Epilogue. Musings

Pessimism and optimism

In previous pages, we have noted that the prevailing cultures across the world are generating human activities on a scale and of a kind that threaten the integrity of the living systems of the biosphere on which we depend. If these activities continue unabated, the ecological collapse of society is inevitable. There are also other highly unsatisfactory features of current society, including the gross disparities in health and conditions of life across different socioeconomic groups and the existence of thousands of weapons of mass destruction.

I have heard it argued that there is no hope of achieving ecological sustainability until we really understand the whole complex biophysical and social system in its entirety, and that much greater effort should be aimed at achieving such understanding through systems modeling. In my view, despite recent advances in systems theory and information technology, the complexity of the system is such that this understanding will always be beyond us.

However, all is not lost, because I suggest we don’t need to understand all the intricacies of this massive and extremely complicated system in order to move forward to a biosensitive society.

The approach that we advocate is indeed much simpler. All that is required initially is a single, if highly significant, change in the system. This change will involve all the world’s prevailing cultures coming to embrace a sound understanding of the bionarrative. Such biounderstanding at the heart of these cultures will have far-reaching repercussions throughout the whole of society — the ripple, or butterfly, effect.
As an outcome of this new understanding, these cultures will share profound respect for the processes of life in and around us, and they will give highest priority in human affairs to the attainment of harmony with these processes. This life-oriented worldview and set of priorities, or bioperspective, will be the pivotal factor in the ecological survival of civilisation. All the necessary changes in human activities (e.g. energy use, consumer behaviour, forestry, lifestyles) and in societal arrangements (e.g. the economic system, government regulations, population policies) will follow naturally from this seminal cultural transformation. Shared biounderstanding across all societies is thus a precondition for the future well-being of humankind and the rest of the living world.

We can call this transformation a biorenaissance, because in the distant past hunter–gathering and early farming cultures understood that humans are part of nature and completely dependent on other forms of life for their well-being and survival, and they held deep respect for the living world.

What is the likelihood of this cultural enlightenment coming about soon enough to avert ecological disaster on a massive scale? I am rather pessimistic. The maladaptive assumptions of the prevailing cultures are deeply ingrained. The notion that economic growth must take precedence over all other considerations and general ignorance of biological and ecological realities do not auger well for the future.

On the other hand, although I think it unlikely that effective cultural reform will come about soon enough to avert catastrophe, I am optimistic enough to think it is not impossible. So long as this is the case, I feel strongly that those of us who understand the nature and seriousness of the situation should continue to do all we possibly can to hasten this critical revolution in understanding and thinking.

One thing that could accelerate the cultural transformation would be for the ideology behind the movement to be given a name. All major political ideologies and religious belief systems have names — Marxism, fascism, socialism, capitalism, Buddhism, Islam, Christianity, Zionism and so on — and yet this life-oriented ideology, ancient as it is, has yet to be bestowed with a universally accepted name.
The term ‘environmentalism’ has been in common use since the 1960s, but it is not adequate for our purpose. The cultural and societal transformation that will be necessary to make the transition to biosensitivity will need to go much deeper than mere concern for ‘the environment’. It needs to be a whole new mindset that understands, celebrates and respects life on Earth and that places the health and well-being both of humans and of the ecosystems of the biosphere right at the top of the social and political agenda.

The adjective ‘green’ is also widely used today, meaning ‘concerned with or supporting protection of the environment as a political principle’ (Oxford Dictionary), and ‘greenism’ has been used for the underlying philosophy. While greenism is an all-important aspect of the ideology that we are talking about, it is less comprehensive, and I find it an awkward term.

Some years ago I coined the word ‘biorealism’ for this purpose — but again I felt it was not adequate.¹ Since then I have wasted many hours trying to find a more appropriate term. Possibilities that have come to mind include biocentrism, biosocialism, biophilism, bioradicalism, bioempathism, bioactivism, biofuturism and life-ism. But none of these words really fits the bill, and anyway it turns out that all of them are already in use, and none is defined in terms that correspond to our meaning.

So we must patiently wait for someone to come up with an appropriate name for the ideology on which the survival of civilisation will depend.

My personal vision of the cultural reform process is summarised in Figure 8.1. Some readers will see these ideas as hopelessly naive and unrealistic. Pie in the sky stuff. Perhaps they are; but if so, then I believe there is little hope for humanity.

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Tenets

- The massive growth of the human population and the great intensification of resources and energy use by human society are unsustainable ecologically. If present trends continue unabated the collapse of civilisation is inevitable.
- There are, also, other highly unsatisfactory features of the human situation today, like the major disparities in health and conditions of life across different socioeconomic groups and the existence of thousands of weapons of mass destruction.
- The best hope for the survival of civilisation lies in a speedy transition to a society that is truly sensitive to, in tune with, and respectful of the processes of life. This is a biosensitive society. It will be a society that promotes health and well-being in all sections of the human population and in the ecosystems of the biosphere. This will require big changes in the scale and nature of human activities on Earth.
- By far the most essential difference between a biosensitive society and that in which we live today will lie in the world view and priorities of the prevailing culture. In a biosensitive society, this culture will embrace a sound understanding of the story of life on Earth and the human place in nature. This is biounderstanding.
- As an outcome of this shared biounderstanding, the prevailing culture will hold profound respect for the processes of life. Unlike today, the goal of being sensitive to, and in tune with, these processes will be at the top of the political and social agenda.
- This fundamental shift in priorities, in what matters most, will be the key factor in the survival of civilisation. All the necessary changes in human activities (e.g. energy use) and in societal arrangements (e.g. the economic system) will follow naturally from this seminal cultural transformation.
- Shared biounderstanding across all parts of society is thus a precondition for the survival of civilisation.
An ethical digression

The richness I achieve comes from nature, the source of my inspiration. I have no other wish than to mingle more closely with nature and I aspire to no other destiny than to work and live in harmony with her laws.

— Claude Monet

Nature is my god. To me, nature is sacred. Trees are my temples and forests are my cathedrals.

— Mikhail Gorbachev

For some of us, the bionarrative has meaning beyond the purely practical. It has ethical significance. This is not to say that this story tells us what is good or evil. The bionarrative comes from the sciences, and the sciences tell us nothing about morality. They do not tell us whether it is right or wrong to cause needless pain or distress in humans or other animals, or whether it matters if the human species comes to an early end through its own activities and arrogance.

Another weakness of the bionarrative is that, while it tells us more and more about the biophysical world, and what happened in the past and how things work today, it does not explain everything. It does not explain existence as such. It suggests that the universe began with a big bang, but does not explain why there was a big bang, or what existed before the big bang, or whether there was a before.

It has been said that life itself is ultimately explainable in terms of the laws of physics. These laws will lead, willy-nilly, to life on suitable planets in the universe. There is, however, a difficulty with this proposition. Atheists are confronted with the same problem as those who believe in God. The latter are faced with the conundrum ‘Who created God?’ Atheists must ask: ‘Where did the laws of physics come from?’

And, indeed, what a wondrous set of laws — laws that have led to
the eventual coming into being, starting from the primordial mass of
matter and energy, of the myriads of living organisms that make up
our biosphere, as well as the plays of Shakespeare and the symphonies
of Beethoven.

On reading some recent discussions on why humans develop religious
belief systems, there is one thing that strikes me as odd. I am puzzled
by the fact that they say little about the ‘thank you factor’.4 The
following quotation from Ian Warden, a columnist in the *Canberra
Times*, puts it nicely:

> True believers are so very lucky. So much in life is so very lovely
> (a morning of whales! of albatrosses! of literature! of wearing fancy
dress!) that, though a non-believer now, it still seems spiritually
impolite to know such happiness, but to not be able to say a heart-felt
‘thankyou’ for it.5

I share Warden’s predicament. The processes of life have brought me
into being. They have given me my life, my body, my senses, and
my capacity to think, to love and to enjoy. They have given me the
opportunity to look around, to marvel, to feel and to choose pathways
of action. I, too, would like to say a heartfelt ‘thank you’ — for this
wondrous gift.6

My own philosophy of life has much in common with deep ecology.7
One definition of deep ecology reads as follows:

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5  *Canberra Times*, 4 Nov. 2006, p. 2.
6  I appreciate that there are many people who would not share this thankfulness. Cultural
evolution has brought about a situation such that many hundreds of millions of humans live
very miserable lives in conditions of extreme squalor and deprivation. It seems that even Buddha
felt no sense of thankfulness. His aim was to escape from the shackles of ordinary life on Earth.
I am among those who are more fortunate.
7  This movement owes its origin to the writings of Arne Naess — see, for example, ‘The
shallow and the deep, long-range ecology movements, *Inquiry*, 16, 1973: 95–100. It is a pity
about the name ‘deep ecology’. According to my dictionary ‘ecology’ means *the study of the
relationships between living organisms and their environment*. ‘Deep ecology’ would therefore
mean *the deep study of the relationships between living organisms and their environment*. This, of
course, is not at all what deep ecologists mean by the term.
Deep ecology is an approach to ethics that holds that the non-human environment has intrinsic value that is independent of human interests. Deep ecology is a reaction to anthropocentric approaches to the environment which hold that the environment has value only as a means of promoting human interests. Deep ecologists view the value of human activities in a larger environmental context.8

Certainly, I find myself in general agreement with ‘The Deep Ecology Platform’, one version of which reads:

1. All life has value in itself, independent of its usefulness to humans.
2. Richness and diversity contribute to life’s well-being and have value in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy vital needs in a responsible way.
4. The impact of humans in the world is excessive and rapidly getting worse.
5. Human lifestyles and population are key elements of this impact.
6. The diversity of life, including cultures, can flourish only with reduced human impact.
7. Basic ideological political, economic and technological structures must therefore change.
8. Those who accept the foregoing points have an obligation to participate in implementing the necessary changes and to do so peacefully and democratically.9

Some deep ecologists put a great deal of emphasis on what they call ‘deep experience’, which is described as a semi-religious experience.

Deep ecologists disapprove of what they call ‘anthropocentrism’. If by anthropocentrism they mean an attitude that sees humans as separate and superior to nature, then I am in entire agreement. Such an attitude is based on ignorance and can lead us into big trouble. But, if anthropocentrism is taken to mean the tendency of humans to be especially interested in themselves and their own well-being, then I think we are stuck with it. It is a natural human characteristic,

8  See www.scicom.lth.se/fmet/ethics_03.html.
the product of our evolutionary background. In my view, however, this kind of anthropocentrism is consistent with the protection and enjoyment of the rest of the living world.

Deep ecologists and like-minded people are in a minority in our society. The ideal of ‘conquering nature’ is still with us today. It goes back over 300 years to the early days of the so-called Enlightenment. For example, Descartes wrote of the purpose of science as part of the struggle to ‘render ourselves the masters and possessors of nature’.10

The notion of conquering nature was also part of the central dogma of Mao Zedong’s Cultural Revolution, which was contrary to earlier, established Chinese philosophy.11

A few years ago, I came across the depressing online journal Capitalism Magazine. The titles of a couple of articles on the environment were as follows: ‘Reject environmentalism, not DDT’; and, ‘Wasting billions on the green agenda’. There was also an article called ‘Industrialisation and the environment’ in which the author describes what he calls the ‘nature-as-sacred creed’. He finishes his article with the following words:

My conclusion [is that] we should reject this anti-human creed [the nature-as-sacred creed] and uphold man’s right to achieve his full glory by using his rational mind to conquer nature for the purpose of enhancing and enjoying life.

My position

Having apparently dismissed science as a source of ethical judgement, I will now describe how, for me, the sciences and, in particular, the life sciences and biohistory, have had a profound effect on my world view and values.

10 Rene Descartes, Discourse on Method, 1637.
First, I must say that I am not attracted to the idea of a supernatural being or god who has created each species of animal and plant separately and who is monitoring my behavior and who will, if I believe in him or her, take me up to Heaven when I die.\footnote{And yet I rather enjoy some of the ritual associated with religion. Of the various kinds of belief systems that humans have concocted over the millennia, I have most sympathy with those that involve nature worship, which seems to me to make much more sense than the worship of any one particular god — because nature is something we can all experience directly, something we can all see. We are part of it and without it we could not exist. And for me it is wondrous and beautiful.}

All religions have their stories. Christians, Muslims, Buddhists and Hindus all have their stories. I have my story. It is the story of life on this planet and of the evolutionary emergence of humankind and of the interactions between humans and the rest of the living world. It is a story based on people’s conscious observations and powers of reason. It is not the stuff of dreams. It comes to us through the natural sciences. It is a truly amazing story and, in my view, it is likely to be much nearer the truth than any of the stories that are products of the imaginations and revelations of prophets and soothsayers.

The more I learn about the story of life on Earth and of the details of living processes — through personal observations and through the scientific observations of others — the greater is my sense of wonder. And, the more I learn, the greater my sense of respect for life and the creative forces that gave rise to the living world and to me.

I am thinking not only of the natural environment, with all its diversity and beauty, but also of the incredible and extremely complicated set of processes that go on inside my own body and that have kept it going for over 91 years.

For me, the bionarrative is a great source of inspiration. It is a driving force in my life, but it still leaves an unexplained mystery. This underlying mystery is ultimately responsible for me, and for all of life on Earth. It is unscientific to deny the existence of this mystery, just as it is rather silly to dream up an explanation in the form of a supernatural human-like being. I am content to accept the mystery as unexplainable at the present time, and I suspect that it will always remain so.
Sometimes my appreciation of the mystery, along with the experience of natural beauty, gives rise to feelings that I suppose could be described as spiritual — an apparent awareness of another dimension to reality, associated with a deep feeling of awe and reverence. Whatever the chemical phenomena in my brain cells that might lie behind such feelings, they are a vitally important part of my life experience.

My scientific understanding of the story of life, together with the feeling of deep thankfulness, generate in me a very strong wish to live in harmony with, and to be supportive of, the processes of life, and to be protective of nature when it is threatened by the actions of humankind. They lead me to believe it is wrong to kill living organisms needlessly, to cause unnecessary pain or distress in humans or other animals, or to trash the living systems that brought us into being and that underpin our existence. I feel it is right to seek to live in tune with the processes of life, and I see the promotion of health and well-being in fellow humans and in the living systems of which we are a part as what matters most.

We humans have all received the gift of life — and I see it as very wrong to deliberately deprive any other human of the opportunity to enjoy being alive, just as it is right to help others overcome threats to their existence and well-being.

These are ethical statements, and they are an outcome of my scientific understanding of the story of life on Earth and the human place in nature. Although the underlying source of these tenets is science, science does not, however, prescribe them. They come from within me.

I am among those who share Albert Schweitzer’s deep sense of reverence for life.13

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13 Albert Schweitzer lived from 1875 to 1965. His Reverence for Life philosophy is well described in en.wikipedia.org/wiki/Reverence_for_Life.
This text is taken from *The Bionarrative: The story of life and hope for the future*, by Stephen Boyden, published 2016 by ANU Press, The Australian National University, Canberra, Australia.