Leaky who on my first day reminded me of my grandfather. And that was fairly superficial because it was just of some looks, but as you get to know them better, you find that individuals have personalities that remind you of people.

AB: Is there a special reason why you chose to study the Kanyawara chimps in Kibale, despite working under Jane Goodall at Gombe National Park in Tanzania?

RW: Well, what I wanted to do was find a place where it was possible to study chimpanzees long-term. I didn't really mind where it was as long as it was going to be possible to develop a long-term field site. And Kanyawara was the place I found. It was in a country that was just recovering from a prolonged period of civil unrest, and it was at a sufficient altitude—5000 feet above sea level—that it was going to be a suitable place to go with my young children. And so that was a simple, practical reason for preferring that to some of these more disease-ridden, lower altitude sites.

AB: Did you ever consider studying other primates after your introduction to the chimps?

RW: Yes. I studied chimps for my PhD after going to Tanzania—that was based on fieldwork from 1971-1973. Then, I went away and did other things. They included studying Gelada baboons in Ethiopia, Vervet monkeys in Kenya, and I spent nine months with my wife, Elizabeth Ross, in our honeymoon year living with people in the Ituri Forest of the Democratic Republic of Congo, or Zaïre as it was then. And, it was after that that I decided to come back to chimps because I realized that there was...I mean other primates are interesting and fascinating in all sorts of ways, but chimpanzees have very special resonance for understanding human evolution, because I think that they do provide a sort of starting point for the kind of

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species that we would have, that our ancestors would have been like, something like five million, six million years ago. Not many studies were going at that time. I think ours was the fourth to get going.

AB: You switch from discussing the evolution of violence in human societies in your book, “Demonic Males: Apes and the Origins of Human Violence,” to determining what difference in human ancestors’ lives triggered our evolution to present-day humans in your latest book, “Catching Fire: How Cooking Made Us Human.” How and why did you decide to focus on these two areas of the field?

RW: Well, I think in both cases, I was presented with problems that I wanted to solve. And so with the case of “Demonic Males,” while I was studying chimpanzees, I, like other people studying chimps, found these extraordinary outbursts of intense aggression. They are so similar to humans in some ways and yet different in others that that demands some kind of explanation. Is it just chance or is there some functional continuity? Something similar happened with cooking...it came, I think, ultimately, with me studying the feeding behavior of chimpanzees, eating everything that chimpanzees ate, sometimes going out on my dawn-til-dusk observations foolishly having brought no food with me, trying to survive on chimpanzee foods and finding them completely unsatisfying. And slowly the penny dropping that there was something very special about cooking. Initially, I sort of couldn’t believe it because if you go to the data on the composition, the caloric density of cooked foods compared to raw foods, the nutritional scientists tell you it’s the same: there’s no effect of cooking. And very little attention had been paid to cooking and everybody assumed that humans are just like other animals—able to eat their food raw and survive on it. And it took me a long time to get sufficient confidence to be able to say, “yeah, no, there’s really something different here.” But it all goes back to trying to live like a chimp.

AB: We heard that you once ate a Red Colobus monkey—how was it prepared, what was it like, and would you do it again?

RW: Well, I haven’t eaten a whole Red Colobus monkey, but I’ve chewed it up. It tasted just fine. This was slightly odd for me because I haven’t eaten meat basically since 1977, but for very few exceptions. One was to compare the meat of Red Colobus and Black and White Colobus. And I did this when chimpanzees had made a kill. For one reason or another, sometimes they leave parts of the meat, so I was scavenging.

Now it turns out that just last year, it’s been discovered that the reason that humans have HIV/AIDS, is that chimpanzees hunt Red Colobus monkeys. It’s an extraordinary discovery. I didn’t know that at the time I was eating raw Red Colobus monkeys. I didn’t eat very much and I spit it out and that sort of thing. Actually the leap of the SIV—the simian immunodeficiency virus—from Red Colobus to chimps has only happened once in the last some tens of thousands of years, so it clearly isn’t an easy one. So, I don’t think it’s that dangerous eating a little bit of monkey. What I was trying to do was see whether or not the differences in the species’ taste of the meat explained why it is that chimpanzees eat Red Colobus more than they eat Black and White colobus, because they do. I was hoping to discover that the Black and White colobus tasted very bad and it didn’t. But then I think I may have made a mistake, because I only had the meat in the side, I didn’t eat the skin. If I find a Black and White colobus in the future, I might try and chew the skin and then see if that tastes bad.

AB: Do you think there’s a current trend where researchers in the field are going with studying primates or is it basically covering everything?

RW: Well, there is a very broad front, certainly, but I think that if you look at the research trends, then clearly the study of the basic natural history and behavioral ecology is going down and the study of cognition, the species differences in mental abilities and mental predispositions is going up. And people are increasingly trying to find ways of experimenting not only in captivity, where they’ve done that for some time, but also in the wild. It’s a pretty flourishing field, but the study of primates is always marked by great difficulty in terms of the sample size and the ability to do the kinds of experiments that, from an intellectual point of view, one would like to do because of the ethical considerations.

AB: Is there anywhere that you would like to go with your research in particular?

RW: I find myself really excited by what we don’t know about cooking. And fieldwork is in many ways a young man or woman’s game because it involves considerable physical challenges. So, I’m passing on the directorship of my field site to my former student and colleague, Martin Muller, and I will probably do less and less in the field and more and more with experiments to do with why it is that we cook and what exactly its done to our bodies.

In the words of Professor Wrangham, being “fascinated for life” seems to be key to fulfilling scientific success. His passion and devotion to his research are an inspiration to us at HSR and we hope that everyone can find something that entrances him or her as much as primates have impassioned Professor Wrangham. After all, who doesn’t want to be so in love with what they do that they would even munch on some monkey meat for the sake of their work? **H**