

Q&A with David Attenborough

Interviewed by Andrea Appleton

Filmmaker David Attenborough has created countless seminal nature documentaries, including *Life on Earth*, *The Private Life of Plants*, and *The Blue Planet*. His sonorous voice has guided viewers through caves in Borneo, across Antarctic glaciers, through the jungles of Rwanda, and along the bottom of the ocean. In his 60-year career, Attenborough has adapted to numerous changes in film technology. Many of his recent films have been in 3D, and he is now experimenting with virtual reality, including a current project that takes viewers to the Cambrian seas, 550 million years ago. On the eve of his 89th birthday, Attenborough sat down to speak with *Dimensions* about the promise and limitations of this new technology.

How has the production of nature documentaries evolved since you first entered the field?

Well, it's been transformed. I mean when I first came into television, we had clockwork cameras and we could only film in black and white and we couldn't put sound onto it, at least not synchronous sound. And every few years, with increasing frequency, we've had new technical developments. So now there's absolutely nothing you can't do. You can film at night, you can film at the bottom of the sea, you can film at the top of mountains. You can slow things down, you can speed things up, you can do anything you wish. And so, if anything, the problem is since you can do everything, deciding what to do.

I understand you're now working on several projects involving virtual reality. Do you think virtual reality has the potential to engage people in ways more traditional ways of presenting science don't?

Algae?

Virtual reality.

Oh, virtual reality. Yes, it's a very interesting development, but it has its limitations. You can't tell stories with virtual reality. Because what virtual reality does is to take you to an environment, to take you to a place. But as the technology is at the moment, you're stuck there. I can take you to the bottom of the sea, and I have been doing so recently, to the Barrier Reef. And you can put on your virtual reality, and you can see shoals of fish coming from here, there, and everywhere. From behind you, in front of you, and from above you, and so on. And moving around. And you can look around and see where you want. And that's riveting and interesting, but it's very difficult to tell a story that way. How do you make sure that all of your audience is looking at the same place, at the same animal that you want to be talking about when you're talking about it? You can't. Or at least if you did, you'd deny the very facility that virtual reality gives you.

So it's a different way of thinking about things, a different way of experiencing. But we have made a virtual reality sequence of the Cambrian Seas, for example, 550 million years ago. And because we're doing it with computers, so we can make things come and go and we can give you a very extraordinary experience. There are ways that you can direct an audience's attention. If you make a very loud noise behind you, you can make your audience turn around and see what it is. But you can only do that in a very restricted way. You can't do it very often. So by and large, the problem is that you are taking people to another circumstance in which they can explore within the limits of sitting in the chair. But nonetheless that facility is a fascinating one. You really enjoy it. It's absolutely absorbing. We also took virtual reality down to the bottom of the Barrier Reef recently, with a virtual reality camera, with fish coming at you from all quarters. Very interesting.

What role do you think virtual reality might play in museums or science centers in the future?

Oh, they can take you to extraordinary places. I mean they can take you to the middle of a colony of penguins, for example. I mean think about that. With all the things, with skuas coming down and raiding the babies. You install the cameras there and take 10 minutes of it, five minutes of it. So

kids can come—why say kids? Anybody can come—and you can have five minutes in a penguin colony, and then five minutes under the sea, and then five minutes back in prehistory. So you know we can produce a very exciting visit to a virtual reality studio.

How soon do you think virtual reality will be available in museums?

Oh, it's available now, if you wanted it. It depends on how you finance it, to some degree, like anything else. And museums will have to decide whether they want to spend the money that way. There are lots of other things to spend it on. But it might well pay for itself. I mean IMAX cinemas, big giant screen cinemas, I believe pay for themselves in many museums, and virtual reality can do the same.

Can you talk a little more about virtual reality as a teaching tool?

Oh, I would be quite cautious about using it as a teaching tool. Because if you are teaching, by definition you are pointing your pupils' attention to particular things at a particular time. That's the one thing that virtual reality doesn't do. But what it can do is to take you to, as I say, a penguin colony. And then after they've experienced it for five minutes, *then* you can start talking about predators or how adult penguins feed their young, all those sorts of things. What virtual reality can do is to take you there and give you that experience, and I'm sure it's much easier for a biology teacher to talk to somebody who's actually been sitting in the middle of a penguin colony about the problems. Now you can do that. You couldn't do that before. So virtual reality has that great quality. But it's an add-on, not a vital one.

You've visited many of these places that most people won't have a chance to, like the Great Barrier Reef. How close is the virtual reality experience to actually being there?

Well, it's heightened, isn't it? Because what is astonishing about it is that one moment you're sitting in a comfortable seat somewhere in a city and the next moment you're on the South Pole. And so that is an extraordinary sensation. Nothing else has ever been able to do that to the degree that we can. But it's only that, it is only that. I keep sounding as though I'm putting

it down, which I don't want to do, because virtual reality is enthralling. I mean, it's an extraordinary experience. But it's not the same as going there.

Do you think it has the danger of taking people's attention away from the real thing, the fossils in the museum, the artifacts?

No, I don't think so. I mean, why limit it? It's an additional way of seeing things. That's just fine. Why should I want to deprive them of it? I don't. It's a great experience, an added experience. Imagine that you had never been to a cinema, ever. And then someone took you and drove you into town and you went to a cinema. You'd be knocked out, wouldn't you? Virtual reality's the same.

And just to step back a little. I wanted to ask if there's a project in all your many that's closest to your heart?

Closest to my heart. Only in a rather childish way, really. It's undeniably thrilling but also undeniably childish really to go where no white foot has trodden. And I did that in the 1950s, getting on 50 years ago, in central New Guinea. I mean that was derring-do in a big way. I mean cutting away through the bush, meeting people who had never seen a white face before—that was quite close to my heart. I don't say it was the most responsible thing I've ever done but it was good fun.

What are you working on right now?

Well, we're doing a series on the Barrier Reef in 3D. The other thing is that I'm doing a film about the biggest dinosaur that's yet been discovered, in Patagonia, which hasn't yet gotten a name. But it was huge, it was 70-odd tons and 20 meters tall.

I take it you're not retiring?

Not while I'm having as much fun as I'm having. Why would I retire?

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