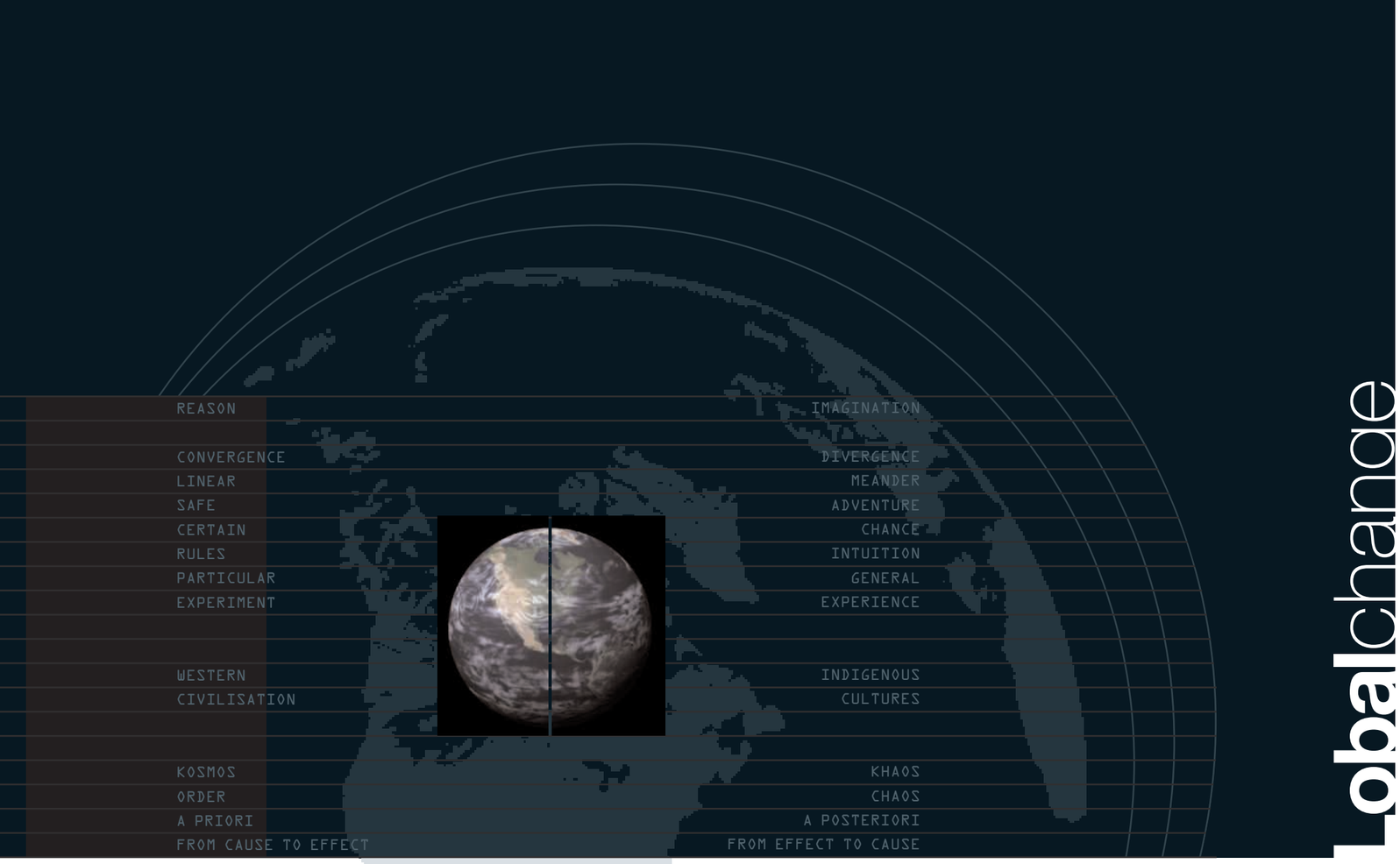


Global change

Lindsay Johnston interviewed Ray Anderson prior to his address to the Commonwealth Government Business Leaders Forum at Parliament House, Canberra in May and has transcribed extracts from his talk.

Ray Anderson has been Co-Chair of President Clinton's Council on Sustainable Development. He is founder and President of Interface, the world's largest manufacturer of commercial floor coverings with names such as Heuga, Bentley, Guilford of Maine. Interface has become an exemplar for the sustainable revolution. With his 'dream team' of expert advisers, which includes Amory Lovins of the Rocky Mountain Institute and architects Bill Browning and William McDonagh, Anderson is demonstrating 'lobal change' – moving thinking from left brain to right. He sees the creation of the next industrial age as a design problem.

● **Fellow travellers on spaceship Earth –** our spaceship is in trouble. For the first 21 years of my company's existence, I never gave one thought, not one, to what it was taking from the Earth or doing to the Earth. Then in August 1994, I read Paul Hawkens' book The Ecology of Commerce. Reading his book changed my life. It was an epiphenomenal experience – it was a spear in the chest. Hawkens' book gave me the vision that my company should be sustainable, even restorative. Paul's examples of what's happening to the eco system is a litany of horror. What's the condition of our spaceship Earth? In business we go for the bottom line. Here's the bottom line concerning spaceship Earth – every life support system that comprises the biosphere is stressed and in decline; long-term decline caused by man-made intervention – polluted rivers, polluted overfished oceans, lakes dead from acid rain and industrial pollution, our forests too, dead and dying from acid rain, atmospheric ozone affecting crop yields adversely. We don't think about that too much in the United States, the land of abundance.

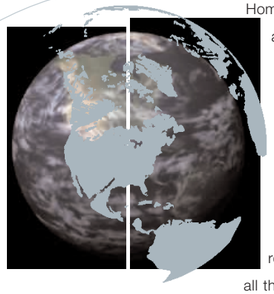
In China, advancing industrialisation and the pollution created and the adverse affect on crop yields will determine whether China can feed itself. A China that cannot feed itself becomes everybody's problem. Disappearing wetlands, our farmlands denuded of topsoil, increasing salinity, air polluted by countless toxins, carbon dioxide, other greenhouse gases building up inexorably to create global climate change. The scientific debate about global warming is over – 2600 scientists from around the world agree, only a handful holds out in sceptical disagreement. Globally the general pattern is frightening. Species are disappearing into extinction at a rate unknown on Earth, since the mass extinction of the dinosaurs 65 million years ago. Paul Hawkens calls it 'the death of birth'.

This is not good news for our species either. If that horrible list is not enough, add to it a required nuclear clean-up that is off the scale both in terms of cost and horror.

No attention to human capital. One billion of Earth's population is unemployed, looking for work and cannot find it, another billion living in starving conditions, another billion hanging on – half of Earth's people are in trouble. No attention to natural capital. Earth's store of natural capital is the natural resources created for us by the Earth over millions of years – the finite, exhaustible, non-renewable resources of natural gas, coal and oil. Yet, modern economies focus myopically on financial capital.

If all of Earth's time was a one-mile long time line, the entire history of our human species is only 3/4 of an inch, and our industrial age emerged 3/1000th of an inch from the end. In that brief instant of time has occurred the great cataclysmic event – industrialisation. The industrial system is spewing poison into the atmosphere and the result is very predictable – the third great mass extinction in the recent history of the Earth. Seven out of ten scientists in the American Biological Association agree, a mass extinction is now underway. The first two, unavoidable natural disasters, the third, the quite deliberate act of the highest form of intelligence yet to evolve. The product of that intelligence – the industrial system. Once one understands this crisis, no thinking person can stand idly by and do nothing. My message to you is that the first industrial revolution, industrialism as we know it, is a mistake. It is destroying life on Earth and is unsustainable. I believe we must have another industrial revolution and a better one and get it right this time. You may point to wealth that has been created as a result of the first industrial revolution but I will answer, it came at Earth's expense.

What is the mindset behind the first industrial revolution? The Earth is so large, it is an inexhaustible source of materials, natural resources will never run out, there will always be substitutes available. The Earth is so large it is a limitless sink, it is able to assimilate our waste, no matter how poisonous, no matter how much. Relevant time frames? The life of a human being, or maybe the working life of a human being. Earth was made by God for man, to conquer, to rule.



Homo Sapiens don't really need the other species, except for food and fibre and fuel and maybe shade on a hot summer day. Labour productivity is the only route to abundance for all. Technology is omnipotent, especially when coupled with human intelligence. Well what kind of intelligence is that? Oh! Left brain intelligence – practical, objective, realistic, pragmatic, numbers driven, results oriented, unemotional – these will suffice, thank you very much.

Every element of this paradigm is wrong, dead wrong. Survival of our species depends on a whole new industrial system, based on a whole new paradigm, a new and more accurate view of reality. A view of knowledge that recognises for example that the Earth is finite – you can see it from space, that's all there is, there isn't any more. It's finite, both as a source – what it can supply – and as a sink – what it can assimilate and endure. Relevant time frames are geological in scale. The right side of the brain, the caring, nurturing, artistic, subjective, sensitive, emotional side – in business, the 'soft' side of business – is at least as important as the left side, and perhaps a good bit more important, since it represents the human spirit.

Is the invisible hand of the market an honest broker? The market is at least opportunistic if not outright dishonest in its willingness to externalise any cost that an unwary, uncaring, public will allow. Does the price of a pack of cigarettes established by the market in its wisdom reflect its cost? No way. Does the price of a barrel of oil, established by the market in its wisdom, reflect its cost? No way, not close. The military power projected to the Middle East to protect the oil at its source adds at least $100 dollars a barrel, when you throw in the occasional Gulf War. Hurricanes, tornadoes, gales, typhoons – who is paying for those? Why, you are, through your insurance premiums, thank you so very much. And global warming – who will pay for the 9000 square miles of the United States of America that will disappear under rising sea levels in the 21st century? The US would fight World War III before it would allow some foreign invader to take 9000 square miles of America – but it will happen. And finally, resource efficiency, not labour efficiency.

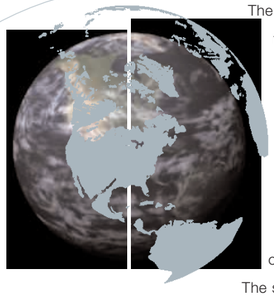
Efficiency, in the use of all resources, is the route to abundance for all. So there's an immediate proximate problem. There's a problem behind the problem – an industrial system based on a totally flawed view of reality. The ultimate problem is the mindset behind the system. This must change. The real crisis of our times therefore is in our heads. My friend David Crockett calls for 'lobal change'. An industrial system based on a flawed view of reality will crash, given enough time.

At Interface we have pursued seven different fronts to sustainability. The first of those fronts is elimination of waste. Any cost that goes into our products must deliver value to our customers, if it doesn't it is waste. It means waste in its traditional notion, scrap, but it is also a mispriced invoice, defective goods, a misdirected shipment. Anything we don't do right the first time is waste.

The second front, is the front of benign emissions. Factories that don't need outlet stacks, how can that be? Recyclical processes – factories that don't need effluent pipes. We must go upstream, all the way back to the lithosphere where nature put that stuff, and learn to leave it there. And we've just begun to understand how difficult that undertaking is. Bill McDonagh says "we have to learn to take the filters off the ends of the pipes and put them in our brains and focus our brains upstream".

The third front is renewable energy. I believe in our time, it must be solar, maybe fuel cells in the short run, a gas turbine maybe running off biomass generated by gasses. In the long run we have to learn to live off current income, current solar income. The Earth cries out for a carbon tax to hasten the day when photovoltaics will be competitive with fossil fuels. So the concentration is on efficiency. Who cares if it costs a little bit more? Our customers are asking for it.

If we understand that design leads to the manifestation of human intention, and if what we make with our hands is to be sacred and honour the earth that gives us life, then the things we make must not only rise from the ground but return to it… soil to soil, water to water… This is ecology. This is good design. It is of this we must now speak.



The fourth front is recycling. Capturing precious organic molecules at the ends of their useful lives, in the old thinking, and giving them life after life, in the new thinking. Recycling using renewable energy. If we can get it right we'll never have to take another drop of oil from the Earth.

The fifth front is transportation. The service side of business requires resource efficient transportation, the front least within our control. We can video conference to avoid that unnecessary travel, we can drive the most efficient automobile available, we can site our factories close to their markets, we can plan logistics for maximum efficiency, but this is the hardest one to crack. But the global brain is waking up.

The sixth front is a sensitivity hook up. In many ways it is the most fun. It opens all kinds of new desirable linkages: service to the community, investment in the community, especially in education, sensitising the community itself to the thousands and thousands of little things every one of us can do to inch towards sustainability, and teaching people the principles of the Natural Step program. ISO 14001 is our road map.

The seventh front calls for the redesign of commerce itself. This hinges on whole new notions of economics, especially prices that reflect full cost. Internalising the externalities as in the price of a barrel of oil. To us it means shifting to servicing. In our sector it's not necessary for our customers to own the carpet to enjoy the service of that carpet. We retain ownership of the carpet, maintain it and at the end of its useful life we intend to recycle it with renewable energy.

If we come to success on all seven fronts, it will be at the expense of the inefficient adaptor, the competitor who thinks the price of oil reflects it true cost. We will be ready for the day that the price of oil reflects its true cost – $100 a barrel, $200 a barrel. That is the day we'll be kicking butt. I'm often asked about the business case for sustainability – and here it is in a sentence – the economy is the wholly owned subsidiary of the environment. Get that. The economy is the wholly owned subsidiary of the environment. Therefore the first case for sustainability is survival of business itself. The second case is doing well by doing good. And the third, I believe there are new and noble fortunes to be made bringing the new technologies and the products of those technologies to market in the next industrial revolution. The characteristics of that industrial revolution will be renewable not extractive, cyclical not linear, solar and hydrogen driven not fossil fuel driven, benign rather than abusive and they will emulate nature. Someone said 'how does a forest work?' When we understand how a forest works, we'll have the model for the industrial system for the next industrial revolution. One organism's waste is another's food. One enterprise's waste becomes another's food. Raw material. And focused on resource productivity, all resources not just labour, but in particular, natural capital. Using what we have in abundance, a billion unemployed people to conserve what we have in diminishing supply, natural resources. In the next industrial revolution, the technophobes and the technophiles will be reconciled. Affluence will be redefined in terms of happiness and quality of life.

The characteristics of the next industrial revolution will be renewable not extractive, cyclical not linear, solar and hydrogen driven not fossil fuel driven, benign rather than abusive and they will emulate nature. Someone said 'How does a forest work?' When we understand how a forest works, we'll have the model for the next industrial revolution.

Now if you'll allow me, I'll close with an original poem by Glen Thomas on our staff at Bentley Mills entitled Tomorrow's Child. Tomorrow's Child speaks to us so clearly if we just will listen with the simplest and most profound message, reminding us that we are all part of the web of life and we have our choice to make while we are here in our brief visit to this beautiful blue planet. To either help it or hurt it: it's your choice.

Tomorrow's Child
Without a name and unseen face
And knowing not your time or place
Tomorrow's child though yet unborn
I met you first last Tuesday morn
A wise friend introduced us two
And through his shining point of view
I saw a day that you would see
A day for you but not for me
Knowing you has changed my thinking
For I never had an inkling
That perhaps the things I do
Might someday, somehow threaten you
Tomorrow's child, my daughter's son
I'm afraid I've just begun
To think of you
And of your good, though always having
known I should
Begin I will to weigh the cost
Of what I squander, what is lost
If I forget that you
Will someday come and live here too.

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Ray Anderson's recently published book Mid-Course Correction is available from Interface, tel: 02 9698 3303 Cost $30.