

*This chapter will be included in Ian's forthcoming book – "The Buddha At The Gate - and other essays". It is also the template for a five chapter book, which provides a response to James Lovelock's 2006 publication "Revenge of Gaia."*

### **Part One: Gaia and Science**

The headline news about the Earth's continuing environmental degradation conveys similar stringent warnings to humanity. Feature stories about the acceleration of Global Warming abound, as do information specials on every environmental crisis from the vanishing ice cover of sub-arctic tundra to the inevitability of 21<sup>st</sup> century water wars, with everything else in between. Intelligent, articulate journalists, ecologists and scientists keep on writing and speaking about our abuse of the Earth and failure to grasp the bigger picture of just what is happening right before our minds. Unfortunately we maintain smaller pictures of ourselves and of the crises we are located within. We fail to be aware of the vast, interconnected and changing web of life and of the very powerful forces on our planet. We choose to remain insulated from reality and cultivate a collective amnesia about what is happening within and around us. There are endless reports by authoritative world bodies, which present reams of brutal findings about the dim prospects facing future generations due to the neglect of how our ecological footprint degrades the Earth resources essential for human survival. Then there is James Lovelock, creator of the Gaia Hypothesis, who in 2006 provided a dire prognosis for the fate of humanity: "Before this century is over, billions of us will die, and the few breeding pairs of people that survive will be in the Arctic where the climate remains tolerable."

Our Earth, as viewed by James Lovelock is a cybernetic super-organism that encompasses absolutely everything, the entire range of living and inanimate matter, in interconnecting feedback loops. Lovelock's views about the planet arose from his work with NASA in the

1960s to speculate on the conditions for life on Mars. The radical scientific position developed for this project – that life and environment are two sides of the same self-regulating coin – was then focused on planet Earth. Though this view was radical for science at that time, we will see later that this was the template for the Buddha's Diamond Sutra 2,600 years ago. A teleology that greatly disturbed the scientific community was Lovelock's contention that Gaia had the capacity to fashion the environment to suit its needs, that it seeks an optimal set of physical and chemical conditions to support life on the planet. But once disrupted beyond certain parameters then life as we know it will not be supported. Lovelock focuses our attention on the biological infrastructure of the Earth and on biodiversity as being key components of planetary self-regulation. It is in this way that the totality of Gaia constitutes a feedback, or cybernetic, system which seeks an optimal physical and chemical equilibrium for life on Earth. The fragile miracle of the biosphere, the thin membrane encasing the planet, was considered as the adaptive control system maintaining the Earth in homeostasis.

In collaboration with Lynn Margulis, Lovelock launched the Gaia hypothesis in their first joint paper, which was not well received by the scientific community of the 1970's. Even by 1987 Lovelock had to point out that the Gaia hypothesis had been neglected rather than criticised by the scientific community (1987: 93). He did not have long to wait for the criticism. The American Geophysical Union in 1988 trashed his views at their annual meeting in San Diego. But at the same time Apple Computers produced a fascinating software program – "Sim-Earth: The Living Planet" - designed by Will Wright, who relied totally on Lovelock's views to construct the program. So despite the best efforts of the American Geophysical Union, the Gaia hypothesis entered public consciousness through the medium of a computer game that anyone could play. A vote of approval by the American Geophysical Union could not have had the same galvanizing effect. Indeed the metaphor of Gaia as a Living Planet had by this time inspired not only the New Age

movement but also feminists and environmentalists, which had the effect of creating active and creative feedback loops – the significance of which I will address later. It took until 2001 for earth scientists to recognise the validity of the Gaia concept. Over 1,000 scientists signed the 2001 Amsterdam Declaration based on the statement “The Earth System behaves as a single, self-regulating system comprised of physical, chemical, biological and human components” (Lovelock 2006: 25). The Amsterdam Declaration validated that indeed the earth was a self-regulating entity with cybernetic control functions. The control system of Gaia, however, has been severely dislocated by human activity over the past 200 years, which is a mere blink of an eye in Earth history. The Earth itself is not in danger, we are. Yet, in order to survive on Planet Earth *homo sapiens* must no longer ignore its interconnectedness with the changing planetary web of life or continue to disrupt the control functions of the biosphere. This provides the basis of Lovelock’s controversial advocacy for a nuclear option. He is not unaware of the problems associated with nuclear energy, yet sees it as the major energy source that in the immediate, short term will not interfere with Gaia’s capacity to regulate a habitable planetary ecosphere for humans. Fossil fuel based energy systems make it certain that such a niche will not be available to *homo sapiens* – a view supported by Flannery’s recent book, *The Weather Makers* (2006), though Flannery does think that alternative energy options would do the trick – a view not shared by Lovelock as the latter require considerable time to develop. Lovelock’s contention is that we are out of time – a proposition to be examined in detail later in this chapter.

It is clearly evident that a new equilibrium is being created, as robust cycles in the biosphere are already disrupted by industrial pollution and global warming. Human instrumentality in changing the present biosphere has belatedly been recognized: UNWMO (1995), Kyoto (1997), and The Hague (2000). Yet, there really is no debate about global warming as the UK Government’s Exeter conference on Avoiding Dangerous Climate Change so dramatically pointed out in 2005. This conference identified the threshold, which once

crossed would produce an accelerated climate change that is unstoppable. That threshold of 400ppm (parts per million) of greenhouse gas combinations in the biosphere – methane, carbon dioxide, nitrous oxide – has already been passed. We are now in the era of dangerous climate change, and we are totally unprepared for it. Global warming changes everything, not just climate. Lovelock is very adamant about this:

*Unless we see the Earth as a planet that behaves as if it were alive, at least to the extent of regulating its climate and chemistry, we will lack the will to change our way of life and to understand that we have made it our greatest enemy. (Lovelock 2006: 17)*

This insight has yet to penetrate the collective corporate and political mentality of the decision makers who shape our future.

For example, at the Hague Conference on Climate Change in 2000, polluting industries from Canada, Japan, and the United States traded for pollution credits with companies who had cleaned up their industrial act. The major polluting industries of these countries formed “The Partnership for Climate Action,” based on emissions trading. It was this agenda that torpedoed the Hague conference in 2000, as it was pursued with blatant disregard and cynicism for a global ecology that is heading straight for what the Hadley Center for Climate Change (UK) calls a “runaway effect” – ecosystem collapse beyond the point of repair (Prattis 2002:199). Trading for emission credits is not the way to encourage polluting industries to change. The Hadley scientists estimate that the “runaway effect” will occur around 2050, as pollutants are presently being released into the atmosphere at five times the rate that natural systems can remove them (Simms 2000). The Kyoto protocol in 1997 was for a 5.2% reduction in global emissions from 1990 levels. To avoid the runaway effect requires at least a 60% reduction over the next hundred years. The American, Canadian and Japanese delegations’ aggressive unconcern about grasping the full reality of global warming leaves the world without an agreement on how to curb the amount of greenhouse gases pumped into the atmosphere.

The delegates to the 2000 Hague conference are also parents, children, members of communities, part of nature – yet they cannot glimpse that Global Warming changes everything that constitutes who they are. Perhaps when profit margins plummet there may be a wake up call they can heed. The delegates, their political masters, and corporate sponsors do not provide the leadership required for the 21<sup>st</sup> century. But they claim to be able to look after the global ecology their way. Who do they think they are fooling? The wrecking ball of corporate culture can only be stopped by civil society worldwide insisting that responsible political democracy reassert its direction and power over the global commercial and financial processes that dominate our world at this time.

Furthermore, there is no argument about the effects of industrial toxic waste on human health. Rachel Carson (1962) and Theo Colborn (1996) detailed the devastating effects of industrial chemical pollution on the health of animals and humans. Their research questions the very fabric of the multinational chemicals industry, as does the research that correlates breast cancer with industrial toxic pollution. The stark picture is that health problems from industrial pollution are inevitable bi-products of the manufacturing processes of the Western wealth-making machine (Tasker 2000:54; Porritt 2000). The genome project has mystified public attention and the medical cancer research program mostly overlooks the impact of industrial pollution and chemical toxins on human health. Why? The big dollars are for the pursuit of the cancer gene, which once found will provide enormous profits for the corporations who control the diagnostic testing process. So the medical-industrial complex is on the genetic bandwagon and for the most part ignores the clear evidence that the more likely causes of cancer are found in human exposure to chemicals, toxins and radio-activity from industrial processes. The adverse quality of the environment that our industrial civilization has created is not factored in. There is certainly a genetic component to the creation of cancer, but it interconnects with environmental factors that trigger the catalytic processes in the cells to produce carcinogens.

Our industries make us ill and often kill us. Yet we choose general amnesia towards these environmental and health crises, rather than a deep look at reality as it is. That reality is stark and we are not yet able to handle it intelligently – yet there really is no debate about global warming or the effects of toxic pollution on human health. The evidence is in and it is overwhelmingly depressing. As a culture we have allowed ourselves to be captivated by the illusion that capital, science, industry and technology will solve everything – whereas they are often the cause of the current crisis. Science, without corporate agendas, would embark on a true investigation of this scenario. Yet this rarely happens (Porritt 2000). The harsh reality is that the scales are tipped in favor of corporate capital and technological development that lacks accountability, ethics and responsibility. This leaves grossly unequal power and control structures in place (Bodley 2000: 206). The consequences are vast. They range from disease, to starving children, to the collapse of communities and the creation of an impoverished world for the vast proportion of humanity.

In his most recent work, *Revenge of Gaia*, Lovelock (2006) extends the impeccable logic that produced the Gaia Hypothesis to argue that the planetary control system, which has worked to maintain conditions suitable for human life, is now working against us. The dependent variable of temperature rise is now a product of this control system and implies that the interconnecting positive feedback systems will amplify global warming and quickly place the situation beyond human control. The evidence for this is grim. The removal of the snow and ice cover from the sub-arctic tundra permits the heat of the sun to be absorbed by the Earth rather than 90% of it being reflected back into space. The huge and imminent release of methane gas from the exposed tundra so accelerates global warming that this alone is a major tipping point. Moreover, the myriad interconnecting set of positive feedback loops that constitute Gaia – including the destruction of rain forests, water systems, industrial pollution, toxins in the soil, desertification of formerly arable land,

changing ocean algal ecosystems and so on – all amplify temperature increase in a manner that is non-linear. It is exponential tending towards infinity. Hence Lovelock’s dire prediction about breeding pairs at the Arctic pole.

In *Revenge of Gaia*, Lovelock states that the present self-regulating mechanisms of Gaia cannot be controlled by human agency. He examines the contributing factors in great detail as he constructs a story of how the control system of Earth responds to severe overload with tipping points and runaway effects. His warning is now aimed at governments to begin large-scale preparations for a retreat from the inevitable burning up of a habitable human niche on the planet. He provides a guide for a planet in grave danger and encourages governments and international bodies to initiate programs of survival that surpass the scale of all space and military programs and dwarf the \$400 billion recently spent on the war against terrorism. The latter is insignificant when we consider that we are at war with the Earth itself. This is not a war that we can win with present views and strategies (Flannery 2006). The Earth has sustained our species but as we are presently at war with Gaia it cannot continue to sustain us. This is a very simple insight. Also a deadly one as it condemns the neglect brought about by the current paradigms that regulate our relationship to the Earth and to one another.

### **Part Two: Failsafe in Consciousness**

In *The Essential Spiral* I coined the phrase “Failsafe in Consciousness” (2002: 119 – 120; 199 – 201) to describe how consciousness expansion will be held in abeyance by human ignorance until the global ecological situation deteriorates to a breaking point. This will then act as a catalyst, penetrating such ignorance and activating consciousness so it is propelled into expansion, deliberation and change. It is not then a question of when we hit the wall, but of how, like water, our consciousness flows round obstacles thus rendering them obsolete. Albert Einstein apparently supports this position with his cryptic comment

that “The world will not evolve past its current state of crisis by using the same thinking that created the situation.” My vision is a positive one, as I do believe that civil society, drawing on a new consciousness, can make the decisions to create new structures and organisations out of which will emerge the radical solutions to address the endemic environmental crises facing the Earth and humanity. This apparent naïve view requires more support than I provided in the 2002 work, but I must be very blunt about the context of current ecological, social and psychological crises.

There is an external environmental pollution crisis on the planet because there is an internal pollution crisis in humankind. In addition to the waste from industrial pollution there is the suffering from wars, atrocities, dehumanizing discriminations, our greed and neglect of everything around and within us. The industrial waste and pollution is readily visible, yet the suffering that rests deep in our consciousness is much more intractable and dangerous. The remedy is not to be found only in North-South pacts, regional peace treaties, hastily compromised agreements on sustainable development or in international conferences on the environment. The remedy has also to be deeply rooted in a consciousness that deals directly with internal pollution, a mindfulness that is imbued in meditative practice. The task is to transcend, and move on from, the internal garbage bags we carry around in our field of awareness. The pile of garbage is created by our judgments, greed, ignorance, fears, hatreds and confusions. All of it derived from the ideology and social structures within which we act. It colors all that we think, do and feel, and has a colossal impact on the internal and external environments that we then create. It is really not surprising that we live in an age of environmental crisis, of global pollution, for our internal garbage bags are dumped onto the world with our thoughts and attitudes. The necessary clarity to deal with the global environmental crises will emerge, once our thoughts, values and attitudes shift and no longer sustain and feed our internal pollution. This recognition of our internal garbage bags and the manner in which they are dumped out on friends, family, loved ones

and the planet is a first step and a supreme responsibility. Through taking such steps, we can begin to transform the accumulated garbage of hatreds, neglect and anger so that they may become the compost for the garden of the twenty-first century.

The dominant worldview of our global civilization sees the environment and its resources in terms of how it can satisfy our greed and needs of economic self-interest. In claiming the world in this way, the environment has become an extension of human egocentric needs and values - an *egosphere* rather than an *ecosphere*. In this *egosphere*, our preoccupation is that of consuming mindlessly in a global economy, controlled by the collective greed and power of some 200 transnational corporations, driven by equally voracious shareholders. There is little regard for ecosystem balance or concern about the creation of increasing inequality and poverty between and within countries. And so we forget that we are part of an interconnected global system. To become ecologically literate we must learn to think about the *ecosphere* in terms of interconnectedness, context and process - the basic principles of all living systems (Capra 2000). An *ecosphere* generates no waste, one species waste being another's food; matter and energy cycle through feedback loops continuously forming a web of life; and diversity increases resilience. When applied to our industrial processes, the *ecosphere* notion means that manufactured products and waste must eventually provide the raw material for further manufacturing, so that industries are linked in ecological clusters. We have the knowledge to create this, but the obstacles that stand in the way are not technological, they are the attitudes, values and concepts that define the present dominance of corporate values.

The three main components of Failsafe in Consciousness are:

Innate Earth Wisdom

Counter Culture

Tipping Points in Consciousness

## **1. Innate Earth Wisdom**

Ninety nine per cent of our evolution as a species has been predicated upon a hunting and gathering adaptation known as foraging - a strategy of adaptation that rests on sophisticated ecosystem knowledge integrated into harvesting patterns and social organization by spiritual ideology. For example, the *Dreaming* in traditional Australian aborigine society provided the mythological base to regulate and guide harvesting activities, social relations, and spiritual interactions with the Earth and Universe (Flood 1983; Tonkinson 1991). It provided a moral law for behavior in all domains of life. Small in scale, nomadic, egalitarian – foragers have been described as the “original affluent society” (Bodley 2000; Lee 1964). They maintained health through a diversified diet rich in calories and protein (Lee 1964), and exhibited reciprocity between groups for food and exchange of goods with a minimum amount of work. They store time rather than food or products, and maintain an over-arching cosmology that offers a detailed charter for day to day living; one which answers the major questions of life and keeps specialized environmental knowledge alive. In this manner a balance is actively created between humans, the planet and the universe – the biotic and abiotic components of our world (Prattis 2002: 170).

Most foraging societies in existence today do actively engage with other societies they interface with, but return to a low energy budget for subsistence activities. They spend much less energy per unit of population than do other adaptations, and are efficient in managing and preserving their resource base. The combination of low energy needs, wide resource base, and controlled population size, means that they minimally disrupt other components in their ecosystem. The systematic sharing of food and other goods reduces inequalities in wealth and maintains reciprocity as a general cultural norm. The resurrection of traditional ecological knowledge has been a crucial component in Native Land Claims in Canada, whereby aboriginal peoples have negotiated the institutionalization of their defining

ideologies in legal settlements with different levels of government. In particular, the Cree of Northern Quebec preserved their *Forest Tradition*, a worldview of stewardship for their ecosystem, which takes into account ancestors, present social relations and descendants not yet born for seven generations (Niezen, 1998). It is based on clearly defined reciprocal relationships and responsibilities to people, the Creator and spirits, and also to the land that sustains them. In their legal negotiations they achieved a foundation for this by establishing an Income Security Program for Cree hunters as a major platform in the James Bay and Northern Quebec Agreement (Government of Quebec, 1976). It secured the ideology by which the Cree chose to define themselves. The elders knew that their traditional ecological knowledge, their *Forest Tradition*, preserved their basic humanity, society and values. They also knew it was the most effective management system for harvesting activities. Traditional ecological knowledge shaped the negotiating strategies of the Cree, but they were clearly aware of the political and economic realities of different levels of state and corporate interests over which they have to exercise constant vigilance. Although not everything is rosy with the post agreement situation (Neizen, 1998), this is an example of traditional ecological knowledge being incorporated within a legal agreement, binding the federal and provincial governments of Canada to a set of contractual obligations towards the Cree. In return, the Cree agreed to extinguish aboriginal rights defined by pre-existing treaties with the Government of Canada. To prevent assimilation and marginalization the Cree sought, and secured, the continuation of their local structures, interconnected with regional and provincial governance. At the same time their core ideology was entrenched through the Income Security Program for Hunters.

Foragers thus interfere the least with ecosystem resilience, as they know it must sustain them indefinitely. The combination of low energy needs, efficient management of the resource base and controlled population size, means that they minimally disrupt other components in their ecosystem. The fact that this mind-set prevailed for 99% of our

evolution may be some cause for hope, as the subliminal memories of sustainable ecosystem balance with a spiritual guidance system are stored deep in our consciousness. It is hard wired into our brain – we just have to learn to re-access this stored knowledge locked away in the depths of our consciousness. It is these subliminal memories that I believe will act as a check and balance to the further degradation of the global ecosystem – the *Failsafe* notion. Just as Gaia is a dynamic system of information circuits arranged in feedback loops, so is consciousness. It is the radical remembering of this mind-set that will activate the feedback needed to prevent further degradation of the global ecosystem.

## **2. Counter Culture**

### *i. Ecology of Ideas*

We have the best of times, yet also the worst of times. While most people in the West enjoy a record level of material wealth we are also beset by a deep spiritual alienation, that God is dead and all we are left with are the devastating social problems of the 21<sup>st</sup> century. The resulting insular view produces a siege mentality (especially after September 11, 2001) that forces everyone to take stock of exactly where they are going. David Myers explores these themes in *The American Paradox: Spiritual Hunger in an Age of Plenty* (2000). His research on the evolution of social ills in America concludes harshly, yet fairly, that in the 21<sup>st</sup> century the consequences passed on by our antecedents have exacted a very costly price for present and future generations. The past century's preoccupation with individualism and rampant materialism provide the causes and conditions that place future generations in peril, destroy common decency and result in a failure to find happiness. All of these themes are topics in the Dalai Lama's book on ethics – *Ancient Wisdom, Modern World: Ethics for a New Millennium* (1999). The plurality of expressions reflect how deeply the theme “the best of times; the worst of times” is a river that runs through us (Prattis 2002: 160 – 161).

No one realized this better than Gregory Bateson. In *Steps Toward An Ecology of Mind* (1972), Bateson identified particular moments in history and invention when attitudes and values were changed and determined, and named this the Ecology of Ideas. He combined biology, cybernetics, psychology and anthropology to demonstrate that the present rules of our modern global context have to be changed. These rules are simply bad ideas reinforcing pre-existing bad ideas. New thinking and values are essential because without them the likelihood of our survival, to use his words, “will be that of a snowball in hell!” He coined the apt term “cybernetic lunacy” to describe the dangerous ideas we hold about our inter-relationship with the environment (Prattis 2002: 160 – 164). This was based on his understanding of the adaptive flexibility necessary for a healthy ecosystem to continue operating. Paradigms for ecosystem extinction are created when both the health of interconnecting variables deteriorates and a single variable (e.g. financial capital) uses up most of the energy. The obvious conclusions from Bateson’s work are that an organism which destroys its environment, destroys itself; lack of systemic wisdom is always punished; and any species unwise and ill equipped to quarrel with its ecology is eliminated in one way or another. Additionally, any organism, or aggregate of organisms, that works with a focus on its own exclusive survival ends up with a destroyed environment. This applies directly to the collusion between corporate and political elites who, if unchecked, will destroy our global ecosystem and us along with it. This cybernetic lunacy is a fairly certain prediction. In the 1970s, Bateson was arguing very forcibly that we not only need new ideas and values, we need to ensure their survival in a circuit of ideas – as an Essential Spiral (Prattis 2002). This is his Ecology of Ideas, an alternative to creating a problematic continuity for our species in the global ecosystem.

His examination of ecology advocates studying the interaction of ideas and programs in circuits (1972, 483), of ensuring that the interconnecting feedback loops include everything. When the feedback loops narrow to a single premise (for instance the interests of elite

structures), then everything that sustains an ecosystem's interconnecting feedback loops is destroyed. With respect to our modern society he is emphatic that our ways of knowing are plain wrong. The threats to our existence arise from errors in our habits of thought - in particular our destructive ideas about relating to the Earth only as a resource producing facility to satisfy human greed. That error in judgement plus the corollaries of population explosion, technological sophistication, ignorance about ecosystems, cybernetics, and the dominance of corporate values, constitutes a massive Molotov cocktail for our civilization. From Bateson's perspective, there is only one entry point to correct our downwardly spiralling ecosystem: change attitudes and values about ourselves, society, and the environment; then feed these new ideas into the functioning of the ecosystem we engage with. But for this to be effective a major shift in collective human consciousness is required.

Enter Rachel Carson centre stage. She was a remarkable American woman. Her 1962 book, *Silent Spring*, transformed the fragmented environmental movement of the 1950's into the more ecologically informed movement of the present day (Norton 1991: 120). She created a new vocabulary to talk about environmental issues in public discourse and supported an ecological view of humility as the appropriate human response to the natural ecosphere that was inhabited. Her work was imbued with deeply held humanitarian and spiritual principles. She identified the main disagreement in basic values in discourse about environmental conflicts. The issues for Carson were moral and ethical, for manufacturers - purely economic, yet Carson was not prepared to compromise with the greed and logic of industrial capitalism. She set the tone for debate and at the same time made it abundantly clear that present methods of production and consumption were totally unsustainable. Her *Sense of Wonder* (1965) was published one year after her death. This volume is reminiscent of Joseph Campbell's work on mythology, particularly the first function of myth - which is to inculcate in the individual a sense of awe in the universe (Campbell

1988). In a similar vein Carson considered a sense of awe and wonder towards nature as an essential core element in human spirituality (Prattis 1987: 272). She was absolutely right when she stated that our challenge is not to conquer nature but to come to terms with nature, to prove our maturity and mastery, not of nature, but of ourselves (Logan 1992: 69).

It was Rachel Carson's (1962) concern with key spiritual qualities of responsiveness grounded in responsibility, along with Bateson's Ecology of Ideas perspective that provided some of the foundations for Ecopsychology, which took as its mandate the understanding of the mind-set of modern civilization and the creation of therapeutic models. Ecopsychology has perhaps been more successful with the first part of this mandate than with the second. It recognizes the ecological illiteracy of our leaders and gives environmentalists the mandate to make it clear that such illiteracy threatens life on Earth (Roszak *et alia*, 1995). Furthermore, Ecopsychologists are re-examining the human psyche and how it fits into nature. Their conclusions are not flattering. Paul Shepherd's seminal work *Nature and Madness* (1982) portrays western civilization as a case of arrested development, populated by adults, leaders and professionals who are not just immature, but who are arrested in an adolescent phase of greed, selfishness and lack of a solid identity structure. He points to a chronically incomplete infancy as the cause, characterized by inadequate caring methods and an absence of initiation rituals that would transform adolescents into adulthood. And so we have a "Gimme, Gimme, Gimme" society, neatly compartmentalized and rationalized, but basically sick. Chellis Glendinning (1994) discusses western civilization in terms of the pathology of addictive behavior. Kanner and Gomes (1995) zero in on the pathology of narcissism to understand the inflated, grandiose, false self that masks deep-seated feelings of worthlessness. The advertising industry feeds this pathology with deadly effect. Dr. Terrance O'Conner (1995) is equally direct. The patterns of control, denial and projection that sabotage his patients are the same patterns that endanger the world.

*ii. Emergence of corporate responsibility*

For the corporate world Paul Hawken's 1993 book *The Ecology of Commerce* led the charge of re-evaluating commerce and redesigning finance capital. He wrote about the necessity of replenishing natural capital if it is used in the industrial process. This is accompanied by a renewed focus on a different and more accurate method of business accounting, so that the hidden costs of environmental degradation are factored in to the cost of industrial products and projects. If taken on by governments and international regulatory bodies, it could mean that the freedom of corporate culture to loot the world would be radically curtailed because they would be held accountable. Their free lunches on the world would be over. The design wisdom of nature is built into Hawken's call for a Restorative Economy, which an increasing number of manufacturers are implementing. Customers are beginning to state a preference for wind and solar power produced products, as their concern about emissions and global warming increases. The exponential increase in oil and gas prices assists this momentum, as alternative sources of energy become financially competitive. The Natural Step Program began in Sweden with thirty scientists, environmentalists and corporate leaders drawing their inspiration from the deep ecologist Arne Naess (1973). They articulated a consensus on what it takes to create a sustainable society - not producing toxic materials faster than they can be broken down by nature; of realizing that the productivity and bio-diversity of nature cannot be systematically reduced; that human needs must be met by an equitable and efficient use of the Earth's resources. These ideas are rapidly circulating through the commercial and manufacturing sectors in Scandinavia, Europe and the USA.

This has prompted the emergence of a genuine environmental capitalism as opposed to the corporate "green-washing" that followed the 1992 Rio conference. For example, Ray Anderson is the CEO of Interface, the world's largest carpeting firm with a \$1 billion a

year profit margin, and is featured in the documentary film *The Corporation*. He did not have an environmental vision until he read Paul Hawken's book. He then proceeded to radically change the manner in which his company operated – reducing waste, conserving energy, recycling, and respecting the environment. He has addressed gatherings of corporate leaders with the greeting: *Dear fellow plunderers* and continues with...

*People like us will be put in jail some day. Theft is a crime, but we've failed to recognize that when we pollute the Earth we're stealing our children's future.*

His firm takes back used carpets from clients and recycles them, plants forests to absorb carbon dioxide, and is moving away from hydrocarbon products for his carpets to vegetable based molecules that can be spun into textiles. He has invested heavily in the biomass industry and the use of alternative energy sources. There is an emerging market for sustainable energy and those companies with the foresight to see it will be the ones that will succeed in the second industrial revolution, particularly as hydrogen fuel cell technology – which produces no emissions – is drawing considerable investment. At the same time, Anderson attests to the fact that this new way of doing things is profitable, while remaining environmentally responsible. His management team implements the precepts of The Natural Step. In Japan, Mitsubishi Electric Corporation has followed suit (Brower 1998: 7). Takashi Kiuchi, the CEO of Mitsubishi, has stated that the limits of the Earth are ultimately the limits of business. Their quality management program is merged with their environmental management division. The lessons their senior management draw on are from the tropical rainforest ecosystem – waste nothing, redesign production processes so that energy is constantly recycled. Other corporations and organisations in Japan, Europe and the USA have followed suit. But is it too little, too late? On their own it certainly is, yet initiatives like these are not alone.

### *iii. Communities and Cybernetic Feedback Loops*

Manuel Castells (2000) has shown in his three volume work, how the rise of informational

capitalism is intertwined with rising social inequality, polarization and social exclusion, which are now embedded in the corporate values that presently shape society. Yet he argues that the information networks that facilitate this process are also being used to initiate shifts in human consciousness, as feminist, environmental, consumer, anti-globalisation and peace groups have become highly flexible, global networks. Moreover, they use the informational systems of the new technological paradigm – the Internet – in a way they are not supposed to! So there is a challenge to informational capitalism, a challenge that seeks to place other values into the informational and financial networks of corporate culture. There are over 40,000 citizen's groups, NGO's and foundations in North America who are addressing the issues of sustainability – ecological and social – in a comprehensive manner. Hawkem (1993) estimates that there are more than 100,000 such groups world wide and they are growing daily. Civil society *is* mobilizing for environmental, peace and justice issues.

The wide variety of organizations that are part of the anti-globalization movement and the emergence of alternative World Forums also feed off these cybernetic loops constituting a loosely defined counter culture. Gaia as metaphor was an inspiration that sped through the feedback cycles of this nascent movement. All three forces – Bateson, Lovelock, and Carson – were prominent catalysts in the creation of this new 21<sup>st</sup> century movement, which objects forcibly to the effects and agendas of the corporate paradigm. The most surprising factor is that no one is in charge of this movement. It operates almost as a consensual anarchy. The groups, which are often very local and marginal, share a basic set of fundamental understandings about the Earth, how it functions as an ecosphere, the necessity of equity and of sharing the Earth's resources for the good of all humanity. Are these simple ideas enough to refocus our attention and make counter culture advocacy a reality for global citizens? Pioneering environmentalists such as David Suzuki, Wendell Berry, Vandana Shiva and their counterparts in every country in the world succeeded in

drawing environmental issues in with issues of social justice and peace. They have seen through and discarded the collective myth and value system of the American Dream, a colossal process of greed, materialism and waste, which has been consolidated in most parts of the globe. The underlying values of this myth are being replaced. The emerging Gaia myth that derives from Lovelock's early work, along with aboriginal and Buddhist philosophies of how to relate mindfully to ourselves, the planet and the universe, represents the shift in values that is absolutely necessary if human life is to continue on planet Earth.

These issues of personal transformation, attitude and value shift and the significance of the spiritual dimension take me to a particular strategy for change. First of all, it is clear that we have to examine and change our models of self and society and how we relate to the environment. Then transcend all the stubborn mental sets associated with the old models. In other words we must stop being ignorant about our true nature. Secondly, to set about doing this involves an inner journey through meditation and self-healing practices, so that a universal nature beyond our individual bag of bones, organs and flesh is experienced. The current perspective of our selves and of our location on the planet and in the cosmos has to be challenged and rethought. The many alarming crises of our times can be viewed as a T-junction, one fork leading to breakdown in all domains, the other directing us to a breakthrough to a new evolutionary level of consciousness as a species. This "new" level has nothing to do with further physical evolution of the human frame but lies in a quantum leap of consciousness. This quantum leap in consciousness may also be somewhat familiar to us, for our deep spiritual nature has in some way spoken to us — through dreams, momentary silences or unexplainable insights. Our spiritual essence is simply buried under layers of ignorance and suffering, yet it is always there. Personal liberation is ours to reclaim once the layers of ignorance and illusion are peeled away. This is why I meditate.

### **3. Tipping Points in Consciousness**

*i. Critical mass*

In terms of Tipping Points in Consciousness my greatest ally is none other than James Lovelock. He concludes a recent article (2005) with:

*My hope lies in that powerful force that takes over our lives when we sense that our nation is threatened. Perhaps when the catastrophe of the intensifying greenhouse effects become frequent enough, we will pull together as a global unit..*

In popular culture the writings of Malcolm Gladwell – bestsellers *Blink* (2005) and *The Tipping Point* (2002) - have caught the attention of an unlikely audience. Business schools and corporate boardrooms are consuming his notions of simplifying agendas and making positive changes through small intuitive actions. Though widely criticised by the *literati*, Gladwell, a staff writer for the New Yorker, was named by Time magazine as one of its 100 most influential people in America and his impact has been dubbed as the Gladwell Effect! His startling point is that social epidemics can spread when actions are placed within the right context, through the pull of certain strategically placed connectors. In speaking truth to power, Gladwell provides for pop and business culture the same ideas as Bateson, just in a different language. He endorses a form of instant mindfulness and changing consciousness in the inertia before a novel thought. Such novel thoughts then give rise to changed consciousness and ensuing positive action. There are many others doing the same on the global stage. The spate of recent books on the end of Big Oil and the certain unravelling of the world has similarly fed through the interconnecting feedback loops that constitute the counter culture. James Legget (2004) has placed climate change on the global agenda with warnings of collapse, repression and fascism. The oil related apocalypse has become a literary mainstream with numerous authors (Goodstein 2004; Heinberg 2004; Simmons 2005) describing in different ways the ushering in of a Mad Max society of feudal style warlords once the oil supply peaks and runs out.

The growing global protest against the corporate order is certainly derided in the media,

perhaps because it is not based on elite, centralized, white male power, concerned solely with greed. The characteristics of corporate culture are missing and this is unsettling for the media, who are very aware of who owns them! I do believe that people are slowly waking up to the fact that the more corporate culture writes the rules for our world and environment, then the fewer rights and freedoms people have. We have to take both individual and collective responsibility. As consumers we can become strategic with our buying power. With organization, global consumers could boycott the products of Alcan and Pechiney for a month, then Monsanto later, and so on. The boycott would have a simple agenda – environmental, social and cultural responsibility by the corporation in exchange for consumers considering buying their product. The complexities of the world order can be simplified – it depends on structure, organization and consciousness – themes I will return to later. It is actually *us* who potentially have the corporate world on the ropes, because that world depends on our regular, predictable consumption to provide them with profits. The corporations know this very well, and employ huge public relations and advertising giants – multinational corporations in their own right - to so manipulate our values and self image that we feel compelled to buy their merchandise and live by corporate culture's rules.

But civil society is waking up, and there is light piercing through the shadows and power of corporate paradigms. There are many more inspiring groups and advocates for consciousness change, but the question remains is there enough of a critical mass that can be identified as a tipping point into a new level of consciousness? I remember many years ago in an audience with Sai Baba, the Indian sage, hearing him say that a transformation in human consciousness required at least 2% of the population to meditate on a daily basis. I have no idea what the knowledge source was for his pronouncement yet I do remember the “buzz” of energy in my body and mind when I heard it. So the identification of the many intricate and powerful feedback loops surely takes us closer to a tipping point in global

consciousness. Gaia has entered contemporary discourse as scientific concept, metaphor and movement in consciousness change. James Lovelock has demonstrated unequivocally where Gaia as scientific concept takes us; yet he has neglected to adequately examine Gaia as metaphor and social movement in his cybernetic model. I believe these latter two components are replete with sufficient interconnecting feedback loops to justify a Failsafe in Consciousness. Using Lovelock's own logic, we are fast approaching a tipping point with respect to inner ecology, the creation of a critical mass of humanity with views radically different to the corporate paradigms that currently regulate inter-human and human-planetary relations. Just as the external ecology of Gaia has tipping points so must the internal ecology of consciousness. Ecosystem knowledge was most effective in small-scale societies because it formed an effective ecosystem management system when the variables of structure, organization and consciousness were in place and integrated. Ecosystem knowledge on its own, however, is not enough. It has to interconnect with structure, organization and consciousness in an effective manner. In the 21<sup>st</sup> century we have a great deal of ecosystem knowledge, but it is not integrated with structure, organization or consciousness in a way that can effectively regulate the global ecosystem. When we apply ideas from the examples of small-scale societies to the global ecosystem, where the thresholds of adaptation are political and economic as well as ecological, it is a daunting task. So of the variables that must be integrated, I will start with the last one – Consciousness - as I believe it holds the key to change.

It is evident from my arguments to date, that the present structure, organization and policies of the global order are highly damaging to the health and well being of the vast majority of humanity and also to the Earth. What alternatives can be proposed? We must learn to think outside the box. We have been trained from childhood to do things in a linear and logical manner, following the definitions of science and rationality to maintain a comfortable conformity. Well, science and rationality have not served us very well as a civilization.

What is needed first is consciousness change, so that clarity and compassion can be engendered. I am convinced that this is the only way out – science and rationality can serve a changed consciousness, but they cannot create the structure and organizations needed for a new world order. They can only produce the same old formulas, fight the same old wars, now with newer and more destructive technologies. Changing the collective human consciousness is the key variable. Once consciousness changes to a foundation of clarity, understanding and compassion, then I am convinced that structure and organization will quickly be redefined, as solutions to our social and environmental crises emerge from a different foundation of understanding. This is what Bateson was driving at in his notion of Ecology of Ideas.

I also draw on two unlikely figures that stand out as crucial links in the interconnecting cycles of feedback loops that surely take us closer to a tipping point. One is a philosopher and biologist, now deceased – Francisco Varela. The other is Al Gore, former Vice President of the United States. Since losing his presidential bid in 2000 to enter the White House, Gore has travelled the world with a message about climate change. His dedication inspired a 2006 documentary film, *The Inconvenient Truth*, produced by David Guggenheim. Gore does not dumb down the situation of global ecological emergency yet seeks to empower his listeners to act for environmental change. Drawing on his long experience with politics and corporate culture he takes the message of Bateson, Carson and others into the corridors of power as well as to the general public. He feels confident that a critical mass of concerned citizens is growing, and that it is close to engineering a major tipping point so that dramatic changes can happen. In 1987 Francisco Varela made a statement that has echoed through the interconnecting feedback loops I have described:

*The chance of surviving with dignity on this planet hinges on the acquisition of a new mind. This new mind must be wrought among other things, from a radically different epistemology, which will inform relevant actions*

*ii. Neuroplasticity – Change the collective human consciousness*

Varela was also the catalyst for the Mind and Life dialogues between neuroscientists and Buddhist meditators. This led to the creation of the new 21<sup>st</sup> century science of Neuroplasticity. He maintained that a third person observational stance was inadequate for modern science as the first person experiential component was necessary to make science complete. He turned to Buddhism for this component and enlisted the support of the Dalai Lama for a series of dialogues, which began in 1987. Varela clearly saw that Buddhism used investigative practices of stopping and deep looking that rested on observation, mind training, logical thinking and a rigorous experimental/verification process that relied on a person's own experience. Verification of Buddhist teachings did not come solely from faith, but relied on testing the teachings out in the laboratory of personal experience and the mind.

Previously, neuroscience in the twentieth century had established the dialectical relationship between the brain and the body. In particular, scientists had identified the health of the immune, hormonal and nervous systems with discrete areas of the brain – frontal lobes, amygdala and hippocampus respectively (Pollard 2004). At that time it was thought that the brain was fixed in its structure and functions early in life – that the brain contained all its neurons at birth. But from the 1980's onwards, experimental research clearly demonstrated that this assumption was incorrect, that new neurons were generated throughout one's lifespan as a consequence of new learning processes activating memory functions in the brain (Milgram 1987; Racine & Kairis 1987).

Recent studies by Begley (2004) and Lutz et alia (2004) that use sophisticated MRI scans on the brains of Buddhist monks in meditation, demonstrated in no uncertain terms that meditation as a long term practice rewired the chemical and physical structure of the brain and as a consequence promoted behavioral and attitudinal changes in the direction of

balance, harmony and happiness. The term “Neuroplasticity” was coined to describe the phenomenon of continually adjusting and reorganizing brain neurons, synapses and neural pathways. There is no longer a place in modern neuroscience for Cartesian mind/body dualism, nor for a plausible distinction between mind and brain. All of these recent novelties of collaboration and experience provide confirmation of the good news that we are not necessarily stuck with the mind state that has created a devastated and discriminating world. Mind states can clearly be changed as brain patterns alter as a consequence of meditation and mindfulness practice. It takes retraining of the mind through skilled practice and guidance to change the current mind state of human beings. This very obvious conclusion is both encouraging and exciting. This natural meeting ground between Buddhist meditation and modern science in the twenty first century has produced a series of groundbreaking studies in neuroscience, accompanied by a flurry of international conferences and collaborative research projects between seasoned Buddhist meditators and contemporary neuroscientists. It is all about consciousness change!

Particularly so, as the efforts and strategies of dedicated environmentalists to provide solutions for the Earth’s problems over the past three decades have largely fallen on deaf ears. So much so, that the Rio Conference in 1992 on the environment was a failure. In a sense this failure simplifies matters, as it enables a booming clarity to emerge. With irreversible changes in the planetary web of life, and the dramatic and catastrophic environmental changes that are ensuing, it appears that there is now only one strategy available:

**Change the collective human consciousness.**

Why? So that clarity, understanding, and compassion provide the bedrock for human response to the impending crises. How? By entering into a practice of meditation and self-healing that cultivates the energy of mindfulness in our consciousness. This was actually the appropriate solution before, yet the promise of various environmental strategies obscured the significance of this solution. While certain environmental endeavours and

measures were realized during the forty five years since Rachel Carson's *Silent Spring*, the rabid nature of our global industrial civilization, spearheaded by corporate greed, continued unabatedly to further the deterioration of the planet and its biosphere. That, in conjunction with the changing energy patterns in our solar system have initiated and compounded dramatic earth changes that now leave us with no alternative. Our planet is part of an evolving solar system, which moves through and interconnects with expanding and changing interstellar space. All of this, together with the energy exchanges within the solar system, has unpredictable consequences for our "Third Rock from the Sun" in terms of major effects on the planet's biosphere. We may begin to recognize that the problems of pollution, environmental degradation and critical earth changes have a location that resides in our state of awareness, for we are not separate from any of these catastrophes. One implication is that commitment to inner cleansing and self-healing, through meditation, has major effects on the individual, their immediate household, community, nation and furthermore on the local and planetary environment. That same commitment enables a foundation of understanding, clarity and compassion to be brought to bear on the crises of earth changes.

We have to return to what is missing from the human-environment equation. We need to step back inside and acknowledge the necessity of changing our individual consciousness by removing negative patterns of inner ecology. In dealing with inner ecology, by surfacing and clearing our old "stuff", by taking care of our distress through self-awareness, we build a climate of understanding, clarity and responsibility. From this foundation we can eventually respond to the crises of the external environment because the internal environment has been properly cared for. In other words, as consciousness changes, negative patterns of inner ecology dissipate and we see things more clearly and holistically. Furthermore, we recognize that our minds, bodies and being are interconnected components of a vast consciousness that includes the entire web of planetary life. This

kind of vision is denied until we clean up internal patterns. This process is a pre-requisite for the emergence of a new consciousness that will provide the foundation for compassion and wisdom to be established. It is from this foundation that solutions will emerge to deal with global pollution and planetary changes.

### **Part Three: Transformation in Consciousness**

The Failsafe in Consciousness concept and its components all refer to attributes of mind. They are seeds of potential stored in our mind, buried under a general amnesia that as a global community we are just beginning to wake up from. To exponentially nurture these aspects of mind it is necessary to draw on liberating teachings about the mind. Thus I take refuge in the Buddha whose understanding of the mind came from his awakened consciousness. The Buddha's teachings are about the mind and what to do when the mind is so overwhelmed by suffering that there seems to be no way out. To institute lucidity and compassion as the basis of action, the Buddha provides guidance with a consistent set of teachings, all derived from his first dharma talk on suffering and how to get out of suffering. In particular, I draw on the Buddha's Diamond Sutra, the teachings on consumption and nutriment and the Five Mindfulness Trainings.

Thich Nhat Hanh (2006) sees the doors of psychology and ecology as providing suitable openings for the Buddha's teachings to penetrate more easily into the Western world. The Buddha could be considered the first Ecopsychologist, as this quote from the Dhammapada reveals profound insight about the consequences of our mind-sets:

*We are what we think.  
All that we are arises with our thoughts  
With our thoughts we make the world.  
Speak or act with an impure mind  
And trouble will follow you*

*As the wheel follows the ox that draws the cart.*

*We are what we think.*

*All that we are arises with our thoughts.*

*With our thoughts we make the world.*

*Speak or act with a pure mind*

*And happiness will follow you*

*As your shadow, unshakable.*

In the Diamond Sutra the Buddha taught that humans and nature are totally interconnected and that if we want to look after humans we have to look after mother earth. Just as important is that if we wish to take care of mother earth we must also take good care of ourselves. “The taking care of” is through meditation, the practice of mindfulness, the actualization of interbeing and being aware of the consequences of our actions. These aspects of meditation, mindfulness, interbeing and awareness with respect to the earth are found in many spiritual traditions, particularly aboriginal ones. Yet neglect, ignorance and exploitation of the earth are the present order of the day whatever the spiritual tradition. If there were an ancient ecologist on Mars observing the five mass extinctions that have taken place on planet earth over the past 500 million years, he would be amazed that right now one species, homo sapiens, is rapidly creating the conditions for its own extinction (Harding 2005: 8). I am sure such an ancient ecologist would chide us all to take heed of the Buddha’s Diamond Sutra and put it immediately into practice. It is all about appropriate leadership for our troubled times. Leaders who root themselves in a deep spiritual understanding and knowledge of themselves are in a position to bring balance to their nation and to the planet, for they will see deeply into the morass of the current crises facing humanity. They know that the solution is a spiritual one, balanced with the existential necessities of life. Their leadership can guide us, for they have the experience and insight to show everyone the pitfalls of ignorance, cravings, myopia and harmful pursuits. The general state of emergency in world affairs causes so much pain and suffering that re-education is crucial. The re-education I have in mind is through meditation, so that

ignorance about our true nature is removed. This need not only be regarded as a spiritual solution per se, simply that the basic necessities of life have not been taught to the current generations inhabiting the earth. With re-education through meditation we experience the territory of the heart, and learn that love and compassion are a necessary part of our daily bread. Furthermore, that our service as leaders rests on this twin foundation of love and compassion.

Without the quality of resting in our true nature, we are not in a position to take care of the world, whether this is our home, workplace, school, or the global ecosystem. In *The Diamond Sutra*, the Buddha very carefully mapped the reality of our being interconnected with everything, so that if we wish to make a difference to the world, to care for it, we must journey inwards and take care of our true nature. Once there, we will find the strength, wisdom and clarity to be the new leaders for the 21<sup>st</sup> century. That is the ground, the foundation from which leadership can emerge. We already possess a means to regulate planetary and universal affairs, but have simply forgotten to turn on the switch. The switch is heart consciousness. The journey to it is meditation and mindfulness practice. These are the major components of a new leadership, which is slowly beginning to emerge.

Lack of appropriate leadership for the 21<sup>st</sup> century has been displayed by two of the most powerful leaders on the planet. George Bush and Tony Blair invaded Iraq because they suspected Weapons of Mass Destruction in Iraq. They ignore our civilizations' creation of the biggest weapon of mass destruction – Global Warming. This is created by our collective greed, produced by our industrial processes and consumerist madness. The result is damage to the global ecosphere. The unprecedented heat wave in Europe of 2003 killed 20,000 people. 3,000 died in the September 11, 2001 attack on the World Trade Centre in New York. I do not diminish that tragedy but point out that the rising sea levels produced by Global Warming will kill millions, displacing millions more. This weapon of

mass destruction is far more dangerous than terrorism as it has the capacity to destabilize existing political and economic structures, which are totally out of synch with the earth's natural capital. Military threats to our security and wellbeing are totally eclipsed by environmental collapse. We must change our ways and make peace with Mother Earth otherwise we will not survive. Our collective greed, mindless consumerism, industrial pollution and government irresponsibility obviously must change.

The 2004 tsunami in South East Asia, the aftermath of Hurricane Katrina in 2005 urge us to come to a stop and look deeply at the present condition of the human species as one component of Gaia. The human species and the planet earth are components of one body – this is the basis of the Diamond Sutra. We have lived together for so long with only neglect and ignorance about the earth. The earth is our mother yet we make our mother suffer deeply - this is the lament from aboriginal cultures worldwide. Every faith and spiritual tradition, not just Buddhist ones, must renew their ethics and responsibilities and honour the interconnected nature of our species with mother earth. The solution is not political or economic – they are secondary. The primary solution is spiritual and requires an implementation of environmental ethics based on spiritual tradition. In keeping with the Diamond Sutra, Thich Nhat Hanh wrote *For a Future To Be Possible* in 1993 and based the entire book on the five mindfulness trainings, which may be found at the end of this chapter. Chapter Seven of *The Essential Spiral* (Prattis 2002) talks about “Guidelines to Recreate our World” and this too is based on Buddhist mindfulness trainings. These measures of an environmental ethics based on spirituality provide the way ahead. The alternative is that Mother Earth and Nature will provide the solution – only we will not be around to see it. James Lovelock's 2006 book is very specific about what that solution may well look like. It is much more intelligent to take heed of the principles laid out in The Diamond Sutra, to adhere to the ethics expressed in the Mindfulness Trainings and to renew a compassionate relationship with Mother Earth.

The Buddha talks about four kinds of nutriments for our consumption:

1. Edible Food
2. Sense Impression Food
3. The Food of Volition
4. Consciousness as Food.

Shariputra, one of the Buddha's most intelligent disciples, emphasized that Right View (the keystone of the Buddha's Eight Fold Path), is also the understanding of nutriments. His point was that we understand what has come to be, only by identifying the nutriments that caused it. If we wish to change what has come to be, we cut off the supply of nutriments that caused it. This is very simple in theory, yet often difficult to practice, as we have become addicted to consumption habits, which are not easy to relinquish. That is, until we become starkly aware of the dire consequences of consuming in a manner that is dangerous for the state of our health, consciousness and planet. Much of our present consumption fosters violence – to our body, to other people and to the planet. If we are serious about stopping violence and bringing environmental degradation to a halt, we must change our habits of consumption. Then by generating compassion, refrain from creating internal violence to our systems - and to the planetary systems we interconnect with. We consume much more than edible food. We also consume with our senses, desires and cravings. This consumption then feeds our store consciousness, which “eats” everything we put into it. If we fill it full of toxins, violence and other negative energies, then it is this accumulation in our consciousness that then drives us. On the other hand if we feed our consciousness with mindful nutriments, then a different energy occupies the driving seat of our life, one that guides us to live a life full of understanding, love, compassion and joy. This is the energy of mindfulness.

Awareness about changing consciousness around food consumption has yet to filter

through to the North American mainstream, as the vast consumption of meat and alcohol constitutes a grossly excessive ecological footprint. Industrial animal agriculture, which is the norm in North America, is not really farming. Animals are treated solely as economic commodities without respect and subjected to incredible cruelty. Over 90% of farm animals in Canada are raised in incredibly confined conditions. They have their testicles, beaks, horns and tails removed without anaesthetic. In cramped living quarters they are fed a diet of antibiotics, hormones and steroids. The stress, despair and anger generated in the animals are the energies we consume when they end up on our plate. We are eating their suffering and pain and taking it into every cell of our bodies and consciousness. Industrial animal based agriculture also pollutes the environment. It depletes the essential resources of the surrounding global ecosystem. In a world of endemic water shortage it is an astonishing statistic that it takes over 3,000 litres of water to produce 1 kg of U.S. beef. Furthermore animal waste contaminates drinking water systems, pollutes rivers, reservoirs and kills humans. The vast proportion of the global ecosystem's protein, carbohydrates and fibre are lost as feed cycles through livestock. It takes 16 kg of grain and soy feed to produce 1 kg of US beef, plus 3,000 litres of water. In Canada 77% of cereal crops grown in the country goes to feed livestock. 60% of the catch by the world's fisheries ends up as fishmeal destined to feed livestock (Prattis 2002: 68). 20 times more energy and 100 times more fresh water are required for meat production than for vegetables, fruit and cereal production. The ecological footprint created by our dietary preferences is huge, costly and damaging. Furthermore it is not good for our health – physically, emotionally or spiritually.

The alternative effect of mindful food habits is at drastic odds with the world we presently live in, which is full of hunger, malnutrition and 40,000 children dying every day from starvation. When we realize that the vast amount of cereals that could feed starving children are used instead to make alcohol and to feed livestock, we must deeply examine the

consequences of consuming alcohol and meat. With awareness we can change our minds and our patterns of food consumption. This is the shift in consciousness I am talking about. We re-educate and retrain ourselves mentally, as well as physically, and choose to support our body and consciousness by shifting deeply ingrained food habits. We step more lightly on the planet when we consume with mindfulness. The chronic degenerative diseases common in western civilization find their origins in the toxic food we eat. Yet if we know how to eat mindfully, then we also know how to take care of ourselves, of others, and the environment. Mindful eating creates celebration as an alternate to violence. Before eating, simply look at what is there on the table, where it has come from, how it has been prepared, and whether it will truly nourish you, and at the same time protect the environment and future generations. The Buddha's advocacy around food consumption is to keep compassion alive. This means reducing as much as possible the violence, destruction and suffering brought to living creatures because if we bring violence into our own biological system and consciousness, then we inevitably bring violence to other systems – political, economic, planetary – that we engage with through our thoughts, speech and actions.

The Buddha taught that in addition to edible foods we also consume with our senses, desires and cravings. This consumption feeds our store consciousness, which “eats” everything we put into it. Our senses (eyes/nose/ears/tongue/body/mind) provide six doorways for sense impression foods to pass into us. The images from the media and advertising, telephone calls loaded with gossip, toxic ideas in the mind, are all invasive energies that deplete our energy. These nutriment foods are foods that nourish the anger, despair, greed and envy that lie within. Our children consume violence, fear, hatred, and desire every time they watch television. The high school murders in North American and European schools are there because society, parents and children did not pay attention to the necessity of guarding their sensory doorways. Clearly we have created a dangerous environment for ourselves by allowing so many toxins to penetrate our senses. High

school murders are not a teenage problem. They are a problem generated by the systematic violence in society, which penetrates the consciousness of young people through their sensory doorways. Mindful solutions that effectively deal with anger, frustration and hatred, and provide an alternative paradigm for being must be applied to all levels of society. I refer later to the Five Mindfulness Trainings of Thich Nhat Hanh as instruments of protection from ingesting the toxic foods that pour through our senses. The best minds in America are now at work on how to implement this, yet Shariputra's dictum from the time of the Buddha still applies. If we do not guard each sensory doorway we will get sick.

We must warn the six senses to consume mindfully, discipline them to avoid self-intoxication and guide them to scrutinize what energies are allowed in to penetrate our consciousness. It is imperative that we actively cultivate this guardianship because misperceptions abound from all our senses, and these misperceptions are not reality. We have colossal misunderstandings about how our mind works, and continue to trust in our perceptions of reality rather than intuit the truth. We do not realize that our sensory perceptions weave a tapestry of illusion that only mindfulness, guiding us to a new level of consciousness, can penetrate. I refer to this new level as heart consciousness, the repository of all the wholesome attributes of our Store Consciousness. (See later section)

Mindfulness is our protector. We must use it to distinguish nutriment that nourish our organism and spiritual well being, from those which do not. By eliminating toxins from our sensory diet we begin cultivating an alternative consumption based on wholesome nutriment – patterns of consumption that enhance mindfulness and compassion. But we cannot see deeply into the interconnection between nutriment and consciousness until we first of all come to a stop. That is the first meditative step before deep looking and insight help us to recognize the toxic nutriment that pollute our bodies and mind. We then cultivate the sense impression foods that nourish us in a positive and wholesome way. We

resist by waking up, by knowing what to do and what to refrain from. Our harmful consumption is based on ignorance, loneliness and despair that we often try to get away from through patterns of consumption that intoxicate and satiate. These patterns of consumption are destructive. Mindfulness and spiritual ethics of practice provide guidelines to restore our freedom.

Volition refers to our deepest desires and cravings. If vengeance and hatred are the deepest desires, then terrorists are created, if rampant consumption is the deepest desire then we have a degraded planet. The energy of volition based on addiction and craving can take over our entire life with disastrous consequences. It describes that state of consumption wherein we cannot be happy without the object of our cravings. We are then driven to search for, strive, fight and even kill, to obtain that “something” we crave. This makes us suffer all our lives, as we are never happy or present with what we get or achieve, as there is always that “want” for more. We need the insight that this kind of volition food is in fact the obstacle to true happiness, for we also have within us the capacity to “be”, to live fully in the present moment through mindfulness practice. Meditation takes us there. Yet these capacities are obscured and covered up by habit energies, by acquired and inherited addictions, and by our emotional afflictions. We must be prepared to release these obstacles rather than feed off and be driven by them.

We stop this process by meditating and looking deeply into the driving force of our deep desires. Then create an opportunity through mindfulness to transform them. Instead of lust, greed and fame we foster the desire to awaken at the highest level; the desire to bring loving kindness to everything we connect with; the desire to alleviate all suffering. Just as the addictive desires of volition provide food for our consciousness, this kind of desire is also a food. We must realize that our ego takes its definition from the various false identifications and attachments that we wear as masks, hiding ourselves under carefully

manufactured personas as a convenient statement of ourselves. The ego defends a restricted and separated view of self, one that often creates catastrophes. Its logic is that of separation, the drive is manipulation and discrimination, the amplification is layer upon layer of delusion, the end result is suffering filled with fear, craving and clinging. This is a very pale and limited reflection of who we potentially are. In meditation we release the hold of attachment to identities and begin to experience true freedom and interconnection, simply because we have stepped away from the bondage of living up to a set of identifications that are false, that do not reflect back to us our true nature. What takes place in meditation is the steady removal of false identifications, so that you are ultimately left with freedom to truly be yourself, and from this point onwards you begin to experience more and more freedom and thus make wise decisions about yourself and the environment in which you are located.

Store consciousness is identified by the Buddha as the fourth source of nutriment for our consumption. It is like an ocean fed by the six rivers of the sensory organs, by everything we consume. The collective mix of toxins manifests as our life as it is and in understanding how it has come to be, we see how the different nutriments consumed contribute to the store consciousness that feeds and defines us. The deepest level of our consciousness, store consciousness, contains absolutely everything – the darkest elements of ignorance, hatred and greed as well as the enlightened mind of the Buddha, the love of Jesus. It consumes everything from everywhere and it all lies latent within us. Depending on what is fostered within, this then becomes the ground for the manifestation of our body, mind and environment. In this sense the nature of store consciousness can be considered as a food. It receives food, then constitutes itself as food for other levels of consciousness and is the architect of their manifestation in our life.

Without mindfulness we do terrible things to our store consciousness. Remember that mindfulness is the basis for everything that transforms our store consciousness. The

Buddha has a story that emphasizes this. He tells of the capture of a dangerous bandit who one morning is brought before the king. The king orders his soldiers to take the bandit outside and to thrust one hundred sharp swords through his body. At noon the king asks “How is he?” and is told that the bandit is still alive. The king then orders an additional hundred sword thrusts to be driven through the bandit’s body and so it continues throughout the day. The Buddha then told his monks (Laity 2002: 20):

*That is what we do to our consciousness every day.....In this way we should regard the food of consciousness. When the nourishment of consciousness is rightly understood, name and form are rightly understood. When name and form are rightly understood, there is nothing higher the noble disciple needs to do.*

We thrust thousands of sharp swords into our consciousness through the nutriments we consume. The drastic imagery of this story is to bring home the fact that when we consume violence, hatred, cravings, ignorance and greed, we drive sword thrusts deep into our store consciousness, making it impossible to transform at the base. We are often not aware of this, totally in the dark about what we are doing to ourselves and to our environment. Somehow we must choose not to consume sword thrusts. The Buddha pointed out that mindfulness was the only way to stop the sword thrusts, to stop the suffering and destruction to ourselves, to others, and to the environment. The Right View argument from Shariputra considers reflection and investigation on the nature of our nutriments to be absolutely crucial for our ongoing spiritual pilgrimage. Being aware and mindful of all that we consume transforms the unwholesome seeds from our ancestors and conditioning, and provides fertile soil for wholesomeness in our store consciousness to flourish.

Mindfulness practice is the most important food that we can provide for our store consciousness. Mindfulness brings us to the state of being fully present so we can draw on clarity, wisdom and compassion without being diverted by strong emotions and wrong perceptions into initiating unwise and harmful actions. The latter blocks our appointment

with reality as it is and makes victims of us all, as illusion weaves its dreadful tapestry of distortion. Once mindfulness is developed, it is an energy that can transform harmful habits. Mindfulness gives us the internal strength to see our negativity just as it is, as part of us, then with its application through meditation and conscious breathing, mindfulness transforms our negative and harmful habits. It keeps us steady, clear and true by constantly providing a direction and method to bring about transformation of our worst patterns of fear, hate and anger. This is what the term “mindfulness” refers to. Meditation is there as a tool to cultivate the energy of mindfulness. It is a strategy to arrive at internal stillness. This generates compassion and clears our mind prior to contemplating any action.

It is not easy to break through all the levels of a discriminating mind. To do so requires that we continue to generate the energy of mindfulness through every step taken. When we are fully aware of each breath and step, and are not carried away by the fears and traumas of the past and anxieties about the future, our solidity, presence and dignity sends a concentrated energy beam right into store consciousness. All of our practice is to touch the base, our store consciousness, transform it and penetrate into heart consciousness, our Buddha nature. Our perceptions totally change into deep understanding and we experience the world through an enhanced dimension of insight. We are always in concentration and awareness – walking around in the forest, or on the street, sitting alone or with a group - transmitting the laser beam of mindfulness to cut through all blockages and distortion, and dwell with the Buddha at the core of our being. We all have the capacity of awakening, it sees the mind and can transform it. If we do not access the capacity to awaken, then we see the mind through veils of distortion and manipulation and become preoccupied with self-importance as we attach yet more “things” to our separated self. Once in heart consciousness, this all disappears. The leap into freedom is through mindfulness practice so we can be free from all discrimination and attachment to self. Day by day we must retrain our mind so that we enjoy a different manifestation from store consciousness. There

is a Zen saying that the goal of practice is to discover our true face. This is Buddha nature, heart consciousness. Every time we are mindful we create an energy that cuts through the delusion and ignorance fostered by ego and intellect. This energy penetrates store consciousness, directly nurturing the collective seeds of wholesomeness, which when activated create the conditions for our awakening. The Buddha's mindfulness trainings provide the ethical guidelines to make this so.

There are three major conditions that permitted the emergence of the Mindfulness Trainings. The first is the awakened mind of the Buddha; the second is the great skill of the Buddha as a teacher and communicator; the third is Thich Nhat Hanh's insightful rewording of the Five Wonderful Precepts of the Buddha. In a language that would appeal to the consciousness of the 21<sup>st</sup> century, the Buddha's mindfulness trainings were renewed, in tune with modern planetary, socio-economic and cultural developments. So when we study and penetrate deeply into the mindfulness trainings we touch all three conditions, in particular the awakened mind of the Buddha. At the same time we also touch our potential to be similarly awakened – another aspect of the Failsafe premise. With the Five Mindfulness Trainings the Buddha communicated in a very precise way the ethical and moral basis of practice; of how to be with ourselves, others and with the planet and society at large. To be in touch with the Buddha's awakened mind enables us to take refuge in the Three Jewels – the Buddha, the Dharma and the Sangha - in a very deep way. Once we grasp the extraordinary qualities and understand the power of the energy created by the mindfulness trainings then something deep and very wholesome stirs in our hearts. From this initial experience the seeds of awakening are nurtured within store consciousness and distance is created between ourselves and negative actions, that can harm both humanity and the planet. Taking refuge in this deep manner is the basis of all dharma practice, which enables the practitioner to transform the energy of past negativity and step onto the path of liberation and create no further harm.

Contrast this understanding of taking refuge in the Buddha with the current mindset of the politicians, corporate executives, and terrorists who are making the decisions that shape our world. They do not have awakened minds. Their minds are scarred, filled with ignorance, greed and vengeance, their hearts held hostage to corporate, ideological and electoral agendas. They all follow the same script, seeking similar justifications to advocate the use of violence. Trapped in history they offer no means of re-creating our world. The Buddha does, as his mindfulness trainings provide a different road map for peace, a different view of politics, conflict resolution and planetary care. The implications of the Buddha's teachings apply fully to the question of how to be with our degraded environment and take steps to transform our consciousness. In the dark times facing us the Buddha's mindfulness trainings provide protection. Our world needs guidelines like these to live by. Embracing the Buddha's awakened mind in the mindfulness trainings is taking refuge in the Buddha. Extending it to our society and environment is the foundation of Engaged Buddhism.

Taking refuge in the Buddha allows us to transport our everyday reality with its disasters, joys, ups and downs, into the loving embrace of teachers such as the Buddha. Their teachings provide instruments for practitioners to travel from the Historical dimension of daily life and be refreshed by touching deeply the Ultimate dimension of the awakened mind of the Buddha and other fully enlightened beings. Such awakened teachers are able to reflect the Ultimate dimension of Nirvana, the Kingdom of God, The Pure Land, yet they also refer to the Historical dimension of the everyday realities of their times and culture.

Taking refuge in the Dharma, practices, sutras and trainings brings to mind the pivotal exchange between Ananda and the Buddha. As the Buddha was preparing for his bodily death his faithful attendant Ananda put a number of questions to the Buddha on behalf of

the monastic community. The Buddha had repeatedly encouraged his disciples not to take refuge in the person of the Buddha, but in the island of mindfulness within the self where the diligent practice of the mindfulness trainings would reveal their Buddha nature. Still Ananda had to ask: “Who will our teacher be when you are gone?” to which the Buddha replied “The Mindfulness Trainings,” adding “They are your teacher even while I am alive.”

Taking refuge in the Sangha brings the Buddha and the Dharma to life. Without the Sangha – the community of spiritual practice - the Buddha and Dharma cannot evolve to be relevant to the suffering of our times, which is quite different from the times of the Buddha. In the latter part of his ministry the Buddha took great care to reconstitute himself in terms of the sangha, so that if you wanted to truly touch the Buddha and Dharma you had to do so in the Sangha. Thich Nhat Hanh has repeatedly referred to sangha building as the noblest profession in the 21<sup>st</sup> century and in his dialogue with Daniel Berrigan (2001), they talk about sanghas as communities of resistance providing a major source of spiritual and global renewal. In such communities of mindfulness practice everything encountered refreshes the senses, guiding us to the energy of peace and understanding. In this way the individual grows from the fruits of community practice, and each person becomes an example for others to similarly grow. The individual and the collective are intertwined. These conditions enable us to awaken the necessity of remaining healthy in body and mind. The sangha as a practice community of this nature is a strong tree that we lean on for support and shelter. An essential component of this support is a unifying set of ethics based on wise spiritual teachings from the awakened minds of great Masters. These provide guidance on the path of awakening. In this way people are encouraged and supported to be internally strong. From that foundation they can engage with communities and nations and transform them. The sangha as a community of resistance presents an oasis of hope for people lost and alienated by a world gone mad. It is a major resource for

ensuring a different future, simply by protecting our sensory doorways and guiding our steps to deepening mindfulness. The trainings allow us to remain steady, lucid and compassionate in the midst of adversity.

Yet I personally encounter obstacles within myself. Across North America there are many instances of children being abused and murdered at the hands of parents and guardians. This deeply distresses me. Teenagers volunteering as suicide bombers in the Middle East could well leave me stunned. If I did not have my mindfulness practice to stay steady and look deeply, I could easily be overwhelmed. But I *do* have my practice of meditation, and I do take refuge in the Five Mindfulness Trainings on a daily basis. I am convinced more than ever before that the world needs a universal code of ethics. The Five Mindfulness Trainings fill this void. For me they are a guide and protector in moments of doubt, so that I see clearly and can take care of my own internal garbage. This is the only way to deal with the potential terrorist that lurks deep within everyone's consciousness. To unravel the insidious internal knots caused by generations of ancestral habits, created from ignorance, vengeance and separation – this is the work of the new revolutionary of the 21<sup>st</sup> century, transforming terror and violence first within themselves and then within the world. It is not a political or intellectual exercise, nor a matter of compromised treaties or ceasefires. It is an internal transformation of consciousness at the very core of our being. It takes mindfulness to do this and the Five Mindfulness Trainings provide the starting gate, a guidance system and a deep well of internal ethics to live by. This is why I do my very best to live by these trainings.

There is an energy to the trainings that comes directly from the awakened mind of the Buddha, which is continued through us. So that when a sangha collectively and diligently practices the five mindfulness trainings, an extraordinary energy emerges that uplifts everyone who is suffering. When I think about taking refuge in the Sangha I smile with

quiet joy. My home sangha in Ottawa, Canada - the Pine Gate sangha founded in 1997 - has matured so that it operates very much as an organism. There are so many leaders in the sangha choosing to walk the Bodhisattva path and be of support to everyone else. We take one another's hand and willingly walk together through the early part of the twenty first century. From our engaged practice in the city of Ottawa – for peace, the environment and schools – there emerges so much confidence and clarity. The experience of the fruits of practice transforms our wider community as we become more skilful and aware that we are infusing mindfulness throughout our city. We have that lucidity and confidence as a consequence of the joy that emerges from experiencing for ourselves the fruits of mindfulness practice. They are all spiritual friends – *kalyanamitra* – and they help me grow in awareness so that I may become more embedded in my true nature by taking refuge in the awakened aspect of my mind. The Buddha's reply to Ananda's question is no longer a theory but a reality for Pine Gate sangha members.

Taking Refuge in the trainings and three jewels is a joyful path. A vital part of the joy is engaged practice with a sangha, as that leads to new leadership, responsibility and care for the wider community. It is in the Sangha that the Ultimate dimension of the Buddha and Dharma truly comes alive, as the feedback is from direct experience with dharma friends. As sangha members feel the fruits of practice from taking refuge, their awareness grows as their suffering is transformed. The sangha becomes a safe haven, a community of resistance where participants are free to explore deeply the Buddha, Dharma and Sangha that is within. Using breath consciously, living the mindfulness trainings fully, practicing the guidance of the teachings enables the awakened mind of the Buddha within us to be touched. And so we transform our consciousness. At this instant the existential realities of the sangha in the Historical dimension, by creating a Pure Land for transformation, cross over into the Ultimate dimension. The waves recognize that they are water. This is not a concept but a reality based on the experience of sangha practice. This is why I believe it will be sanghas creating Pure Lands that provide the basis for the next Buddha to manifest, with each sangha operating

organically as a cell in the new manifestation of Divinity on Earth. This is a statement of practice and is our greatest gift to humanity and Mother Earth. Our deep practice of the mindfulness trainings enables us to live authentic lives and be free, at the same time ensuring that a future is possible. There are many ways to talk about the Five Mindfulness Trainings. They can be applied to personal spiritual growth, global ecology, the post 9/11 world and so on. With each focus we rest in the awakened mind of the Buddha, which is also there within each one of us. Our practice and actualization of the mindfulness trainings in daily life defines us as true revolutionaries for the 21<sup>st</sup> century for we can transform both global terror and environmental degradation.

Thich Nhat Hanh (1998) does not see a way out for our modern civilization other than practicing the Five Mindfulness Trainings – or something like them. The trainings are not there for us to be in judgement of others, to bludgeon people with a misplaced self-righteousness. They are an internal compass to our hearts so that we wake up to love and compassion, and take heed of the directions in which the Mindfulness Trainings guide us. Practicing the trainings with an open heart strengthens and develops our compassion and loving kindness, and builds our awareness of interconnectedness as we move in the direction of the trainings' intention. Practicing the trainings nourishes “boddhicitta”, the “Mind of Love.” Thich Nhat Hanh refers to their practice as the medicine for our times, as the hope for the future. They provide protection and enable us to distinguish that which is good for ourselves, our minds and planet and that which is not. It is not necessary to be perfect in the practice – that is not possible. But it is possible to move in the direction of responsible and ethical living and make a difference to our society and environment. By doing this, then we can transform global terror and environmental degradation. We created the present situation, yet there is a clear way of transforming our creation. If there is “this”, the actualization of the Five Mindfulness Trainings, then there is “that”, a balanced and peaceful world. By being centred in mindfulness we can in fact change the world and the

planet.

## **Conclusion**

From my own experience, I know that as a species we must learn to meditate, or at least a critical mass of us must — otherwise the ethical imperative to shift to a new consciousness of our interconnectedness with everything will not happen. Without this shift in consciousness, we eliminate one by one all of our life support systems, and we will become totally alienated not just from ourselves, but from the Earth we live on. I used to think that there was nobody listening to the fundamental simplicity of this assertion, yet as a meditation teacher and educator I am increasingly encouraged by how people are grasping this essential truth. I know that our evolution and cognition are intricately interconnected with all that takes place within the wider ecosphere of our planet. Our consciousness is not separate from it, and we have to recognize this. We do so by moving to a radically different perspective, first towards ourselves and secondly to the incredibly beautiful planet we live on, and realize that the planet is changing. We have to realize that we are part of a changing web of life, and are not the masters of the earth. We need to relate to ourselves and to the earth with a sense of wonder and humility - in a spiritual manner rather than an exploitative one. In this way our knowledge will fuel wisdom rather than create structures of dominance and control.

Herein lies the transformation potential of the individual and the species. As each one of us takes responsibility to be open to the expression of our true nature, there is an exponential bursting out of energy that is akin to the superconductor principle. The deeply embedded horizontal connection of Changed Consciousness produces a resistance free connection between human beings who choose to locate in ecological truth. This connected system of parts then swiftly slides up the vertical ladder of consciousness as a whole - as a tipping

point tending towards infinity, because the experience of a common transformed consciousness is shared. As interconnectedness is mutually recognized, then one's journey, the River of Life, flows swiftly up the vertical axis of consciousness. This Cosmic Axis releases one from limitations and leaves one open to the realization that the center is everywhere. One simply has to recognize that this is all within. At this juncture the River of Life, one's individual journey, asks us to trust inner direction. For just as the River flows endlessly from its source, so too will our evolution as we listen within. It is at this juncture of balance that the individual integrates with the Creator, self meets God and part meets Whole. That is the message, to locate at the center of being and sustain a spiritual connection both to the Universe and to Mother Earth; otherwise disorder and chaos will ensue. Mindfulness facilitates such a spiritual connection. It also requires that we put our individual and collective mindfulness into practice and take wise action.

Right now is the time to be bold and confident — internally and externally.

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## **FIVE MINDFULNESS TRAININGS**

### ***FIRST MINDFULNESS TRAINING***

***Aware of the suffering caused by the destruction of life, I am committed to cultivating compassion and learning ways to protect the lives of people, animals, plants and minerals. I am determined not to kill, not to let others kill, and not to support any act of killing in the world, in my thinking, and in my way of life.***

### ***SECOND MINDFULNESS TRAINING***

***Aware of the suffering caused by exploitation, social injustice, stealing, and oppression,***

*I am committed to cultivating loving kindness and learning ways to work for the well-being of people, animals, plants, and minerals. I will practice generosity by sharing my time, energy, and material resources with those who are in real need. I am determined not to steal and not to possess anything that should belong to others. I will respect the property of others, but I will prevent others from profiting from human suffering or the suffering of other species on Earth.*

### **THIRD MINDFULNESS TRAINING**

*Aware of the suffering caused by sexual misconduct, I am committed to cultivating responsibility and learning ways to protect the safety and integrity of individuals, couples, families, and society. I am determined not to engage in sexual relations without love and a long term commitment. To preserve the happiness of myself and others, I am determined to respect my commitments and the commitments of others. I will do everything in my power to protect children from sexual abuse and to prevent couples and families from being broken by sexual misconduct.*

### **FOURTH MINDFULNESS TRAINING**

*Aware of the suffering caused by unmindful speech and the inability to listen to others, I am committed to cultivating loving speech and deep listening in order to bring joy and happiness to others and relieve others of their suffering. Knowing that words can create happiness or suffering, I am determined to speak truthfully, with words that inspire self-confidence, joy, and hope. I will not spread news that I do not know to be certain and will not criticize or condemn things of which I am not sure. I will refrain from uttering words that can cause division or discord, or that can cause the family or community to break. I am determined to make all efforts to reconcile and resolve all conflicts, however small.*

*Aware of the suffering caused by unmindful consumption, I am committed to cultivating good health, both physical and mental, for myself, my family, and my society by practicing mindful eating, drinking, and consuming. I will ingest only items that preserve peace, well-being, and joy in my body, in my consciousness, and in the collective body and consciousness of my family and society. I am determined not to use alcohol or any other intoxicant or to ingest foods or other items that contain toxins, such as certain TV programs, magazines, books, films, and conversations. I am aware that to damage my body or my consciousness with these poisons is to betray my ancestors, my parents, my society and future generations. I will work to transform violence, fear, anger, and confusion in myself and in society by practicing a diet for myself and society. I understand that a proper diet is crucial for self-transformation and for the transformation of society.*

### **Acknowledgement**

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### **Bibliography**

Bateson, G.

1972 Steps Toward an Ecology of Mind: A Revolutionary Approach to Man's Understanding of Himself. N.Y.: Chandler Publishing Co.

Begley, S.

2004

Scans of Monks' Brains Show Meditation Alters Structure

HYPERLINK "http://www.urbandharma.org/udharma8/monksmed.html" <http://www.urbandharma.org/udharma8/monksmed.html>

[monksmed.html](http://www.urbandharma.org/udharma8/monksmed.html)

Bodley, J.

- 2000 Cultural Anthropology, Tribes, Nations and States. Third Edition. Mayfield Publishing Co.
- Brower, D.  
1998 CPR For Business And The Planet. Earth Island Journal Fall 1998
- Campbell, J.  
1988 The Power of Myth. N.Y.: Doubleday
- Capra, F.  
2000 The Challenge Of Our Time. Resurgence, No 203, November/December 2000
- Castells, M.  
2000 The Information Age: Economy, Society and Culture. London: Blackwell
- Carson, R.  
1962 Silent Spring. Boston: Houghton Mifflin Company  
1965 The Sense of Wonder. NY Harper and Row
- Colborn, T.  
1996 Our Stolen Future. N.Y.: Dutton
- Flannery, T.  
2006 The Weather Makers. NY: HarperCollins
- Flood, J.  
1983 Archaeology of the Dreamtime. University of Hawaii
- Government of Quebec  
1976 The James Bay and Northern Quebec Agreement. Quebec City: Government Printer
- Glendinning, C.  
1994 My Name is Chellis and I'm in Recovery From Western Civilization. Boston: Shambhala
- Gladwell, M.  
2002 The Tipping Point: How Little Things Can Make a Big Difference. N.Y.: Little, Brown and Company  
2005 Blink: The Power of Thinking Without Thinking. N.Y.: Little, Brown and Company
- Goodstein, D.  
2004 Out of Gas. Chicago: W.W. Norton and Co
- Hanh, Thich Nhat  
1998 For A Future To Be Possible. Berkeley: Parallax Press (Revised Edition)  
2006 This Is The Buddha's Love. Shambhala Sun, March 2006  
.....with D. Berrigan
- 2001 The Raft Is Not The Shore. Maryknoll, N.Y.: Orbis Books
- Hardin, S.  
2005 Halting Mass Extinction. Resurgence January/February 2005. No 228

- Hawken, P.  
 1993 *The Ecology of Commerce: Declaration of Sustainability* N.Y.: Harper Business
- Heinberg, R.  
 2004 *Powerdown: Options and Actions for a Post-Carbon World*  
 Gabriola, BC: New Society Press
- Kanner, A.D. & M. Gomes  
 1995 *The All-Consuming Self*. In Roszak et alia (ed): *Ecospsychology: Restoring The Earth, Healing The Mind*. San Fransico: Sierra Club Books
- Laity, Sr. Annabel  
 2002 Translation of *The Son's Flesh Sutra*. *Mindfulness Bell*, 30:  
 20. Winter 2001 - 2002
- Lee, R.B.: *The Ikung San*. Harcourt Brace  
 1964
- Legget, J.  
 2005 *The Empty Tank: Oil, Gas, Hot Air and the Coming Financial Catastrophe*. NY: Random House
- Logan, J.W.  
 1992 *A Scientist's Reverence for Life*. *Chrysalis*, V VII, 1, Spring 1992
- Lovelock, J.  
 1979 *Gaia: A New Look at Life on Earth*. Oxford University Press  
 1987 *Gaia, A Model for Planetary and Cellular Dynamics*. In W.I. Thomson (ed): *Gaia, A Way of Knowing* 83 – 97. Gt Barrington, Ma: Lindisfarne Press
- 2005 *At War With The Earth*. *Resurgence*, No 228 January/February 2005
- 2006 *Revenge of Gaia*. Harmondsworth: Penguin Books
- Lutz, A., Greishler, L., Rawlings, N.B., Ricard, M., & Davidson, R.J.  
 2004 *Long Term Meditators Self-induce High Amplitude Gamma Synchronicity During Mental Practice*. *Proceedings of the National Academy of Sciences of the USA* 101 (46) 16369 – 16373
- Milgram, N.W., C.M. MacLeod, & T. Petit (eds)  
 1987 *Neuroplasticity, Learning and Memory* (Proceedings of a Symposium held at the University of Toronto, March 25, 1986) Alan R. Liss Inc.
- Myers, D.  
 2000 *The American Paradox: Spiritual Hunger in an Age of Plenty*. Yale University Press
- Naess, A.  
 1973 *The Shallow and the Deep, Long Range Ecology Movement. A Summary*.



Little, Brown and Company

Tonkinson, R.

1991 Mardudjara Aborigines: Living the Dream in Australia. N.Y.: Holt, Rinehart and Winston

Varela, F.

1987 Laying Down a Path in Walking. In Thompson, W.I. (ed): Gaia, a Way of Knowing. Gt. Barrington, MA: Lindisfarne Press

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I moved this up to be the topic sentence.

“at the time” inserted

deleted “now widely accepted by the scientific community” since its placement implies reference to Lovelock’s 2006 work – which has not yet been accepted.

In Part One, you stated that Gaia is “part of everyday vocabulary as metaphor”. To avoid contradiction, I deleted the statement above.