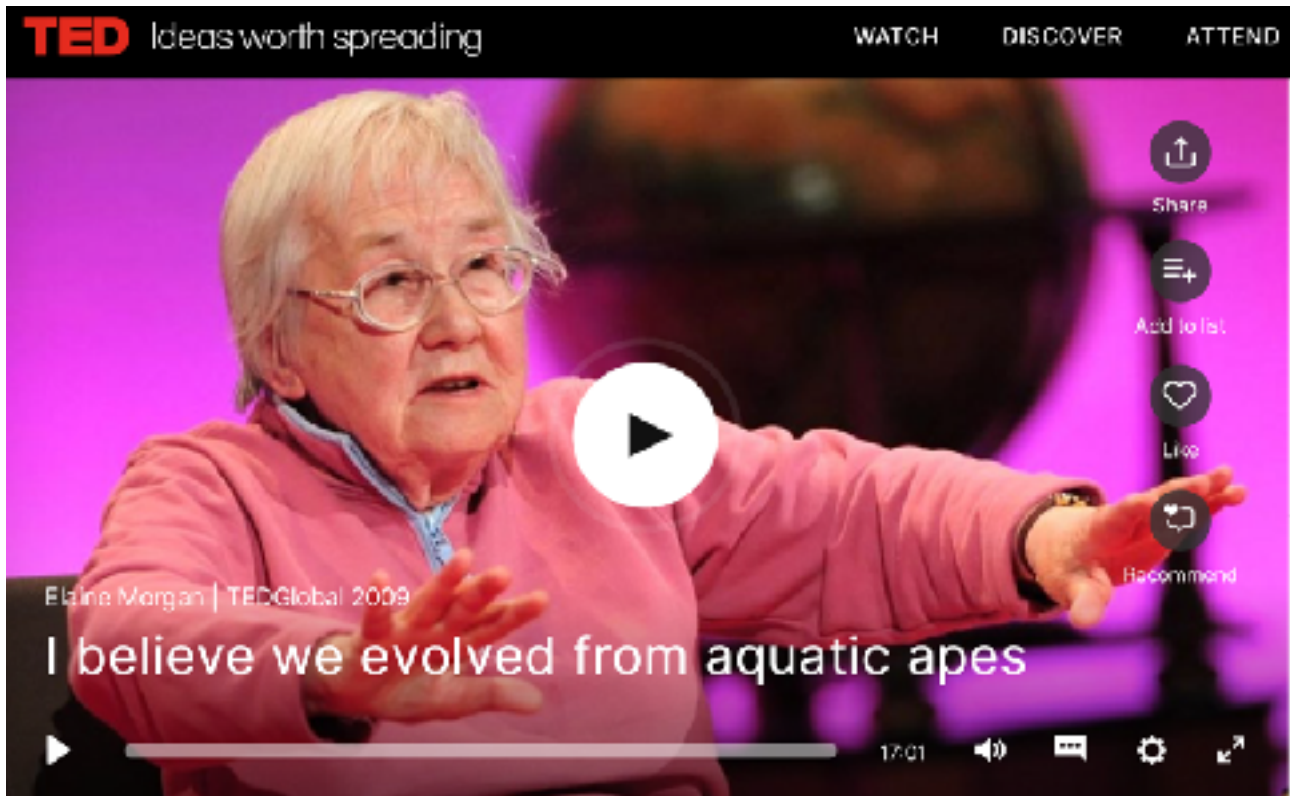


I believe we evolved from aquatic apes

Elaine Morgan 2009

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Well, this is 2009, and it's the bicentenary of Charles Darwin. And all over the world, eminent evolutionists are anxious to celebrate this. And what they are planning to do is to enlighten us on almost every aspect of Darwin, and his life, and how he changed our thinking.

I say almost every aspect, because there's one aspect of this story which they have thrown no light on, and they seem anxious to skitter up and step over it and talk about something else. So I'm going to talk about it.

It's the question of: Why are we so different from the chimpanzees? We get the geneticists keeping on telling us how extremely close we are, hardly any genes are different. Very very closely related. And yet when you look at the phenotypes, there's a chimp, there's a man, they are astoundingly different. No resemblance at all. I'm not talking about airy-fairy stuff about culture and psychology or behavior. I'm talking about ground-based nitty-gritty measurable physical differences. There, that one is hairy and is walking on four legs. That one is a naked biped. Why? I mean, if I'm a

good darwinist, I've got to believe there is a reason for that. If we changed so much, something must have happened.

What happened? Now 50 years ago, that was a laughably simple question. Everybody knew the answer. They knew what happened. The ancestors of the apes stayed in the trees. Our ancestors went out onto the plains. That explained everything. We had to get up on our legs to peer over the tall brambles, and to chase after animals, or to free our hands for weapons. And we got so overheated in the chase that we had to take off that fur coat and throw it away. Everybody knew that, for generations.

But then, in the 90's, something began to unravel. The paleontologists themselves looked a bit more closely at the accompanying microfauna that lived in the same time and place as the hominids, and they weren't savanna species. And they looked at the herbivores and they weren't savanna herbivores. And then they were so clever, they found a way to analyze fossilized pollen. Shock horror: the fossilized pollen was not of savanna vegetation. Some of it even came from xxxxxx within the middle of the jungle.

So we're left with a situation where we know that our earliest ancestors were running around on four legs in the trees before the savanna ecosystem even came into existence. This is not something I've made up. It is not a minority theory. Everybody agrees with it. Professor Tobias came over from South Africa and spoke to University College London. He said: "Everything I've been telling you for the last 20 years, forget about it. It was wrong. We've got to go back to square one, and start again." It made him very unpopular. They didn't want to go back to square one.

I mean, it's a terrible thing to have. You've got this beautiful paradigm. You've believed it for generations, and nobody has questioned it. You've been constructing fanciful things on top of it, relying on it to be as solid as rock. And now it is swept away from under you. What do you do? What does a scientist do in that case? Well, we know the answer, because Thomas S. Kuhn wrote a seminal treatise about this back in 1962. He said: "What scientists do when a paradigm fails is..." (guess what) "...they carry on as if nothing had ever happened."

If they haven't got a paradigm, they can't ask the questions. So they say: "Yes, it's wrong, but supposing it was right, and..." And the only other option open to them is to stop asking the questions. So that is what they have done now. That's why you don't hear them talking about yesterday's questions.

Some of them have even elevated it into a principle for what we ought to be doing. Aaron Filler from Harvard says: "Isn't it time we stopped talking about selective pressures? I mean, why don't we talk about chromosomes, and then genes, and recall what we see?" Charles Darwin must be spinning in his grave. He knew all about that kind of science, and he called it hypothesis-free science, and he despised it from the bottom of his heart. And if you're going to say, "I'm going to stop talking about

selective pressures" you can take the *Origin of Species* and throw it out of the window, because it is about nothing else but selective pressures.

And the irony of it is, that this was one occasion of a paradigm collapse where they didn't have to wait for a new paradigm to come up. There was one waiting in the wings. It had been waiting there since 1960, when Alister Hardy, a marine biologist said "I think what happened, perhaps our ancestors had a more aquatic existence for some of the time." He kept it to himself for 30 years, but then the press got hold of it and all hell broke loose. All his colleagues said, "This is outrageous. You exposed us to public ridicule. You must never do that again." And at that time, it became set in stone: the aquatic theory should be dumped with the UFOs and the yetis, as part of the lunatic fringe of science.

Well, I don't think that. I think that Hardy had a lot going for him. I'd like to talk about just a handful of what have been called the hallmarks of mankind — the things that make us different from everybody else and all our relatives. Let's look at our naked skin. It's obvious that most of the things we think about with loss of body hair, mammals without body hair, are aquatic ones, like the dugong, the walrus, the dolphin, the hippopotamus, the manatee, and a couple of wallowers in mud like the babirusa. And you are tempted think: "Well, perhaps could that be why we are naked?" I suggested it, they said: "No no no, look, look at the elephant. You've forgotten all about the elephant, haven't you?" So back in 1982 I said: "Well perhaps the elephant had an aquatic ancestor?" Peels of merry laughter. "That crazy woman. She xxxxxx will say anything, won't she." But by now, everybody agrees that the elephant had an aquatic ancestor. This came round to all those naked pachyderms have aquatic ancestors. The last step out was the rhinoceros. Last year in Florida they found an extinct ancestor of the rhinoceros and said: "seems to have spent most of its time in the water."

So this is a close connection between nakedness and water. As an absolute connection, it only works one way. You can't say all aquatic animals are naked, because look at the sea otter. But you can say that every animal that has become naked has been conditioned by water in its own lifetime or the lifetime of its ancestors. I think this is significant. The only exception is the naked Somalian mole rat, which never puts its nose above the surface of the ground.

And take bipedality. Here you can't find anybody to compare it with, because we are the only animal that walks upright on two legs. But you can say this: all the apes and all the monkeys are capable of walking on two legs if they want to for a short time. There is only one circumstance in which they always, all of them, walk on two legs, and that is when they are wading through water. Do you think that's significant? David Attenborough thinks it is significant as the possible beginning of our bipedalism.

Look at the fat layer. We have under our skin a layer of fat all over. Nothing in the least like that in any other primate. Why should it be there? Well, they do know this, if you look at other aquatic mammals. The fat that's in normal land animals is deposited inside the body wall, around the kidneys and the intestines and so on, has started to migrate to the outside and spread out in a layer inside the skin. In the whale it is complete, no fat inside at all, all in blubber outside. We cannot avoid the suspicion that in our case it started to happen. We have got skin lined with this layer. It is the only possible explanation of why humans, if they are very unlucky, can become grossly obese, in a way that would be totally impossible for any other primate, perfectly impossible. Something very odd xxxxxx, never explained.

The question of why we can speak. We can speak, and the gorilla can't speak. Why? Nothing to do with his teeth or his tongue or his lungs or anything like that. Purely to do with its conscious control of its breath. You can't even train a gorilla to say "Ah" on request. The only creatures that have got conscious control of their breath are the diving animals and the diving birds. It was an absolute precondition for our being able to speak.

And then again, there is the fact that we are streamlined. Try to imagine a diver, diving into water, hardly makes a splash. Try to imagine a gorilla, performing the same manoeuvre. And you can see that compared with a gorilla we are half way to being shaped like a fish.

I am trying to suggest that for forty odd years, this aquatic idea has been miscategorized as lunatic fringe, and it is not lunatic fringe. And the ironic thing about it is that they are not staving off the aquatic theory to protect a theory of their own, which is all agreed on and they love. There is nothing there. They are staving off the aquatic theory to protect a vacuum.

How do they react when I say these things? One very common reaction I've heard about twenty times is: "But it was investigated. They conducted a serious investigation of this at the beginning when Hardy put forward his article." I don't believe it. For 35 years I've been looking for any evidence of that kind, and I've concluded that that's one of the urban myths. It's never been done.

I ask people sometimes, and they say: "I like the aquatic theory." Everybody likes the aquatic theory. Of course they don't believe it, but they liked it. I say: "Why do you think it's rubbish?" They say: "Well, everybody I talk to says it's rubbish. They can't all be wrong, can they?" The answer to that, loud and clear is: Yes, they can all be wrong. History is strewn with occasions of everyone got it wrong.

And if you've got a scientific problem like that, you can't solve it by holding a head count and say more of us say yes than say no. Apart from that, some of the heads count more than others. Some of them have come over. There is professor Tobias,

he's come over. Daniel Dennett, he's come over. Sir David Attenborough, he's come over. Anybody else out there? Come on in, the water's lovely!

And now we've got to look to the future. Ultimately, one of three things is going to happen. Either they will go on for the next 40 years, 50 years, 60 years: "well we won't talk about that, lets talk about something interesting." That would be very sad.

The second thing that could happen, is that some young genius will arrive and say "I've found it. It was not the savanna, it was not the water, it was this." No sign of that happening either. I don't think there's a third option.

So the third thing that might happen, is a very beautiful thing. If you look back at the early years of the last century, there was a stand-off and a lot of bickering and bad feeling between the believers in Mendel and the believers in Darwin. It ended with a new synthesis, Darwin's ideas and Mendel's ideas blending together. And I think the same thing will happen here. You'll get a new synthesis: Hardy's ideas and Darwin's ideas will be blended together and we can go forward from there and really get somewhere. That would be a beautiful thing. It would be very nice for me, if it happened soon. Because I'm older now than George Burns was when he said: "At my age, I don't even buy green bananas."

So if it's going to come and it's going to happen, what's holding it up? I can tell you that in three words: Academia says no. They decided in 1960s that belongs with the UFOs and the yetis, and it is not easy to change their minds. The professional journals won't touch it with a barge pole. The textbooks don't mention it. The syllabus doesn't mention even the fact that we are naked, let alone look for a reason to it. xxxxxx, which takes its cue from the academics, won't touch it with a barge pole. So we never hear the case put for it, except in jocular references, xxxxxx on a lunatic fringe.

I don't know quite where this diktat comes from. Somebody up there is issuing the commandment: "Thou shalt not believe in aquatic theory." And if you hope to make progress in this profession, and you do believe it, you'd better keep it to yourself, because it will get in your way.

So I get the impression that some parts of the scientific established are morphing into a kind of priesthood. But you know, that makes me feel good. Because Richard Dawkins has told us how to treat a priesthood. He says, firstly: "You've got to refuse to give it all the excessive awe and reverence that it has been trained to receive." Right, I'll go ahead with that. And secondly, he says: "And you must never be afraid to rock the boat." I'll go along with that too. Thank you very much.