Feature Article

TOWARDS A NEW COSMOLOGY OF ENVIRONMENT

Murray May

Department of Arts, Heritage & Environment, Canberra

(Note: The views expressed here are not necessarily those of the Department of Arts, Heritage and Environment).

Abstract

The purpose of this article is to review and integrate a number of concepts and perspectives recently developed or revived which challenge society's current attitudes towards the environment. The concepts discussed include, for example, ecophilosophy and deep ecology, holism, cultural transformation, the Gaia hypothesis, transpersonalism and world, national and state conservation strategies.

It is concluded that the notion of living in harmony with nature is central to any view spirituality. The implications of this view in terms of individual personal action are discussed.

Introduction

Balasubramaniam (1985, p.61) has argued that an adequate approach to environmental education will always elude us if we are not prepared to consider our orientation towards nature or confront the problem of formulating an appropriate environmental ethic. He suggests that the prevailing positivist philosophy is at the root of many environmental problems. This occurs as a result of positivism's denial of any significance to metaphysics and consequently a denial of any real significance to either aesthetic or ethical value judgements.

I will present and discuss each of the ideas, sometimes using a symbol as an aid. Finally, I will draw parallels and connections between the themes and suggest practical ways in which they may be further developed and applied in everyday life.

(1) Eco - philosophy

Skolimowski (1981) in his "Eco-Philosophy" has responded to E.F. Schumacher's view that one of the most urgent tasks of our times is a metaphysical reconstruction. He addresses the philosophical and value problems which lie at the core of this reconstruction and argues that it is important to get our thinking straight before applying it.

Figures 1 and 2 show the elements of eco-philosophy as against the orientation of present day philosophy. Contemporary philosophy is identified as being empiricist, positivist and analytical.

One of the central differences between these outlooks is that eco-philosophy is life-oriented, as contrasted with contemporary philosophy which is language-oriented. Eco-philosophy attempts to understand nature and life in compassionate terms while empirically oriented positivist philosophy has provided the philosophical justification for the exploitative mechanistic paradigm which has wrought so much havoc on world ecology.

Ecological consciousness as advocated by eco-philosophy entails a reverence for nature and involves a realisation that we are an extension of Nature. It also means taking judicious stock of the existing resources and advocating stringent

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measures so that such resources last longer. Present day philosophy, however, either participates directly in exploitative views or by Its indifference to ecological Issues silently endorses the prevailing ethic.

Also at odds with present day philosophy's support of quantitative so called "objective" approaches is ecophilosophy's concern with "wisdom". Wisdom is obviously a difficult concept in a quantitative society as it is essentially unquantifiable.

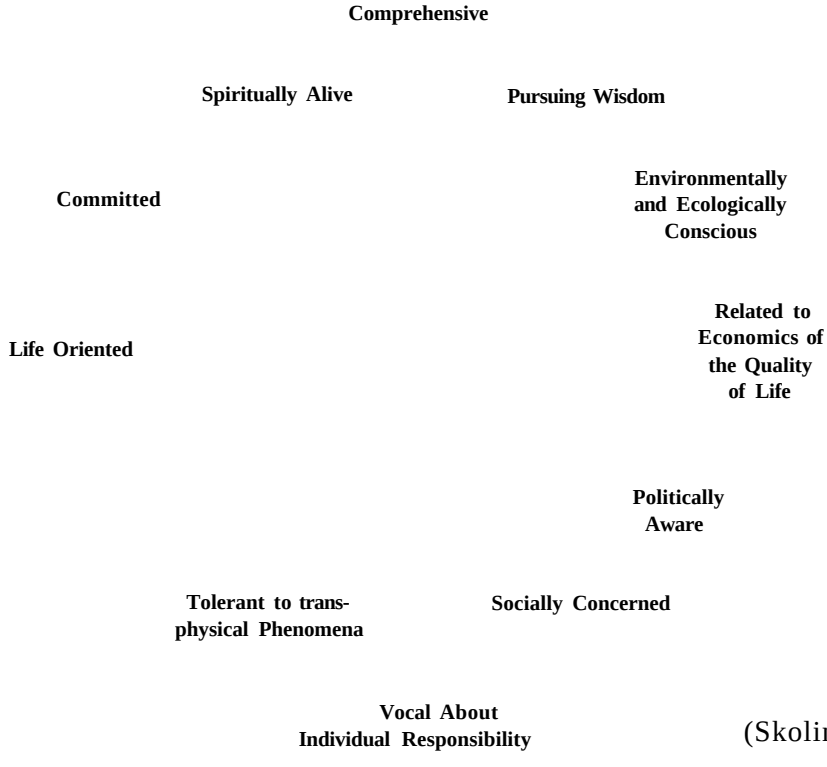
Skolimowski's mandalas attempt to show in diagrammatic form the two value stances characteristic of the paradigm now under threat and a new one which is developing.

(2) Holism and Western culture

The concept of holism as well as Western culture and Its scientific worldview are useful ideas in thinking anew about environment. I will discuss each and link them with an example.

A holistic view seeks to understand the relationship of the part to the whole and the whole to its parts but in contrast to the prevailing reductionist perspective, holism comprehends whole organisms and systems as entities greater than and different from the sum of their parts. Thus in contrasting a holistic, acausal view of phenomena with a specialised, compartmentalised, linear, cause-and-effect approach to the same phenomena, it Is important to note that neither of these seemingly opposing perspectives yields a totally adequate view.

Figure 1:
Mandala of Eco - philosophy



(Skolimowski, 1981)

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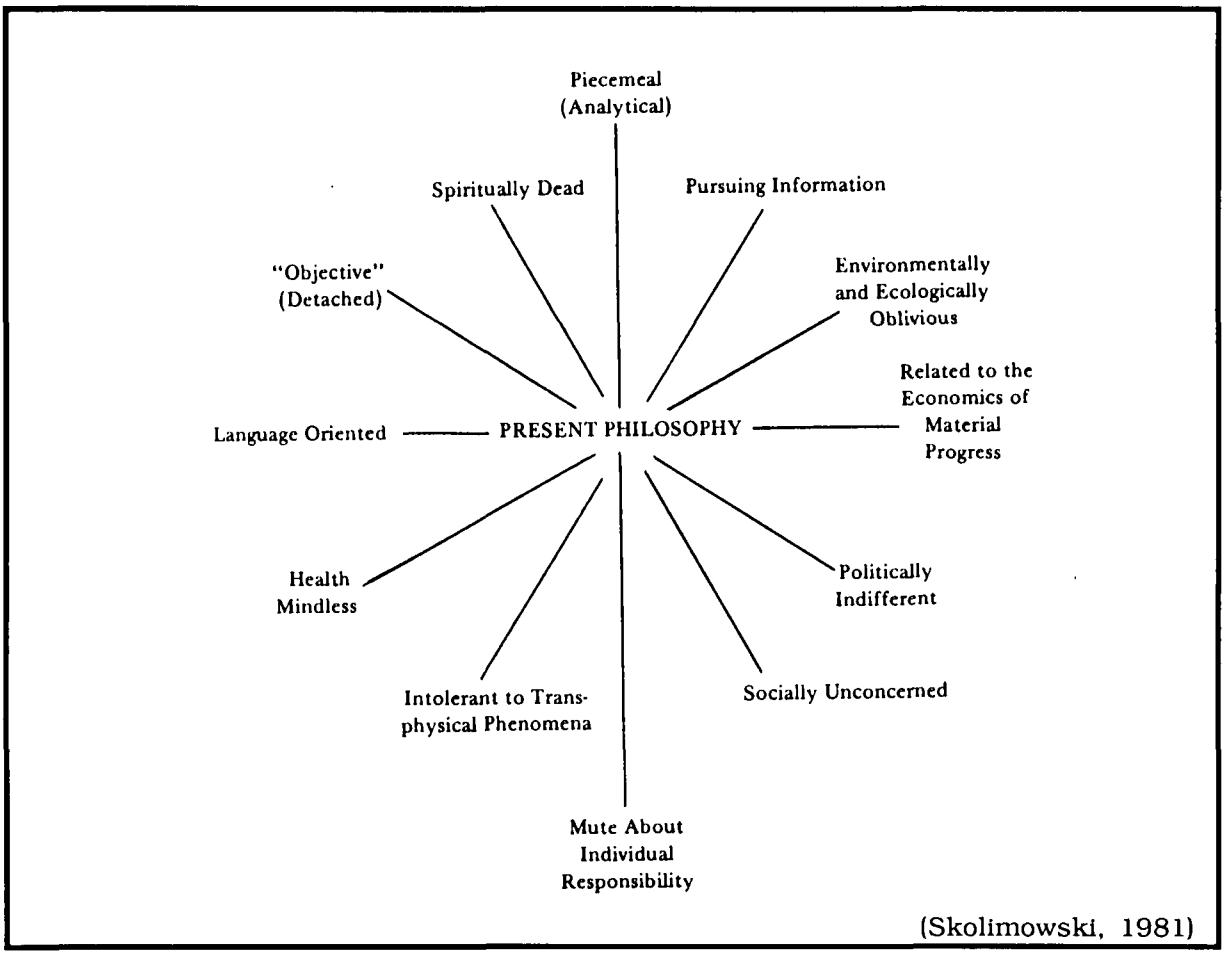
Figure 2:
Mandala of present philosophy



(Skolimowski, 1981)

An example of a model used by Theodore Roszak to describe the origins of Western culture is useful in reflecting on the limits of a seemingly irreconcilable dualistic position (Roszak, 1976, Chapter 7). Roszak views the dialectic between feeling and rationality, between the individual and society in terms of two triangles which he calls the sacred and the profane (see figure 4). The sacred triangle, the traditional province of religious culture, has myth, magic and mystery at its vertices. In his view, these have become devalued in the Western world view and have been replaced in the inverted profane triangle by history, technology and reason respectively.

Thus, for example, magic is transformed to technology. Magic is concerned with the person's encounter with nature, says Roszak. Besides the security which comes from trust and co-operation there is also the security which comes from domination, a forcing-power characteristic of Western technology. In its most debased form we have the technology of bombs and the arms race - a form of black magic.

Of relevance to this discussion on holistic thinking is Roszak's assertion that religious teachers have lost sight of the evolutionary unity which makes the profane triangle a natural transformation of the sacred triangle while secular humanists, having risen in rebellion against the vices of established religion, have cut themselves off from transcendent experience. Roszak's call is for a more holistic perception:

> ... the teaching counsels us to see that the unity of 'this' world and 'other' world is the relationship of a reflection to its source. The reflection is also a reality to be appreciated and enjoyed, all the more so when we grasp the role it plays as the image-bearer of a transcendent original (Roszak, 1976, p.180).

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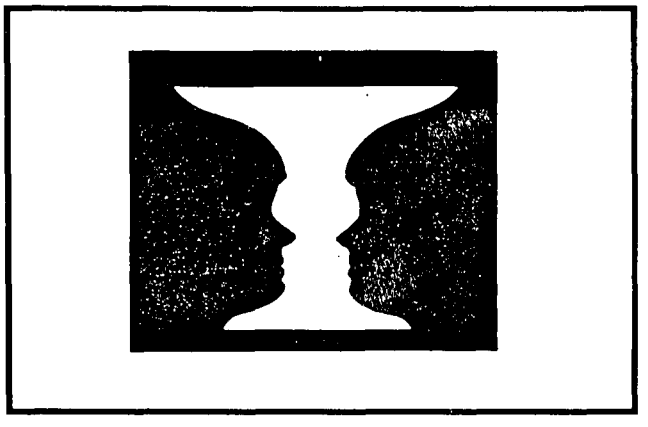
Figure 3:
Holism



(3) To Have or To Be?

Erich Fromm (1976) in his book "To Have or To Be?" argues that two ways of being are struggling for the spirit of humankind. The first one which he calls the "having" mode concentrates on material possessions and power and is dominant in modern industrial society, whether capitalist or communist. The second, alternative way is what he calls the "being" mode, which manifests itself in the pleasure of shared experience and truly productive rather than wasteful activity, and is rooted in love and the ascendancy of human over material values.

Fromm's analysis considers well-being in relation to the "cybernetic, bureaucratic industrialism" (whether 'capitalist' or 'socialist') which people now live in and makes the observation that growing numbers of people are becoming aware that the unrestricted satisfaction of all desires is not conducive to well-being, nor is it the way to happiness or maximum pleasure. Yet this is one of the main psychological premises, both in theory and practice, on which the industrial system is based i.e. the aim of life is happiness, or maximum pleasure defined as the satisfaction of any desire or subjective need a person may feel (radical hedonism).

However, radical hedonism was never the theory of well-being expressed by the great "Masters of Living in China, the Near East, and Europe". Radical hedonism emerged as a guiding principle of economic behaviour as a result of eighteenth-century capitalism separating ethics and human values from economic behaviour.

As to the future, Fromm quotes Mesarovic and Pestel's report to the Club of Rome as saying that economic changes are possible only "if fundamental changes in the values and attitudes of man occur, such as a new ethic and a new attitude toward nature" (p.18). Fromm himself says: "Right living is no longer only the fulfilment of an ethical or religious demand. For the first time in history the physical survival of the human race depends on a radical change of the human heart" (p.19).

Fromm sees a new society which will encourage the emergence of a new kind of person with different qualities. Some examples of these qualities are (p.167):

- Security, sense of identify, and confidence based on what one is, on one's need for relatedness, interest, love, solidarity with the world around one, instead of one's desire to have, to possess, to control the world, and thus become the slave of one's possession;
- joy that comes from giving and sharing, not from hoarding and exploiting;
- love and respect for life in all its manifestations, in the knowledge

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that ... life and everything that pertains to its growth is sacred;

- trying to reduce greed, hate, and illusions as much as one is capable;
- making full growth of oneself and of one's fellow beings the supreme goal of living;
- sensing one's oneness with all life, hence giving up the aim of conquering nature, subduing it, exploiting it, raping it, destroying it, but trying rather to understand and co-operate with nature;
- happiness in the process of ever-growing aliveness.

Figure 4:

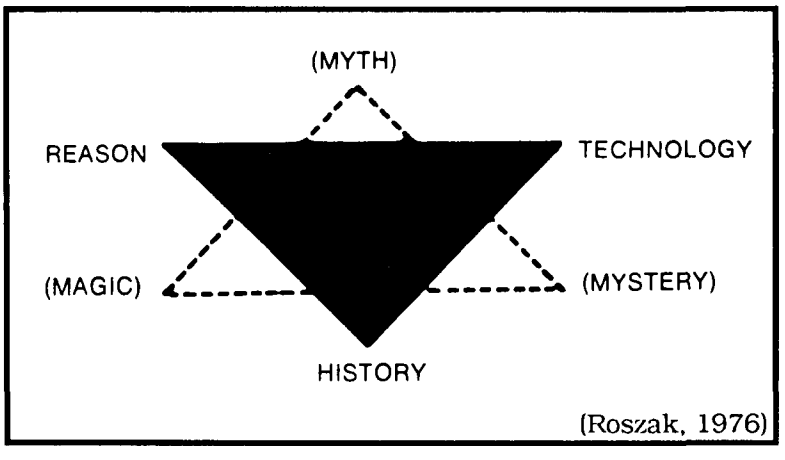
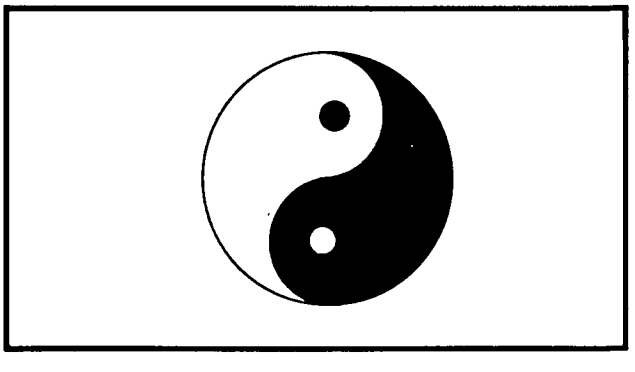


Figure 5:
Yin and Yang



(4) From yang to yin

Capra (1982) looks at the topic of cultural transformation by considering various ideas related to the processes of fluctuation. One of these ideas concerns the two polar forces called yin and yang, which ancient Chinese philosophers believed were in a dynamic interplay. The symbol in Figure 5 is often used to represent this concept.

A number of associations with the concepts of yin and yang are useful:

yin	yang
feminine	masculine
being	doing
contractive	demanding
cooperative	competitive
intuitive	rational
synthesizing	analytic

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Capra's basic thesis is that Western culture has become overly yang or masculine and that the feminine qualities of intuitive wisdom, synthesis, and ecological awareness have been neglected.

However, Chinese Taoist philosophy suggests that all natural phenomena are manifestations of a continuous oscillation between the two poles.

Capra's description of this dynamic presents a strong integrative underlying theme:

> Today, however, we are witnessing the beginning of a tremendous evolutionary movement. The turning point we are about to reach marks, among many other things, a reversal in the fluctuation between yin and yang. As the Chinese texts says, "The yang having reached its climax, retracts in favor of the yin". Our 1960's and 1970's have generated a whole series of philosophical, spiritual, and political movements that seem to go in the same direction. They all counteract the over-emphasis on yang attitudes and values, and try to establish a balance between the masculine and feminine ideas of human nature (p.30).

(5) The Gaia Hypothesis

This hypothesis, coined by the British chemist James Lovelock in honour of the ancient Greek "Earth Mother" goddess, Gaia, has altered many people's perception of the planet.

Lovelock concluded that a number of factors suggest that the atmosphere of the earth is being manipulated on a day to day basis by the many living processes on Earth. For example, the oxygen concentration of the atmosphere is stabilised at 21% which is far removed from the equilibrium predicted by physical chemistry. Other examples of a homeostatic mechanism occurring include the steadiness of the Earth's surface temperature and the regulation of the amount of salt in the oceans.

Lovelock says: "We defined Gaia as a complex entity involving the Earth's biosphere, atmosphere, oceans, and soil, the totality constituting a 'feedback' or 'cybernetic' system which seeks an optimal physical and chemical environment for life on this planet. Gaia remains a hypothesis, but much evidence suggests that many elements of this system act as the hypothesis predicts" (Lovelock, 1985, p.100).

Peter Russell (1982) uses Lovelock's concepts to consider the role of humanity as a sub-system of the larger planetary system, which cannot be treated in isolation.

He suggests that humanity may be part of some global nervous system capable of being to the planet everything that our own brains are to us. However, the pessimistic side to this picture is that this nervous system appears to be out of control as in a recently-erupted malignant growth which threatens to destroy the very body which supports its existence.

Evidence of this includes, for example, the proliferation of nuclear weapons, the destruction of large tropical rainforests essential for the health of the biosphere, and the threat posed to life support systems by the products of industrial activity such as acid rain.

The positive side of Peter Russell's thesis is that humanity is at the threshold of a quantum leap in consciousness which will change, in the most radical way, our attitudes towards ourselves, others and the planet as a whole.

The inference that humanity and the environment are a single system is brought out also in Theodore Roszak's Person/Plant (1979). In it, he maintains that the needs of the planet are the needs of the person and the rights of the person are the rights of the planet. Again we see strong arguments made for the convergence of a humanistic and transpersonal psychology with an enlightened ecology.

(6) Deep Ecology

The contrast between so called "deep ecology" and the dominant world view is summarised in Figure 6.

The distinction between shallow and deep ecology was coined in 1972 by the Norwegian philosopher Arne Naess and has subsequently been developed by a number of thinkers e.g. Devall and Sessions (1985), Fox (1984, 1985).

Shallow ecology (or reform environmentalism as it is often called) and deep ecology have very different emphases, constituting rival environmental paradigms. Deep ecology is a minority but persistent tradition in Western politics and social philosophy and is also found in other cultures and traditions including Taoism and some Buddhist communities.

Deep ecologists are, in effect, agents for a "paradigm shift" or alternative worldview. Such a view contrasts sharply with the dominant worldview of technocratic-industrial societies which regard human beings as isolated and fundamentally separate from the rest of Nature. Shallow ecology is anthropocentric, ascribing only instrumental or use value to the non-human world.

Figure 6

Dominant Worldview	**Deep Ecology**
Dominance over Nature	Harmony with Nature
Natural environment as resource for humans	All nature has intrinsic worth/biospecies equality
Material/economic growth for growing human population	Elegantly simple material needs (material goals serving the larger goal of self-realization)
Belief in ample resource reserves	Earth "supplies" limited
High technological progress and solutions	Appropriate technology; non-dominating science
Consumerism	Doing with enough/recycling
National/centralized community	Minority tradition/bioregion

(Devall & Sessions, 1985)

A main focus of deep ecology is on changing human relations with the natural environment, away from dominant exploitative practices. A basic notion is that all organisms and entities in the ecosphere are equal in intrinsic worth. The practical implications of this idea are that we should live with minimum rather than maximum impact on other species and on the Earth generally.

Deep ecology is concerned to criticise the dominant metaphysics of materialism and to replace the ideology of economic growth with the ideology of ecological sustainability.

Reform environmentalism, on the other hand, tends to accept by default or positively endorses the ideology of economic growth which characterises industrial societies. It is thus often referred to as the "resource management" or "resource conservation and development" approach and tends to operate in a reformist fashion within the dominant paradigm.

The ultimate norms of deep ecology are holistic, putting into perspective our place in the larger scheme of things. They cannot be fully grasped intellectually but are ultimately experiential.

(7) Transpersonalism and deep ecology

Deep ecology is supported by modern science, and in particular by the new systems approach which is rooted in a perception of reality that goes beyond the scientific framework to an intuitive awareness of the oneness of all life.

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In parallel, concepts about consciousness are being developed in the area of transpersonal psychology.

Wellwood (1979, p.23), for example, in his discussion of self-knowledge as the basis for an integrative psychology, distinguishes three levels of mind, namely:

1. "Thinking mind", a surface level of mind which uses concepts and focal attention and which divides, analyses, and categorizes the world and experience into discrete units.

2. "Body/mind", the organism-as-a-whole as we feel it from moment to moment. This is an experiential level where we can sense ourselves and the environment without having to articulate such feelings into discrete units.

3. "Big mind", a term used to describe the deep nature of consciousness which is not solely limited to the boundaries of one's body but which is always present in a background way in all our experience, perceptions, and thoughts.

Wellwood goes on to suggest that these three levels of mind reveal three kinds of truth. Thinking mind produces conceptual logical truths. The interaction between thinking and felt experiencing gives rise to experiential truths which serve to integrate body/mind into awareness. Finally, the truth arrived at through the realisation of the deep nature of mind is a lived truth which cannot be named or readily articulated in a discursive way. Such a truth is seen to be a transformative truth whose effect is to integrate thinking mind and felt experience with a deeper order of existence.

(8) Synergy

Russell (1982) has used this concept for looking at human society from a systems point of view.

Synergy implies that the elements of a system work towards their own goals yet are mutually supportive. Viewed as a system, human society today is in a state of comparatively low synergy. The costs of unproductive activities - maintaining complex technologies, managing large bureaucracies, mediating conflicts, controlling crime, protecting consumers and the environment, and so on - make up an increasing portion of the GNP.

Russell suggests that there is the possibility of an evolutionary leap to a high - synergy society in which there is minimal conflict between the elements of the system, and between these elements and the system as a whole.

Thus one characteristic of such a society is that the goals of the individual are in harmony with the needs of the system as a whole. In a global high - synergy society we might therefore expect a large reduction in crime, violence, international hostilities and terrorism.

Such an evolutionary leap implies the acceptance of spiritual values as an accepted part of life. War, murder, rape and other forms of personal violence would become anathema. This theme, while very different from that generally accepted now, occurs in a number of the above analyses.

(9) Future scenarios

A more practical and economic approach is taken by James Robertson (1985a,b), a leading British futurist, who discusses three possible futures, or paths of development for industrialised countries. He calls these paths Business as Usual, Hyper-Expansionist (HE) and Sane, Humane and Ecological (SHE).

The key values and principles underlying each of these futures is summarised in Figure 7:

Robertson analyses the implications of each scenario for a range of issues such as work, money and incomes, health, energy, technology, education and learning, food, planning and housing, and the economy and transport.

While the HE scenario envisages the acceleration of the forms of progress that have dominated the industrial age, the SHE scenario envisages a breakthrough on a different front: in the growth of our capacities to develop ourselves, our societies and sustainable relationships with the natural world.

Figure 7:

Three Possible Futures

Business as usual	HE (Hyper-expansionist)	SHE (Sane, Humane, Ecological)
. mass employment, mass consumption	. mass leisure, mass consumption	. a shift towards self-help and decentralization in production of goods and provision of services
. dependence on institutions for work, and goods and services	. continued dependence on institutions	. reintegration of people's work with other aspects of their lives, bringing new meaning to life
. obligation to be employed	. increased dependence on technology and experts	. personal, feminine, ecological values
. organizational, masculine, anthropocentric values	. a schizophrenic society: the working elite is hardworking, responsible, and highly motivated; the masses enjoy leisured irresponsibility	. experiential mode of action
. interventionist, instrumental mode of action	. technocratic values dominate, including even greater emphasis on organizational, masculine, anthropocentric values etc.	. intuitive mode of awareness
. analytical, reductionist mode of thought		

(Robertson, 1985)

To the extent that the SHE vision prevails, it will be one aspect of what is becoming widely known as the "paradigm shift".

(10) World, national, and state conservation strategies

The World Conservation Strategy (WCS) was launched simultaneously in more than 30 capital cities of the world on 5 March 1980. It was prepared by the world's leading environmental agencies.

In June 1983 a national conference agreed on a National Conservation Strategy for Australia (1984), which has been endorsed by the Commonwealth government and most State and Territory governments.

The strategy rests on assumptions made in the WCS but applies them specifically to Australia. For example, it recognises that living resource conservation and sustainable development are interdependent. In addition, the three main objectives of living resource conservation identified in the World Conservation Strategy were adopted for the NCSA. They are, in brief:

- to maintain essential ecological processes and life-support systems;
- to preserve genetic diversity;
- to ensure the sustainable utilisation of species and ecosystems.

An additional objective added to the NCSA is to maintain and enhance environmental qualities which make the earth a pleasant place to live in and meet aesthetic and recreational needs.

On a continuum of attitudes towards the environment this approach represents the middle ground as shown in Figure 8.

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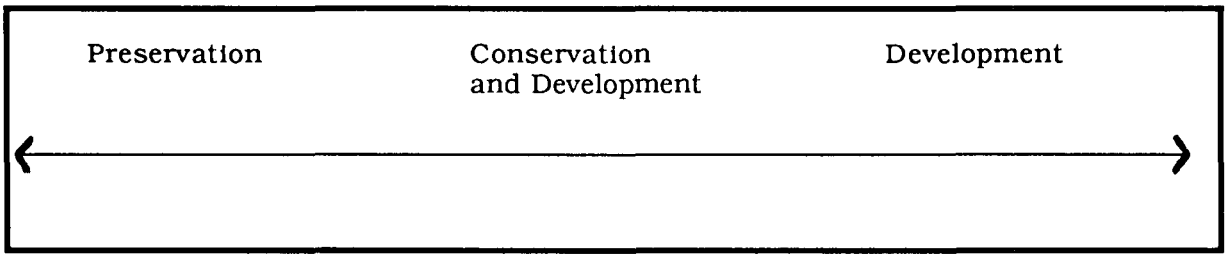
Figure 8:
Attitudes to the Environment



A summary of the background to the NCSA in Australia has already been given by Greenall (1985). She suggests that it indicates a turning point in prevailing attitudes towards the environment and offers new direction and hope for the future of environmental education in Australia.

Coombs (1986) looks in particular at the concept of sustainability underlying the WCS and the NCSA and asks what are the prospects of our society achieving such a goal. After cataloguing a number of Australian disasters showing our past and present relationship to the environment, he is more pessimistic in outlook. He suggests that such a "custodial relationship towards the environment would require an intellectual and moral revolution" and obviously feels that such a change will not come easily.

(11) Political literacy and education for the environment

The last concept in this review of perspectives on the environment is an approach to education which stresses activism, community participation and awareness of the nature of political disputes.

Huckle (1983, 1986) has summarised this approach. An example of the sorts of issues students in a school might consider include:

(a) In what form is the dispute expressed?

(b) What are the sources of the dispute?

(c) What is the nature of the issue?

(d) Who are involved in the dispute and what standpoints do they adopt?

(e) What opportunities are open to them to influence the outcome of the dispute?

(f) What methods of influence do they or can they use?

This action-oriented problem solving approach is also characteristic of the "education for the environment" focus as discussed by Robottom (1984).

There has obviously been a reluctance to apply or be able to apply this approach because of its political nature. Maher (1986), for example, provides an interesting list of courses which have been censored from the Queensland school curriculum over recent years.

The activist approach is also characteristic of green politics e.g. Porritt (1984) which, while being committed to non-violence, does not rule out active social resistance.

Conclusion

Many of the approaches to the environment discussed here form part of the task of metaphysical reconstruction. It is clear that many of them argue or suggest that harmony with nature is central to any new spirituality.

Skolimowski (1981) has addressed himself to the foundations and philosophical value problems which lie at the core of a metaphysical reconstruction. His answer to those who are concerned about the implementation of ideas is that we must first get our thinking straight.

Even though Robertson's (1985) approach is more practical and economic, his analysis makes it clear that we must influence every element of our social, individual, spiritual, ecological and political life, not separately, but all at once. For example, a shift to "soft energy

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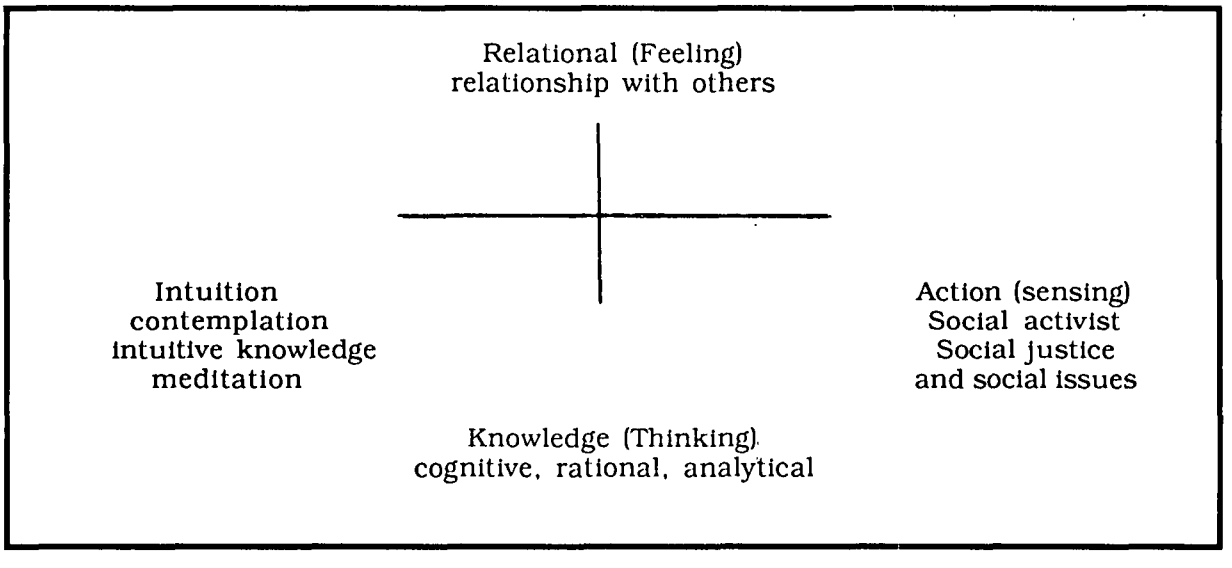
paths" and the "informal economy" goes hand in hand with the notions of feminine values and an intuitive mode of awareness.

Devall and Sessions' (1985) book on deep ecology has a strong action component. They maintain that those who subscribe to deep ecological principles have an obligation to directly or indirectly implement the necessary changes. They list a number of suggestions - some directed at cultivating ecological consciousness, others directed at actions in the political arena, while others involve working in organisations promoting the wise use of natural resources or trying to stop the nuclear weapons arms race.

Drawing on ideas from Jung about individual differences between people and on different developmental stages, I have shown in Figure 9, a range of options which people may have an affinity for at various stages of life. These allow for different forms of expression in relation to the environment. O'Connor (1985) provides a good introduction to the topic of different psychological functions being emphasised by different people.

Figure 9:
Four Paths of Spiritual Growth



For example, the approach of a social activist is very different from someone who pursues a more contemplative role although both may be very helpful in ushering in a new paradigm. A person involved in the task of developing new views for the future and communicating them is emphasising the thinking function.

Another theme of central importance discussed in the article is the idea of living in harmony with nature and the place of human beings in nature.

Most of the approaches discussed advocate the "in harmony" approach but what this means in practical terms still needs to be clarified further, especially for modern day economies.

The resource conservation and development approach, as used in the World Conservation Strategy and the National Conservation Strategy for Australia, is in a somewhat ambiguous position with respect to the concept of living in harmony with nature.

Devall and Sessions (1985, Chapter 8) give examples of the conservation and development positions being used to justify "scientific management" practices which are in fact quite exploitative. They quote from a U.S. Forest Service pamphlet designed to encourage the public to accept "tree farms" in place of natural forests. One pamphlet asks "Is Nature Always Right?" and states: "Nature often works in slow, ponderous rhythms which are not always efficient".

Further the World Conservation Strategy states that Man (sic) "is both apart from Nature and a part of Nature". Porritt (1984, p.206) has criticised the strategy for its human-centred or anthropocentric philosophy. He says:

> The World Conservation Strategy has done its best to sit on the fence on this crucial issue, with painful consequences for both the authors and the whole environment movement: an environmental ethic so lacking in integrity can serve only to reinforce the destructive power of industrialism today. For our survival depends on our being able to transcend our anthropocentrism.

On the other hand, it can be argued that such conservation and development strategies at least shift economies in the direction of protecting the natural environment as shown in Figure 8. While acknowledging that the WCS is anthropocentric in nature, deep ecologists Devall and Sessions (1985, p.157) state that "this worldwide plan has been worked out in considerable detail and might actually help provide a transition to deep ecology decentralized futures".

All the approaches reviewed in this article suggest a very different approach to the environment than that currently prevailing. The changes in approach will need to apply on both an individual and world wide scale and would seem to demand intentional action on each person's part to produce a healthier society and planet. The ramifications of such a paradigm shift are challenging, exciting, and perhaps confusing but, as I have argued, present great opportunities for human growth and liberation.

A question which arises is: "How can people work towards a future in which a sense of the sacred can be an integral, practical part of daily life?"

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