

Anna Doel:

Today is August 23rd, 2023, I'm Anna Doel talking with Sarah Blaffer Hrdy online. Sarah, where are you connecting from?

Sarah Hrdy:

I'm at Citrona Farms in Yolo County in northern California, about an hour and a half north and east of San Francisco, hour from Berkeley, about 40 minutes from Davis when I drive, 20 minutes when my husband drives.

Anna Doel:

I would love to talk more about your farm. Before that, we should probably go back to the beginning. I know you were born on July 11th, 1946, is that correct?

Sarah Hrdy:

In Dallas. Right at the cusp of the baby boom, at the end of World War II.

Anna Doel:

Could you tell me a little bit about your parents?

Sarah Hrdy:

I grew up in Texas in the late 1940s and 1950s in Houston, which is where my father's family was from. My father's father had come to Texas from New Orleans to buy coal for a railway line right about the time that oil was discovered and getting picked up, and he went to Spindletop and became involved in the oil business, and that's the business that my father inherited also.

My mother's family was... Actually, in a way, it's a more interesting family, because I'm closer to my mother and my maternal grandmother, I like to concentrate on their family. I think the Hardins originally came to this country, as Huguenots. They must've been refugees from the problems in France at that time with the Huguenots, and they went to Tennessee, and I know a lot of their history because when she was dying of cancer, my mother wrote a book based on old family letters about the Hardins of Hardin County, and the book was called *Seven Pines*.

They came to Texas before it was even a state. They were actually coming to Texas because there was no extradition, and one of my great-ancestor's sons had killed the son of a local sheriff who was having an affair with his wife, so it was time to get out of Tennessee, and they came to Texas. I think that really shaped a lot about my mother. And then, I never knew my grandfather. That grandfather, I never knew. He was dead before I was born. He became a banker and a lawyer in Dallas, and I was living in my grandmother's house in Dallas when I was born. That was my first home, before we moved to Houston when my father came back from the war. He was in the Coast Guard, though, not the Navy. I came from a well-to-do, highly conservative Texas family, though I don't know how conservative my mother and grandmother actually were.

My father was very conservative, and quite racist. It was a segregated part of the world, very patriarchal, and basically, the best thing I ever did was get out of Texas.

Anna Doel:

Did your parents have a college education?

Sarah Hrdy:

Yes. My grandmother, my maternal grandmother, was one of the first women from Texas to go to Wellesley College, and that is also where my mother went, and when I was applying to college, I wanted to be a “good” girl and applied to Wellesley too and got in, and I was there for two years. And then somehow, I don't even know how I did it... I know what motivated me, but I don't know how I managed it, because it's very hard to transfer from Wellesley to a college like Radcliffe. But anyway, I did, and I went to study with Evon Vogt, who was the great Mayanist at Harvard then, and just a wonderful influence in my life. He was my undergraduate advisor and shepherded me coming in. I was writing a novel about the Mayans, about the whole concept of Malinchistas, about people who betray their culture.

Talking to you now, I wonder, was it relevant that I was betraying my own culture? I don't know. Anyway, Malinche was the translator for Cortés, and it was due to her offices, according to legend, that the conquistadors were able to take over the Indians in the New World. She apparently goes mad and dies. She runs all over Mexico and the southwest and her hair turns gray and catches on the trees, so the Spanish moss I saw growing up, was the hair of Malinche. But I thought, "If I'm going to do this, I really need to find out more about the traditional Maya and their values as well as the modern Mayan descent people that I was writing about." And so I went to study with Evon Vogt. Everyone called him Vogtie.

I became very interested in Mayan mythology, and structural analysis was all the rage at that time. He introduced me to the work of Claude Levi-Strauss and Mary Douglas, who became very important to me. I've actually been writing about Mary Douglas more recently, going back to old times. But anyway, structuralism was all the rage, and so I remember going into Vogtie's office, and I was even then very dogged. I think that's a trait I got from my mother and my maternal grandmother. They were very persistent. I came into his office and had all the pages of *Le Cru et Le Cuit* marked in my book. Vogtie looked at me and said, "Sarah, have you actually read it?" No one was reading these books. Levi-Strauss did this whole series of books on myths. It's kind of like Stephen Hawking's books. People owned them, but they didn't really read them, but I was really reading them.

Anyway, the whole business was about breaking these stories into their component parts and then looking for patterns. And I loved it. I'm sure that that is one reason later on that so attracted me to sociobiology, because of all the things that sociobiology was attempting to do. A key method was the comparative method, which was to look for patterns across species and across animals in different environments and then put it together and try to make sense of it. What is this telling us?

I wasn't aware of any of this then. What I'm leaving out of this story is how naive I was about everything. I was naive about racism. I was naive about sexism. I sensed this stuff. I knew I didn't like it, but I didn't understand it. I didn't know anyone who talked about it. I didn't know anyone who was anything like a feminist early on, except there were hints. There were hints that

my mother and grandmother maybe weren't completely on board, but it was the world I grew up in. If people haven't grown up with it, they don't realize what it was really like.

Anna Doel:

Could you tell me a little bit more about your childhood?

Sarah Hrdy:

Well, it was not a happy childhood, probably.

Anna Doel:

It wasn't?

Sarah Hrdy:

I was desperately insecure. My mother, who was a wonderful person and very honest and loved her children, didn't understand what children needed. She had taken psychology and at Wellesley then presumably reading John Watson who promoted the idea that if a mother picks a baby up when it is crying, she makes it more dependent, and the mother ends up raising a very dependent, clingy child. And she wanted her children to be independent, which of course is the opposite of what happened. I cried when they took me to kindergarten, and I was very shy. I was not shy with my friends and entertained all my friends by telling scary stories about the boogie man and stuff. I was shy otherwise, and very insecure, and it was not a happy childhood. And I was very afraid of my father, who had a very bad temper.

Anna Doel:

What did you enjoy doing as a child? What were your interests?

Sarah Hrdy:

I loved horses, loved animals, loved going down to Eagle Lake. It was a hunting club that my father belonged to that didn't allow women, but it did allow women to go in the summer, and we'd go down and I loved it and the birds. Horses were a big, big part of my life. I spent much of my childhood riding hunters and jumpers and going around Texas to horse shows and even up to Tennessee, to the show in Germantown.

Then when I went away to school, which was a very good thing to happen to me, I went to a small all-girls school—there were only 125 of us—called St. Timothy's in Stevenson, Maryland. My mother picked it because they had a good riding program. The other thing it had though was that it was all right to be a “blue stocking” at St. Timothy's, and this was such a surprise. Back in Texas I had not been a good student and remember weeping in algebra class because I had no idea what the teacher was talking about. Girls were supposed to be cheerleaders and this and that. Only men were encouraged to do science. This was the St. John's School in Houston, Texas. That has really changed. They've become much more cosmopolitan. Houston is more cosmopolitan. When I was growing up, there were still cattle grazing on Buffalo Speedway, but nowadays, if you've been there, it's just freeways everywhere but there are also fine museums. As it happened, our next-door neighbors, the De Menil family, had a great deal to do with exposing Houstonians to new forms of art, not to mention more enlightened ideas about race. Yet, it's

pretty clear from what's happening in Texas right now that those old racist and sexist undercurrents are resurfacing with a vengeance.

I could see it coming in 1981 when at the end of *The Woman That Never Evolved* I warned my daughters and women to come, that they couldn't take the kind of rights we had won, reproductive rights in particular, for granted. And in 1999, when I was asked to write a preface for a new edition of the *The Woman That Never Evolved*, I concluded with an imaginary conversation with my daughters, cautioning them, "Don't take your reproductive rights for granted." I could see what was coming down the pike. And I am very concerned about backlash against the advances we've made in all sorts of areas. In integration and in women's opportunities. Many of the themes of that book, and especially a later one, *Mother Nature*, had to do with why patriarchal tropes generated by tensions far older than our species, keep coming back.

You asked me in your letter, "What do you want to tell women scientists a hundred years from now?" I don't know what that situation is going to be like. That's why I think it's so very important to always keep the past in mind. That wonderful line from Faulkner is very real to evolutionary anthropologists. "The past is never dead. It's not even past." My concerns about what's happening today were part of my motivation for writing *Father Time*, the book I've just finished. It examines the nurturing potentials of men. To do so I had to travel far back in time, not only in primate and mammalian evolutionary history but further still, all the way back, to fish and the early vertebrates. To understand what's happening in men in the 21st century, in the wake of a serendipitous series of historical events and uniquely human innovations, we also need to know what males were doing 400,000 years ago, which sounds absurd, but I think it's true.

Anna Doel:

Did you like reading books as a child?

Sarah Hrdy:

Oh, of course. But there weren't many admirable women protagonists, mostly just Nancy Drew. She was pretty much all there was. And of course I loved Walter Farley's black stallion books. Beside living on a farm and raising horses, I wanted to be a writer, initially, a novelist. That's all I could imagine ever being. When I was in high school, I remember my mother, who was a Jungian and believed in handwriting analysis, took me to this specialist who tells people what kind of occupations they might like to pursue in life. It was interesting for her time that she even considered that I might want a career. Anyway, she took me for these tests, and they told me I should either be a fabric designer or veterinarian, which was not too far off.

My mother, by the way, had wanted to be a lawyer. I really should tell you more about my grandmother. Her mother over-ruled her, wanting Mom to make her debut first, and it was a big deal in Dallas. Elsa Maxwell, who was a big "influencer" at the time, came and wrote an article about it for *Life* magazine. There she met my father -- handsome, virile, and very wealthy. It seemed too good a match to pass up, I guess. That's what women did then. That's how they established their place in life, by marrying a man who would make their identity for them. And that certainly had been true of my grandmother, who grew up in a small Texas town. Both her parents died while she was at Wellesley or maybe just after. And she came back and worked in Dallas to put both her younger siblings through school before she would agree to marry my grandfather, prominent banker and lawyer Wirt Davis.

She worked as a sheriff's deputy. She worked as a reporter for the *Dallas Morning News*, and she ran a bookshop. And then her siblings were grown up and she married him and then pop, pop, pop, three kids right in a row. But then she became, instead of perhaps the person she really was, she became this *grande dame*. Very proper, and propriety was very important to her. Once I was with her when she refused to ride up in the same elevator with Claire Booth Luce, because Claire Booth Luce was divorced. That's how it was.

And Claire Booth Luce, by the way, completely charmed me. I was an awkward adolescent, but I had done these paintings and I'd left them on my parents' bed in a hotel in Hawaii where we were staying, and she was going out with a former husband of an aunt, and she comes into the hotel room and sees my paintings and says, "Oh, I must have one of these for my collections." Well, can you imagine? I was just in love with this woman. Anyway. So my life, in terms of the thing that I became known for, began when I went away to school, to a small all-girls school where it was all right to like books and all right to be a "bluestocking". "Bluestocking", by the way, was a pejorative term in my family.

Anna Doel:

Growing up, were you close with your siblings?

Sarah Hrdy:

My immediately older sister was very good to me when I was growing up and filled a lot of very maternal roles. But later, as I grew up and became more independent, things did not work out. My family was pretty dysfunctional, and I probably shouldn't... It was just too dysfunctional to talk about. My aunts, siblings, nephews spend a lot of time suing each other. It's a lot like Succession or something. It can't be helped. But I'm out of it.

Anna Doel:

So your mother sent you away to school across the country.

Sarah Hrdy:

My older sister was sent away to live with my grandmother, because she didn't get along with my mother. Children were sent away because it's what you did. For me, it was a wonderful opportunity. I loved horses and at St. Timothy's I learned that I loved education. But back then, going away to prep school is what people did. So I was going to either go to Foxcroft, Madeira or St. Timothy's. That was it.

Anna Doel:

What would it take for a young woman of your stature and from your family to be accepted to Wellesley?

Sarah Hrdy:

I did well on my SATs and although I had not been a good student back in Texas, once I got to St. Timothy's, I blossomed. In fact, I was surprised when I would win these academic awards and gold medals and red seals. There was even a prize for reading the most books, which of course I won. It was a different world. I loved the headmistress, a very Christian woman, and I think she

sensed that there was something in me, and that she believed in me, which is so important. That by the way is the advice I give mothers. You must always believe in your children. Miss Watkins believed in me. I think she was the one who wrote the inscription for my high school yearbook, where she wrote that I'd be the first Texas wheeler dealer to win a Pulitzer Prize.

Well, I haven't won a Pulitzer Prize. Not likely. But I did win the Staley Prize, which is referred to as "anthropology's version of the Pulitzer Prize". So, I thought of Miss Watkins without my knowing at the time how important to me she had been. And the biology teacher at St. Timothy's was important to me, but science wasn't much taught there.

I got into Wellesley because I had good grades and good SAT scores, I'm sure. But on the other hand, the fact that my mother and grandmother and aunts had all gone there probably helped, but it wasn't as hard to get into as it is today. Getting into Radcliffe was harder. In retrospect, I don't doubt that it helped that my family had money. I had no contacts with Harvard. In fact, my family wanted no contact with Harvard, which my father considered an immoral den of radicals. Not a good place. I have always been acutely aware that the advantages I had in my academic career were very much influenced by my background, and that they are women with a lot more talent than I have who haven't had those opportunities. I have to pay it back which Dan and I have both tried to.

Anna Doel:

Did your family belong to a religious congregation?

Sarah Hrdy:

They were Episcopalian, and I was baptized as an Episcopalian. I went through confirmation as an Episcopalian, learned the Apostles' Creed, and I was actually deeply religious as a child. I would memorize psalms from the Bible and passages and go to church. But I was the only one in my family who did. I would walk to church from my home. I remember my best friend, Phip de Menil's family next door was Catholic, and Phip went to catechism on Saturday as well as church on Sunday. I wanted to convert to Catholicism, so I would go to church twice a week.

Of course, as I grew older, organized religion became less important. But I was never inclined to sign on with fellow evolutionists who became intransigent atheists. Richard Dawkins would be an example. But I think people, many people, probably most people, need religion. They abandon religion without realizing they are simply substituting a different cult.

The daughter of a cousin of mine wanted me to marry her when she married my son's best friend. So I went online, and for \$15, I became an ordained minister in the Church of Spiritual Humanism. And I learned more about spiritual humanism. I like it. It's an admirable religion. In a way, I've earned my ordination in the sense that not so long ago I was asked to come to Utrecht to accept an honorary doctorate in humanistic studies. I didn't know what humanism was, so I called up my colleague, Frans De Waal, and I said, "Frans, what's humanistic studies?" And he said, "Oh, it's something they do in Europe." And while I was there, I learned more about it, and I found what they advocated very admirable.

Humanistics is sympathetic to both science and to religion. And of course, Buddhism is quite sympathetic to science, as I learned some years ago. Dan was diagnosed with a very aggressive, rare form of cancer that was in his face. I canceled all my obligations then and stopped work on the *Father Time* book during those years when he was having surgeries and radiation so I

wouldn't be torn and I could just focus on what he needed. But I left one thing on my schedule, and that was going to Brussels to one of those conferences where scientists engage in conversation with the Dalai Lama. I figured that, if things go south with Dan (fortunately, they didn't, his cancer has no more activity on that front), I'm going to need what the Dalai Lama and meditation had to offer.

Anyway, I was impressed by him and by all his admirers who came out in force, the Tibetans in Brussels, to volunteer at that meeting. But I didn't really connect with what the Dalai Lama was saying. Spiritual humanism suits me better, but in a very personal, idiosyncratic way. It's not an organized religion for me but fits in with my reverence for the natural world.

Anna Doel:

Sarah, when I was reading the materials you sent me, it struck me as very interesting that your professional trajectory has been very, very non-linear. And I had a sense that the non-linear paths started at Radcliffe.

Sarah Hrdy:

The non-linear path started because I was a woman. Have you read that volume *Leaders in Animal Behavior: The Second Generation*? Contributors to the *Leaders in Animal Behavior: The First Generation* was all male. The second volume, they said, "Oh, let's have some women in it." Compare the biographies of the women with the biographies of the men, and you'll see what I'm talking about. The men's careers, Richard Dawkins, John Krebs, et al. all lockstep. They went to fine schools, graduate schools, post-doc, tenure track, whatever. The women's careers were so idiosyncratic. Mary Jane West Eberhard explained it to me once. We juggle the pieces of our lives to make the best of what we have. The challenge for women in science then, besides just overcoming the barriers was managing the compromises.

Add question: What were some of those challenges?

For me they included my advisor at Harvard as a graduate student, I was his first woman graduate student.

Back then, anthropology, cultural anthropology, Vogtie's area, was fairly open to women. Margaret Mead, after all. Ruth Benedict. They had paved the way. But when you got closer to the natural sciences, and if you got into chemistry—too bad. Women were not welcome. In fact, I just read the most amazing anecdote. It was in the biography of Parfit—I was listening to it online—it was about 1981, very late. 1981, when All Souls College at Oxford was voting whether or not to allow women fellows, and E. B. Ford, the great evolutionist (who did the work on the melanic moths adapting to air pollution) was against it. And he lost. The first woman, Dr. Hurley, was admitted and the great E.B. Ford saw her in the hallways, and according to this anecdote, which I need to track down to see if this really happened, apparently "screeched", that was the word in the book. He screeched, "Out of my way, hen chicken!" And hit her with his umbrella. You just weren't welcome. You weren't part of it.

Anthropology was a little bit better, and I also encountered vital exceptions, for which I am eternally grateful. So be sure, ask me about the mentors who made this possible. But you were asking me something different. You were asking me about the idiosyncratic trajectories of women. Look at that book.

Jeanne Altmann, for example, has become a very close colleague and dear friend. Jeanne Altmann was teaching grade school math in Atlanta while her husband was pursuing his credentials. She had already served as editor of the *Journal of Animal Behavior* before she got her PhD, which was quite late, in 1980, that became her first book, *Baboon Mothers and Infants*. She had already published what is still, I think, the most widely cited paper in *Animal Behavior* in 1974, about field methods. That was published in 1974, I think. So that's before she even had her PhD.

She finally gets her PhD, but she still is in this subordinate position at the University of Chicago where her husband is. And finally, late in life, this extraordinarily distinguished scholar receives an offer from Princeton to become a full professor. And by then Chicago says, "Oh, maybe you should stay..." But it's too late. She goes.

Mary Jane West-Eberhard, the same. No lockstep there. She did a postdoc at Harvard and then went to Columbia with her husband, did fieldwork, and then went to work at STRI (Smithsonian Tropical Research Institute). She and her entomologist husband Bill Eberhard lived in Costa Rica where they could get household help on their salaries so that they could raise a family. Back then, women in science often just didn't have families. And I figured I wanted one. And I remember when Alison Jolly came to Harvard, I had no role models as a graduate student at Harvard among women ahead of me. The year I graduated from Radcliffe, there was not a single woman professor at Harvard College. That was at Harvard College. There were a few at the university, and 10 at the medical school. None of the ten had children, except one, and she was married to a Nobel Prize winner. There simply weren't role models around. But when Alison Jolly visited Harvard and graduate students flocked around her, without knowing where it came from, must have been some place deep within me, I humiliated myself by asking a ridiculously inappropriate sounding question: I blurted out to her, "But what is your life like?" That's what I wanted to know.

And she said, "Oh, very quiet." And of course, Alison had an extraordinarily distinguished career as well as wonderful family life. She was very balanced, and also always part-time. She must have been an adjunct professor and finally had a more permanent position. But I don't think it was a tenure track position at Princeton, it was part-time. And her husband's career at the U.N. probably took priority.

So I did not want a career. I never wanted a career in academia, and it wasn't on my mind. I didn't have colleagues who thought about careers that way. The first woman I met who actually was thinking in those terms was probably fellow primatologist Alison Richard, who, of course, later goes on to be vice chancellor at Cambridge University, and did a wonderful job. She impressed me because this woman was indeed lockstep. But Alison needed to make a living, and that probably made a difference too. I never could have done what I did and had a family if I'd needed to make a living.

I think that's a very important thing that women have to recognize, and administrators have to recognize, how hard it is to be a woman academic and a scientist, especially if you are in big time science, getting grants to run labs. And in 1975, the year I got my PhD, Nancy Hopkins wrote an essay for the Radcliffe Quarterly titled "The High Price of Success in Science". That was when Mary Bunting was at Radcliffe promoting the idea of superwomen, that we could do it all, because she herself had had a very impressive career and a marriage and four children, and she said, "You can do it all, ladies."

And Nancy Hopkins wrote this essay about the price of success for women and scientists, and she said, "If you want to be a successful scientist and run a big-time lab, don't count on marriage and don't plan to have children." It was an incredible thing, and it made a deep impression on me, and I didn't want any part of that. And of course, we all know, and we're going to hear, actually, on September 7th at the American Philosophical Society about Nancy Hopkins's career and what she went on to do, and how long it took her to figure out that there were structural barriers to allowing women to be themselves.

When I was finishing *Mother Nature*, talking about women's careers, I remembered that article by Nancy Hopkins, and I called her up and I said, "Do you still think what you thought then?" And here's what she told me, I quoted her in the *Leaders in Animal Behavior* book. She said, this was July 16th, 1997, "Each generation of young women thinks it is an issue of the past," meaning the challenges for women in science, "And then has to discover for themselves how hard it is to create an environment where their own way of being is allowed." That's true, and doing so became very important to me, to create an environment where my own way of being is allowed. And you asked me where I am living now, and I said Citrona Farms. Well, it allows my own way of being to thrive. I like it here.

Anna Doel:

Who would you nominate as your mentors?

Sarah Hrdy:

I have wondered if I would have finished graduate school if Edward O. Wilson hadn't been so supportive. It bothered me a lot when Science for the People and these various groups started to criticize him for, among other things, sexism, because I knew the support behind the scenes he had given to women both older and younger than myself. And it's not that he invested a lot in students or spent a lot of time with them. At the time, the joke was that, to Wilson a good graduate student was someone who slipped a reprint under the door every so often. But there was a supportiveness, he believed in you, and he wanted to see people do whatever project they wanted to embark on. And there was considerably more than sexism, outright misogyny as well, at Harvard then but Ed was gender blind, it was the work. It was the work you were doing that mattered, and that's what mattered to me.

The one helpful thing that happened as a graduate student is Irv DeVore opened his house for evening meetings once a week, or once a month, to what were called Simian Seminars. You'd come to his house for these informal gatherings and people would be invited to give talks. If anybody famous in my field, like Dian Fossey, Jane Goodall or Lionel Tiger, Margaret Mead, or Robin Fox, was passing through Harvard, they would speak at his house, and we could meet them and talk to them. And because it was an informal gathering, this wasn't men after a seminar going out for a beer, it wasn't an official setting where often it was very intimidating to talk, it was women too. I loved those seminars, and they were very important to me. At Davis, my colleague Peter Rodman continued that tradition, and I think it goes on to this day in the anthropology department, I hope so. I think Lynne Isbell is continuing it, but she just retired, everybody's retiring or dying.

And of course, there was Bob Trivers, an extraordinary teacher who could also behave abominably. When he was good, he was superb, a brilliant and inspirational teacher and we were all devoted to him. But when he was bad, he was toxic. I can't say that his treatment of women

was ideal, but his enthusiasm for what he had to teach was infectious. And through him, I met William Douglas Hamilton and George Williams, and they too became very important. George in particular had no reason to help me, but he went out of his way to. Early in my career, I was writing an essay called "Behavioral Biology and the Double Standard" to serve as introduction, for an edited volume on the *Behavior of Female Vertebrates*, when the editor decided we really need someone more famous.

And George said, "No, no, no, I'll co-author it with her." And he just joined on. And so, it became Hrdy and Williams. And it wasn't that this man needed another publication, believe me, it was that he wanted to offer his support. And there was one line in the essay that I had mostly written that George added something whose importance I would only recognize years later. The article was about how we needed to expand evolutionary theory to include selection pressures on females as well as males, and in that throwaway line George added "And it might also be a good idea to consider selection pressures on infants and earlier life forms." Well, that's what much of my later work focused on, and it was thanks to George, really.

Some years ago, I was sent a manuscript by University of Nevada Press to review about George Williams. It was an analysis of his books as literature, by Michael Cohen, and I loved it, and told the press, "You've got to publish this." Well, they didn't, for some reason. Then, a couple of years later, this man named Michael Cohen ordered walnuts from Citrona Farms online. And I saw his name there, and I saw that he was in Nevada, and I wondered, is that the same guy? So I wrote to him and I said, "Hey, what happened to that book?"

And he said, "Oh, they didn't publish it, and I got discouraged."

So I called up Randy Nessie, who was George Williams' co-author, and said, "Look, this is happening," and Randy arranged for the book to be published right away, and it's a wonderful book. But literature I think, may be a link between me and all three men, I'm only thinking this now off the cuff, because literature certainly is a tie with Hamilton too, and Wilson. They were each in their own way wonderful writers.

Ed, who, like me, only I'm far more so, always felt challenged by his mathematical ability. I have near zero mathematical ability, and with age am losing even that. I won't even review most papers that are sent to me anymore because I don't have the statistical expertise to evaluate them. I just tell the journals to quit sending me work I'm not qualified to review. But these mentors were wonderful writers, and back when I was the editor of the *Foundations of Human Behavior* series, I had convinced Bill Hamilton that he needed to compile his collected papers for the series, and he said, "Oh, they're too out of date."

And I said, "Well, just write a brief introduction to each one," because I knew that buried in Bill's writing were these little gems, like Haiku. He was a poet. And he started out and he did the book, but then he published it with Oxford instead. Although he credited me with the idea, he decided to go with Oxford. I had told him, "Oh, don't do that because we'll keep your book in print at the *Foundations of Human Behavior*." In fact, he made a very good decision because that series that I was editing later was orphaned and subsumed with general books at Transactions. For me, it had been a labor of love, and I was very sad to see that happen, but it happened. But Oxford still publishes all Bill's collected papers with these wonderful gem-like introductions, but they put this enormous price tag on them. I scold them every time I review something for them, I say, "Could you not do that? Paying \$100 for a paperback, you just make it inaccessible." But they do it, and I've been told by editors and publishers that they have to. University presses are in trouble.

Anna Doel:

Sarah, what happened to your plan to write a novel about the Maya?

Sarah Hrdy:

It's a typescript. It was never finished. My son was saying I should write fiction instead. And of course, my critics say I've always been writing fiction. Are you a writer too? I sense that, Anna.

Anna Doel:

I'm a historian.

Sarah Hrdy:

Well, I'm a historian too, when you think about it. I think evolutionists are historians.

Anna Doel:

Oh, yeah. Oh, absolutely. Just like geologists.

Sarah Hrdy:

Yeah. And if I trace some of the questions I've asked, they have always just come out of some personal realm. Why are males killing infants? Why do I love my children so much and yet feel ambivalent about their demands? Why do I feel like I need so much more support than I have? Turns out that's natural, that's what humans evolved to seek, but never mind that. It was in the *Father Time* book I that I finally asked, how can my son-in-law and my son become so invested in babies? It's not something I had ever seen, I'd never even seen a man change a diaper before, and here they were. The point being my books have always been driven by me wanting to answer some very personal questions and using scholarship and the writing process to seek answers.

So these were very personal questions, but the way I answer those questions has always involved incorporating history and integrating history with evolutionary theory and history and culture. And that, of course, sociobiology with its focus on the comparative method had so much to offer in those respects. Sociobiology was a blueprint for a new way of thinking about evolution, and eventually also, history writ broad. That 1975 book was scarcely a finished document. Proximate causes, development, cultural processes, history, were all given short shrift. I think Wilson referred to anthropologists like Levi-Strauss and Mary Douglas as, "Poet naturalists pursuing their idiosyncratic personal visions." It bothered him that nobody's work in that area could build on anybody else's. It was too subjective and crazy to make sense to this biologist. But culture spins off in its own directions and it takes history with it, and we ignore those processes at our peril.

Anna Doel:

Sarah, could you talk a little bit about the place of fieldwork in your professional life? And maybe more so, outside professional life.

Sarah Hrdy:

I loved fieldwork at Mount Abu, and I would've continued but for two things. One was the political problems we ran into in India, which were hideous, and second, how incompatible it

was with the needs of my children. People do take their children to the field, but often at a cost to the children. Children need to grow up in a stable environment with their friends and a sense of belonging, and I became aware of that. Katrinka went to India with me twice, and it was very hard on her, I think, and I feel very guilty about it sometimes.

Anna Doel:

So most of your field work was in India, in Rajasthan?

Sarah Hrdy:

Well, there's a field stint that I don't talk about because it flubbed. I went to the eastern part of Madagascar to study mongoose lemurs, and sometimes they are diurnal, but mostly they are nocturnal, they are in between. And it wasn't clear whether or not they were monogamous and why, and I wanted to find out. And so, I was in a very dry zone forest and living in a little ranger's house with a couple of rangers, and we'd eat our rice with dirty hands out of the same rice bowl. But I would set my alarm and I'd go out to where I'd sensed the lemurs might be at 2:00 in the morning, and they hadn't gotten up yet, and I'd go back at 3:00, and they hadn't gotten up yet, I'd come back at 4:00, and they'd be gone. I never learned anything.

Anna Doel:

Is this something that Patricia Chapple Wright ended up working on?

Sarah Hrdy:

Well, Patricia Chapple Wright was the pioneer in that era. Let me tell you a bit about her life then. She was living in New York, and I think she was already a single mother, and she got a pet. Flower was the name of the pet, a little owl monkey. And she fell in love with Flower and decided she wanted to learn more about this little New World monkey. There was an old lady that she met in upstate New York who funded her to go down to South America, and these animals are nocturnal, monogamous and exhibit a lot of male care. The owl monkeys in Argentina that Eduardo Fernandez-Duque is studying are diurnal, but these guys were completely nocturnal, so Pat is out in the Amazonian rainforest at night studying tiny little arboreal monkeys and documenting how much male care there is.

It was a revolutionary study under nearly impossible conditions at the time. I know Eduardo who has been able to collect far better data would say, "Oh, don't cite that." She "couldn't really see her animals" and so forth. But you need to understand. We knew nothing about *Aotus* and that extent of male care before Pat's work. We had Bill Mason's very preliminary 1966 report that titi monkey males were carrying babies, but it was really Pat's work. Her persistence and dedication were truly off the charts, and then later on, I think Elwyn Simons at Duke recognized her talent. Did Elwyn recognize her talent or her persistence? I don't know, but she has both. And he had her come down to the Duke Primate Center and sends Pat to Madagascar where she rediscovers this bamboo lemur, thought to be extinct. The rest is history. That wonderful center she set up. Noel Rowe is now her partner, and they work together on lemur and primate conservation, and I certainly support them. Pat's in a class by herself.

But talk about challenges for women in science. Pat actually conquered all of them. I had this buffer because I didn't need to make a living, and I didn't need to support myself, and that's so important. Virginia Wolf, a *Room of One's Own* is a classic. I needed this room of my own.

Anna Doel:

Thinking back to fieldwork, could you tell me more about it? How was it organized when you were doing it, and you were doing it for decades. What led to it?

Sarah Hrdy:

I had no training. I had been invited on a safari with the former husband of an aunt, Ed Hudson, who was taking two of my favorite cousins and their girlfriends on a safari, and I was invited to come, and it was a wonderful opportunity. I didn't hunt, but I went, and my younger cousin also didn't hunt, so we watched birds. When it was over, I thought, "I'd like to learn more about this..." Oh, by the way, I was already accepted at Harvard and I was going to be starting graduate school that next fall, and so I had no training whatsoever in studying animal behavior, but I definitely knew that I wanted to go to India and study these monkeys I'd never seen before, these langur monkeys that I'd heard that, because they were crowded and supposedly killing their babies.

And so, I thought I should stay here longer, and I went to see Louis Leakey, who I'd heard of, read about him in a Spanish course in a Spanish language *National Geographic* article when I was at St. Timothy's School, and he said, "Oh, well, you should go to Tigoni." He said, "Go stay at the Tigoni Primate Center outside of Nairobi," where Neil Chalmers, then a young primatologist, was studying infant care and various things about infant care in old world monkeys there. Neil was tearing out his hair because Louis kept sending these young women to stay there, and some of them were just taking advantage of an old man, really, but I actually wanted to learn something.

And Neil Chalmers handed me Pru and John Napier's *Handbook of Living Primates*, with his wonderful pictures and capsules of the different species, and they also had a number of the Old World primates there in the Tigoni Primate Center. And I was assigned project, Neil was very interested in whether or not infants in arboreal monkeys were restrained more and kept closer by their mothers who don't let them wander as much. While I was collecting data for him, I also was doing what became my first study of aunting behavior—that's what we called it back then—when a female other than the mother takes care of another female's babies.

So that was my introduction to primatology, and it was the only training I had when I the next summer I finally went to India, to Mount Abu. I was actually on my way to Darwar in southern India where a Japanese team had first reported infanticide in Indian langurs, but by the time I left, a report had come in from an Indian team studying langur monkeys at Jodhpur, the University of Jodhpur in Rajasthan, so I went there first to talk to S.M. Mohnat, who was working with one of the grand old men of Indian zoology, M.L. Roonwal, a very fine man and a wonderful zoologist. And S.M. said, "Why don't you go to Mount Abu instead? It'll be healthier for a young woman on her own." Mount Abu has a beautiful hill station at an altitude of 4,000 feet.

I went to check it out, and Mount Abu was perfect because the monkeys there were spending time in town where they were provisioned and living at fairly high densities and then were also spreading out into the forest, where they lived at much lower population densities. Good, this is exactly what I wanted, some natural experiment. I can see if infanticide is happening where they're crowded. This was my starting hypothesis, that it was due to crowding that male langurs were behaving in such a bizarre, maladaptive way, killing babies. The whole project was

incredibly naive. The idea that I could do any of this, and with a rare phenomenon like infanticide, I could go out and study. Nevertheless, that is what happened.

I didn't tell you how I got that hypothesis. We probably should go back to when I graduated from Radcliffe. While I was at Radcliffe, my honor's thesis was a structural analysis of Mayan myths. I graduated in 1969, a year later, because I'd taken a year off to go to Africa once before. Anyway, I was traveling in Africa and South America and collecting information having to do with my honors thesis.

Anna Doel:

Sarah, if you don't mind my asking, how did you pay for the traveling?

Sarah Hrdy:

Well, the first time I went to India, I think my mother gave me \$500, which was enough for a round trip ticket back then, and my living expenses in India were very cheap, so it was a gift-

Anna Doel:

Did you have to ask your mother for that?

Sarah Hrdy:

I don't know. She was happy to do it.

Anna Doel:

It's not that you had a pot of money of your own, right?

Sarah Hrdy:

I probably did, but I didn't know it. I was the heiress to spare. I was the third daughter, and by then there was a son. I never thought much about money (which I realize is an extraordinary thing to say) but I didn't, and don't recall.

Anna Doel:

But by then, you had rejected the whole southern debutante path, right?

Sarah Hrdy:

Yes, but I certainly maintained the proprieties and came home and was very respectful to my parents. And I went through with the debuts in Houston and in Newport. My debut party was all decorated with Mayan temples. And when *The Black-Man of Zinacantan* was published in 1972, it was temporarily a bestseller in Houston because all my mother's friends bought copies, and I fear they were surprised. It was totally unreadable for them. But that was then. I really did become, I think, a different person, but I never left that behind me. I still pay attention to what I wear, how I do my hair, tell my children what they can wear, what they can't wear. They wish I wouldn't.

Anna Doel:

And were you keeping in touch with your siblings as well at that time when you were away from home?

Sarah Hrdy:

I was very close to my immediately older sibling, and very much loved my younger sister, who's had a very tragic life with many mishaps. Well actually none of my siblings have had happy lives. My older sister is now a born again with her own version of "motivated reasoning", a MAGA Republican par excellence. I don't want to talk about it.

Anna Doel:

That's fine. Pretty much all of us have at least one family member whose political views are very different.

Sarah Hrdy:

Interestingly, my favorite cousins, all my favorite cousins, I refer to us as the "Texas refugees", are now living in California, one of them is teaching history at the University of San Francisco, another cousin is growing grapes over in the Napa Valley. We needed to get out of Texas though, we just did. And I keep telling my cousin's daughter, who married my son's best friend, "Don't go back to Texas." She's under a lot of pressure to do it. They're offering her all kinds of goodies if she'll just come back. Do not go. I lived there once again when we lost our permission to work in India.

Anna Doel:

Yes, I was going to ask you about Houston and how you went back for a while with Dan.

Sarah Hrdy:

I rented my mother's house and I lived there with our first daughter, Katrinka, a wonderful opportunity for Katrinka to get to know her grandmother. And by then, I had an identity. I was employed, I had to go to work every day, and my mother was very respectful of that. My father was dead, and my sisters were all living someplace else, except for my younger sister, who I've remained very close to.

Anna Doel:

I am also curious, you've spent so much time in India, have you adopted any of the culture?

Sarah Hrdy:

Well, one of the benefits of fieldwork in India was that I could spend a lot of time with these monkeys that were habituated. One of the downsides though is I was with animals, not with people. I did make some good friends in Rajasthan and stay in touch with the widower of one of my close friends to this day, and with his children. And our former landlord, I stay in touch with his daughter, Uma, and a little bit with S.M. Monnot who sadly died earlier this year. But I was not embedded in Indian life. I did learn that the best meals to be had in India then, with obvious reasons, because of the whole tradition of the caste system and who could cook for you and who couldn't and so forth, at the time, there weren't really good restaurants, but boy, there was

wonderful food if we were invited to dinner in somebody's home. And my good friend, Nirmal Kumar Dhadhal, I came to know his family. He was a birdwatcher. And he really knew the monkeys, and I trusted him. And I loved him very much, but he's long dead. It's a strange story. I wasn't there then, but they said he went mad, and they had to chain him to his bed. I don't know what happened.

I am in touch with a young naturalist in Mount Abu now, who I've never met in person, who is working to help preserve the ecosystem. Since I was at Mount Abu, there has been a nature preserve set up there, and there's some very rare birds, beautiful avadavats there. And he's also worried about tourists feeding the langurs, who come out on the roads and get run over. Mount Abu changed a lot. Of course, it's very built up. And it was on the way, even then. There was a cottage industry. You couldn't cut down wood in the forest, unless it was dead wood. So there was a cottage industry of making dead wood. And I don't know what's going to happen. And there's climate change. They just had their first cyclone, which Mount Abu typically didn't have. And of course, I'm worried about fires there.

Anna Doel:

How much did you rely on the help of locals in your fieldwork?

Sarah Hrdy:

Not at all, other than people who were running the houses where we stayed. It wasn't a big project. It would have been, later on. But remember, this was just basically me for a number of years. And then, as the work became known, both the Smithsonian and the NSF became much more interested. And that actually was the kiss of death, because there was money involved then. And people wanted access, I think, to these resources. And we were seen as a threat, perhaps to others more.

But it was more complicated than that. Our biggest problem came from Rajasthan's chief game warden, Kailesh Sankhala, who was known for his beautiful tiger photographs. And the students who were with us, in particular Sylvia Howell, really wanted to work in Rathambhore tiger sanctuary where we were working with the local warden, a wonderful man, Fateh Singh Rathore (Keep in mind that one of the main criticisms of my work then was that the supposedly "abnormal" attacks on infants I was observing was due to human disturbance and Ranthambhore was free of human occupation). Fateh Singh was completely supportive and on board. But I think his superior, Sankhala, felt threatened that we might take photographs of tigers, too. It was absurd. And the Jodhpur crew wanted us based at Jodpur, because then they would have access to the jeep and equipment that the NSF was funding. So, I think that probably, they were in cahoots. Supposedly, Professor Vogel of Germany was helping them. But I don't believe that and am convinced that statements attributed to him at the time were misquoted.

There were articles in the newspaper about how we were dangerous to the monkeys and working for the so-called "Defense Pathology Organization" of the US, whatever that is. Because we were going to be trapping monkeys to take some blood. That was the only way to do DNA back then. And Indian langurs are sacred. And we would be releasing them right away. But this was terrible, and it was brought up in Indian Parliament. It was debated. And poor Dan lost almost a year of his life going back and forth between Delhi and Jaipur, trying to get permissions back. And the medical students were also just left in limbo. Poor Sylvia was starting to chain-smoke and lose weight and I was taking Valium. It was a terrible time. We were never actually thrown

out. We were allowed to remain in India, but our research permissions were suspended, and we couldn't observe monkeys. By then, I had two children, and I didn't want to start fresh someplace else.

Anna Doel:

So what happened?

Sarah Hrdy:

We gave up. The last fieldwork was in 1979. *The Langurs of Abu: Female and male strategies of reproduction* (based on my PhD thesis) had been published in 1977. Work after that wasn't in it, but I gave up. What can I say?

Anna Doel:

Is this around the time that you pivoted from monkeys to humans?

Sarah Hrdy:

Yes. It was a project studying human inheritance patterns that I could do close to home. It led to some interesting things. Together with another lapsed primatologist, one of my graduate students at UC Davis, Deborah Judge, who had been working in primatology but had two children, who were very good friends of my children. We were testing predictions from the Trivers-Willard hypothesis by analyzing last wills and testaments. Very tedious work in dry dusty courthouses. But Deborah devised a system for working out quantitatively what proportion of estates were given to different offspring. And these are public records. And we ended up looking at wills in Sacramento County, between the 1860s, when it began, and 1960s. And then Suffolk County, Massachusetts, going back to colonial times. And it was interesting work, and it was Deborah's PhD thesis. I did the Boston wills. And they were really interesting to see these laws. The hoops men would go through, to avoid leaving their widows their widow's dower. That was fun.

And it led to one of my favorite papers. It's not often cited, but it's "Darwin and the Puzzle of Primogeniture" by me and by Deborah Judge. Darwin thought primogeniture was a terrible thing, because it was against natural selection. But he himself believed in equal treatment, but only equal treatment of his sons, not equal treatment of sons and daughters, which was of great interest to me. We talked a little bit about how history interacts with evolutionary predispositions. So, I did a lot of work on parents preferring one sex or another. And how in some animals like coypu it's automatic. A mother in good condition will give birth to more sons than daughters. But in humans, that doesn't happen. Discrimination, where it occurs, occurs after birth. I think this is because humans are so flexible and the circumstances leading to sex preferences depend so much on culture and history. Any fixed rule of biasing sex ratios would lead to maladaptive as often as adaptive responses. These days there is a great deal of documentation for that.

Back in 1989 when I gave a plenary address at the physical anthropology talking about "Sex bias in Nature and in History", I was already interested in historical factors that would only become more important to me over time, as in *Father Time*, where I had to trace how cultural constructions of being a father change through time, in response to economic conditions, and environmental conditions and social trends. But I remained interested in how these processes interacted with much older evolutionary predispositions. And that's really what the book, at one

level, is about. So the time on wills wasn't wasted. And Deborah of course has gone on to a fruitful career studying parental investment. She is now working in Timor, looking at parental investment there. But it's probably, again, no accident that I would be interested in sex biased inheritance. I grew up in a part of the world where sex biased inheritance was very much part of life and primogeniture still practiced. It wasn't just in England. It was in the U.S. as well..

Anna Doel:

Could you talk a little bit about one of your most influential books, *The Woman That Never Evolved*? And the first edition came out in 1981, right?

Sarah Hrdy:

Remember I was an unemployed, self-funded postdoc when that book came out. And I figured, this is going to be the end of my career. If I ever had a career, this is it. Because anthropologists wanted nothing to do with sociobiologists. We had to whisper in the hallways. And that did a lot of harm to this fledgling field. It denied this fledgling science its proper maturation in the social sciences, in the human social sciences. It went on and prospered in animal behavior. Animal behavior today is now 90% sociobiology. And you go to the animal behavior meetings, and all the talks are... The hypotheses are well constructed, and people are generating predictions, and they're testing them with really excellent methods. And not so much in the human evolutionary sciences, but they're getting better. They're definitely getting better. Things are improving.

So, sociobiology had to go underground. It resurfaced over in the social sciences. And when it did, it happened to resurface over in social psychology, which was of course, the weakest, theoretically, of all the social sciences. So they adopted, unreformed, the 1970s evolutionary theory, without ever going through it. Over in biology, evolutionary theory was changing fast, and all this focus on development, and phenotypic flexibility, and epigenetics was coming on board. It has taken time for that to come into the human social sciences. But anyway, back then, social anthropologists wanted nothing to do with anyone with a biological perspective. We were stained. It's unfortunate that many of these people weren't reading what was being written. And if they paid attention, they'd realize that what Ed said in chapter 27 of *Sociobiology* was what was already in all the textbooks, in biological anthropology. That wasn't sociobiology. That was physical anthropology. That was just 101.

And they forgot that this guy was really a hardcore entomologist and a biologist, and he was just taking their word for it. And he actually gave chapter 27 to all of us to read. All of us had seen chapters of it. I'd only seen a few. I didn't have much impact. I was just a graduate student. But he gave it to Irv DeVore to read ahead of time, and Irv later told the scholar Ullica Segerstrale who wrote *Defenders of the Truth*, "Oh, I never saw it." Of course, he saw it. Ed gave it to him. We all had had mimeographed or Xerox copies of it. He didn't read it. If he had read it, he would've seen that blooper. There were various bloopers in it, but the big one, from my point of view, was the one about in hunter-gatherers that women stay back at camp, and men go off and hunt and bring the food back.

No! And it was the Harvard Kalahari Project that had actually documented 60% of the calories come from food gathered by women. These women are walking thousands of miles, and they're carrying babies on their shoulders and walking. This wasn't right. If Irv had only read it, he would've corrected Ed, and saved so much grief. But anyway, he didn't read it.

Anna Doel:

I am curious about your other book, *Mother Nature*.

Sarah Hrdy:

Oh, I never explained about *The Woman that Never Evolved*. So I thought, "This is going to kill my career." And that feminists were going to hate it, because I was talking about sex differences as if they existed. And I ran into a stroke of good luck. This woman called, last name was Henry, reviewed it for *Off Our Backs*, the lesbian radical newsletter, out of Washington, D.C., and said, "Oh, this is thoroughly feminist on every page." She knew some biology. After that, people in women's studies thought, "Okay, we can't attack her for being sexist, maybe." So they'd sort of nodded at the book, put it on their reading lists, but they weren't really reading it. And there was also residual hostility. I remember going to talk to the women's studies department at Princeton in 1995, so it must've been about female sexuality and patriarchy. And the questions were so hostile.

They said, "Why are you privileging heterosexuality?" And I said, "Well, if you're a biologist, reproduction is where the rubber hits the road." And I went back years later and was talking about motherhood. For feminists, I think, motherhood is an even more contentious subject. Yet these were young women who were eager for this information and to understand what biology meant for them. Things were really changing. Natalie Angier's book, *Woman: An Intimate Geography*, had come out, along with her columns in *Science Times* that convinced women readers that it was worthwhile to consider biological perspectives.

This stuff is not necessarily sexist. It's just that some areas of science have been incredibly male-centered, androcentric yet nobody complained about "masculinist bias". Feminism was a dirty word, yet biology and animal behavior then were permeated by androcentric biases. There were biases on both sides, but when feminist approaches led to correction of previous biases, science comes out ahead. I didn't see myself particularly as feminist. Though, because of the situation, if people address me as a feminist, I wouldn't hide from it. Rather I saw myself as expanding evolutionary theory in order to include selection pressures on females as well as males, on immatures as well as matures, on allo-parents as well as parents, on fathers as well as mothers, rather than on males, which is where the focus had been up until the end of the '70s. And I don't know why I did that. Where was this coming from? It was like another person. I wasn't brought up to do that.

Anna Doel:

In your book, *Mother Nature*, what were your primary sources, or data if you would rather call it that?

Sarah Hrdy:

My prime resource was my own emotions. The ambivalence I felt about being on call 24/7, night and day with the baby while my husband went off to work. I didn't understand why I should feel that way, if I had evolved just wanting to promote the interests of this little gene vehicle. That's what my colleague Volker Sommer calls our children, little "gene vehicles". Obviously, I had not evolved to be a single mother. It turns out no one, no human has. Apes in the genus *Homo* evolved relying on a lot of social support from others. Mothers today still need a lot of support.

We didn't know that, then. Science didn't know that, then. I think some cultures knew that. A lot of cultures knew that. But science and evolutionary biology didn't understand that.

As a mother I was fortunate in having been influenced—I still had it—by my dog-eared copy of Bowlby's *On Attachment*. Unlike my mother, I realized that my baby was in her rights wanting someone constantly to hold her and not to be left alone and all that. I knew that from mid-twentieth century psychiatrist John Bowlby. What John Bowlby didn't understand, though, I think over the course of his career he came to learn it more, and I think Mary Ainsworth may have helped him expand his model, to include people other than the mother herself. But back then, attachment theory was really about mother-infant bonding. And of course, over in developmental psychology, in academic settings, it just took off on steroids. And it led to things like this attachment parenting, which is really hard on mothers. But the attachment theorists themselves, the serious ones, are very aware of what's happening. In fact, I was so happy earlier this year, when I received the Bowlby-Ainsworth Award. I didn't even know such an award existed. I didn't even know who these people were. Psychiatrists and psychologists, not my normal tribe.

But I was delighted, because Bowlby has been so important to me, and his insights are so important to me, and important to my children, and important to all of us. Of all the evolutionary psychiatrists and psychologists, no one has done more for human wellbeing than John Bowlby. But his theory does need to be revised and tweaked. And we need to understand that it's not just the mother, but mothers and others that are very important. And the kind of contingent commitment mothers have towards their children is very much linked to how much social support they can expect.

Anna Doel:

It would be wonderful if you could talk here about your own experience with balancing a professional life and a family. And you did mention earlier that you wanted a family.

Sarah Hrdy:

I must have, but I wasn't aware of it. When Dan and I first married, I never thought about children. And we didn't have children. We married when I was 26. I was 31 before I had children. And Dan said, "Oh, well, you'll just forget them in the supermarket." Meaning that I'm absentminded. I was about to leave for Africa and Dan was doing his internship in Michigan, where we had never expected to be. He didn't get his first choices. I gave up my lectureship at Harvard, and we moved to Ann Arbor. And I really wanted to do more. I was unhappy and eager to go to Africa to do fieldwork in Madagascar, when I learned I was pregnant.

I had an abortion right before I left. It was just a few years after *Roe v. Wade*. The availability of that choice was life-changing for me. It made a tremendous difference to have that freedom. I only had to do a day of counseling, and I remember the best sleeping pill I had ever been given was after that. It wasn't traumatic. And then, off I went. But yeah, to lose reproductive autonomy... I don't know if you're aware of what I've written on this, detrimental to women for sure, but there is also no more awful thing than for a child to be born unwanted. And the unwantedness is lifelong. My younger sister was an unwanted daughter, and I saw what it did to her, and it was awful. My parents wanted her to be a boy. No child should ever grow up unwanted, and I wanted my children to grow up under very different circumstances than I had witnessed.

But I was aware of my limitations and knew enough to realize that. I know more now, because of my dear, recently deceased friend, Mary Main, who was a disciple of Mary Ainsworth, and who wrote about how attachment experiences carry over into later life of a mother's own willingness to give of herself to her own children. And I knew that given my own upbringing, my battle-axe of a grandmother, my mother who loved her children but didn't know what to do and didn't know what we needed, and a series of nannies. And if they got too attached, "You better fire them because you're going to lose your influence, Mom." And that's always my first advice to anyone who hires a nanny is, "Okay, you can do that, but don't ever be jealous of her."

I knew we were going to need help. By the time I was writing *Mother Nature* and was figuring it out, I knew I needed a lot of support around us. At one point, we had a nanny and during a time of transition two au pairs as well. And that particular "nanny", Guadalupe de la Concha, who is so much more than that term implies has lived with us for over 30 years, and we are very much her family and she ours, and our grandchildren are her allo-grandchildren. My son certainly loves her as much as he does me, perhaps more, and his children feel the same way. And they're lucky. It was like having an in-house grandmother or aunt.

Anna Doel:

Could you say a few words about your children?

Sarah Hrdy:

I'm enormously proud of all three. They're very accomplished, each in their own way, and like their father Dan, extremely athletic. I reared a family of jocks, and their teammates and coaches became the extended family that helped rear them. Katrinka was a varsity rower all through college. Today she teaches world history at the Ethical Culture Fieldston School in New York and has done so for years. She married her sophomore sweetheart from Harvard, who also wanted to be a teacher. They graduated from Harvard and went right into teaching, and she taught at Ethel Walker and then Fieldston. And then, they went back to graduate school at Columbia, and both got master's degrees in different things. And then, back into teaching. These are young people who could have done anything, but they wanted to be teachers. And she's a wonderful writer, very creative. She has two children. And my son-in-law is a prince among men. He's the star of the new book, *Father Time*. Big picture of him in chapter one, bathing his baby.

And then, there is my second daughter, Sasha, who was born one week before the first International Conference on Infanticide in Animals and Men. My co-organizer, Glen Hausfater said I could not bring a baby into the auditorium where the conference was being held. At that time, Kathy Horton, Ed Wilson's wonderful research assistant, had a friend who had a year-old baby, and she had lots and lots of milk. She breastfed Sasha during the day, and I breastfed her at night, so that she'd still be breastfed, and we could take her to this conference. And I would be able to sit in the auditorium without breastfeeding for hours at a time, without my milk building up too much. And I hired a nurse who went with us to Ithaca for this. And it must have seemed very strange to the taxi driver taking me and another participant in the conference who was about seven months pregnant. We had these... What do you call them? Stickers, for our meeting saying, "The First International Conference on Infanticide in Animals and Men."

But of course, there simply are no acceptable infanticide jokes, and you cannot laugh. People hate the topic, and they don't like hearing about it. And as several who have studied it may have

noticed, it's a total career killer. You just don't want to study infanticide, except as it turns out it has played a very important role in the evolution of parental behavior in many species, including our own.

Anyway, like Katrinka who went to Milton, Sasha also went away to school, to Andover. Coming from rural northern California, it was our way of ensuring they got a good education, and both are wonderful schools. At Milton Katrinka was a field and track star, and then spent a year in France, where she did *le marteau*, essentially throwing a heavy hammer. We call her "Powerful Katrinka". Her first day at Harvard she was in Harvard Yard the first day when an assistant crew coach walked by and poked Katrinka in the chest and said, "You, I want you to try out for crew."

She loved it and rowed for the Radcliffe varsity crew every year, all four years in college. Except, she had back surgery one of those years. And I have to caution anyone who does crew, it is probably not good, if you have any vulnerable vertebrae. Dan who played all-state football for Utah and then later on competitive squash, has had two back surgeries, with the same vertebrae. Anyway, she paid a cost, but boy, she loved it. And the women... There's a picture of Katrinka and her crewmates in their prom dresses, and they're showing their muscles. Title IX and team sports have done so much for women. And these women, if there was ever a catastrophe, like 9/11, Katrinka's teammates is who I want to be with. They'd look out for each other. And they're so strong, and so able. I loved them. Katrinka is still good friends with her crewmates, and it's just a very special relationship.

Sasha went to Andover and was also athletic, the captain of her tennis team. And then to Harvard, and in squash training, but immediately injured herself, referred to by the squash coach as "dead meat", so that was the end of Sasha and squash. What she loved was chemistry. She had a teacher at Andover, named Temba Maquebela, from South Africa, and now the headmaster at Groton. Maquebela had been part of the resistance against apartheid, had known Mandela and Bishop Tutu. I met Bishop Tutu once, and I loved him. And I spontaneously... I can't even believe I did this: this tiny man, after he was leaving to go back to his prostate surgery in South Africa, I leaned over and kissed him. I had never even met him before. I loved this man. A lot of free association here....

But anyway, Sasha loved this inspirational teacher, whose goal in life was to make women love chemistry. And Sasha did. This is a young woman who in grade school loved grammar. Later, she loved chemistry. She went to Harvard, planning to study chemistry but found out that if you study chemistry at Harvard, if you want to be in the honors program, you have to work in a chemistry lab in the summer. She said, "This is not for me." Sasha switched to History and Science, loved it and prospered winning Harvard's Hoopes Prize for her senior honor's thesis about two 16th century Spanish mystics and how they thought about interactions between the body and the soul. Sasha had two wonderful mentors there, Katie Park and Mario Biagioli, and also with a friend found time to found *H Bomb*, celebrating "Brilliant brains and hot bodies", a literary magazine, Sasha said, that people might actually want to read. That magazine sold more copies the first year it was published than my books have in my lifetime. Anyway, Sasha loved the history of science and went on to the University of Cambridge, for an MPhil in Philosophy and History of Science before realizing that she could still do what she wanted to do – research and writing—and also get a job if she went to law school at Berkeley. Sasha was named for my mother, who had wanted to go to law school, and that is when Sasha started to use her legal name, Camilla, which was my mother's. But we still call her Sasha. After law school at Berkeley,

she did fellowships at Penn and Yale, loving Yale's intellectual property program. Today she teaches law at the University of Akron. If you look online, you can see some of the things she's writing. For fun on the side, she and a colleague are also writing about patent law and science fiction, which is just nutty, but she loves it.

My younger son, Niko did okay in school, but what he really cared about was sports. Blessed with extraordinary hand-eye coordination, the year he graduated from high school he was one of the top American-born college squash players in the U.S. When some years after college he said he wanted to go back to school, to Harvard Business School, I was surprised and said, "Sweetie, you don't like academics. Why do you want to go back to school?" He said "Because business is what I am interested in He loved it and he was good at it. And he just blossomed and bloomed, and now that's what he does, that and raise his 3 children with a level of commitment that has astounded me (so much so that his and my son-in-law David's roles as fathers really provided the catalyst for *Father Time*). I guess the moral of the story is, you have to believe in them and let young people find their way to what truly interests them. And you don't interfere with anything. I've always said that unless they're getting ready to marry a drug dealer, you don't interfere.

Anna Doel:

Now, it would be a very good moment for us to talk about your husband Dan and Citrona Farms.

Sarah Hrdy:

Yeah. Dan and I met at Harvard, in William Howell's class on Fossil Man. Years later when I was being given the Howells Prize for *Mother Nature*, I got to joke that it was "love at first sight. He was the only one with any flesh on him." The dedication to that book reads "To Dan, the best choice this female primate ever made." And I am repeating that line again in the acknowledgements in *Father Time*. I mean, I am so grateful. There's never been anyone in my life I trust so much. And he's been so supportive of anything to do with my work. I still remember the day at the farm when he came up and he had a letter in his hand and he looked so pleased. And I said, what's that? He showed it to me, and it was this letter saying I was going to receive an honorary doctorate in science from Harvard. His smile meant even more than the award. This is a husband who has given up a lot for me and has buffered me from so many challenges in life. It's been a wonderfully companionate marriage and I truly cannot imagine how I possibly could have spent over half a century sharing with and married to anyone but him. The children are as dedicated to Dan as I am. That tells you a lot, doesn't it, when children both revere and love their father? The reason we were married in Katmandu instead of a wedding in Texas was because my father's family and my older sisters were generating such ugliness about our union. So, we eloped. We married in Kathmandu while I was on my way back to Mount Abu and Dan was on his way to the Solomon Islands where he was working on the Harvard Solomon Islands project.

Well, I forget what I was going to say. There are so many women with so much talent for science who've had to give it up because of the way academia is structured. Because of the way science is structured. Because of the demands on them if they have a family. Because of the kind of daycare that's available, or more accurately in the U.S., unavailable. Increasingly because of the kind of reproductive care that's available. I've been buffered from many of those constraints, and I am acutely aware of how privileged I have been and don't quite know what to do about it. Culture is hard to change. Administrative bureaucracies are hard to change. I'm really glad that

Sarah Bennett, daughter of my wonderful former Harvard Press editor William Bennett, is working at Harvard now to make daycare more available for women at Harvard. It's changing gradually. And when I was at Davis still teaching, we bought an apartment across the street from the department, where graduate students could come with their children, and they could hang out there waiting to meet their babysitters so they could still go to seminars and such.

We had no proper insurance, no accreditation. This wasn't a proper daycare center. It was a bad idea in that sense. It depended completely on the honor of the people using it so people wouldn't take advantage of it. And no one did. But we need that kind of buffering for women to pursue their careers. And the Radcliffe Institute, as it was originally envisioned by Radcliffe president Mary Bunting, was set up for that. And the first generation included women like Maxine Kumin and Anne Sexton and artists like Marianna Pineda and Tilly Olsen. Tilly Olsen had to combine housekeeping and making a living and all these children with her writing. Mary Bunting wanted an institute that would foster such women's creativity.

And I'm not sure we have enough of that now. And I don't think institutions are sufficiently aware of the need. Though some are becoming more aware of it. I mean, I am preaching to the converted here. But we do need more of that. And I have noticed that Mary Bunting's institute, the Radcliffe Institute, has actually become more like support for people who already have an awful lot of academic support. But what about the women who got left out that Mary Bunting was worried about? Maybe there are not as many of them now. Maybe there are other resources that I'm not aware of. I don't know. What do you think?

Anna Doel:

Well, you just said a moment ago that a lot of institutions are becoming aware of the situation.

Sarah Hrdy:

Well, Harvard is.

Anna Doel:

Now, it is true. However, I know this from interviews with other women scientists and from my own work in history of science, that institutions are becoming aware of it because there are women scientists who make their way to committees or form committees who hit the institution on the head with a hammer about these things. Otherwise, the institution would not budge.

Sarah Hrdy:

Like Nancy Hopkins and the women at MIT.

Anna Doel:

When you are saying you are preaching to the converted, they have only been converted for a week. A lot of them, sadly.

Sarah Hrdy:

Are you interviewing Nancy Hopkins?

Anna Doel:

No, I don't think so.

Sarah Hrdy:

I listened to Kate Zernike's book on Audible. All my reading that doesn't have to do directly with my work is on Audible now. I love it. Books like Zernike's are so important, but what these women went through, all too familiar to me, made my blood pressure go through the roof. Partly of it, of course, was frustration with how these women were treated. And the behavior of men like Landers and others at MIT was appalling. But I also was frustrated because it took Nancy so long to see what she saw later in life. I too of course was naïve, but actually evolutionary perspectives in my field helped me, because I could see patriarchal arrangements going back in time and take into account some of its pre-hominin roots. Patriarchy is of course very cultural, but the tensions generating it go far back in evolutionary history, long before humans. But I remember my own awakening being partly due to a young firebrand of a historian at Harvard, who was writing about southern plantation women. Her name was Catherine Clinton. Do you know her or her work at all? I don't know where she is now. This was decades ago.

Anna Doel:

I'm not sure. I'll have to think about it.

Sarah Hrdy:

This was decades ago. But she was over at my house for coffee or lunch, or something. And she started to explain to me what patriarchy and sexism was about in the South and how it currently played out at Harvard. And it was like, "Oh." And the other thing is I was seeing this work, the early primatology was so androcentric, it was all about these male baboons competing with other male baboons in order to gain rank so they could have access to a number of females. And of course, this is what was happening at Harvard. And when these professors were sleeping with students and pressuring people to sleep with them, they would back each other up. And none of us could complain about it at that time or point it out.

And when I talked to women colleagues today, my age, we feel guilty that we didn't speak out more sooner, the way women in the MeToo movement are doing today. And that kind of started in anthropology. Even before it got to Hollywood, anthropologists were talking about it. But the thing is, I doubt it would have made any difference, not back then and we knew it difference. The couple of times I brought it up, I would have even supportive male professors say, "Oh, Sarah. Don't go there." And there were letters that I wrote to President Bok that I burned in the toilet because I knew this was not a good idea.

And Harvard, I guess they're getting better. I mean, presumably they are. I don't know. It was particularly bad in my field, I think, because of fieldwork. These women-

Anna Doel:

Oh, yeah?

Sarah Hrdy:

Yeah. I remember almost weeping when I was in Kyoto at the primatology meeting. And the Indian Science Foundation had sent a representative, this very sympathetic man who said that he

thought that women field workers in India should be assigned a ranger to be with them to prevent any possible rape from happening. And I thought, oh my God, they're recognizing that this is a problem. This is important. But then I also saw there was another problem, which is, it would make work by women more expensive.

And of course, we've had these archeologists say, "Well, we don't want to take women to the field because we don't want any trouble." It's a double-edged sword. The absolutely critical thing, and I think you've put your finger on it earlier, has been this critical mass of women. And for me, it was a game changer to have women colleagues my own age that I could talk to. Earlier, the only women I could really talk to were graduate students and other people's students. And we couldn't meet as a conference of just women, which would be considered sexist. So, we had house parties, and then we talked and when you get women together, it all comes out. It doesn't come out when we're alone so much. Your point about critical mass.

Anna Doel:

You couldn't meet at a conference, like have a women's caucus?

Sarah Hrdy:

I remember some decades ago there was a biological anthropologist named Adrienne Zihlman who felt strongly about sexism in her field and felt she was discriminated against because of her sex by paleontologists. Probably true. I don't know. So, she organized a conference of all women, and people were all over her for sexism. Even though all-men conferences have been going on for decades, this one was slammed as "feminist". And of course, the fact that theirs had been masculinist was not relevant. But now it is. But I don't think any of what's happening now can be taken for granted. It definitely cannot. And I think Texas is proving my point. Who could believe that this would be happening? Who could believe the Supreme Court? Who could believe it? And all those references in the Dobbs decision to 17th-century British Common Law when husbands owned their wives and it was legal to rape your wife. I mean, the idea that such a critical life decision could be based on that kind of motivated reasoning. It's incredible. And yet it's happening in other places too. Russia, India.

Anna Doel:

Sarah, I quickly looked up Catherine Clinton to refresh my memory. And guess what? She is now at San Antonio, Texas.

Sarah Hrdy:

Oh, God, I bet, I hope. I'm sure she's supporting Wendy Davis. .

Anna Doel:

She teaches at San Antonio. Isn't that amazing? University of Texas, San Antonio.

Sarah Hrdy:

Okay. I will contact her.

Anna Doel:

There's hope. There's some hope.

Sarah Hrdy:

Maybe. Maybe. I thought it would be hard. You see what they're doing in Florida?

Anna Doel:

Oh, I know.

Sarah Hrdy:

You probably know more than I do because I am in rural California.

Anna Doel:

Sarah, could you say a little bit about Citrona Farms and how that came about, and how this wonderful project continues?

Sarah Hrdy:

Yes. When my brother died, I had inherited an interest in a quail hunting plantation in Alabama. I don't hunt and I don't live in Alabama and don't go there. Anyway, my mother was willing to buy out my interest, and she was selling a shopping center in Houston. So Dan and I had this willing buyer and this pot of money that we could adjust the timing to. And we thought we'd always wanted to live on a real farm. We'd had a farm in New Hampshire, but the growing season is an oxymoron. We wanted to raise our children on a farm. But we wanted it to be self-sustaining so the children wouldn't have to sell it when we die. And so, we were looking for a place where commercial agriculture was still a possibility.

It had to be near a university with a medical school. There was the University of Virginia, but we didn't want to grow tobacco. Ditto Duke. At Cornell, the medical school is in the city, not out in the country. University of California Davis was the only place in the country that fit the bill. And Dan applied for a position there in infectious diseases and they wanted to hire him. And so, a position was made for me. I went from being an unemployed volunteer at my children's daycare center in Cambridge down the street from where we lived, to being a full professor, but with a right to be part-time at Davis. And I'm sorry to say, I think that provision is no longer there. I don't think you can be a tenured professor and be halftime.

When I mentioned it once at a lunch at Irv DeVore's where Laura Nader was present, she beat the table with her fist. And she said, "That's because of me." Apparently, she's the one who pushed that through at the University of California. I think maybe Arlie Hochschild is the only other person right now who has that. And again, this goes back to being buffered. The downside is, of course, I don't get a pension. I didn't get health benefits. Administrators were careful to keep me under 50%. So, they got a very good deal. But I got a good deal too, because I couldn't teach full-time and do right by my family. And in the end, it turns out I couldn't do all three anyway. There are the three things: research and writing—and the writing was so important to me—the teaching and administration, and the children.

In 1996, I wrote a proposal for *Mother Nature*. And to my surprise, there was a bidding war in New York for this book, a scholarly tome which I'm sure disappointed them after it came out.

But nevertheless, they bid a lot of money for it. And I said, "Okay, I can do whatever I want with this. The illustrations, everything's going to be taken care of." And so, I was going back and forth to Houston then too. And my mother was dying. My brother just died. And I went to see this really awful lady dean at Davis who misunderstood. At the time she happened to be having an affair with a friend of my husband's, who confided in Dan that he had heard we were having marital difficulties. Not at all. It was the insurmountable task for a mother and a daughter of juggling the demands of research, writing, teaching, administrative duties with family responsibilities.

I didn't want to be so conflicted all the time. And it was crippling me and wanted to work on this book (*Mother Nature*). But here's the upside. The dean was thinking about her bottom line and just said, "Well, if you'd like to be emeritus, that's fine." So I'd be emeritus. But without any of the benefits. There'd be no financial cost to the university. They'd get me off the books. They were trying to save money because by then, the UC system was strapped. So, they're getting me off the books, and they get credit for anything I do. But I get to quit with dignity and write. Given how controversial my early work was, I saw this as a boon. I don't believe we've talked about how controversial my early work on infanticide was just within anthropology, not within biology. In biology the idea that this could be an evolved reproductive strategy was accepted, and my sexual selection hypothesis soon replicated on many fronts. Predictions that it generated were confirmed. To this day colleagues from Biology still call me up and ask, "Sarah, what was that controversy about?" But objections linger on in the social sciences. Anyway, I appreciated being able to quit with dignity but keep on doing research and writing. So, that was good for me, my self-image, and my family.

Citrona Farms is really my base now. Have you seen on our website the list of all the people who've done research out here on hedgerows, soil, and carbon sequestration? We've planted more than 70,000 trees. And a lot of those trees are, of course, walnuts and commercial. But many of them are native trees and watching them grow is a great joy in my life. And we're putting in miles of these native plant hedgerows. And the research on hedgerows is gorgeous. It's showing what we've long suspected, that these hedgerows are great for pollinators and good refuge for wildlife, increasing populations of various birds, quail, for example. But they also play a role in carbon sequestration. Since we began this years ago, along with John Anderson on the next farm over, who started all this, farmers in many areas of California are getting the message.

And so, it's just good all around. And my favorite story is the story of the codling moth. We planted native oaks for habitat restoration. At the time, we had no idea that oak trees would not just increase acorn woodpeckers, but also bring in Nuttall's woodpeckers. Nuttall's woodpeckers are a major predator on codling moth grubs over-wintering on walnut trees. Codling moths are a walnut pest. So, we get to reduce pesticide use. We are doing some organic walnuts, but also some non-organic, and both kinds of trees. The codling moths absence is a big plus something we were not counting on when we began. Something else we weren't counting on 40 years ago was of course climate change.

I no longer know exactly what climate we're restoring this habitat for. The oak trees have a better chance than some other things do. The blue oaks for example are pretty dry adapted. But I have herpetologist friends who say that by the end of the century, there'll be desert tortoises around the capitol in Sacramento. So, I don't know. But if we are ever going to properly address climate change, sustainable agriculture has to be part of the solution along with cutting dependence on fossil fuels. Having habitats where organisms can adapt to change is another plus. . So, it's not

all lost. I suppose it might be less depressing if I actually studied climate change, because then at least I could say, "Oh, this is exciting." But it isn't. It isn't exciting. It's depressing. And we didn't count on fires. We anticipated floods and drought. But there is also the intensity of fires and the Anemoi. The ancient Greeks were sailors and knew that ultimately the winds were in charge, the Anemoi Nature gets the last word.

Anna Doel:

Sarah, is there something I haven't asked you about that you would like to comment on today?

Sarah Hrdy:

My mind is blank. I don't know.

Anna Doel:

This is a wonderful interview. Thank you so much for the conversation.

Sarah Hrdy:

Well, I'm just sorry you didn't ever visit us. I was hoping that you'd come, and I could show you the farm. And it's fun to see why the ancient Greeks were convinced that trees are temples to the gods. Don't come when it's 108 F, but we've had a mercifully cool and wonderful spring. And we only had a few days of 108 degrees. We were lucky this year. No fires yet, but the winds of autumn have still to come.