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Solution to Pollution, Natural Step, and the Permaculture Labyrinth

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[Submitted Paper]

Carol

We are glad to welcome all of you to this session of the conference entitled *Solution to Pollution, Natural Step, and the Permaculture Labyrinth*.

At first sight you would think they were three unrelated topics. But I believe that the Labyrinth is a symbol of our time awoken from an 800 year sleep, and as it circles the globe it is a way in which many people are finding the connectives of earth, air, fire and water, and of all living things in harmony.

As we know, one of the biggest things that threatens our survival on this planet and of all living things is pollution of many sorts. Paradoxically, a major source of pollution comes from the by-products of trees under the ground forming petrochemicals, which we human beings now use in increasing quantity.

And The Natural Step which started in Sweden, as I have discovered in the last 2 days, has a marvellous systems approach which is very simple and guides us to reduce biosphere pollution, increase bio-diversity and increase justice and sharing among all.

I am Carol McDonough, and I personally have been injured by chemical exposure and have had to search for clean air, clean food and clean water in order to survive, because I am one of the canaries of this planet. That is, a human canary as distinct from the many animals, birds, insects, trees and water ways threatened with extinction because of pollution.

My body misreads the signals from many of the petrochemicals that we take for granted in daily life and causes all sorts of immune responses and polysystemic responses.

This syndrome is often called Multiple Chemical Sensitivity. And with me to present the workshop today is Chris Phillips, Barrister and Solicitor, and founder, with his

wife Diana, of Pristine Ecoscene. Chris will tell his own story of how as a barrister he represented persons suffering from bodily illness caused by exposure to chemicals in the workplace. He has moved on to look for the Solution to Pollution. In other words, he and I are both on about healing this planet so that all may live in freedom, harmony and justice.

And that is what brings us to the permaculture conference. Chris met permaculture four days ago and sees that, with its enhancement of planet Earth and its values, that it is consistent with what his organisation is trying to bring into effect. I met permaculture about 15 years ago and I have been happy being a quiet permie and at the property at which I now live there is most days of the year clean air; from the South Pole through to South America the cleanest body of air on this planet. However, may I just say even it is polluted. In the year the Berlin Wall came down they discovered in ice samples from the polar ice cap pollutant substances only found in the Northern Hemisphere.

So there is no clean air left on this planet but, anyway, I live in the cleanest air that there is at the back of sand dunes on limestone sand with which you are so familiar in this State. And I'm creating an ecosystem there, that is in harmony with the wild coast protection zone and with the needs for organically grown vegetables, and our water comes from the Aquifer about 40 metres below the ground which runs out to sea, which of course we then filter.

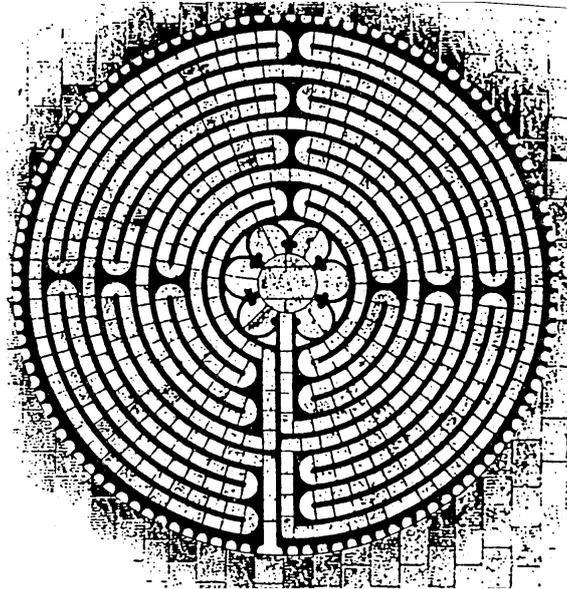
People have come to live with me and Ca-naan Community of friends is a growing event. I liken it to a small child with the rapid changes that a small child has in its development. So do we. There is the core group and the network and the people that live at Ca-naan and we welcome, as part of our service of hospitality, many people that are suffering from Multiple Chemical Sensitivity and who are devastated and desperate. The permaculture gardens are a source of peace and healing and I have been led to build 5 circle gardens. There is the herb garden which suggests the rose window in the west face of Chartres Cathedral, the brumerage which is a peaceful place to sit, the vessel of a fish garden which is an ancient caritas symbol of two interlocked mandala with an olive tree in the centre of it as a sign of peace. The large Labyrinth, based on the Chartres Cathedral Labyrinth integrates the symbols of earth, air, fire, and water which are: body, mind, spirit, emotion and whose colours are yellow, gold, blue, fiery reds, purple and silver.

And then we have built the permaculture medicinal garden and it is fascinating that the symbol at the centre of the permaculture garden is precisely the symbol of the Chartres Cathedral Labyrinth and it has risen spontaneously at this time as this ancient Labyrinth has woken up.

For I believe it has been sleeping peacefully at Chartres for 800 years and now is bringing back it's ancient message of balance and harmony and wholeness as human beings journey on this planet.

I will read to you a brief article that was written about the Labyrinth by one of our permaculture members, John Elderidge.

The Labyrinth was constructed in May – June 1996 at Ca-naan community of friends on coastal bush land bordering Point Nepean National Park – the property of Carol McDonough, as a Permaculture Dromana member. The Labyrinth was built by Robert Hosking and Carol McDonough, with assistance from many others, including some WWOOFers, Permaculture Dromana members (assistance with site preparation) and friends.



The Ca-naan Labyrinth painted on green cloth and used here at this conference was an English Turf Maze. It has been modelled on one found at Charteurs Cathedral in France, which dates back to between 1194 AD and 1220 AD.

The Labyrinth is a circle with one entrance and one path to the centre which is retraced to leave. It symbolises the sacred path which every seeker treads through out life. It is a visible representation of the way. Those who walk the Labyrinth will find the necessities of following this way into the centre. As we walk on, we should let go of the cares of life to find a new direction in the centre. As we walk out, we should find strength to continue our journey through life.

The Labyrinth has universal meaning in so far as it transcends culture and religions. It has its roots in pre-Christian times.

Labyrinths are found in many northern hemisphere cultures, Greek, Celtic, Indian and American India. The Labyrinth is a great pattern which maps the inner soul. Walking the Labyrinth opens the seeker to those age-old mysteries associated with the pilgrimage and the great journey. With this in mind the Labyrinth is:

- A mode of spiritual cosmology or map of the soul.
- A form of mandala which unties the opposites of our lives.
- A metaphor for the path of life, or the way.
- A great archetypal form.
- A symbol of the unified mind, uniting the left and right brain (rational and intuitive consciousness).
- A map of human development from birthing to death.



The Labyrinth is complete (except for half moons). Note centre of Labyrinth traditionally dedicated as the Madonna. Ours has red brick outer circle blue brick rose petals (blue is her colour). Oak seats in the petals (traditionally animal, vegetable, mineral, human, angelic, desire) and her traditional, plants – red, white, gold mini roses and thyme and pennyroyal. May 1996. Vesica Piscis ganlen with slice tree across in back ground, bromeliad circle garden through trees.

The form of the Labyrinth is a spiral – reflecting that which is found in nature – and a shape of particular note in the understanding and use of pattern in permaculture.

There are numerous meanings that can be ascribed to different aspects of the Labyrinth design – too numerous to mention here. Some of the physical features of the Ca-naan Labyrinth are:

- 13.5 meters in diameter, making the path to the centre approximately 275 meters.
- A rose shape at the centre of the Labyrinth with 6 petals.
- The Labyrinth is divided in to four sectors each denoted by use of different bricks, stone and plants.
 1. Earth (body) sector, by yellow bricks and yellow flowering plants.
 2. Air (mind), by limestone and blue flowering plants.
 3. Fire (spirit), by red brick and red flowering plants, and
 4. Water (emotions), with stones from the sea and silver foliaged plants.

There is no correct way to walk the Labyrinth. When walking the Labyrinth you are invited to let go and be led, be receptive. Experiences range from dramatic insights to bursts of emotion and very little. The Labyrinth may be walked (or even danced) in many ways:

- Mindful of your present life and the transitions through which you are going.
- Meditatively.

- Pondering a question as you walk in, allowing the question to become part of you in the centre and then 'know' the right answer as you walk out.
- With a mantra, in prayer, etc.

Well, there you are – a bit of zero zero zero for you – I hope you can see the earthcare connections. I can.¹



The children on the Labyrinth. Labyrinth builder, Robert Hosking welcomes children, then the adults. Morning after Winter Solstice June 1996.

Today I have with me a five circle Labyrinth. It was impossible to bring our own Labyrinth with its thousands of bricks and plants and so I have borrowed the five circle turf maze Labyrinth from England, which is similar to the Cretan-Minoan Labyrinth found in Crete. Both of these are about 3000 years old.

The Labyrinth you will walk today is made on green sheeting sewn together, then the design of the Labyrinth sketched in chalk and gold spray paint used to mark the paths. As you walk this Labyrinth be open to the feel of it. Be open to what you are to receive from it.

A Labyrinth is a maze with one entrance; you walk to the centre to receive and then walk out gaining strength to the next step of your journey. As you walk I will read the poem written about the Ca-naan Labyrinth called *Journey of the Labyrinth* by Vicki Renna. It also will be available to you after the work shop.

We walk the Labyrinth one step at a time, which is a Natural Step; and now I hand you over to Chris Phillips to tell you about Pristine Ecoscene and the Natural Step. Thank you.

¹ (a) John Elderidge for Permaculture Dromana Network Earthcare – August 1996
(b) Robert Hosking and Coral McDonough, Welcome to the Labyrinth Ca-naan Community, June 1996
(c) Lauren Artrecc, Walking a Salvaged Path, Riverhead Books, NY 1995

Chris

Over the last six years I have acted for clients injured by chemicals in the workplace, where I believe the exposure was caused by the neglect of the employer, and clients recovered up to \$520,000, including workers compensation payments and legal costs. However, in each case, settlement was reached before trial and the defendant usually insisted on a secrecy agreement, and in each case maintained a denial of liability.

The clients were injured as a laboratory assistant or microscopist separating and identifying minerals, in petrol dispensing, and in sterilising and disinfecting in the health industries. I have also been asked to advise clients who have complained of chemical injury as a result of exposure to chemicals in the X-ray departments of hospitals, in the application of pesticides, in a laboratory working with hydrogen sulphide gas as well as carbon tetrachloride, ammonia, para-kerosene and petrol, in a bank mixing chemicals for laser printing, living next door to a service station emitting significant petrol fumes, living in a home where strong fumes were emitted from glue used to stick down cork tiles, working with art paints and inks, working in "sick" buildings, working as a hairdresser with dyes, bleaches and perms (bladder cancer), working with resins and glues in wood flooring, working in chemical transport with chemicals such as formaldehyde, as a patient by general anaesthetic, working in the dry-cleaning industry, and working in the construction industry with surface retarders, lubricants and resins. Injury has mostly been by inhalation and skin contact, with inadequate equipment, training, instruction and supervision.

In many cases cumulative damage occurred and, frequently, the multiplicative effect (synergism) seemed operative with certain mixtures of chemicals. In addition to more common symptoms such as dermatitis or occupational asthma, many of the victims of chemical injury have suffered severe intolerance to a wide range of chemicals after initial over-exposure in the workplace, causing them to seek isolation from modern society. There is a growing body of literature on this condition under the heading "Multiple Chemical Sensitivity" (MCS) and the impression I have gained in my law practice is that this group of patients is growing.

Clients overexposed to chemicals also complain of difficulties in memory, concentration, speed of information processing, chronic fatigue and so on.

You will be aware of a range of other conditions, including various forms of cancer, where chemicals may be a contributing cause.

Many of the dangerous chemicals concerned occur naturally in oil, coal, and natural gas and these chemicals are collectively termed "industrial organic solvents". Important uses of organic solvents, according to a Worksafe Australia publication entitled *Industrial Organic Solvents* of November 1990 are:

- cleaning (degreasing) agents to remove oils and grease from machinery, metals, plastics and textiles;
- dry cleaning;
- constituents of paints, varnishes, lacquers, thinners, waxes, floor and shoe polish, inks, adhesives;

- motor fuels, antifreeze mixtures;
- pharmaceutical products and preservatives;
- manufacture of artificial rubber, leather, plastics, textiles and explosives;
- therapeutic, pesticide, fumigant and disinfectant formulations;
- extraction of fats, oils and medicinal materials from seeds, nuts and bones;
- use in various chemical reactions and laboratory procedures.

Variation in individual susceptibility can lull exposed people into a false sense of security, and the contribution of factors such as increased heat, smoking or drinking alcohol, eating contaminated food, sucking on a contaminated cigarette butt (where chemicals are transferred from fingers) or wearing inadequate gloves are too often overlooked.

There seems to be a great need for preventative education as to chemical hazards and precautions, for safer labelling, closer attention to systems of work and more attention by the medical and legal profession to the problem.

My wife Diana, a Zoologist by training, did the chemical research in the chemical cases I have mentioned. She and I have started an organisation called Pristine Ecoscene and we hope to advance awareness of environmental hazards and safe alternatives. We are pleased to find that there are beautiful alternatives for most, if not all, hazards created by man. For example, we have recently been informed that one school in Queensland stopped using industrial organic solvents and the asthma rate dropped from the state average of about 30% down to 10%.

We were then encouraged to come across an organisation founded in Sweden called the Natural Step.

The Natural Step is based on a series of principles designed to link ecological responsibility with long-term corporate viability and profitability.

The Natural Step sought to obtain scientific consensus, to use systems thinking, to address core issues in a simple way, to use upstream thinking, looking to the source of the problem, to focus on cyclic rather than linear thinking (so that there is no unwanted waste).

The Natural Step set out to develop a model which could apply to any operation, which could promote good examples, which could encourage industry and government to do what we can now without moral judgement and which could allow ecological responsibility whilst maintaining economic viability.

The Natural Step was founded by a cancer medical research scientist called Carl Henrik Robert who, with 50 scientist colleagues and after 22 drafts, arrived at four system conditions which are described as compass points for all in our society to endeavour to follow.

The system conditions are:

1. Substances from the earth's crust must not systematically increase in the ecosystem.
2. Substances produced by society must not systematically increase in the ecosystem.

3. The physical bases for the productivity and diversity of nature must not be systematically deteriorated.
4. There must be fair and efficient use of resources with respect to meeting human needs.

So far, the Natural Step has met with tremendous success and we understand that sixty corporations have taken up the Natural Step in Sweden with considerable profit resulting in each case.

Also, forty municipalities in Sweden have taken up the Natural Step. The Natural Step has spread to the United States and the United Kingdom and has commenced in Australia.

As examples of success, McDonalds Sweden claim that as the result of taking up the Natural Step they have reduced their waste by 98%.

The Scandic Hotel chain has radically reduced its waste, its use of toxins and its use of materials derived from fossil fuels, which cannot be dispersed in the ordinary cycles of nature.

Electrolux has managed, in taking up the Natural Step, to remove hard freons from it's refrigeration equipment, turning to substitutes that no longer harm the ozone layer, developed paints which are water based and will not contaminate the planet, a solar powered lawn mover, the use of train instead of truck, a range of recycling initiatives and other measures.

Furthermore, the Natural Step has commenced a project called *Challenge* where ten corporations are networking with each other so as to create ecological advances both with in and between each company which would not otherwise be achievable if each company were working alone.

The Youth Parliament for the environment has been started by the Natural Step and has spread to some twenty three countries, including Australia which has it's first conference in the National Parliament of Australia on the 16th and 17th of October 1996.

It is very exciting to see the potential for the Natural Step to be used in tandem with the principles of permaculture since both call for harmony with the natural patterns and cycles of nature.

It is interesting to ponder how permaculture can add to the principles of the Natural Step since permaculture is about not only the preservation of the biodiversity and productivity of nature but it's enhancement.

If we add to this mix the new understandings we have of holistic thinking, the path forward of planet Earth looks ever more fruitful.