Beyond 'Gloom and Doom' - Responding to a World on the Edge

Richard A Slaughter

Introduction

Humanity is faced with an unprecedented array of serious issues and major world problems that, taken together, provide convincing evidence that we are set on an 'overshoot and collapse' path. Another way of putting this is to say that we're living by mining the Earth's capital, rather than living on the interest. Some of the key concerns are summarised in the appendix below. There are many reasons for a diagnosis of this kind. For example:

- the 'success' and subsequent failure of economic liberalism and 'wild globalisation'
- the inability of education and business to read and understand signals from the global system
- the incapacity of governments to respond effectively and pursue progressive visions of futures
- an environment that is being irreversibly damaged, and
- a progressively more dangerous mismatch between social/ethical development on the one hand and growing technological capacity on the other.

This paper is not, however, merely concerned with re-iterating examples of 'bad news' nor is it yet another expression of so-called 'gloom and doom'. Rather it focuses on the nature of human and cultural responses. So I begin with an overview of what might be called 'strategies of avoidance' and commonly adopted ways of *not* knowing, and therefore *not* responding.

Avoidance strategies

Human beings clearly have available a range of psychological protection mechanisms that enable them to deal with (or, rather, not deal with) facts they find uncomfortable. These responses almost certainly developed in order to mitigate the unacceptable foreknowledge of one's own death. Perhaps the most common response, therefore, to 'bad news about world problems' is to dismiss it in the (false) belief that it is unhealthy to 'dwell on the negative'. Better to change the subject and take shelter behind such responses as outright denial (it won't happen to me), avoidance (not now please) and repression (I am going to hide this knowledge in a place where it cannot be found). Clearly these strategies are functional up to a point because they help us to keep going, to not be immobilised by fears and worries that appear to have few easy answers. This tendency, however, is not merely a personal ploy. It is powerfully reinforced by a culture that provides us with a huge variety of indulgences, diversions and endless opportunities for 'not knowing.' These, indeed, are some of its main purposes. So we need to address this directly.

One rather serious drawback is that if these 'not knowing' strategies are the main, or only, ones at our disposal then, at some point, as I think we all know, 'reality comes crashing in.' Clearly, that's when the suffering really begins. Moreover, it's a poor way to run a powerful, globe-spanning culture equipped with the most powerful tools and technologies yet seen in human history. The key point of this paper, however, is that all these issues can be re-framed, reconceptualised, seen differently and therefore responded to in more active and helpful ways. Let me be clear: we do not have to walk passively into dystopian 'overshoot and collapse' futures. The more clearly we understand the pathways and processes that lead there, the more leverage and potential for social innovation we have.

Worlds of illusion and 'the great forgetting'

In the field of conjuring and magicianship the creation of illusions is a positive and enjoyable experience. The audience chooses to have their sense of reality, their ordinary assumptions and perceptual habits challenged in the most entertaining ways. The magician seems to have extraordinary powers: the cards obey his will; the doves and rabbits appear as if from nowhere; the lady vanishes. We leave perplexed but happy, knowing that our ordinary assumptions have been challenged, if only briefly. Clearly there's more to the world than meets the eye (a point that will become more significant below) and this can leave us with a sense of widened possibilities, even if we do not, at that moment, know exactly what they may be. Such illusions are temporary and we soon forget them as we return to the daily round. But if we look more closely at daily life we soon see that it is filled with illusions of a completely different kind.

The familiar surfaces of everyday life are made up of the things we see, hear and do without, in most cases, thinking about them very deeply. That is to say, the world we experience is comprised of other people, imagery, music, signs, symbols etc, all embedded in familiar, man-made, infrastructures such as roads, railways, airports, pavements, offices, shops and shopping malls, cinemas and, of course, our homes and those of our friends. Within this world, both public and private, are rapidly increasing numbers of glittering attractions such as shop signs, advertisements, magazines, TV and cinema screens and the ever growing range of hand held electronic devices, from mobile 'phones to sound and image-rich I-pods. Increasingly the range of sensory options from the external world is matched, and perhaps even exceeded, by the infinite range of material now available on the internet.

There is, therefore, a strong sense of being surrounded by a kind of multi-media, multi-domain, orchestra that sometimes plays 'in tune' (as we make sense of fragments of it momentarily) and then 'out of tune' (as we struggle to cope with the sensory overload that it creates). There's an increasing sense that the wider world 'out there', while attractive in many obvious respects, is also demanding, harsh, abrasive, unforgiving and quite possibly dangerous as well. Far better, perhaps, after prolonged exposure to 'tune out' and seek solace somewhere else. For some that 'somewhere else' is, in fact, a deeper engagement with the external world, through sport, bush walking, travel and other such activities, including companionship with others. For the majority, perhaps, it is found by turning inward to reading, television, computer games, the internet and so on.

What is clear is that we now live amidst enormous sensory complexity. Hence the question that arises here is the effect all this has on our sense of the wider context in which our lives are lived. I suspect, in fact, that the world of culture that I've been attempting to evoke above, now functions primarily as a dense and all-but impenetrable screen that intervenes between us and the background natural world so effectively that we have, in fact, lost sight of our real relationship with that world and, equally, also lost sight of what that means. I call this 'the great forgetting.'

There is, however, a group of individuals that, instead of turning away from the wider world, spend a great deal of their time dealing very directly with one or another aspect of it. Some are scientists, while others are writers, journalists, academics, wardens, guides and so on. Some are professional (in the sense of being formally paid for what they do) while others are volunteers who work out of a sense of certain value commitments or personal connection with some part of the natural world. They are a varied group and they have vital role to play. Some of these I think of – in a sort of 'shorthand' way - as physicians of the planet.

Physicians of the planet

When we get physically sick we usually visit a doctor, a person trained to read the signs of physical and/or emotional distress; one who will interpret the signs and prescribe a course of action (that may or may not include taking some form of medication) to ameliorate or cure the condition. Broadly speaking, we tend to listen to what the humanly oriented physicians have to say about us individually and to consider their advice. One of the measures of civilisation is the extent of institutional provision for the sick, the injured, the young and the elderly. The medical infrastructure in any country provides for this and woe betide any local politician who overlooks this responsibility! Just as there are physicians who deal with human beings, so too there are those who focus on the planet and specialise in a particular geographical area, earth system or type of organism. Yet we have great difficulty even hearing what the Earth oriented physicians have to say and we seldom follow *their* advice unless we are forced by circumstances to do so which, on occasion, can be too late. Why is this?

At the civilisational level, that is, at the level of governments, large organisations and the key social formations and institutions, our culture is permeated by illusions, wishful thinking and ideas that are way past their 'use by' date. For example, the twin ideologies of progress and of growth, sanction a continuing assault on the natural world that beggars the imagination. The destruction of forests, lakes, rivers, reefs and ecosystems of all kinds has become so 'normal' in the so-called 'advanced' societies that few ever give it serious thought. Most people would probably not even know what has been called the 'sixth extinction' stands for, even though they are part of it. Life on Earth took some four billion years to evolve but it is being dispensed with wholesale as though it counted for nothing. The arrogance is breathtaking and supports an illusion of safety and security. The illusion in question is that, in an immediate sense, affluent life (and in an extended sense, any human life) can prosper while the Earth's life support systems are steadily compromised. The associated illusion that *homo sapiens* is a 'peak species' that bestows on it the status of 'lords and masters of nature' is also false. It obscures our real situation and sponsors the kind of wishful thinking that stands behind the vast majority of decisions made in our major institutions: government, business and education.

Were it otherwise then the long chains of reasoning that stand behind conventional thinking would be challenged and, in some cases, reversed. The structure of institutions would change and the reality principles of advanced civilisations would change as well. Where the extremity of the human condition is put so far out of mind that it ceases to exist then 'anything goes.' In a complex environment it is already difficult to 'clear the fog', think clearly and understand what is happening and why. The question is: how can this be turned around?

The civilisational challenge

If we are going to make any real progress it is essential to re-frame our situation away from trite and ill-considered 'gloom and doom' responses (that basically suggest we are, or will be, helpless victims of forces beyond our control) towards the notion of us being collectively challenged. One of the immediate gains is that, instead of having to mount a psychically expensive and debilitating strategy of denial, etc, we can start to explore the range of options that are, in fact, available. It's my belief that this approach leads us to genuine empowerment, social innovations across the board, sustainable long-term solutions and, eventually, a very different future world. There are three key steps. These are:

• understanding our situation

- taking responsibility, and
- acting effectively.

1.   Understanding our situation

The roots of the human and civilisational predicament go back at least to the Western enlightenment when some of the core notions of our culture emerged: the scientific method, the power of reason, individuality and so on. They were developed and applied further during the industrial revolution, as the revelations of science become embodied in increasingly powerful machines and devices of all kinds. Discoveries in biology, medicine, farming and so on fuelled a great increase both in human numbers and in the steadily growing impacts that populations were exerting on their environment. The mass societies that we take for granted today emerged from a series of revolutions in human ingenuity and technical skill.

Of relevance here is the fact that these developments occurred in the face of critiques, warnings and direct opposition – not once, but many times over. From poet William Blake, the early 19th Century Luddites, to the suffragette movement, Lewis Mumford and HG Wells of the 20th, there have been many who have stood up and argued against the trends of development that they could see taking place around them. The turning point in terms of popular awareness occurred during the early decades of the 20th Century as the 'high ground' of Victorian optimism gave way to a sense of malaise and a growing view that the future looked increasingly forbidding and dark. The impacts of the First and Second World Wars, followed by the explosion of the first atomic bomb in 1945, put paid to the earlier dreams of rational social organisation and the possibility of a perfectible society on earth. At that point utopia turned into its opposite, and we have been living with (or repressing) the consequences ever since.

In other words, to understand our current situation we have to look back and develop an historical analysis, a clear view of how it is that we reached *this* world, and not any of the other multiple possibilities that could have eventuated. Without this analysis we can make little progress in discussing 'the future' - which is why inspirational, poorly grounded, futures work is worse than none at all: it is built on illusions and wishful thinking. The rise of critical futures studies begins here; begins, that is, with a deep appreciation not merely of the 'external' history of our path to the present (machines, technologies and infrastructure) but, perhaps more significantly, of the social and human 'interiors.' That is, the inner worlds of people and cultures. Both of the latter are accessible to the right methodologies, and they've had huge impacts on the range and power of Futures Studies and applied foresight. But there are no quick fixes.

Critical futures studies looks at the grounding of societies in worldviews and ways of knowing. It uses the tools of enquiry that developed in various contexts to 'get inside' and deeply understand the principles and processes that can be summed up in the term 'social construction.' This means that, instead of dealing only with the external, visible, world (technologies, infrastructures, 'the future of cars' [a media favourite] etc) we can also both see and understand many of the processes that proceed all the time 'under the surface.' One of these deals with the issue of legitimation, or how it is that a society establishes something it considers of value and then tenaciously defends it. Another is identity, or how we learn who we are and are inducted into the social order.

Integral thinking enabled a further decisive step forward toward clarity and integration. Until it appeared futurists (and others) had concentrated on understanding the external world through methods such as systems theory and empirical science. Postmodern scholarship in general, and critical futures in particular, brought into play the underlying social factors as mentioned above. But

it was integral theory that both extended these and provided a way of linking them together, achieving a balance across hitherto separate fields of knowledge that had not been possible before. Specifically, integral thinking allows us to integrate four domains:

- the inner individual (or the domain of 'I')
- the inner collective (the domain of 'We')
- the external individual, ('It') and
- the external collective. ('Its')

It turns out that different phenomena operate in these domains and, as a result, different methods and ways of knowing operate in each of them. This may, at first sight, appear to be an abstract sort of argument, but it you look at the results that have flowed from it you quickly realise that, for the first time, we have an immensely clarifying 'meta map' that allows us to make sense of the complexities and challenges around us. The very positive point is this: it turns out that 'understanding the present', while clearly challenging, is also more achievable than at any time in the past. This provides a valuable clue. With the right tools we can see much, much more deeply into the present and much further into the near future context. In other words, looking 'beneath the surface' provides rich rewards.

A well-established characteristic of mass societies is that citizens have come to be seen as passive consumers with little or nothing to say regarding the great issues of our time. Rather, there are strong pressures to retreat towards privatised zones of comfort and security where the wider world and its problems are excluded. This has been described as 'cocooning', a term that successfully captures the essence of this widespread phenomenon. The tendency is reinforced constantly by the powerful interests that lie behind the huge expansion of marketing and merchandising over recent decades. It is a model that was pioneered in the USA and then spread out across the world with incalculable results. As noted, it is reinforced by a saccharin entertainment industry which itself functions as a vast instrument of diversion. There is a sense in which we've all been turned into observers, bystanders and even voyeurs as the culture of celebrity has inflated beyond all reason the habits, fashions and peccadillos of a few seriously-overexposed people.

The implications are pervasive. For example, the erotic charge and power fantasies associated with fast cars are clearly very appealing to some. A look at the lead articles on the latest luxury models of any car magazine or 'quality' newspaper reveals no hint that the goods on offer are anything other than a right theoretically available to all who can afford them. But, as ever, the truth lies elsewhere.

Early 21st Century consumerist culture has its achievements, perhaps, in making available to large numbers of people sophisticated goods at relatively low prices. It is here that any residual 'social utility' of business may reside. Yet in the process whole populations have been turned into consuming automatons that have, in certain key respects, lost sight of the value and grounding of their own autonomy, along with any clear notion of what their own best interests might be. The cornucopia of superficially attractive consumer goods conceals a very different reality – the full cost of mass affluence to us, to the web of life that supports us and to future generations has never been reckoned. Perhaps it never will be. It may literally be incalculable. It can, however, only be a temporary phase.

What's been widely overlooked is that the very success of economic liberalism, the fulfilment of its materialist cornucopian agenda, has led directly to its failure. Those responsible for it may well have genuinely believed that if the economy was 'running well' and that goods and services were being successfully produced for millions of people, then human happiness and social wellbeing

would follow. But that's clearly not what's happened. People are now unhappy at higher standards of material living. They are suffering from meaninglessness, depression and alienation on a vast and growing scale. Moreover, it's clear that the Earth cannot sustain the system that's been created to feed endless economic growth for very much longer. What have been called 'the resource wars' have already started. But, rather than demonstrating the positive uses of power, they only signal its nihilism and exhaustion.

2. Taking responsibility

Under these circumstances, taking responsibility can appear to be an awesome project. It means, for a start, consciously separating oneself from the flow of conscious and subliminal messages that tell us to want more, buy more, consume more. It means putting these illusions aside and thinking for ourselves. It is also an invitation to a very different way of life – a life that is open to possibilities currently eclipsed by the power of social convention, habit and symbolic power. Here are four specific suggestions, four specific ways to take back responsibility. Many more are, of course, possible.

First, we can become aware of the protective mechanisms of denial, avoidance etc that were outlined above and, instead of taking shelter in the comfort they provide, decide on a case by case basis if we really do want to adopt them so uncritically. In other words, we can begin to open to the reality of our situation without automatically filtering out information, and knowledge that we may initially find uncomfortable. We can begin to positively value this knowledge, recognising that within it are truths, ideas and options that can help shake us out of our ordinary complacency.

Second, we can reverse 'the great forgetting', ie, the complete dependence of society, the economy, the life and breath of each person, on natural systems. We can recognise the arrogance and hubris that always stood in the background as powerful men swelled with pride at new discoveries or a new technologies that aided (some) human beings in some ways but, equally, depleted or destroyed natural capital somewhere, sometime. This insight leads to a refreshing change or perspective. For example, much has been said and written about the moon landings and, more generally, the journey into space. But few have reflected on how that journey was made possible by what someone once called 'the stored motility of countless tiny pre-historic organisms' (ie, fossil fuels), the concentrated energy of ancient sunlight. In like vein, every rush hour in every city in the world thoughtlessly relies on this same archaic source. Beyond this, the construction and deployment of modern armies and weapon systems involves, in each and every case, a vast increase in entropy, the wholesale waste of precious stores of human skill and rapidly diminishing stores of fossil energy. Viewed in these wider terms, war itself becomes even more insane than it looks from a purely human point of view. It is an entropic trap made possible only by a kind of widely shared species vanity and what EO Wilson calls our 'paleolithic obstinacy'. Yet understanding the abject dependence of our civilisation on past riches provides motivation to move away from convenient – yet ultimately fatal – illusions and to seriously develop alternatives.

Third, we can consciously explore the possibilities inherent in what can be called a 'world centric' stance. That is, a view of the world that sees it as a total system comprised both of material and non-material parts. In the expansionist ethos of the last couple of centuries the laws of ecology were both discovered and then set aside. As noted, it became easy to forget the connections between each of us and the wider world. The limits of the human senses reinforce that tendency and have sanctioned much suffering, waste and destruction as a result. The dominant social organisations of our time – transnational corporations – have developed upon and exploited this fractured foundation. As a result they have been accurately described as 'externalising machines.' What this

means is that they have a single-minded focus - to make money. Toward this end they have actively sought to reduce regulation, deny the full costs of their activities and externalise as many of the costs of production as possible onto the wider environment and, inevitably, future generations. Corporations are not necessarily 'bad' in any final sense. A more constructive view is that they are only part-way through their own process of development and now need to be brought into line with long-term social needs. In a world centric view everything is always viewed in multiple contexts, from micro -, to macro - scale. Although there are few simple answers, vital new rules for the conduct of civilisation can be explored: balance, interdependence, reciprocity and so on.

Fourth, and this is a focus that is often taken by those wishing to encourage others to participate in bringing about change, it is entirely possible to begin to make a host of changes in one's own life, work and household toward 'living more lightly upon the earth.' This is, at the same time, both a useful and a very imperfect solution because, for as long as we have vast entropic infrastructures and war-making capacities; as long as we acquiesce to proxy wars being carried out on our behalf; as long as consumption and waste remain central principles of social life; and as long as the reality principles underlying our civilisation remain fundamentally defective, for all these reasons what any one individual or family can do alone is very minor indeed. Yet this is by no means the end of the story.

When the actions of countless numbers of active citizens align with each other, reinforce each other, governments and businesses start to pay attention. It is then that populations begin to be aware of, and then approach, various 'tipping points' where changes in thinking and practice can follow each other with remarkable speed. The fall of the Berlin Wall and of the old Soviet Union are often quoted in this context. It is therefore vital that changes in personal lifestyle do take place but, at the same time, are not seen as a substitute for all the many other things that need doing at the social level. Taken alone they could be seen as a way of 'keeping radicals quiet' while others go about their old ways of extracting wealth and power at every opportunity.

3. Actions and strategies

In order to act people need to find sources of motivation that work for them and, since 'people are different', no single approach will suit everyone. It is indeed up to everyone to consider the options and to decide what form of motivation is likely to be effective for them. Here are some options:

•   feel responsible for one's children and work out of that sense of being committed to an open future;
•   feel anger about the state of the world and learn how to sublimate this into effective action;
•   get informed about an issue that seems to 'strike a chord' and pursue it tenaciously;
•   make a decision to strike out in a new direction and make the study of a world problem a long-term and sustained personal preoccupation;
•   participate in, or create, some sort of educational program, or program of renewal
•   look at issues in one's own locality and decide where to place efforts, etc.

When the motivation is clear a direct link with specific issues can be made. In this process there is a central idea that I've found to be very useful and effective. The core of it is this. It's very easy to become depressed, worried, overwhelmed by a sense that the 'problems of the world' are too vast and simply beyond our ability to deal with. What's often overlooked, however, is that we mistakenly locate the source of power in the problem. We don't see that the power (to understand, act, make changes and create social innovations) actually resides in each one of us. So the key here is to, in a sense, withdraw energy from creating and sustaining 'the problem' and to redirect that

same energy into solutions.

This principle can be taken on a naïve level (where it often fails) or on a number of successively deeper levels where it gains more credibility and substance. I call it the 'empowerment principle' and have run many workshops that demonstrate its power. It's not difficult to show how shifts of this kind can make a huge difference in the way people approach and deal with all sorts of problems. The key shift (which is best experienced in a workshop format with other people and not alone and 'in the head') is to (a) consider a range of possible responses to a specific problem and (b) to then explore 'high quality responses.' If the latter are seriously engaged over a period of time it is surprising what can result. To this end I've suggested a number of such responses that can be explored through a wide variety of strategies. I've also found it useful to separate (artificially of course) strategies that can be realistically pursued by the young and those that are more appropriate for older people. A brief summary of some of these is set out below.

    Strategies for young people

• Develop an understanding of the effects of young peoples' media.

Look at the ways that such media portray the future in dark, violent, stereotypical terms. Ask 'What is going on here?' Direct attention to the *constructed* nature of these images. De-code the marketing imperative using the suggestions opposite. Begin to consider a wider range of non-commercial, post-materialist possibilities and alternatives.

• Change fears into motivations.

Show how energy is channelled into creating fears or concerns. Explore strategies for re-directing this energy toward strategies of response. Explore the meaning of high-quality responses. Explore the empowerment principle.

• Explore social innovations.

Use simple examples to illustrate how they work. Provide opportunities for young people to model or use the social innovation process. Look at people, literature where successful examples are given.

• See the future as part of the present.

Explore conventional notions of the future. Look at connections between past, present and future. Explore the extended present. Consider examples from this and other cultures of how future generations can be considered and valued.

• Use futures concepts, tools and ideas.

Take up some of these and explore their implications with/for young people. Teach futures concepts with the express purpose of helping to develop a futures discourse. Introduce simple futures tools such as time lines and futures wheels.

• Design ways out of the industrial era.

Show how the concept of design is inherently futures-oriented. Use concrete examples to show how the creative process works. Apply to problem solving, social design, social directions. Work

through a Futures Bibliography to see what resources exist on some of these themes.

• Explore individual responses to these strategies.

Experience in the use of such strategies will alter perceptions of the future because they build individual confidence and capacity, and reveal avenues for social intervention. In other words, they help people to see themselves as agents rather than passive observers or victims. Those who consciously take on the role of caring (ethical) agents become better placed to negotiate images and pursue projects of futures worth living in. This is a natural extension of the empowerment principle.

Strategies for adults and those working with the young

The above provide a number of starting points for young people. But qualitatively different approaches are needed for dealing with systemic difficulties and deep-seated world view assumptions and commitments. Those working with young people can therefore explore a range of more demanding and longer-term strategies. The latter can be seen as a bridge into dealing in depth with the civilisational challenge. Those who begin to develop insight and understanding at this more profound level are better placed to teach and guide the young, as well as to play more positive roles in the wider culture. They will have access to a wider range of cultural and methodological resources. They will find it easier to chart their own course through a difficult, demanding and, at times, contradictory environment. Finally, they will begin to discern the grounds of long-term solutions. Taken together, these are important gains. There are a number of ways into this deeper perspective. They include the following.

• Studying cultural editing and understanding its creative potential.

Cultural editing refers to the processes by which cultures choose to construe the world one way and not another. The editing process appears to constrain choices and options. There is, however, always a wider range of possibilities than is normally considered.

• Mastering the skills of critical and integral futures.

Critical futures study attempts to understand the present in depth. It considers different ways of knowing, values and epistemologies. Fundamentally, it is about the negotiation of meanings and the grounds of value. Understandings at this level greatly clarify the nature of the present and expand the range of possible futures which emerge from it. Integral futures provides the tools to balance conventional exterior views with less conventional, but equally vital, inner ones. Again, it is no quick fix. Over time, however, it reveals the grounds for long term solutions to many human and world problems.

• Re-negotiating world view assumptions.

When old assumptions prove inadequate, they can be discarded, revised, reconceptualised. This means that what is meant by 'growth', 'health', 'defence' and so on, is much more open and negotiable than is commonly realised. A great deal of constructive work is needed in such areas.

• Creating and supporting institutions of foresight (IOFs).

IOFs are part of the early warning system of advanced, futures-responsive societies. Their role is to scan the environment and to draw attention to signals, precursors, future options that would

otherwise be overlooked. Currently they tend to serve a number of governments and corporations but they potentially have much wider and more valuable uses – such as helping to create and sustain social foresight (foresight in the public interest). The use of social foresight would achieve two vital gains. First, environmental 'signals' would mean that future problems can be detected and given serious attention before they become critical. Second, the 'design forward' principle can be applied to creating the underpinnings of a new civilisation.

• Conceptualising more advanced forms of social and economic life.

Fritz Schumacher wrote of 'an economics of permanence'. But it is also possible to have an economics of kindness or of wisdom. What is needed here is a modelling and exploration of the implications of *more advanced human motives*. These arguably have the power to re-shape social and economic systems toward different ends. The literature on this subject is vast and connects with that on higher order human development, spirituality and a range of other post-materialist topics.

Conclusion

Our civilisation needs to 'wake up' before it is awakened by a series of events that will decimate it mercilessly. No one can say what the trigger(s) will be: climatic, environmental, viral, terrorist, out-of-control military nanotech, or some combination of these. What is certain is that the 'normal' operation of human societies, their infrastructures and their economies, are progressively eroding the shared foundations of life. This is the heart of the civilisational challenge and to deal with it we need to deploy our in-built capacities for foresight and intelligent, future-focused action more than ever before.

We have to come to terms with the fundamental dynamic that is undermining civilisation, both East and West, and that points inexorably toward a diminished future for all unless it is understood and resolved. While I am keenly aware of the limitations and drawbacks of a 'crisis mentality' and the often over-stated sense of urgency that comes with it, I'm also aware that the cost or our current failure to understand and deal with this phenomenon will continue to rise and will reach levels that exceed our imagination. That is why observers such as James Lovelock are saying that it is already too late. That may be a hasty diagnosis but what is clear is that it is very, very late indeed to begin a process of wholesale restoration and renewal.

One thing is for certain, though we can be sure it will be denied by many: we are looking at the end of the world as we know it. I cannot, by any stretch of the imagination, imagine a world that can sustain the impacts outlined below (let alone others that could be added) and remain much like the current one. In other words we are closing in rapidly upon what we might call an 'evolutionary break point' or a 'fundamental shift' in our relations with the planet. But this is not another essay of despair.

I suggested above that in order to act people need to find what works for them. The light at the end of this particularly challenging tunnel is clear. As noted at the beginning, the perception of downbeat Dystopian futures can be, and often is, read as merely depressing. But that same perception can also be re-processed, revised, re-framed, read and responded to very differently. With a certain degree of skill and basic human courage, it can also be read as providing us with new, or renewed, forms of motivation. This is the key point I want to make and it is articulated by one of the leading 'physicians of the planet'. In his book *The Future of Life*, EO Wilson wrote that:

> we have entered the Century of the Environment, in which the immediate future is

usefully conceived as a bottleneck. Science and technology, combined with a lack of self-understanding and a Paleolithic obstinacy, brought us to where we are today. Now science and technology, combined with foresight and moral courage, must see us through the bottleneck and out.

EO Wilson, *The Future of Life* (Abacus, NY, 2002)

This piece captures the reality of our situation in a very real and concise way. It also, to the great credit of its author, anchors long-term solutions in all four of the integral domains I mentioned above. The notion of a bottleneck is also informed by evolutionary history – there were other occasions when our distant ancestors 'only just made it.' Science and technology can never, ever, offer complete solutions for two fairly straightforward reasons. First, they cover only 'half of reality' (ie, the external part). Second, they create as many new problems as they promise to solve. If, however, we take up the deeply human power of foresight and powerfully, profoundly, use it to understand in depth and detail the kind of world we've been creating and what that means for our species and our world; if we can bolster that with moral courage and, I would add, a certain measure of wisdom, then we can indeed see our way beyond what Wilson calls the bottleneck and what I call the civilisational challenge.

If earlier cultures were motivated by positive goals to protect themselves from the vagaries of nature, build cities and create the possibility of a viable social order, ours can draw on these sources in order to take the next steps. Our task is to re-conceptualise, re-vision our place on this small planet and to use all the skill and capacity we can muster to consciously design a world worth living in. It's a huge task but, in my heart of hearts, I think and believe that we're up to it.

Appendix 1

Civilisation-threatening world problems

1. We are facing the end of cheap oil and the withdrawal symptoms from this powerful 'drug' will be painful, in part because although we've known this for many years, we've been mis-led into thinking that 'the market will suffice' and have not taken seriously the many innovations and adaptations that the 'post oil' era will require.
2. A global 'flu pandemic may be imminent. If that does not occur there will certainly be others in part due to the size of the human population and also because it penetrates into most of the places where other life-forms, including disease-causing ones, are found.
3. The trend towards global warming has been scientifically proven and yet efforts to control CO2 emissions have thus far proved largely ineffective. Some powerful actors have deliberately cast doubt on what are now well-established facts, thus confusing the issue and delaying effective responses.
4. The nitrogen cycle is also out of balance with the natural processes of circulation increasingly overwhelmed by a cascade of man-made nitrogen with numerous 'downstream' effects on, eg, lakes and coral reefs.
5. Sea level rises of several meters over an historically short period are inevitable.
6. The current model of 'wild' globalisation continues to create wealth on the one hand and alienation, resentment, on the other, sowing the seeds of future conflict.
7. The rise of religious fundamentalism in the USA has impeded its own social development. Elsewhere it has provided a convenient but false rationale for opposition to the West and a focus for those wishing to carry out violent attacks on it.
8. The war in Iraq has exacerbated the above and also rationalised a diminution of privacy and

loss of civil liberties in some Western countries. It has also shown the limits of the neo-liberal project to create the world in its own image of market based consumer societies drawing disproportionately on the world's resources and living systems.

9. The collapse of many living systems – from forests to fisheries and reefs – is progressively reducing the capacity of the Earth to support life. This has still not been acknowledged even though the process is well advanced and objectively obvious.

10. Ecosystems, where they are not being destroyed outright, are being simplified. One result is the artificial acceleration of species extinctions, sometimes called the 'sixth extinction'. (The other five were natural events that occurred in the distant past.)

11. There is a long-standing trend toward growing shortages of fresh water and the 'mining' (or depletion) of underground aquifers which means that water will grow increasingly scarce.

12. New waves of technology are being driven by the abstract imperatives of transnational corporations in their quest for power, profit, market share and return on investment. Such developments are not subjected to effective human, cultural and technological assessment such that societies, as currently constituted, manifestly lack the wisdom to use them well. If left to run unchecked, future technological revolutions look set to overrun human societies.

13. Digital, diversionary, surrogate worlds that are characterised by distancing, forgetting and unreality are proliferating. These further sever the links between individuals and the living world that supports their existence. These 'worlds of illusion' are often very compelling, especially to young males.

14. The commercially dominated media purports to be 'free to air' but is, in fact, 'extremely expensive to air'. The costs are borne by everyone but are hidden from view in advertising budgets and emerge as social/environmental dysfunctions. In straightforward terms you could say that commerce is 'driving society in the wrong direction', ie, toward more consumption, more dependence and more unsustainable social/environmental impacts.

15. Conservative governments are best described as administrators who are currently 'minding the shop'. They lack systems awareness and foresight, operate out of earlier world views, worship mainstream economics and cannot act before consulting opinion polls. They are therefore systematically prevented from leading in any meaningful sense. They place society at risk because they neither see nor understand the challenges of the near term future.

16. Education systems are governed by two sets of powerful forces that have very little concern with young people or the future: local politics and mainstream economics. Hence these systems are based on redundant principles that fail to prepare young people for the world of hazard and risk that they are entering.

17. Universal health care (in Western nations) has reversed the age-old trend of Darwinian evolution and caused human weaknesses of many kinds to be retained (rather than eliminated). While humanly desirable, the long-term implications continue to create weak and dependent populations, difficult resource dilemmas and new sources of social conflict.

18. Big business is still, on the whole, hooked on the growth paradigm and a convenient belief in the efficacy of markets. They overlook the fact that, for markets to 'work' correctly, intelligent governance at national, regional and global levels is required. They do not understand that, by succeeding, the neo-liberal project has failed. They are therefore not looking for solutions in the 'right' places.

19. The US government has opted out of offering genuine leadership and is complicit in exacerbating many of the world problems outlined here. It is the world's leading example of wasteful, empty consumption and the exploitation of others to sustain global inequality and hegemonic power. The US has therefore 'set itself up' for exceptionally difficult times.

20. There is a growing potential for future conflict over political influence and access to raw materials (especially oil) between the US, Europe, Japan and China. It has been suggested that the era of 'resource wars' has already started.

Appendix 2

Civilisation saving solutions (or, at least, productive ideas to explore)

1. Get serious about reducing oil dependence. Provide incentives to drive innovation and investment in alternatives: wind, wave, solar, hydrogen etc. Also invest in the social innovations required: move beyond mainstream economics; see economics as a sub-set of society and the economy as a 'fully owned subsidiary' of the ecology; reduce luxury vehicle sales, tax large 4WDs, put road tolls in central CBD streets; also invest in demand management, fast & efficient public transport etc. All are based on well-known options.

2. Recognise the role of pandemics in human history and why they occur. Seek solutions based on understanding the relationships between human beings, micro-organisms and the environment. Take the broadest possible ecological approach to this world-wide problem. Put in place the means to detect 'early signals' of new outbreaks and ensure that they have the back-up required to deal with them.

3. Get to grips with the underlying drivers of global warming. Understand that is a humanly-initiated process based on long term trends (farming, burning of fossil fuels, expansion of human populations and activities). Find a viable balance between adapting to the new conditions and reducing their impact. Eg, where possible move settlements away from low-lying coastal areas and those prone to flooding or storm surges. Reduce dependence on fossil fuels. Invest in sustainable agriculture, manufacturing, transport etc.

4. Use the science of the nitrogen cycle to re-design policies to regulate the use of nitrogen in, eg, agriculture. Find ways to reduce the cascade to manageable levels – perhaps even re-think it as a resource. (NB. A resource may be 'waste in the wrong place.')

5. As in (3) above. Re-zone vulnerable areas so that they become less densely populated. Re-design master plans of low-lying cities to accommodate sea level rise. Look again at likely impacts on coastal plain agriculture and explore mitigation strategies.

6. Understand that 'wild' globalisation driven by corporate 'externalising machines' was never in the best interests of humankind as a whole. Reject corporate ideology and face-saving claims to 'good citizenship'. Insist that corporations be reformed and required by law to operate in the long term public interest. Understand that the neo-liberal project has been completed and measures are now needed to (a) repair the damage and (b) move beyond redundant (right/left) political distinctions toward an economy of permanence.

7. Religious fundamentalism is a human and social developmental issue and it needs to be approached and resolved as such. Use integral theory, spiral dynamics etc to provide clearer diagnoses of 'what is going on' in fundamentalist mind sets and approach solutions in this way. Locate the common ground through shared human needs and universal values.

8. Although warfare is as old as human civilisation its modern forms cannot be sustained in a fragile, compromised, world, especially in the light of existing nuclear arsenals and the advent of powerful new technologies. It is time to wake up to the fact that the international community must outlaw warfare and re-deploy military resources toward positive long-term ends. A variety of social innovations can be used to support this huge task including: UN insurance policies instead of standing armies; conflict resolution techniques; developmental solutions as noted in (7) above.

9. A combination of scientific knowledge, ethical commitments and multi-generational efforts in many places can be synergistically combined to replace the present dynamic of destruction with one of restoration and renewal. It is a long term cultural commitment. The fruitful abundance of nature provides the wherewithal to re-seed and renew many devastated areas and to re-build damaged ecosystems. The human population, its settlements and its

technologies do, however, need to be 'nested into' this restored environment and kept in balance with it. This is a 'prime directive' for a sustainable society.

10. Species extinctions must be prevented at all costs. A new respect for natural process and our common roots within the overall web of life needs to be incorporated in reinvigorated human cultures. The sixth extinction can only be reversed if the present and future generations abandons the arrogance of previous ones and re-thinks their relationship with the rest of nature.

11. Fresh water needs to be treated as the precious resource that it is and re-used, re-cycled and conserved with as much care and ingenuity as possible. Again, much is known about the science of water cycles and this knowledge should be brought to the forefront and used in policy making decisions.

12. No new technology should ever be introduced without substantive, exhaustive and thorough technology assessment. The skills of TA have been around for some time but they have been under-valued, set aside and, basically, ignored in the 'rush to market.' But markets are incapable of making ethical decisions or of extending prudence and care now or for future generations. New waves of technology will cause severe disruptions if they are allowed to run unchecked and may well cause the extinction of our species.

13. The drawbacks of digital secondary reality need to be explored, appreciated and much more widely understood. Within a marketing culture they are applied naively and with no thought for human, social and environmental consequences. The prevalence of 'unreality industries' based upon them needs to be re-assessed.

14. So-called 'free-to-air' broadcasting needs to be openly costed so that the sources of funding are clear for everyone to see. Judgements can then be made about desirability.

15. Governments need to acquire a much keener knowledge about, and understanding of, the civilisational challenge than is currently the case. They cannot do a great deal on their own, without pubic support, but they could do much more than at present. For example: move away from their fundamentalist belief in neo-liberal (market based) economics; focus on the real and fundamental issues of our time (rather than the politically convenient ones); and underwrite the development of Institutions of Foresight (IOFs) to provide timely and accurate advice about (a) signals from the environment and (b) quality interpretations of what these signals may mean for governance.

16. Free education from the stranglehold of politics and economics. Use the integral perspective to develop a more holistic view of knowledge, society and the world. Ensure that educators in training are given the very best professional start possible, with frequent opportunities for up-dating and personal/professional development. Put education in the hands of educators.

17. Seriously get to grips with the long term dysfunctional aspects of universal health care and explore the dilemma created by the opposition between short-term individual human needs and long-term needs of an increasingly dependent population. This is a tough issue that requires serious attention within a wise and mature culture.

18. Realise that the growth paradigm was appropriate during an earlier stage of history but has now become unhelpful and destructive. Some growth can be diverted to non-material paths (such as communication substituting for some travel). But, on the whole, the growth paradigm needs to be replaced by a different conception of the needs that economic systems are supposed to serve.

19. Feel compassion for the US as its 'view of reality' works out in the world, creating great misery for US citizens and many others. Ensure that we acknowledge our own complicity in 'owning up' to some of the (disowned) characteristics we share with them. Having done this, get creative about re-directing our efforts away from 'empty consumerism' towards long-term ends that both matter and are more satisfying.

20. Realise that 'resource wars' are the outcome of some of the social, political, economic and

worldview deficiencies discussed here. Ghandi once famously said that 'there is enough for man's need, but not for his greed.' With an integral outlook, widely implemented social foresight, a developmental view of human and social capabilities, some humility, a necessary slice of wisdom and, indeed, the right kind of scientific and technological infrastructure, resource wars will become unnecessary.

Further reading

Beck, U., *World Risk Society*, Polity, London, 1999

Diamond, J. *Guns, Germs, Steel: a Short History of Everybody for the Last 13,000 Years,* Vintage, London, 1998; *Collapse: How Societies Choose to Fail or Succeed*, Penguin, London, 2005

Lowe, I. *A Big Fix: Radical Solutions for Australia's Environmental Crisis*, Black Inc, Melbourne, 2005.

Slaughter, R.A., *Futures Beyond Dystopia: Creating Social Foresight*, Routledge, London, 2004. Also on *Towards a Wise Culture: Four 'Classic' Futures Texts*, CD-ROM, Foresight International, Brisbane, 2006.

Wilber, K., *A Brief History of Everything*, Shambhala, Boulder, Colorado, & Hill of Content, Melbourne, 1996

Wilson, E.O., *The Future of Life*, Abacus, London, 2003

About the author

Richard A Slaughter is a writer, practitioner and innovator in futures studies and applied foresight. He completed a PhD in futures at the University of Lancaster (UK) in 1982. Since then, he has explored the futures domain through educational work, institutional innovation, social foresight, integral futures and the identification of an evolving futures studies knowledge base. He is currently Director of Foresight International, an independent company dedicated to building the futures field and facilitating the emergence of social foresight.

During 2001-2005 he was President of the World Futures Studies Federation. During 1999-2004 he was Foundation Professor of Foresight at the Australian Foresight Institute, Melbourne. He is the author or editor of some 20 books and many papers on a variety of futures topics. His most recent projects include two books *Futures Beyond Dystopia: Creating Social Foresight*, and *Futures Thinking for Social Foresight*; and two CD-ROMs in a projected series: the *Knowledge Base of Futures Studies: Professional Edition* and *Towards a Wise Culture: Four 'Classic' Futures Texts*.

For more details, including extracts, free downloads and info on related works, please go to: http://www.foresightinternational.com.au or http://www.richardslaughter.com.au
Postal address: PO Box 793, Indooroopilly, Queensland 4068, Australia.

Note: an earlier version of this paper was produced for the Ideas Festival, Brisbane, 2006.