

Charles Birch Interview

By Richard Slaughter

Charles Birch is Emeritus Professor of Biology at the University of Sydney. He was born in Melbourne in 1918. He is a highly respected commentator, writer and speaker on theological and environmental issues, and a member of the Club of Rome. His 1976 book *Confronting the Future* was revised and re-issued in 1993. It is a ground-breaking book which systematically considers the challenges confronting Australia and, indeed, the whole Western world. His 1990 book *On Purpose* attempted to establish a basis for values in a world dominated by science and technology. This was followed in 1993 by *Regaining Compassion for Humanity and Nature* which explores alternatives to the materialistic outlook.

Richard Slaughter: It's a pleasure to catch up with you and to have a chance to talk with you. Your book *Confronting the Future* seemed to me to touch on many of the key issues that need to be looked at and understood in this country. Can you tell me something about the origins of the book?

Charles Birch: Yes, the way it started was that the President of the Club of Rome, Aurelio Peccei, came to Australia to promote the idea of 'limits to growth' which the Club of Rome had pursued since the early 1970's. He got together two or three people at the time to become members of the Club of Rome and to promote its philosophy. They were Sir Gus Nossal, myself, an industrialist in Western Australia, and Sir Zelman Cowan. Our meetings stimulated me to write something on limits to growth which would be relevant to Australia. It contains a virtual philosophy of the limits to growth. I became very familiar with it because I got to know one of the authors of the original *Limits to Growth* study very well: Jorgen Randers, a Norwegian. He was the youngest member of the study team. Later he came out to Australia and said, 'you know we were talking about models of the future? Well Australia is the sort of continent in which you ought to be able to develop something on those lines.' It was the inspiration he had which I thought was very interesting; and I wanted to do something about it.

RS: So if you were to summarise the main theme of that book, what would it be?

CB: Well the point was that you can't keep on growing economically and in terms of material wealth forever. There comes a point at which you've got to choose limits due to the impacts on the environment and because other resources are limited. The question was posed by Jorgen Randers and also by the then Minister of Environment in Brazil. I said to him 'you know, the way Brazil is going is just full steam ahead as though there are no limits to forests, no limits to rivers, seas and all the rest of it.' Brazil was in a bad way destroying the environment, and he was the Minister responsible. He said, 'it's all very well for you, but what about Australia, what are you doing about the problem? Could you give us a model to follow?' That seemed to be an appropriate challenge - so I wrote the book.

RS: And yet I'm aware that the kind of issues that you've raised, for example, re-thinking economic growth, looking at it differently, these are not things that are easy to grasp or change.

CB: No of course not. In fact the biggest obstacle to thinking about the subject and not being regarded as an absolute crank, comes from the people who think the only solution to all our problems of unemployment, inflation and what have you is continued economic growth. Traditional economics knows no other answer to economic problems, other than increasing economic growth. The index that all governments, state and federal, use to measure the health of society is whether it's growing economically or not. Now the argument hinges on what sort of growth we are talking about. There are many things that need to be done in society. The problem to me is why can't we have an economic system in which you have more schools, you have better hospitals, you have better roads and bridges and all the rest of the things that are really needed? Why can't we do that in this country? Why do we have to produce things which the world is producing too many of anyway? That's a real problem which the economists should be able to answer.

RS: Given that economic rationalism is so solidly embedded in Canberra, how can you get across the idea that the old style GNP-measured growth is becoming dangerous?

CB: Well it's demonstrated every day of course with what's happening around the world in terms of pollution in the cities, soil loss through unsustainable agriculture and the meaninglessness that stems from a materialistic outlook. Bob Hawk did admit once that one of the worst problems in Australia was the loss of top soil. So he supported a million tree campaign. Then the Commonwealth government set up a land care scheme which was pretty radical. The view was 'we've got to conserve that particular resource in the environment. We've got to spend money on it.' So there are some pointers here and there. The campaign to save the Franklin river in the West of Tasmania had a big political input that would never of come off without the Federal government coming in. So there are indications of hope. One can afford to be a bit optimistic.

When I first wrote *Confronting the Future* most of my colleagues just thought I was crazy. They used to refer to me as an 'eco nut.' But now there's a general acceptance we have a problem, and you're not simply regarded as a nut if you raise issues about the environment.

RS: So you've seen a change in outlook?

CB: Oh there's been a tremendous change in perception by Australians as well as people around the world. There's a whole different attitude. It doesn't mean that they know what to do about it but they are concerned. In Australia there are over 1,000 grass roots movements now concerned with the environment, which is pretty impressive in many ways.

RS: But is there anywhere a high quality expression of what intelligent growth might be like?

CB: That's a good question. Randers tried to look into that question another way. He looked at an industry in Scandinavia which had already reached its limits to growth,

namely the timber industry. They couldn't plant trees faster or use them faster. So he was employed by the Scandinavian government to look at the future of that particular industry. One of the problems of the timber industry in Scandinavia was that they needed growth in order to update their technology in the timber mills and all the rest of it. That's where they got their income from. But how would they be able to keep the technology up to date if they didn't grow? Randers job was to try and find a solution. I'm not quite sure exactly what he came up with, but he did suggest alternative strategies which were possible given that they had actually come to the limits of that resource.

RS: It seems to me that in many cases we do know, and can outline in great detail what many of the long-term solutions are, but we're caught up in whole series of institutional learning lags.

CB: Oh yes.

RS: That is, we can conceptualise growth and move towards ecologically sustainable development. And yet old notions of growth are still embedded in economic discourse around the world. So here we are in a time when we need to change the economic paradigm, but we haven't even started the change.

CB: Yes, well, we haven't made a change in a major way but we can see some change. There are a substantial number of economists around the world now who are at least talking about ecological economics. There's even a journal for ecological economics which would have been unheard of ten years ago. These people are trying to put the issue of environment into every equation, every economic equation - something which was not done by classical economics at all. Now these represent a small proportion of economists but nevertheless their numbers are growing.

RS: So a new economic outlook could be on the way?

CB: Yes, you see a few years ago there were only about five or six substantial economists who in fact were pushing the notion of an alternative to 'growth forever.' One of them was Herman Daly, who eventually got a job in the World Bank, believe it or not. He's the one who had some influence on the World Bank's attitude towards environmental issues, but now he has quite a few supporters.

RS: Before asking you about your book *On Purpose*, could I ask you about the new edition of *Facing the Future*? In the Foreword you sketched in a few of the things that you have seen change over the last 15 years. Can you recall some of them?

CB: Well, one is what you've already mentioned, the greater perception in society, in Australian society about environmental issues. That's become really very, very important. Another one is agriculture. It is a very interesting example because some years ago you couldn't talk to agriculturalists about Australian agriculture being unsustainable, or even the notion of unsustainable agriculture. Now there are courses on sustainable agriculture and that took a lot of pressure. The economists were very opposed to this, but it's happening. A big school that teaches agriculture at the University of California was actually sued. A court case was made against it by a woman who complained that they taught unsustainable agriculture there - and she won!

It's an unusual way to do it, but the University of California was forced, then required by law, to put courses on sustainable agriculture into its curriculum.

RS: Would it be true to say though that the question about the long term sustainable population for Australia is still unresolved?

CB: Oh yes, because at present Australia has no population policy at all. However, at the moment the senate has a committee of enquiry into a sustainable population for Australia. There were calls for submissions from all around the country. So the question is finally being asked about how many people Australia can support. That was a question politicians never used to ask.

RS: You mention in your book what you call the 'IPAT' equation: the view that population impact cannot be determined by crude numbers but by Population x Technology x Affluence. Does this mean that the total impact of the Australian population is far larger than it may seem?

CB: Yes, if you do the sums you'd say the impact of seventeen million people in Australia is equivalent to about a billion Indonesians.

RS: That puts things in a very different light.

CB: It certainly does. It suggests that the developed countries are the real despoilers of the earth, not simply those in the Third World who are chopping down forests.

RS: The fact that we can go for so many years having an immigration policy in the absence of a population policy suggests a lack of long term systems thinking in politics.

CB: Yes, well I think the analogy that Paul Ehrlich used when he was here is useful. It's like giving somebody the instructions to build an aircraft in which you tell them how many people it must be able to be board every minute or so, without saying how many people in total the aircraft should take. It's a pretty good analogy. Ehrlich has been one of the strong advocates of a population for Australia a good deal less than what we have at the moment; that is, less than 10 million.

RS: He also used the metaphor of 'rivet poppers.' That is, people swarming over the aircraft removing rivets and saying 'don't worry, one more rivet gone, but the aircraft is still flying.' He was of course referring to the loss of wild species. One writer has suggested that we could be losing 27,000 species worldwide each year.

CB: Yes, that's an important one because we don't know enough about the role of vary many species in sustaining the life support systems of the plant, so when you don't know you'd better be careful, take precautions.

RS: Let's go on to your book *On Purpose*. Can you outline for me the essential ideas?

CB: Well the main idea was that it seemed to be important in human society and in individual human lives to have clear cut purposes and to know something about how you could achieve the purpose that you chose. Science is producing a picture of the world in which the word purpose never comes in at all. I wanted to know the extent to

which the notion of purpose might be relevant in the rest of nature, and the only way in which I can make any sense of it is as a concept that goes right down to the building blocks, the atoms, electrons and all the rest of it. So there's a philosophical side which I put in right at the beginning of the book (which some people found difficult). Then there's a practical side: what difference does that make to what you do with your life, what you do with the world? A good deal of the book is spent on evolution: cosmic evolution, biological evolution. The extent to which the concept of purpose is relevant then I think is clear. But the Darwinian understanding of evolution leaves it out altogether because it is a completely mechanistic scheme. So the book is an attempt to bring something which is non-mechanistic into the mechanistic picture.

Some people who were not scientists found the science difficult, and some who were not philosophically minded found the philosophical bit difficult. That's partly why I wrote the next book which is called *Regaining Compassion*. I wanted to win over people who have been lost from something that's a bit too difficult for them.

RS: Let's look at *Regaining Compassion for Humanity and Nature*. You write about three attitudes towards the environment: exploitation, stewardship and compassion. Now until I read this I assumed that what we needed was a stewardship ethic in this country. But what you've done here is to take an extra step and say we need to go beyond stewardship to compassion. Can you explain that?

CB: Well the notion of stewardship is a very common one and certainly the one which is promoted by Christians who get it out of Genesis. You look after nature because nature looks after you. It's an instrumental approach to the world and it very quickly and easily leads to the notion of exploitation. You don't remain a steward very long before you begin to exploit things. So another possibility is that of compassion. It suggests that you have an attitude to all life, human and non human, in which you recognise there is something of *intrinsic* value which should be respected. By intrinsic value I mean - entities that feel, are sentient to the world around them have intrinsic value. In other words, you value them or they value themselves quite independently of their usefulness to other creatures including human beings.

That's an extension of the notion of justice: compassion and therefore justice, therefore rights are attributed to the non human world. This view hasn't been taken too seriously in the West. It's of course always been taken seriously by Buddhists and some Hindus, but it hasn't been taken terribly seriously by Christians for various reasons and certainly not by the scientific community.

RS: I understand that intrinsic value is a viable alternative to exchange value and use value which have been dominant in our economic systems. But, I wonder, can you get to the notion of intrinsic value by reasoning, or do you have to make that a fundamental postulate to begin with?

CB: Oh, I think you do it by reasoning. The question one might ask is are there values other than instrumental values in nature? We recognise in human beings that there are - human beings have a value in themselves, quite independently of their usefulness to others. So you then ask the question does that apply to other creatures? The argument is: yes it does apply to other creatures. It would only apply properly if they are also sentient and have a feeling for the world, so we should respect feeling wherever feeling

exists. People are able to do that in relationship to their pets. They have no problem with wild birds that they may feed. But anything beyond that they tend to ignore.

I live in an apartment building in Sydney right on the harbour and we have a lot of birds and trees. I'm amazed that there's nobody in that building apart from me who's interested in the birds. I'm the only one who feeds the birds that come on to the balcony. The other residents don't see life, it is not important to them. They'd like a lot of the trees to be cut down so they can have a view of the Sydney Harbour Bridge, believe it or not. Why do you want to have a view of a mechanical structure in the sky when there is so much natural beauty close at hand? Most of us in Australia are city slickers. We don't have this feeling unless we get into the country a bit, a feeling for the rest of the world around us. So this is where compassion extended to non-human nature becomes very important.

RS: You've said in your book *On Compassion* that modernity failed to point a way beyond injustice and the destruction of the environment. It seems difficult to attain a vision of a viable future within the parameters of the modern mind.

CB: Yes, well 'the modern mind' and 'the modern world' have very specific meanings. They refer to the scientific technological world view arising out of science, which has a very mechanistic outlook and this is why we talk about - some of us talk about - the re-enchantment of science. The model is not just a mechanistic one. It's one which includes subjectivity or, in other words, the feeling side of things, consciousness. Science hasn't got anywhere with that. In so far as it deals with issues of feeling, consciousness and purpose, ultimately we try and reduce everything to what the atoms and molecules are doing. That's fair enough in itself; but in the end it tends to leave out the subjective component.

Now, the modern worldview. I drew a contrast in *On Purpose* between the so-called modern world view arising essentially in the 16th, 17th century, which is the dominant world view today, and what we call post-modern. But post-modernism is a bit difficult because it can be taken to mean so many things. However, there's a constructive post-modern view which is not mechanistic. We get a lot of help from the physicists here because, when people like Paul Davies tell us that there are no particles, that's a pretty clear statement. There's no material substance, but there are events. So it is the nature of events that become interesting philosophically.

RS: I remember one of my lecturers saying that we're still discovering oxygen, what it really is, meaning that things haven't settled, finished, been totally defined yet.

CB: Yes, that's an interesting question. It applies to all molecules and I don't think reductionism in science has an answer. If you take water which consists of oxygen and hydrogen, how is it that when you've got two gases together in certain combinations that you get a molecule of water which has the quality of wetness? That remains a mystery.

Most scientists will simply say 'oh what happens is that you have an emergence of a new quality.' But that doesn't *explain* anything. What I would say is that if hydrogen and oxygen together in certain combinations gives you water which has a quality of wetness, that tells me something about the nature of the hydrogen oxygen molecule. In

other words you take a step back. You have to ask another question. Eventually you ask if there is there some kind of subjective aspect down there. And I've come to believe that there is.

RS: So is it possible to move towards a view of not just the re-enchantment of science, but in Berman's term the re-enchantment of the world, seeing purpose as a structural aspect of the world?

CB: Yes I think so, I think that's what some people are doing. It's against the modern, dominant trend of course. But that doesn't worry me too much. I tend to think against majority movements anyway. If they have anything in them they will become more influential in time. Perhaps my problem is that I'm not very good at creating metaphors and images and stories. They are the only ways you can get things across these days.

RS: So there's a role for the media perhaps to help create a richer vision of the world?

CB: Certainly, yes.

RS: To wrap up this interview I wonder if you can you think of two or three concrete steps that you would suggest if Australia were to take seriously the notion of building a sustainable society?

CB: Oh yes. The first one would be to have as a national objective that instead of economic growth increasing all the time, to measure the health of the environment, the health of the people and the health of the relationship between the two. That's far more important as an indicator. Just as an indicator of the well being of an individual human, is not how his weight or her weight is going up or down or staying steady. It's got to do with real health, qualities of how you feel, if your relationships are positive and creative. So we need to get away from simply measuring net economic growth (and we are beginning to do that) to asking what sort of economic growth is healthy. We also need to be willing to pay more taxes.

RS: That will be very unpopular.

CB: I know. In fact almost everything that I would want to recommend from *Regaining Compassion* doesn't have a political platform at the moment, you know, wouldn't get in. But grass roots activity will change that. I often quote Pierre Trudeau when he was Prime Minister of Canada going to a meeting of the Club of Rome saying 'I believe all this stuff about limits to growth, we've got to do something about it, we've got to change our national outlook and way of doing things. But if I go back to Canada and put that on the platform I'll be tossed out tomorrow. I don't have the grass roots support.' So, what we can do is to keep working to increase the grass roots support. It has a fairly substantial base in Australia at the moment. We must let people feel that they are important, that their influence can be decisive in changing things. They changed the outcome of the Franklin river controversy, they are beginning to change agriculture and they may even change cities.

RS: So maybe the governments may sometimes be the last to find out that changes are underway?

CB: Oh the government is not going to lead the way; I don't think governments can lead the way. But they will have their noses to the ground and will take note of important movements. They're finally taking note of women. But they didn't ten years ago.

RS: So change will come through grass roots activity?

CB: Yes. It's a very much a grass roots movement rather than something that happens from above. The changes that have already occurred have happened that way. The whole conservation program, the fact that there was a meeting of world leaders at Rio last year was not due to the United Nations leaders. It was due to grass roots movements, conservationists, people who care.

An edited version of this interview was published in *21C* 1995 issue 1, pp 74-77.

Note

Two short pieces by Birch were published in *21C*, as follows.

A Titanic on a collision course

Our technological civilisation is totally unadapted to the needs of survival says Charles Birch, Professor of Biology at the University of Sydney. Unless we make it adaptable, we too will go the way of the Brontosaurus. *21C* issue 2, 1991, p 82.

No room in the Ark

There is a growing consensus among scientists and economists that the planet is in peril. But the solutions to our problems depend less on technological advances and economic growth than on human will guided by a 'moral compass', requiring a change of heart about how we live and work, how we produce things, and how we treat other people and other species. *21C* issue 2 1993/4, pp 40-43.