Suzuki lecture

(This is an edited transcript of the 2013 Jack Beale Lecture on the Global Environment, delivered by Dr David Suzuki at the University of New South Wales on Saturday 21 September 2013.

Dr Suzuki’s talk was entitled: Imagining a sustainable future: foresight over hindsight.)

I would like to acknowledge that I am on the traditional territory of First Nations people. I am deeply honoured to join such an eminent list of speakers in the Jack Beale Lecture series. Thank you, David (Beale), for coming and honouring me with your presence. And thank you to the university, for the privilege of being able to share a few of my ideas.

I have to admit I was shocked when I arrived here, so soon after an election, and things seemed to be happening. I wrote a whole bunch of additional stuff. I was thinking: should I change that (lecture title) to The Barbarians have Breached the Gates?

If you were to say, I want to figure out what do Australians think are the really important issues that confront them as a people, and I’m going to judge that by the amount of time or space in newspapers and news reports on TV and radio - I think you’d very quickly find in Australia the absolutely highest priority is sports. Coming after that, is business, then politics then, of course, celebrity and entertainment. What that does is to distract you from the fact that the most powerful factor shaping our lives, our society, our world today, is none of those things – it is science. Science when applied by industry, medicine, and the military.

I was born in 1936. When I was a child, my parents never worried that I was watching too much television, playing too much video games, or text messaging too much, because none of those existed when I was a child. When I was a child my parents wouldn’t let me go to movies or public swimming pools in the summer because they were afraid I would catch polio. Most children today have no idea what polio is; it’s almost extinct around the world. Back then, smallpox ravaged the world. Millions of people got smallpox and hundreds of thousands of people died every year. It’s been extinct for over 30 years. Today’s children don’t know anything of diphtheria, scarlet fever, measles, chicken pox or mumps, that we were all afraid of when I was a kid. There were no commercial jets, satellites, Xerox, organ transplants, antibiotics, plastics, nuclear plants, oral contraceptives, cloning or genetic engineering—I could make you a list that would go on for pages of what wasn’t, when I was a child.

And you realise that each of these innovations transforms the way that we live, rendering the old ways that we did things extinct and changing the very definition of our society and our values and what it is to be a human being. I spent 8 years, from 1954 to 1962, getting an education at top universities in the United States - the kind of education that wasn’t possible in Canada at that time. This interval spanned the most exciting period for science students in history. In 1957, the Soviet Union launched Sputnik and it was a shock, it was electrifying. But the Americans began to scramble to try to catch up. It was a glorious time. All you had to do was say, “I like Science”, and they threw money at you. Job offers came to me long before I graduated that I didn’t even apply for. I got a job offer from Stanford. I was amazed. But I left the United States after a year of postdoctoral studies, because I wanted to go home to Canada.
Canada was different and for me it was preferable. I didn’t think we were better than Americans. I just didn’t want to live in the United States when I had the country of Canada. To me, Canada meant first and foremost a man named Tommy Douglas, who was the head of the CCF - the socialist party that brought Medicare to Canada. Canada meant Quebec and the French language, the national film board, and the Canadian Broadcasting Corporation. Canada meant equalisation payments from the richest provinces that were given each year to the poorest provinces to help them out.

Canada meant social security. Canada to me meant sharing and caring and cooperating, not the dog-eat-dog survival of the fittest that was the American style of society. But when I arrived home, I was a hot-shot geneticist and I was going to set the world on fire. I was shocked to discover the extent of scientific illiteracy in my country. And the reflection of that scientific illiteracy was the degree to which science was supported by government. We were given handouts. In my first year as a university professor I got a grant for $4,200. They told me you should have got $3,500 but you have a year of postdoctoral studies. At the same time my colleagues that I had graduated with in the United States were getting grants between $60,000 and $80,000. So I began to wonder whether I should think, if I wanted to make a reputation in science, to go back to the United States, when lo and behold I was given a huge grant from the Americans that I could use in Canada. So thanks to the Americans and their funding I was able to stay in my own country.

But in 1962 as I was beginning my career, something very significant happened. I was asked by a local community channel to give a lecture on television, to give a lecture on genetics. So I did it as a lark. They gave me 15 bucks and they liked it so much that I ended up doing eight. And that was my first television series. As I became involved, I realised this is a powerful teaching tool. The program was called “Your University Speaks” – nothing could be more boring than that – and it was shown on Sunday morning at eight! I was shocked because after a couple of these shows had run, I walked on campus and a number of people said, “Hey, I saw your show. I really liked that show”. And I’m going, “What the hell are you doing watching television at 8 o’clock on Sunday morning?”. That’s when I realised, Holy Cow, people really do watch television and it can be a powerful way of informing people. You see, I believed, and I still believe, that we make the best decisions when we have the best information available to make the assessment before arriving at a decision. I thought science was too important to leave just to the politicians and business people to decide on, that the public had to have input into how science was going to affect their lives, and the best way was to popularise science and make it available to the general public.

I have to admit it’s been absolutely astonishing to watch the revolution in communication technology, to see what’s available now. When I started in television, in 1962, there were only two channels in Canada. One of them was our old CBC, and then a private channel, that was it. But to see today, there are 24 hour news channels, that with satellite or cable in Canada we can now get between 400 and 1000 channels. With laptops, PCs, tablets, mobile phones, we can tap in to information from around the world, it’s truly astonishing. The problem of course is, most of what’s available is gibberish, it’s babble, it’s about sex, it’s about selling stuff and ads, and it’s polluted from the kind of information we are getting from big pharma, from oil companies, from the chemical industry, and so on.
But as I was, back in the 1960s, swept up in the environmental movement, television in fact was a powerful force of influence, and I was very proud of the fact that I had done a number of shows that added in a small way to the discussions about issues. I got involved in doing programs that opposed the proposals by the Americans to move super tankers from the north slope of Alaska down the British Columbian coast to Seattle – to be refined in Seattle. We fought that and we stopped it. There was a proposal to drill for oil in one of the most dangerous areas of the BC coast and we stopped it. A dam was to be built on the Peace River, at Site C. We stopped that. Americans keep wanting to drill in the Arctic National Wildlife Refuge in Alaska. This is the grounds of one of the largest group of mammals on the planet - the Porcupine caribou herd. Each time the Americans were trying to push through legislation to allow drilling, I did a show on the caribou. I’m not saying we stopped it, but it helped stop the initiative. I was very involved in raising money and doing programs about the proposal that Brazil had to build a dam. They had been offered 500 million dollars from the World Bank, and we got the bank to pull its loan. Each of these battles ended in a huge victory in the 1980s, and each of these battles that I mentioned, is, guess what, back on the agenda.

Here is where I think that despite the enormous success of the environmental movement in the 60s and 70s, we have fundamentally failed to use each of the battles to broaden the public understanding of why we were doing these battles. Why were we opposing the dam? It wasn’t just power of environmentalists against developers, environmentalists against the oil industry. It was because we had a different way of looking at the world. That environmentalism is a way of seeing our place within the biosphere. That’s what the battles were fought over. That’s not why the battles are recurring. We have failed to shift the perspective, or in the popular jargon, we failed to move or shift the paradigm. We are still stuck in the old way of seeing things.

So, I come to the barbarians, that is, many of the politicians and corporate executives that environmentalists have been fighting all these years. They are driven by a totally different set of values, by the drive for profit, for growth, and for power. In that drive, they fail to see the bigger picture that environmentalism informs us about. Look at the largest corporations like Apple, Walmart, Shell, Exxon, Monsanto – they are bigger and richer than most governments. And we treat them as if they are people. They are corporations, they’re not people. Why do we allow them to fund politicians, for God’s sake? They’re not people.

Politicians are running to look out for our future. But because corporations have the wealth to fund to a massive amount, after an election, guess who gets in the door to talk to the ministers and the elected representatives? It’s corporations. What we find is that governments now are being driven by a corporate agenda, which is not about our wellbeing and our happiness and our future. Look at the climate sceptics today. If you think of all the PR and ads and entire programs run on television today that are funded by corporations. When you look at the climate sceptics, most of them are hired guns for the fossil fuel industry. Many of them are the same people that were saying tobacco wasn’t dangerous if you smoked it 30 years ago. Don’t believe me, read a book like Merchants of Doubt by Naomi Oreskes, or read Climate Cover-up by James Hoggan, or go to DeSmogBlog, a site set up just to follow where the sceptics get their money. Follow the money. And then ask, how credible are they?
Politicians today have very few tools with which to shape behaviour in society. One of the tools they do have is regulation. You set targets and you pass laws mandating them. And of course they are hated and fought tooth and nail by corporations – largely successfully. Another tool they have – an enormous tool—is taxation. Taxation can be used to tax the things that we don’t want and pull the taxes off the things that we do want to be encouraged. We know that taxes work as a way of changing human behaviour. The carbon tax—putting a price on carbon—is by far the most effective way to begin to get corporations, to get companies, to get people to reduce their carbon footprint.

Your new Prime Minister ran on a promise to eliminate the carbon tax. I have no doubt he is going to do that, and will probably make this politically toxic now for at least a decade before it will be able to come back on the agenda. And this, of course, is just what corporations have wanted.

In Canada, we have the same kinds of arguments. We argue: oh, we’re a northern country; if we try to begin to reduce our carbon footprint it will destroy the economy. But we don’t look at what’s happening in a country very much like Canada – Sweden - a northern country which imposed a carbon tax in 1992. They now pay $140 a tonne to put carbon in the atmosphere, they’ve reduced their carbon emissions by 8% below 1990 levels, which is beyond the Kyoto target, and during that interval, their economy grew by more than 40%. So all this argument that we can’t afford to put a price on carbon – it will destroy the economy - is just what the corporations want believed and said.

There is in Canada a legal category where people can be sued and thrown in the slammer, called wilful blindness. If people in positions of power deliberately suppress or ignore information that is vital to the decisions they’re making, that is wilful blindness. I call it more than wilful blindness. I call it criminal negligence because it’s a crime against future generations, to avoid facing the reality.

That is what Mr Abbott is doing, by cancelling the (Climate) Commission, by firing Tim Flannery. It is criminal negligence through wilful blindness.

In my country we have a government that, I am ashamed to say, is even more intensely on this path because it has been in power longer than Mr Abbott. Stephen Harper, our Prime Minister, was a big admirer of John Howard and of George Bush, and he has cancelled virtually all research going on in Canada on climate change. He has muzzled government scientists: they are not allowed to speak out in the public, even in areas in which they are expert, unless they are first vetted by the Prime Minister’s office. Scientific papers must go through the Prime Minister’s office before they are allowed to be submitted for publication. So we’re now getting science being moulded to fit a political, ideological agenda. He is laying off scientists in sectors like atmosphere research, forestry, and fisheries. So we can go into a very uncertain future basically blind. In the book 1984, George Orwell speaks of newspeak, that when you can convince people that black is white and that war is peace, you can tell them anything. And what better way to allow people to believe whatever you say than by shutting down all avenues of serious, hard information. How can we make truly informed decisions if the scientific community itself is shut down? I say to you, that in your society scientists better be up on the ramparts making sure you don’t fall on the path that Canada is on right now. When politicians are relieved of having to pay attention to real information – to science – they can base their decisions on what: the Koran? the Bible? My big toe has a bunion? I
mean, what the hell is going on? As a Canadian, I beg Australians to think hard on what’s happening in Canada, and please avoid that in your country. How on Earth have we reached this point in human history?

One of the most amazing things to me as a geneticist is the way that scientists can now manipulate and use DNA. One thing scientists can do is to use DNA to follow the movement of human kind across the planet back through time. All trails lead back to Africa, 150,000 years ago. I never actually spoke to the Ku Klux Klan. I’m waiting for them to invite me. If I did, I would tell them that we’re all Africans for God’s sake, what’s your problem?

Look back and try to imagine when we were born as a species. Imagine that we could be transported back in time and hover above the Serengeti plains 150,000 years ago. The plains would be covered with animals in abundance and variety beyond anything we can imagine today. You’d have to look very hard to spot little clusters of three, four or five of these funny looking two-legged furless apes. That was us. I’m sure no other species back then whispered: “Don’t alarm that naked ape. They’re gonna take over the planet”. I mean, what did we have going for us? We weren’t very big, there weren’t very many of us, we weren’t fast, we weren’t strong. Nobody would be worried about this animal that in one hundred and fifty millennia would take over the planet.

What was our secret? Well of course, you couldn’t see our secret. It was a two kilogram organ buried deep in our skulls. The human brain was the secret of our success. François Jacob, the Nobel Prize winner, said that the human brain has an in-built need for order. We don’t like things happening that we don’t understand. So we have a genetic impulse to try and organise what we see around us into some kind of order that makes sense. We create world views by trying to fit everything together. No other mammal on earth has the memory capacity of the human brain. We were inventive and we were curious. We were able to dream of things. Like the future. No other animal has the concept of the future as we do. The future doesn’t exist. The only thing that is real is now and what we remember from the past.

But because we invented the notion of the future, we are the only animal that realised we can affect the future by what we do today. Based on our knowledge and experience, we can look ahead. We can see where the dangers are, and see where the opportunities lie, and we can deliberately choose a path to avoid the dangers and exploit the opportunities. I believe foresight was that great gift that the human mind conferred upon us – that we were able to plot our way into the future. Today we’ve come to dominate the planet. We’ve occupied every continent. We have amplified abilities to analyse and look ahead: we call them scientists. We have supercomputers. Scientists now act in the best tradition of our species. They look at the information available, and they try to look ahead and see where the dangers and the opportunities lie.

I’d like to just give you an example of one of those attempts by scientists. This is a remarkable document called World Scientists’ Warning to Humanity. It was published in November of 1992 and it was signed by more than 1700 scientists from 71 countries in the world, and included over half of all Nobel Prize winners who were alive at that time. So that’s a pretty good roster. I mean, these are top scientists, not fly-by-night scientists. What did they say in the World Scientists’ Warning? “Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society, and may so alter the
living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about.”

They then list the areas that collisions are occurring in - the atmosphere, water resources, oceans, soil, forests, species extinction, and population. Then the words grow even more bleak. “No more than one or a few decades remain before the chance to avert the threats we now confront will be lost, and the prospects for humanity measurably diminished. A great change in our stewardship of the earth and life on it, is required, if vast human misery is to be avoided and our global home on this planet is not to be irrevocably mutilated.” Then they go on to list what they believe we must do, immediately. A frightening document, a terrifying document. Scientists of this stature don’t normally sign petitions or comments like this. If this document is frightening, the response of the media around the world was terrifying. There was none.

What these scientists were telling us is that human beings have become so powerful we are now altering the chemical, physical, and biological properties of the planet on a geological scale. Physically we create dams, divert rivers and build huge lakes. We drain entire wetlands, remove mountain tops to get at coal, build massive open pit mines, and because of our fracking practices now, we know that we are producing earthquakes.

Chemically, we know we’ve passed 400 parts per million of carbon dioxide in the atmosphere. Because of the carbon in the atmosphere, it dissolves in the oceans, creating carbonic acid and acidifying the oceans. Nitrogen fertilisers spread on land wash into the seas, creating areas of eutrophication which become dead zones because all of the oxygen is depleted. Pollutants, of course, are spread throughout the air, water, and soil. Every one of us in this room is carrying dozens of toxic chemicals in our bodies. With endocrine disruptors from plastics, the whole process of development and differentiation of our reproductive capacity has been interfered with.

Biologically, we are driving entire ecosystems out of existence for farming, cattle ranches, roads, housing. We are introducing alien species all over the planet and driving some 50,000 species to extinction every year. That’s why scientists call this moment in time the Anthropocene Epoch - the era when humans have become a geological force. It has happened very, very suddenly. That’s what gives the urgency now to addressing the issue.

If you go back, at the beginning of the agricultural revolution, which is 10,000 years ago, we think there were about 20 million human beings. When Jesus Christ was born, there were some 200 million. We reached a billion – the first mammalian species to reach a billion – about 1803. When I was born, there were just over 2 billion people on the planet. Can you imagine, in my lifetime, the population has more than tripled. If you were to plot that on a graph, in which the X-axis is 150,000 years, and the Y-axis is the population of humans in billions, what you’d find is the curve is virtually flat for 99% of it and in the last pencil width of time, it explodes straight up off the page.

Every human being today has to be fed, clothed, and sheltered, and just to stay alive, we have a very big ecological footprint. It takes a lot of air, water and land to keep us alive. Of course, we’re not like a rabbit, or a rat, or a mouse – we have an enormous amount of technology used on our behalf. I’m sure that nobody in this room has a field of cotton plants growing in your backyard or a flock of sheep – but thanks to technology, we wear cotton shirts and sleep under woollen blankets.
Thanks to technology - technology that now can exploit to the far regions of every corner of the planet for raw materials and deliver the goods that we take for granted in our lives, like computers, cars, and food – all of that amplifies our impact, our ecological footprint. Ever since World War II, we’ve been afflicted with an incredible appetite for “stuff” – we love to go shopping. 95% of American teenage girls call shopping their number one recreation. So they’re having fun and getting exercise at the same time. We love to buy stuff, and all of the stuff that we buy comes out of mother Earth, and when we are finished with it, we throw it back into mother Earth, and that increases enormously our ecological footprint.

This is all overlain by a globalised economy. I believe globalisation will, if humans are around by the end of the century, be looked upon as one of the big disasters to hit our species. Globalisation exploits the entire planet biosphere for raw materials and as a dumping ground for our waste and toxic materials. Globalisation also hides the ecological and social impact of the stuff that we buy.

Canada is a northern country – it snows a lot in our country – and yet millions take for granted that in the middle of winter we can go down and buy fresh raspberries, strawberries, onions, and tomatoes. Where do they think that’s growing in Canada? When I was a kid and I wanted a vegetable or fruit in winter, my mother said: go to the canned goods section. Now we want fresh food. Do we not think that’s come from somewhere else on the planet? What was the ecological cost of delivering that? It costs less than a dollar for an apple in the middle of winter that’s shipped all the way from New Zealand. But what was the ecological cost?

I keep going to Japan and telling the Japanese: “the oceans are a mess. Why aren’t Japanese leading the world and fighting to protect the ocean?” They look at me with a blank stare and say: “what are you talking about? Go down to Tsukiji, the world’s largest fish market. There’s lots of fish there.” The reality is, 50 years ago, virtually all the fish in Tsukiji would have been caught within 50 miles of Japan. Today, they’re caught from around the world. To them, it’s just fish, and there’s lots of fish there, so everything is fine.

Globalisation hides the impact. When we go to buy cotton shirt, how many of you ever say: “is this organic?” Cotton is one of the most chemically intensive crops that we grow, and if you look at a big cotton growing area in Eurasia, around the Aral Sea, it’s been an absolute ecological and social disaster. But we don’t ask that. I just want a T-shirt. I pay my money, and I buy it without a second thought. It’s that way for virtually all of the products that we buy. In this period of explosive growth in our ecological footprint, we are in fact undermining the very life support systems of the planet.

You see, because we no longer see what the life support system is. We live in a world that is shaped and constrained by the laws of nature. In physics, we know that you can’t build a rocket that will travel faster than the speed of light. Nobody complains about that, except maybe science fiction writers. We know that the law of gravity says you can’t build an anti-gravity machine here on Earth. We know that the first and second laws of thermodynamics mean you cannot build a perpetual motion machine. We know that, and we accept that. Physics imposes that on the way that we live.

In chemistry, it’s the same thing. We know that there are limits on the kinds of reactions you can carry out, and molecules we can synthesise, and we live with that. That’s imposed by the world that we live in. In biology, it’s the same thing. Biology dictates that as a species, there are carrying capacities for any ecosystem. For us, we didn’t evolve to fit a specific ecosystem, we’re very
adaptable – the entire biosphere has become our living quarters, and there has to be a carrying capacity for any species within a biosphere; it can’t support an infinite number.

We also know that we are biological creatures, we’re animals. As animals, our biological make up dictates absolute needs. I spoke to children here in Australia, and I said: “Now kids, I want you to try this for me. Take a deep breath and hold it, hold that breath for five minutes while I keep on talking.” Kids are so trusting that they try to do that, and of course they have to take another breath. The illustration is that air is something you need from the moment every one of us left our mother’s body, until the last breath we take before we die. Air is so important you cannot commit suicide by deliberately holding your breath. Your body will not allow you to do that. We need air. If you don’t have air for three or four minutes, you’re dead. If you have to breathe contaminated air, you’re sick. So surely, biology dictates our highest priority as an animal should be the protection of clean air.

I didn’t realise the extent to which calling someone an animal is a real insult until I gave a lecture in Austin, Texas, many years ago. There was an audience about this size, with a lot of children in the audience. At the end of it I said: “kids, if you remember one thing from my lecture, remember that we are animals.” My God, did their parents get pissed off: “Don’t you dare call my daughter an animal!” You can see our attitude towards other species: if you call someone a pig, a chicken, a worm, a snake, or an ape – these are insults, because somehow we think they’re not up to us.

I walked into a store in Calgary, Alberta, and in the front window there was a big sign that said: “No animals allowed”, and I went in and told the owner: “If you enforce that, you are not going to have any customers.” He thought I was nuts. So we don’t like to remember that we are animals. But if we don’t, we don’t understand what our most fundamental needs can be.

Physics, chemistry, biology dictate clearly the world that we live in and the limits and constraints on that world. We need clean water. Without water for more than a few days you’re dead. Drink contaminated water and you’re sick.

All of our food was once alive and most of it was grown in the soil. We need clean food. Without food we die in a few weeks. Our biology dictates that all of the energy in our body that we need to move and grow and reproduce - all of that energy is sunlight captured by photosynthesis, transformed into chemical energy and then we get that by eating the plants or eating the animals that eat the plants. And what delivers these fundamental needs we have as animals is the web of living things around the planet we call biodiversity.

Biodiversity delivers what I call the four sacred elements: earth, air, fire and water. That is what I learnt from my aboriginal brothers and sisters in Canada. I have been a student of theirs now for over 30 years. They haven’t lost that understanding that we are part of the earth, that the rest of life is our brothers and sisters and that we are created out of the four sacred elements from mother earth.

Other things, we create and think that they are just as important. We draw borders around property, around cities, states and countries. And boy, do we take those borders seriously. We go to war and people kill and die protecting those borders. In Texas in the United States, you’re allowed to kill someone – legally – who comes onto your property. You know what? Fish and birds and air and
trees don’t give a shit about our borders. We take them very seriously for ourselves, but don’t expect nature to pay any attention to the borders that we create.

Then we do other things. We invent other ideas like capitalism, economies, corporations and markets. And we really take those things seriously. We act as if they are real entities. Just listen to the news reports every morning: “the market’s not looking too healthy this morning.” Mitt Romney said: “if Obama gets re-elected, the market is not going to be happy.” We make them into entities.

A few hundred years ago, we really believed in dragons and demons and monsters – I mean, we really believed. We would give them jewels and sacrifice virgins and do anything to make sure they’re happy. Today, we know those are figments of our imagination – nobody believes in dragons and demons and monsters today. What did we do? We replaced them with another demon or another figment of our imagination called the market. We do the same damn thing. In 2008, what did Mr Obama do? He poured hundreds of billions of dollars into the banks, into the market in order to get it back up.

Those are not forces of nature, we invented them. And guess what, they’re the only thing we have a hope of changing if they’re not working. You can’t do the same with nature. The result of reifying these ideas, these human elements of creation, is that they dominate the negotiations that we now involve ourselves in, when it comes to the biosphere. Look at the international conferences we held in Rio in 1992, the largest gathering of heads of state ever in human history. Nobody remembers that at Rio, people signed a climate convention saying we will stabilise 1990 levels by the year 2000. Kyoto, 1997, we set the target for reduction at 5 to 6% below 1990 levels by the year 2010. Australia is the only industrialised country allowed a target above 1990 levels because Australians whinged and complained: “No, no. We need coal. We’re a special country.” It just boggles my mind.

I come to Australia, and I love Australia. I think of it as my second country, and yet you’ve got something Canadians would die for called sunlight. You’ve got the nerve to say: “No we can’t get off coal”. I know that you’ve got the expertise. The CSIRO, the universities have really outstanding people if you just make the commitment. This is our opportunity, our energy source of the future. But no, we’re stuck because of the world in which human-created ideas and borders and economies fence in the argument or the discussions.

Look at what happened in Copenhagen. Copenhagen was supposed to be a renewal of the Kyoto process. By the way, most countries who signed on to Kyoto met their targets. Canada signed, but pulled out a year before the agreement ended. At Copenhagen, 192 countries gathered to negotiate the atmosphere – that doesn’t belong to anybody – through the priorities of 192 national borders and 192 national economic agendas. So what we ended up doing then, is not dealing with the atmosphere as it should be, we tried to shoehorn nature into a human agenda. It simply cannot work.

So what do we do? For years in British Columbia, I’ve battled the forest industry over their clear cut practices and to ward off these big battles, the British Columbia government set up a series of round tables where all of the “stakeholders” with a vested interest in some aspect of that forest could come to the table and you’d then negotiate. They’re doomed to fail because what you do is fight for your stake. Ultimately, what results is compromise. I just don’t think we’re at the point where we can compromise.
I’ve been asked by the vice president of Shell to meet with other environmentalists and his executives to talk about future energy strategies. But again, it was all couched within the perspective of “how do we pay for this” and “what is the economic cost of doing the right thing”. The CEO of a consortium of tar sands companies, visited me and said: “will you talk to me?” And I said: “sure, I’m happy to talk, but I’ll only talk to you if we can agree on certain basic things. I don’t want to fight anymore. There’s no point fighting. Let’s start from a point of agreement.”

So, how about this? How about starting by saying, we are all animals, and as animals our most fundamental need, before anything else, is clean air, clean water, clean soil, clean energy and biodiversity. But we’re also social animals, and as social animals, we have fundamental needs. What are our most fundamental social needs? Our most fundamental social need, it turns out, to my amazement, is love. If you look at the literature, our most fundamental need for children is an environment of maximum love, where they can be hugged, kissed, and loved. That’s what humanises us and allows us to realise our full potential.

If you look at studies of children growing up under conditions of genocide, racism, war and terror, children deprived of those opportunities, you find people who are fundamentally crippled physically and psychically. We need love, and to ensure love, we need to have full employment, and social justice. We need gender equity. We need freedom from hunger. These are our most fundamental needs as social creatures.

And then we’re spiritual animals. We emerged out of nature and when we die we return to nature. We need to know there are forces impinging on us that we will never understand or control. We need to have sacred places where we go with respect, not just looking for resources or opportunity.

I believe we are doomed to failure unless we come together to agree on what our most basic needs are. And then we ask how do we create an economy, how do we make a living, how do we keep viable strong communities? We’re doing it all the wrong way, because we take ourselves so seriously. And we think we’re so smart we create things that dominate the discussions. That’s the challenge and what has to change.

Thank you.

Dr Suzuki questions

Dr Suzuki gave the following responses to audience questions, which are paraphrased below.

Q1: (Bill Gates devotes himself to good causes in global health. Business people have a lot of influence. Can business people help to reach agreement so it is not always a battle?).

A1: Yes there are all kinds of enlightened people, and Bill Gates. You know everybody’s all in love with Bill Gates. God damn it. He’s a multi-billionaire! Nobody should be allowed to be worth a billion dollars. He does good things, but the whole idea that people that are that wealthy are the ones we then turn to to do good things....that’s why we elect governments. There are a lot of good people but I think, as long as we remain trapped within the current economic system, which is absolutely flawed, we’re in trouble.
The two major things that I think are its flaws are one: we seem to equate growth with progress. And economists actually think the economy can grow forever. It’s impossible. So the idea of a growth economy has got to stop.

And the other thing is that when I fight forest companies about logging forests, they’re talking about pulp, jobs, profit, and I’m talking about the ecological benefit of a standing forest. You know it’s doing all these things, like taking carbon from the atmosphere, and putting oxygen back into it - not a bad service for an animal like us. But guess what...those don’t cut any ice economically. So we’re not arguing the same thing. Every time we go to talk about reducing greenhouse gas emissions, we’ve always got to talk about it within an economic context. It’s doomed to fail.

Q2: (Can small steps towards a solution add up?)

A2: I think people have to get onto reducing our footprint for sure. Especially at the level of cities, there is a lot of very good stuff that’s going on. But I don’t think that, globally, as a species, we’re going to do it until we get out of the economic paradigm we find ourselves in. I’m very excited about the transition town movement - urban agriculture that’s being driven in Canada by young people. People are beginning to question their values. Quite frankly I think that to avoid the absolute catastrophe, we need a market meltdown. We’ve got to have a collapse. I thought 2008 was going to be it. But until we get the stock market crashing to where people say: “My god, this is a really screwed up system, we’ve got to change the whole thing”, we’re going to have to do it all in local groups.

Q3: (Will the IPCC report be portrayed as scientists not being united. How can we ensure focus remains on the great work scientists do to give us foresight.)

A3: I think the whole discussion has been muddied. I want to remind you that in 1988 we were at the absolute height around the world of concern about the environment. In 1988 I came to Australia for the first time. I met Roz Kelly, the Minister for Environment. She got it, she was right there. In 1988, a guy ran for President in the United States and said: “If you vote for me, I will be an environmental president”. You know who that was? George H.W. Bush. He didn’t have a green bone in his body, but he said it because Americans had put the environment at the top of the agenda. In 1988, Brian Mulroney was re-elected Prime Minister of Canada. He appointed his brightest star to be the Minister of Environment.

I interviewed him three months after he was appointed. I said: What is the most critical issue Canada is facing?” Right away, he said: “Global warming”. I was impressed. I said: “How serious is it?” He said: “It threatens the survival of our species. We have to act now”. So, it was all there in 1988. What the hell happened?

Well I’ll tell you what happened. The fossil fuel industry and outrageously rich people, like Gina Rinehart and the Koch brothers in the United States began to pour - not millions, not tens of millions – but hundreds of millions of dollars into a campaign of confusion, supporting right wing think tanks to say this is junk science, this is a natural phenomenon, that humans can’t possibly have that effect. And it worked! And we in the media have been complicit. When we have a story on climate change, we bring on a scientist like Tim Flannery who says: “Look we’ve got to do this”. But oh, we’ve got to have a balanced report so we’d better get one of those sceptics to come on and say it’s bull s***. And that’s supposed to be balanced. We take a totally skewed picture of reality. Reality is that the
vast bulk of scientists are saying this is serious, and we’ve got to do something. And a few people, mostly paid by the fossil fuel industry, are saying other things

What’s going to happen with the latest IPCC report? You can see it happening now. Organisations like the Heartland Institute are going to pull pieces out of here and there, out of context. They’re going to lie, they’re going to distort and say: “See, it proves exactly what we said. It’s not really happening. For the last 16 years there’s been no increase. So it’s over, we’re done with global warming. And look, they’ve modified what they think the rise in temperature is.”

This is all baloney. But it will work. For the public, it is total confusion. This is really an attempt to set science aside as relevant: “Oh, they’re just another vested interest group, they just lie, you know, about Climategate. They just lie like everybody else. They want bigger grants.” And I fear that the waters are very, very muddy. And we have a total inability as a public to wade through all this information, to decide what is credible, and what is not. I tell people: “Who should you believe? Follow the money. Where are they getting their money? That will indicate what angle they’re coming from.”

Q4: (If we disappeared, would other species survive?)

A4: A lot of kids come up to me and say: “How do I go about saving the planet?” And I tell them: “Don’t worry about the planet. The planet was fine long before we ever arrived. And it will be fine long after we’ve gone.” I am sure, however catastrophically we’ve upset the balance, life will ultimately equilibrate, be it a totally different kind of life. I have children, I have grandchildren. I simply cannot accept what many of my colleagues have reached now - which is the position that it’s too late, that we’ve passed too many tipping points. I think this is what Clive Hamilton was suggesting in Requiem for a Species. Sir Martin Rees, the Royal Astronomer of England, was asked recently on BBC: “What are the chances our species will survive to the end of this century?” And he said: “50-50”. James Lovelock, who coined the expression Gaia for all life on earth, has written a book in which he says over 90 per cent of all humanity will be gone by the end of this century.

I can’t simply say: “That’s it, we’ve just got to live out our life and it’s too late”. I have children and grandchildren. I am not a Pollyannnerish optimist, but I live on hope. And the hope is based on the fact that we don’t know enough to say it’s too late. We just barely know that much. And I believe that if we give nature a chance, nature will be far more forgiving than we deserve.