The Promise of the 21st Century

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Introduction

The end of one millennium and the prospect of another to follow is not merely symbolic; it provides us with an opportunity to take stock and consider our position. Why are such turning points important? They reflect two powerful aspects of our reality. One is the capacity (even the need) of the human mind to range at will over time past, present and future. The other is the fact of our interconnectedness with all things past and future.

During the course of everyday life we become entrained in short-term, ego-bound, thinking, in the limited demands of the present. But the transition into a new century reminds us of the wider process that willy-nilly we participate in. Looking back over the last hundred years we contemplate our roots in the lives and cultures of our parents and their parents. Over the next hundred years we look forward with our children and theirs to the world that is growing organically, day by day, from our present reality. This 'two-hundred year present' is our space in time. And when we reach the changeover, as dictated by the calendar and our numbering system, for a brief moment we seem to stand on a pivot of history.

The perspective catches our imagination. It is, perhaps, the temporal equivalent of the view from a high mountain. The details that had absorbed us stand revealed in a breathtaking panorama. Yet that is where the analogy ends. For we are keenly aware that the 20th Century has been harrowing for us, for the Earth and certainly for our children. It is highly significant that at the end of the 19th Century people looked ahead with optimism and hope. They believed that the rational application of scientific knowledge and technical skill would re-make the world and usher in an era of peace and prosperity. Nowadays it takes a profound act of imagination to re-construct that sense of boundless possibility. For we carry the experience of the souring of that dream, of wars, catastrophes and the steady deterioration of our prospects and our images of the future.

Approaching the new millennium we know at a deep, incontrovertible level that everything is at stake. As Macy puts it:

With isolated exceptions, every generation prior to ours has lived with the assumption that other generations would follow...Now we have lost the certainty that we will have a future. I believe this loss, felt at some level of consciousness by everyone, regardless of political orientation, is the pivotal psychological reality of our time. (Macy 1991: 5)

There is no transcendent principle which says that the experiment of life on planet Earth must succeed. Our very success as a species, coupled with the extraordinary assumptions and habits of the industrial era have brought us to a real 'hinge in history', not an imaginary one or merely a calendar change. So it is not surprising that people have come to fear the future. Someone once called it 'a disaster that had already happened!' To the extent that substances such as plutonium will be around for up to 250,000 years or that the viability of forests and other ecosystems is threatened, that could be true. It's also possible that a keen awareness of both halves of this two-hundred year period may, in fact, stimulate changes, shifts of perception, processes and

actions which could lead in an entirely different direction. That is the suggestion advanced here.

There is, of course, a danger here of wishful thinking, of 'finding good in everything', a silver lining in every cloud. That is not what I am suggesting. We are in very great perilafact that is already fully appreciated by the collective unconscious (otherwise, why would images of disaster, decay and decline dominate our popular and visual media?). But, properly handled, that fact may jolt us into a new awareness of where we are and what we need to do. It is most emphatically not a case of thinking good thoughts and being good, positive people. We may need to get angry. The point is that we face a challenge of unprecedented proportions. We have known it for some time. But late industrial culture has provided us with so many diversions and avoidance strategies that most of us are simply not paying attention.

The approach of a new century provides a genuine chance to take stock. We must look back at the horrors of the century: at Auschwitz, Hiroshima, Bhopal and the rest. We must be able to look right into the abyss - and then beyond it to the processes of recovery and renewal that point in quite different directions. This is not an illusion. There's plenty of evidence that within the vast span of human cultures and responses there can be found all the resources necessary to re-conceptualise our predicament and steer in a different direction. It is from this viewpoint that we can discuss, indeed more than discuss – create - the promise of the 21st Century, for promise there is.

One of the most encouraging things I have observed from meeting people, monitoring the literature and reflecting on the implications is *the emergence of a deep consensus* about our predicament and what is needed to change it. It seems to me that there is a genuine congruence of insight emerging from many places and many cultures. There's no conspiracy, no blueprint. But there is an emerging view of reality that could help us to construct truly post-industrial cultures. So, while social learning is slow, while there are enormous lags in virtually all our important systems (government, business, education, economics etc.), it is possible to discern a way out of the trap we have constructed. The remainder of this paper considers the promise of the next century under the eight headings illustrated below.

Table 1: Agenda for the 21st century

- * Recovering a sense of the future
- * Creating institutions and processes of foresight
- * Repairing the damage, reducing risk
- * Creating sustainable economies
- * Releasing the potential within people
- * Finding new purposes and meanings
- * The re-discovery of intrinsic value
- * Re-inventing culture via. renewed worldviews

1. Recovering a sense of the future

Many cultures, including Western ones, have, and have had, a clearly articulated relationship to the future. American Indians, for example, were known to consider the seventh generation in their decision-making councils. Yet the cultural editing of most contemporary Western cultures has had two contradictory effects. In some ways it has misrepresented the futures dimension as a kind of empty space, an abstraction, which is

not worthy of serious attention. That is one reason why school curricula embody so many references to the past, but so few to the future. On the other hand two very different types of futures images have become current in late industrial cultures. One is the optimistic, high-tech, machine-dominated version that is found on popular TV and in young peoples' books. The other is the dark vision of Dystopia, of decline, decay and eventual destruction.

While it may be true that both represent real alternatives, with roots in aspects of the present, neither begin to do justice to the much wider range of options and possibilities that lie ahead. Activating a developed sense of the latter has therefore become very important. How may this be done? Futures concepts and ideas are of enormous importance here. The reason? Though they have been widely overlooked, they provide the means by which to consider futures. Like the language and symbols of any area, they give substance to what may otherwise seem vague and unreal; they provide clarity and definition so that hitherto obscured ideas and possibilities spring into sharper focus. Equipped with these resources, the ability of the human mind to grapple with futures concerns is greatly enhanced. Futures concepts, methods and applications each serve to augment the natural capacity of the human brain/mind system and raise its power to engage in futures work to new levels.

Speculative fiction also has a major role to play. Many novels and short stories serve to elaborate futures potentials. That is, to illuminate futures and aspects of futures tend to be inaccessible to reason in general or 'hard-headed' (i.e. empirical/analytic) futures research in particular. A working familiarity with this literature demonstrates, as perhaps no other source can, that the idea of the future as 'empty space' is invalid. On the contrary, many futures-related stories actually *demonstrate* the wider range of options, dangers and possibilities that lie ahead. Instead of remaining an abstraction, the imaginative and intellectual space of the future begins to coalesce around a variety of themes, scenarios and lines of development. Table 2 provides an outline rationale for re-integrating the futures dimension into daily life and culture. Let us look briefly at each point.

Table 2: Why futures are essential

- Decisions have long-term consequences
- Future alternatives imply present choices
- Forward thinking is preferable to crisis management, and
- Further transformations are certain to occur

Decisions have long-term consequences

Every decision is a branch-point. It leads away from one end and toward another. This is how the world is shaped. While some decisions are trivial and become lost in the texture of larger events, others powerfully condition the present and future. The survival or extinction of entire species is now dependent upon human decisions about their habitats. Decisions to deploy certain chemicals, technologies, weapons systems all affect the viability of our environment and our prospects for a livable future. If we continue to pour resources into negative and damaging enterprises, the odds will continue to mount up against us. If we could alter the cultural programming we might see things differently. We might pursue qualitative growth and pour our ingenuity into restoring the earth, to healing the damage.

Future alternatives imply present choices

The power of the human mind to range at will across the vast span of past, present and future provides us with a powerful means of controlling which ends we pursue. We are not (yet) locked into a mechanical process that dictates our futures. Since we can envisage many different possibilities, we have freedom of choice. To the extent that we become aware of different future alternatives, we gain access to new choices in the present. If we become aware of something we want to avoid we can take appropriate action. Similarly, if we can imagine something we want to create, we can set in motion the means to create it. This is as true of a relationship as it is of a new car model or airport. Future alternatives imply present choices because it takes time to exert our will and mobilise the resources involved in doing something or avoiding it.

Forward thinking is preferable to crisis management

It follows that foresight has now become a structural necessity for societies in transition, rather than merely a matter of personal prudence and safety. Forward thinking is preferable to crisis management because the latter is expensive and wasteful. Furthermore, as the Chernobyl example tragically proved, the ensuing damage may be more costly than anyone would rationally contemplate. While it is not possible to predict the future states of social systems in any detail, it is possible to take a strategic view, to explore options and alternatives, and to anticipate eventualities. Forward thinking creates a decision context in which unpleasant surprises can be minimised. It means that crises can be kept to a minimum. As the stakes mount, so it becomes increasingly important to invest in foresight (Slaughter, 1990).

Further transformations are certain to occur

One thing we can know for certain is that if the present dynamism of our social and technical systems continues, we will continue to be faced with radical changes in every aspect of our lives. The changes in prospect over the next 100 years are probably as great, or greater than those that have occurred over the last 1,000. They may well include: the loss of most remaining tropical forests; major climate shifts; new person/machine interactions; significant life-extension; increasingly powerful computers, expert systems etc. and powerful new technologies (e.g. nanotechnology, genomics). The fact of continuing rapid change in so many areas creates a major challenge for the species. Can we adapt? Should we adapt? How can these changes be regulated for the benefit of all? The futures dimension in general, and the study of futures in particular clearly has a role to play in posing, and attempting to answer such questions.

2. Creating institutions and processes of foresight

In some ways we have known how important foresight is for a long time. That is why the following maxims have become validated through long traditional usage:

- look before you leap
- a stitch in time saves nine, and
- forewarned is forearmed.

Such sayings establish the fundamental legitimacy of the foresight principle. Our species long ago learned that it is better to look ahead and to make provision for what may happen, than to let things take their course regardless. Successful foresight is clearly

preferable to clearing up the mess. But how can foresight work when social futures cannot be forecasted or predicted?

This apparent contradiction has a surprisingly simple solution. Futures scanning can certainly be difficult. However, it is congruent with what has been suggested above that most of the difficulties involved can be offset by the richness of the concepts and methods brought to bear upon them. Here I am referring to the intellectual, methodological and conceptual resources available in the field that are more substantial than is commonly realised.

Everyone applies the foresight principle in their daily lives. We check the weather before leaving home. We consider the options before taking a new course or beginning a new job. We make provision for contingencies by accumulating a financial 'nest egg" or taking out insurance. All this is common practice. Foresight raises no major problems at the individual level because it is part of the standard mental equipment of most normal people and its utility is unquestioned. But foresight at the social level is more problematic. It is not yet well supported because its utility has not been widely perceived and the institutional equivalents to our mental capacities have not yet been constructed and assembled. Why is this?

As noted above we have inherited a set of assumptions and presuppositions that condition our view of the world in various ways. Among many other things they tell us that the past is authoritative and real, that the short-term present is all that matters and that futures can be safely ignored. So this worldview actively discourages any social investment in foresight even though, at a more personal level, we know it to be essential. Future discounting can therefore be seen as one of the perceptual defects carried over from the scientific revolution and the industrial way of life.

This is not to say that organised foresight work does not exist. It does exist, but it is not normally available to the public. Every large organisation has discovered that it must plan. It must look ahead and develop strategic responses to its environment. Otherwise the product fails, the supply of essential parts runs out, the enemy's plans were better and the battle is lost. The sad story of Chernobyl graphically illustrates the costs to be expected when foresight is not correctly implemented and applied.

Techniques have been developed to facilitate systematic foresight in some limited contexts. However, the results of this work tend to be proprietary, fragmented and difficult to obtain. Given the fact of rapid structural change and growing environmental uncertainty, some means of abstracting the best available material, filling in the gaps and making the results more widely available are undoubtedly needed. As noted, foresight work in the public interest has now become a structural necessity.

A prudent and responsible society will engage in foresight work because it understands that there are important futures-related choices to be made. Avoiding those choices simply cancels out the possibility of choice or shifts the responsibility elsewhere. So a carefully designed initiative to implement foresight in the public interest cannot be dismissed as an individualistic or a self-interested quest. It is a very major and substantial cultural commitment to the well being of future generations.

3. Repairing the damage, reducing risk

Given the enormous costs that the industrial system has exacted upon the world, repairing the damage has become a major imperative. There are very many areas and

ecosystems that have been completely destroyed. Others have been severely compromised; entire species of plants and animals have been lost. This dynamic of destruction must be replaced with a new dynamic of restoration. Hence there is scope for a series of new professions to develop from the confluence of ecological science and environmental activism.

Beyond this there is a dawning possibility that humans may, in some sense, be able to 'reinvent nature'. Of course, this instantly recalls the notion of hubris, or unjustified pride. But in a different cultural context, one that had re-established a sense of the sacred and incorporated a strong stewardship ethic, it is conceivable that one part of nature (humans) could act with other parts (animals, plants, ecosystems) to create new patterns of life. If habitats can be recovered and restored there may be no reason why future humans should not reanimate extinct species (by reconstructing their DNA from numerous individual samples), adapt existing species (as is now being done with many crops and transgenic transfers) and invent new ones. When guided by sufficiently robust ethics humans might actually improve upon what nature has achieved blindly.

Yet for any of this to happen, and to be viable, the present serious risk factors would need to be reduced or eliminated. These include stocks of nuclear weapons, military action, overpopulation, further deterioration of ecosystems and genetic pools. Resolving these is a *sine qua non* of a viable future (Tough 1991).

4. Creating sustainable economies

This will not be easy, but in a sense it could be inevitable because a non-sustainable economy is just that. However, there are many contradictions to resolve. Advertising, consumerism, materialism, competitive individualism and the pursuit of old-style growth all make it difficult to embark on the transition.

Growth will need to be re-defined. Resources will need to be re-valued and seen in their wider context. The environment will need to be brought fully into all economic calculations instead of being dismissed as a mere 'externality'. Energy will need to be conserved and used much more efficiently. At a deeper level, the ideologies and power systems that drive the technocratic machine will have to be challenged and replaced. Similarly, the time frames that are applied to human economic life will need to be reassessed. Most importantly, it will be necessary to escape from the chronic short-termism now common in business, government, industry and education.

The default notion of 'the present' that has dominated the industrial era has been a minimal and unlivable one: the fleeting present. Instead of accepting this passively, we need to get into the habit of consciously choosing appropriate time frames for different purposes. For some activities, such as typing, driving or playing music, a short time frame is vital. For others, such as listening to music, writing a story or resting a longer one is needed. At the social and cultural level we should be thinking in decades and centuries. It is in the latter context that sustainability becomes an issue. So there is something of a chicken-and-egg problem here. Longer time frames legitimate the idea of sustainability; the latter also require the former.

So it's helpful to regard several developments as being linked together: a critique of industrial era economics, the rise of a different time sense and the implementation of a range of conserving measures and practices all reinforce each other in the longer term.

5. Releasing the potential within people

It was Schumacher who observed that, at the level of human beings, no upper limit to capacity can be found (Schumacher, 1977). This is so because we have evidence from many cultures and traditions that higher states of knowing and being have been achieved by outstanding individuals over the centuries. The work of writers such as Huxley, as well as the work of transpersonal psychologists, has done much to clarify the picture (Huxley 1946). So, in contrast to the usual machine-led view of the future, we can see a more humanly compelling option taking shape. Essentially it is one in which human development accelerates to the point where it can assert dominance over technical development. That is the real challenge of the next century and beyond. If base human motives such as greed, fear, arrogance etc. continue to be linked with powerful technologies it is not hard to see the future as a continuing disaster.

Yet there exist within each culture all the potentials needed to empower other lines of development. They are accessible through clarity of insight, through deepened perception, creativity and certain forms of spiritual practice. All reveal new possibilities precisely because they progressively refine the instrument of knowing itself. As the latter changes, so does the wider world of which it is the most highly developed part. This is a principle of great, largely untapped, power.

Though it has been widely overlooked there remains a persistent thread throughout most cultures and spiritual traditions which suggests that we are all and always immersed in a stream of knowing in a world brimming with immanent meaning. Since language cannot fully encompass those realms, the descriptions may appear paradoxical. From within the desert of scientific empiricism that is the end of the story. But the account given above suggests that in any particular context the higher may not be noticed from within the lower and certainly cannot be explained by it. Thus, far from sustaining an adequate worldview, the tired rationalism now solidly embodied in educational, social, political and economic discourse around the world, itself represents a radically limited frame to read upon an interconnected world rich in hierarchical truths.

Higher awareness is refined, peaceful, compassionate. It is not under threat. It does not need to consume the world or destroy it. It recognises, with Siddhartha, that 'meaning and reality (are) not hidden somewhere behind things, they (are) in them, in all of them' (Hesse 1951: 32). The widespread recognition of such insights will not be quickly achieved. It is a distant goal. Yet the lines of development implied can energise very many changes in the here-and-now. The structures discussed above are steps on a long journey. It's a journey that leads up and out of the abyss toward new stages of personal and cultural development.

Here, then, is a key to cultural renewal and a renewed sense of meaning and purpose for the next century. For all persons have within them enormous capacities and powers which are hardly engaged in everyday life. Those who are able to locate their potential and to develop it have the ability to become constructive agents of change. The whole history of citizen action movements, of innovators and social activists tells us that people can indeed be very powerful. When linked with the right ideas and proposals this force is irresistible.

6. Finding new purposes and meanings

The purposes and meanings that powered the social system over some two hundred years created a world of contradictions. The process of selecting new ones will not be an easy one since powerful groups always have interests bound up in the way things were. Yet the de-legitimisation of redundant social principles and practices is overdue. This is a major focus of critical futures work. It begins with the critique of what is wrong, redundant and no long helpful in contemporary cultures. It's a necessary ground-clearing exercise. It proceeds to develop alternative ways of knowing and being. These alternatives thrive upon new purposes and meanings, examples of which have been given above. Let us briefly consider three: stewardship, selfless love, and obligations to future generations.

A stewardship ethic could well be a motivating force in the establishment of new intentional communities that will spring up in formerly ravaged areas. Such communities will not be like the self-indulgent communes of the 1960's. Rather, they will exist to repair landscapes and re-invigorate ecosystems. They will be part of a shift toward long-term responsibility for the well being of the earth.

Selfless love will be part of a shift away from the me-ness and materialism of the 20th Century. It reflects an established trend from outer-directedness to inner-directness, or, from having to being (Fromm 1978). This is an important distinction. The having mode is insecure, needing constant re-assurance and material inputs. On the contrary, the being mode is self-sufficient. It is centred in 'that which is' and sees the material realm as only one among others.

Obligations to future generations will emerge as a new (or renewed) social/cultural concern (Busuttil, 1990). Humans will no longer see themselves as cut off from past and future, but as participating in a cosmic process with no discernible beginning or end. In that process the generations are partners in time, each contributing to the overall journey.

Such developments will be supported by changes in worldviews that reveal the interwoven, interconnected, layering of reality. The latter will no longer be seen to reside primarily in material objects and physical powers, but will embrace other domains: emotional, mental and spiritual (Wilber, 1990).

7. The rediscovery of intrinsic value

It seems clear that present-day negative views of futures are driven by fairly primitive human instincts that are magnified and augmented by powerful technologies (particularly tools of communication and the mass media). The interaction of an industrial worldview with the political and commercial opportunism of the 20th Century has permitted a crass and short-sighted marketing culture to become dominant. So it's hardly surprising that a positive view of the future is lost. It cannot be overemphasised that the simple extension of present trends leads inexorably on to a devastated and impoverished world. That fact underlies all the reasons why young people get depressed and makes it clear why business-as-usual assumptions are no longer viable. We are caught up in a giddy pattern of dynamic change and chronic unsolved world problems.

Yet it is entirely possible to 'breach the bounds' of present social reality and to imagine a very different world structured according to different values and assumptions. This

could be the role of a 'wise culture' (Slaughter, 1991). It may not be achieved tomorrow, next year or even next century. What it does do is much more immediate and practical. It creates a contrast which, like the best speculative fiction, de-familiarises the present, makes it seem strange (i.e. historically contingent). A compelling vision therefore appears which transcends the catastrophic futures endemic to technocratic scenarios.

How can one define a wise culture? We cannot be entirely sure. Perhaps the actual details are less important than *the quality of consciousness* that they evoke, for it is this which is arguably the pivot, rather than the technical or other means by which it is expressed. Nor need this quality be wholly displaced into future time. The startling thing is that people have always been capable of it. Today one such person may be Thomas Berry. His *Dream of the Earth* (Berry, 1988) seems to presage exactly the kind of shifts outlined here. Following Berman (whose book, *The Re-enchantment of the World* is a milestone in this literature) he writes,

This reenchantment with the earth as a living reality is the condition for our rescue of the earth from the impending destruction that we are imposing upon it. To carry this out effectively, we must now, in a sense, reinvent the human species within the community of life species. Our sense of reality and of value must consciously shift from an anthropocentric to a biocentric norm of reference...Our challenge is to create a new language, even a new sense of what it is to be human. It is to transcend not only national limitations, but even our species isolation, to enter the larger community of living species. This brings about a completely new sense of reality and value (Berry, 1988: 42)

This 'new sense of reality and value' is, perhaps, the key to a new historical dynamic. In part it turns not on the intellectualisation of experience, still less upon the reductionist interrogation of nature by naturalistic science; but rather upon *the direct experience of intrinsic value*. This stands in stark contrast to use-value and exchange-value that still remain core assumptions of the late industrial era. Imaging workshops that can bring participants to this point in living experience are clearly promoting social change at a very profound level.

Intrinsic value gives back to the earth, its wildlife and ecology the right to independent existence, regardless of the needs or uses of human kind. But, as Mc Kibben (1990) and others have pointed out, from a human viewpoint nature may no longer exist as an independent category. This may be overstated. Yet in order for nature to recover and retain its capacity to sustain any life it will need, in some sense, to be re-constituted at the heart of the social order.

8. Reinventing culture through a renewed worldview

The way we see the world dictates the way we use it. So the commitments embedded in the foundations of industrial culture need to be examined and, where necessary, transformed or discarded. A renewed worldview will retain much that is good and useful from earlier times. It will retain notions of justice, equity and so on. But it will also include other elements such as sustainability, stewardship and a global, long-term view (Slaughter 1992).

I've suggested that such a culture can arise from the inner dynamic of higher-order human capacities, founded on wisdom. But the fact is that no one really knows. The culture that follows on from industrialism cannot be specified fully in advance. What is

certain is that if the human race is to survive in a world worth living in, a world rich in other life forms, rich in resources, rich in human and non-human options, then it will be with a culture based on assumptions very different than those now operating.

Conclusion: the challenge and promise of the 21st century

Possible futures for humankind are many and varied. The inert, radioactive desert is still a possibility, though less likely than it once was. More likely at present is a planet whose life-support systems are devastated beyond all hope of repair. In that scenario the four horsemen will ride at will across the densely populated landscapes, wreaking their age-old havoc through famine, war, disease and pestilence. By contrast, there are some who place their hope on 'the high frontier', i.e. the promise of space, orbiting colonies, mining the asteroids and so on. Others are unlocking the DNA code, pursuing nanotechnology and other such wonders. The fatal flaw, however, in many of these enterprises is that they leave the question of human motives unaddressed.

As noted above, when primitive human instincts or motives such as fear, greed, hostility etc. become associated with powerful technologies, the result is, indeed, a long-running disaster. We have seen many of the latter in recent history. But when higher motives such as selfless love, stewardship and what Buddhists call 'loving kindness' come into play, there are interesting consequences. The grounds of many otherwise serious problems seem to disappear! Furthermore, many new technologies are seen to be unavoidably secondary. If they are applied at all then it is sparingly. Ethical concerns such as 'enoughness', a deep identification with the natural world and a developed interest in future generations come to the fore. In other words, when a right relationship is re-established between people, culture and technology a whole new world of options emerges.

This does not mean going back to some pre-industrial condition of innocence. One can argue that as a species we may have 'needed' the 20th Century to make available to us certain kinds of experience, along with the experience of their costs and limitations. We have learned that the industrial assumptions about materialism, growth, the world as a machine or a resource and so on, are untenable. Consequently, we are challenged to create a new synthesis, and that has been the focus here.

The promise of the 21st Century lies in our ability to learn from the 20th and to collectively decide to strike out in new (or renewed) directions (Milbrath, 1989). In part this means giving up the disastrous conceits of the past and embarking on a journey to explore the *heights* of human ability and potential. From that viewpoint the future looks much less daunting.

Bibliography

Berman, M. (1981) *The Reenchantment of the World*, Hartford, Conn: Cornell University Press.

Berry, T. (1988) The Dream of the Earth, Sierra Club, San Francisco.

Busuttil, S. (et al, eds.) (1990) *Our Responsibilities to Future Generations,* Malta: Foundation for International Studies.

Fromm, E. (1978) To Have or to Be? London: Jonathan Cape.

Hesse, H. (1951) Siddhartha, New York: New Directions.

Huxley, A. (1946) The Perennial Philosophy, London, Chatto & Windus.

Macy, J. (1991) World as Lover, World as Self, Berkeley, California: Parallax Press.

Mc Kibben, B. (1990) The End of Nature, London, Penguin.

Milbrath, L. (1989) *Envisioning a Sustainable Society*, New York: SUNY Press.

Schumacher, E.F. (1977) A Guide for the Perplexed, London: Jonathan Cape.

Slaughter, R. (1990) The Foresight Principle, Futures 22 (8) 801-819.

Slaughter, R. (1991) *Futures Concepts and Powerful Ideas*, Melbourne: Futures Study Centre.

Slaughter, R. (1992) Critical Futures Study and Worldview Design, Papers from *Advancing Democracy and Participation*, Barcelona 17-21 September, 1991, WFSF Conference.

Tough, A. (1991) *Crucial Questions About the Future*, Lanham, Maryland: University Press of America.

Wilber, K. (1990) Eye to Eye. The Quest for the New Paradigm, Boston, Shambhala.

Note

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