

WONDERING ABOUT HUMANITY'S DISTANT FUTURE

(Notes for a presentation on Deep Futures)

In the last few weeks University of New South Wales Press and McGill Queens University Press in Canada have co-published Deep Futures: Our Prospects for Survival. It is my fourth book with UNSWP and in the few minutes I have today I want to tell you something of why I wrote it, what ground it covers and several conclusions I reached. And I will mention several of the collateral rewards that have come my way through writing this book.

Why I wrote Deep Futures

Curiosity

In a word---curiosity. I am very curious about how our species will fare over coming ages. Will the human lineage survive, reasonably happily, into the far distant future? indeed, will we survive another millennium in reasonably good shape? Will the next thousand years be just ordinarily difficult or, if the next ice age arrives suddenly, particularly difficult? supposing we survive the next thousand years, will we eventually go extinct as most species do or will we evolve into a new species with which one might empathise? or into a whole lineage of species as in Olaf Stapledon's great sci-fi novel, *Last Men, First Men*? and, supposing we continue to evolve, will that new species or its descendants survive the death of the sun as an energy and light source in five billion or so years? not to mention a clutch of other cosmic challenges from asteroids to 55 hour days. Beyond that, there is the ultimate question as to if, when and how the universe will end and whether, in some sense, life might best that challenge.

In fact, a large part of what has been foreseen for the lineage's distant future can be likened metaphorically to posterity, if I might give the lineage a name, playing a game of dungeons and dragons. The other focus has been on speculations about the lineage's physical and mental evolution, possibilities for social organisation, technology developments and the macro-environment.

Peace of mind

I have written *Deep Futures* primarily for my own peace of mind, to find out how I think about these sorts of questions and what *can* be thought about them. How do I know what I think till I see what I say! the fact that I know so little of many of the things I am writing about deters me not a jot. I have to sort out what I know, not keep accumulating information forever like a stamp collector. And, having discovered what I think, I need to share my 'creation myth' and my 'destiny myth' to fix them in my imagination. This means putting them in a book which others will read. As Darwin wrote to a colleague 'no belief is vivid until shared by others.'

But I am not wholly self-centred. I would also like others to find my efforts helpful. In particular, I suspect that most people in modern societies lack a sense of their place in the

larger scheme of things and that this makes life a little more confused than it need be. I don't think I am looking for disciples.

Where I started from (a do-gooder)

Philosophically, I am a naturalist, meaning that I do not find stories which invoke the supernatural to be plausible. For example, when I find a gap, a lack of causal specificity, at some point in the evolutionary story---eg what happened before the big bang, before the rise of life, before the rise of consciousness---I prefer to 'wait and see' rather than attribute events to a creator, a vital principle etc. As an act of faith (and that is precisely what it is), I assume there is always a natural (causal) explanation for what has happened even if it cannot be accessed.

I am also a meliorist. Meliorism is the doctrine, somewhere between optimism and pessimism, that purposive human action can often improve outcomes over what would otherwise be in the absence of such action. Without such a belief, I could not write a book sub-titled *A Guide To Surviving Well*. Not that I quite have the confidence this subtitle implies (Postscript: In fact the sub-title has been changed to *Our Prospects for Survival*)..

I am certainly not a fatalist who believes there is nothing we can do to change the future.

My pessimism extends to observing that the deep future may be a bugger of a place which we can do little to avoid (I don't know) but, if we try to make it better, it is unlikely to be worse than if we had not tried.

Put naturalism and meliorism together and you get (to use a term of Julian Huxley's (1953) which is now probably dated) a *scientific humanist*, someone who wants the best for people and thinks that science, dangerous as it often is, offers one of the better prospects of that.

So, lets face it, apart from curiosity, my other reason for writing *Deep Futures* is that I am a bleeding heart do-gooder.

First rule of futurology: make scenarios, not predictions

No one will believe me I suppose but this book is not about predicting the future because I do not think that can be done with any confidence.

I will of course die with my curiosities about the lineage's future unsatisfied and, thereafter, I don't expect to be watching the story unfold from some heavenly vantage point.

My only practicable option, in the absence of revelation, has been to collect and construct some plausible well-informed stories---optimistic, pessimistic and realistic---about what might happen to the earth and its inhabitants.

Remember that ‘plausible’ does not mean ‘true’. It means that if things turned out that way, one would not be too surprised.

In contemporary language, such plausible stories are scenarios. They are not predictions.

Second rule of futurology: reculer pour mieux sauter

Arthur Koestler introduced me to the phrase: Reculer pour mieux sauter. If you are to acquire any feeling about possible futures, you have to build up an understanding of the past.

Happily, we have reached an era where science and history have produced a truckload of exciting and plausible, and sometimes contradictory, stories of how things got to be the way they are. Indeed, one of the collateral rewards from writing *Deep Futures* is that I have discovered history.

The scientific method has expanded our understanding of life and the universe in spectacular fashion across the entire scale of space and time (Wilson 2000). For example, the 19th century geologists discovered the enormity of time and, in the 20th century, Hubble confirmed the enormity of space. I have found ideas helpful to my purpose in disciplines as diverse as palaeontology, archaeology, sociology, psychology, geography, ecology, complexity theory, evolutionary economics and political science; and, of course cosmology.

Anyone who takes the trouble to read and try to understand a sample of these scientific and historical stories will be rewarded with a sense of the past which is not unlike one’s own memories, albeit ‘false’ memories because one wasn’t really there when it happened. You too can be 14 billion years old if you wish! That is another collateral reward from writing a book like this.

And if the stories we similarly create about the deep future are plausible enough, we can ‘live’ for billions more years, we can have a sense of participation in the ongoing evolutionary play.

By the same token, we would be foolish to think that our present ideas about ‘everything’ are more than a small fraction of what will be revealed over the almost endless years ahead. Indeed, judging from what happened in the twentieth century, many of science’s paradigmatic ideas will be overturned presently (Maddox 1998).

What has been foreseen?

I spend a chapter in the book reviewing these speculations about the deep future. And I also spend a chapter reviewing speculations about what might happen in the 21st century

Chapter 1, *21c ---A difficult century*, focuses on possible developments within the global bio-physical environment, the global economy, global society and global governance during the century we are standing in.

Many see it as being a particularly difficult one to manage, basically because so much is changing rapidly by historical standards---Toffler's 'future shock'. and also because we have accumulated some big demanding problems such as rapid population growth, environmental pollution, probable climate change, poverty, bubbling international aggression and a looming energy crisis.

Conversely, quality of life could improve in many societies and we may well continue acquiring the knowledge of life and the universe which will be necessary if the lineage is to survive long-term (happily preferably), if that is what we want.

Chapter 2, *Deep futures*, is long on time and short on detail. While the present century can be discussed in terms of the assumption that much of what we know will persist and much of what is to come will unfold directly out of the present, this starting point for thinking about the future breaks down once you start gazing ahead for tens and thousands of millennia. Out there, a few physical landmark-events and several big slow processes have some probability status but the quintessential nature of humans, post-humans and the societies they will live in are highly uncertain.

One can no longer talk about particular nation-states, races, demographic structures, settlement patterns, industries, continents etc. Indeed such categories may themselves no longer exist. In this situation serious future-gazers can do little more than build plausible if...then scenarios---if the world and its inhabitants turn out to be like X then they will also have to be like Y. Much of the challenge is in selecting the warp threads that will persist as the rich tapestry of the future is woven.

The chapter focuses on speculations about the lineage's physical and mental evolution, possibilities for social organisation, technology developments and the macro-environment.

Having reported on what informed people have foreseen for the world and world society, the book turns to the matter of what people might like (wish, prefer, hope) to see happening in the distant future. My way into this more normative discourse is to ask:

Can the future be successfully managed in some sense?

The words 'successfully managed' in this question imply that the lineage is an entity with a collective view on what it wants to achieve through time---what its long-term goals are---and that it has a capacity to work towards achieving those goals in some sort of collective coordinated way. If you don't know where you are going, it doesn't matter which bus you catch.

While it would be naïve to believe that contemporary society has such a goal and such a coordinated capacity, it is not totally implausible that we might move in that direction. In order to make some progress then on this question, in the absence of any such agreement, I spent a couple of chapters on developing my own working assumptions on what such a goal and associated strategy for working towards it might be. Note the term 'working assumptions'. I am not trying to tell humanity what its long term goal should be and how it might go about getting there. What I am doing is making a suggestion and saying

that if you can accept my suggested goal and strategy for the moment then we can think further about whether the future can be successfully managed.

In the briefest of sentences my working assumptions are that humanity's long term goal is to survive well and that their strategy for doing so will be to use rational choice methods to collectively address a frequently revised set of what seem to be the most important problems and opportunities threatening that goal or promising to bring it closer. The goal of surviving well means the goal of high quality of life for most people, now and into the indefinite future.

Managing the evolution of world society requires models/theories of societal change

How do societies change over time?

Chapter 4, *Understanding how societies change over time*, is a search for theory, meaning, ideally, a plausible succinct description of some core process that, in diverse manifestations, seems to be operating when societies undergo marked change in characteristics deemed important, eg survival and quality of life prospects. Is there a behavioural or organisational trajectory common to all societies and does that trajectory evolve in an understandable way? armed with such a grail, it might be possible to learn how to steer a global society towards quality survival or other goals.

Macro-history, systems thinking, complexity theory, evolutionary biology, ecology and the socio-behavioural sciences all contain models which can be transposed less-or-more directly to the task of foreseeing how the lineage, its organisation and its environment might change over the long future under particular conditions. For example, macro-history suggests that many failed civilisations simply became too complex to run.

Systems thinking reminds us that you cannot do just one thing when managing a society. Complexity theory holds out the hope that societies can be purposively transformed if they are nudged in the right way at the right time. Evolutionary biology provides the natural-selection model which not only allows us to think productively about human evolution but about social processes ranging from economic development to fashion. Ecology explains the pervasiveness of hierarchical structures in the world and how these come about; it also explains why complex energy-degrading systems, like ecosystems and societies, so commonly go through a birth-maturity-senescence-death life cycle. Sociology identifies the functions common to all societies and the tendency that all have to pass from being traditional to being modern. And so on.

Guidelines for addressing priority issues

Chapters 6, 7 and 8 take this suggested strategy a step further by suggesting candidate guidelines for helping society formulate responses to three families of priority issues that emerge from the discussions of social goals in chapter 3 and the nature of societal change in chapter 4 and from the possible futures that people have foreseen for world society as described in chapters 1 and 2.

What, I am now asking in light of all this, are the priority issues, the handful of really major concerns at this point in the history of the lineage, that have to be addressed if the

lineage is to have some prospect of achieving quality survival? there is no right answer but, restricting myself to four, my choices are:

1. Nursing the world through endless change
2. Raising the quality of social learning
3. Confronting near-future threats and opportunities
4. Anticipating deep-future challenges

Thus Chapter 6, *Nursing the world through endless change*, explores contemporary thinking about the way in which complex energy-degrading systems (like world society) evolve in order to find guidelines for protecting world society from its own instability and, at times, excessive stability. On one hand the reference is to any society's tendency to collapse or change direction dramatically, and on the other, to its tendency to stagnate, failing to adapt to external and internal change. The true importance of the chapter is that it is arguing for a way of thinking about societal change which, I believe, will continue to throw off a rich stream of insights into when and how it might be possible to move world society closer to quality survival, notwithstanding its emphasis on the unpredictability of systems like these.

The starting point for Chapter 7, *Learning forever*, is that while surviving well will require full use of what we already know, that will not be enough, at least within a framework where managing the future is interpreted as a matter of guiding world society towards quality survival via selective policy responses to a rolling set of priority issues. The chapter is a search for guidelines for making world society into more of a learning society than it is now, a learning society being one in which high priority is given to the social learning task, ie to the building up of a sufficient body of collective knowledge (useful information) to ensure quality survival. The chapter analyses the social learning process and suggests how it can be nurtured and boosted. The importance of taking an experimental approach to social learning is emphasised. In particular, despite its many problematic consequences, scientific research must continue to have an increasing role in social learning.

Chapter 8, the third chapter on finding guidelines for quality survival, is *Working on perennial issues*. That is an umbrella heading which allows a little to be said on each of four families of substantive issues (social learning and managing change are more process or 'means' issues) that collectively absorb much of world-society's problem-solving capacity and will continue to do for the foreseeable future. The four families cover social, political, economic and environmental issues respectively. The *social issues* I have included on the basis of being most in need of guidelines are fraternal-sisterly relations, participation and the social contract, and cooperation-competition. My *global governance* issues, chosen on the grounds of their importance for quality survival are democracy{ XE "democracy" }, world government, war and oppression. Under the heading of *production and distribution*, my global economic issues are ideology, global investment and relations between business and society. My environmental issues under

managing the global ecosystem are biodiversity, genes and population and depleting non-renewable resources.

What have I concluded about the future of the human lineage?

I am cautiously optimistic that we can give the deep future a good nudge. The jury is still out on the very deep future. We have a great capacity to cooperate. We are still learning rapidly. We are becoming more mature emotionally. Having said that, there are some big physical challenges ahead which we may not be able to negotiate and there are some social and psychological weaknesses which could collapse world society at almost any time, eg myopia, hostility to strangers and bad leadership.

But I close the book on the important idea that clear thinking about priority issues, change management, rolling strategies, social learning etc. will never be enough to ensure the lineage's quality survival if these ratiocinative activities are not supported by a critical mass of passionate people who want and believe it is possible to survive and survive well. More than that, if posterity is to negotiate all the contingencies that no amount of forethought can anticipate, she will need role models that provide her with the style and attitudes that serve as all-purpose behavioural guides. I think a dungeons and dragons allegory is a good example of what I mean.

Posterity, our hero, finds herself in a labyrinth of dungeons, each holding a fierce dragon. For each dragon she slays, her immediate 'reward' is entry into the next dungeon where an even bigger dragon is waiting. Her real reward is that with every dragon slain posterity matures and grows stronger. But, and this is the question Gertrude, can she continue to outgrow the dragons she is encountering? Furthermore, for the reason that she is a flawed hero, posterity's survival will hinge on more than just the balance of power between her growing strength and ever-bigger dragons. Sometimes she unwittingly conjures up dragons of the mind and these have to be slain just as surely as the denizens of the labyrinth if the story is to go on. To translate this allegory, the labyrinth's dragons are energetic or insidious natural hazards, the dragons of the mind are problems of the lineage's own making/makeup and posterity's growing strength is her growing knowledge of life and the universe.

An even more powerful metaphor for me is what I call, for want of a better term, is that of 'the successful human life'. Enormous insight into posterity's challenge to achieve quality survival flows from recognising that her challenge is strongly analogous to that which every mature human faces to make the best of a finite life. In terms of this metaphor, posterity is still an adolescent.

