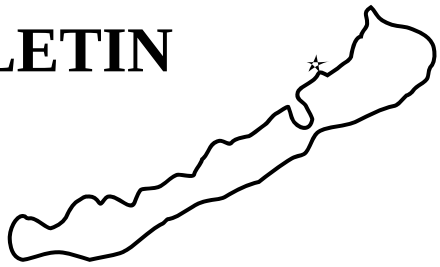
# THE BALATON BULLETIN



**Newsletter of The Balaton Group** **FALL 1999**

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# Balaton '99

## Future Perfect: The Role of Vision in Creating a Sustainable World

*If you can see your path laid out before you , step by step, then you know it is not your path.*
Winston Churchill

Leading up to this meeting on vision, some of us polled our friends and neighbors for their visions of a sustainable world — and some of the responses are scattered in *italics* throughout this meeting report. Nationalities, ages, and other specifics about the quoted visionaries are omitted, because they seem to be unnecessary. Real visions transcend particulars and are recognizable by everyone.

About half the Balaton participants arrived in Csopak a day early this year, for a Systems Day, led by **Dennis Meadows**, with contributions from **Anupam Saraph, Garry Peterson, Pavla Polechova,** and **Dana Meadows**. We held that meeting on the new fourth floor of the Hotel Petrol, where a big modern conference room has been added, along with a smaller work room. They are beautiful spaces — but for our Balaton meeting it seemed right to stay downstairs in the old meeting room that feels like home.

The tourist season was winding down, the beach was uncrowded, the neighborhood quiet. The weather was beautiful all week, sunny, warm but not hot, stars hanging over the misty lake every night. No thunderstorm. No rain on the goulash.

The calm weather soothed and blessed the most turbulent meeting we have ever had. Everything was up in the air: the future of our meeting place (the Hotel Petrol is about to be bought by a Dutch hotel chain; our friends on the staff are living in uncertainty about their jobs); the future of the Balaton Group; and of course the future of the world. The last of these uncertainties has been the theme of our meetings for 18 years, but the first two were new to us. Never before has the Balaton Group Steering Committee had seven intense meetings during the annual meeting.

An energetic cabal consisting of **Bert de Vries**, **Dennis Meadows**, and **Wim Hafkamp** demonstrated the power of vision before our very eyes, as they worked to enroll everyone in their dream of a Balaton center in the South of France. A quieter cabal of Indians presented a vision of next year's meeting taking place in India. By meeting's end both these visions seemed likely to become manifest. The next Balaton meeting will be in India; our ability to help pay anyone's way there depends on the manifestation of currently nonexistent funding, so please save up your frequent flier miles. The South of France vision is one that we all want to see succeed, but its manifestation will be the responsibility of a subgroup of Balaton members, not the Balaton Group as a whole. That subgroup is clearly committed to its task, so La Taillede, owned and operated by several members but not by the Balaton Group, is likely to become a place for workshops, projects, and small meetings. More on that later in this *Bulletin*.

In this atmosphere of uncertainty, the Balaton Group demonstrated its vitality and maturity. It verified and clarified its abiding value to all members, including future ones. It self-organized on the spot. Responsibilities that could no longer be filled by some persons were adopted by others. The group continued to sing (thanks, **Alan AtKisson** and **Dave Berry**), to play games with systems messages (thanks, **Dennis Meadows**, **Pavla Polechova**, and **Gillian Martin-Mehers**) and to have a stellar set of plenary presentations on visions of a sustainable world, about which more below. One morning **Dave Berry**, with the help of **Joan Davis, Melita Rogelj, John Peet**, and **Jorje Zalles**, led us through a ceremony that took us back to our earliest ancestors and left many of us in tears.

We took a boat to Tihany for a wine festival, listened to the organ playing in the thousand-year-old church and bought wine, apricot brandy, baskets, paprika to take home to our families.

**Zoltan Lontay** was declared the Balaton Member of the Year, an award long overdue for his dedicated service to the Group's logistical needs in Hungary over many years, and for his efforts toward energy conservation in Hungary, which have been a popular and commercial (and nega-energetic) success.

We parted with a shared commitment not only to a sustainable world, but to the continuation of our mysteriously powerful fellowship. As with many visions, we can see only the first few steps ahead. The vision will only manifest if our commitment holds. Our comfort and certainty are gone. Which means it's time to resource the vision, to center ourselves on our deepest values and visions, to create, to participate, to take on responsibilities and to grow!

*Keep fresh before me the moments of my high resolve.*

*Despite the dullness and bareness of the days that pass, if I search with due diligence, I can always find a deposit left by some former radiance. But I had forgotten. At the time it was full-orbed, glorious, and resplendent. I was sure that I would never forget. In the moment of its fullness, I was sure that it would illume my path for all the rest of my journey. I had forgotten how easy it is to forget.*

*There was no intent to betray what seemed so sure at the time. My response was whole, clean, authentic. But little by little, there crept into my life the dust and grit of the journey.*

*Details, lower-level demands, all kinds of crosscurrents — nothing momentous, nothing overwhelming, nothing flagrant — just wear and tear. If there had been some direct challenge — a clear-cut issue — I would have fought it to the end, and beyond.*

*In the quietness of this place, surrounded by the all-pervading presence of God, my heart whispers: keep fresh before me the moments of my high resolve, that in fair weather or in foul, in good times or in tempests, in the days when the darkness and the foe are nameless or familiar, I may not forget that to which my life is committed.*

*Keep fresh before me the moments of my high resolve.*

— Howard Thurman, *Meditations of the Heart*

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**DAY ONE: Overview, Energy, Climate**

*I want a world that is building up, rather than breaking down.*

*A world run on solar energy and renewable resources, with clean rivers, pure air, lush forests, and teeming biodiversity.*

*Massive steps have been taken to stabilize climate turbulence, and we know where we are headed.*

*Though I have never seen one myself, I hope my children will see a quetzal or a sea turtle laying its eggs in the sand of a distant beach.*

*The world will be de-militarized and nuclear weapons will be eliminated. Funds will be freed up for food, health care, education, family planning, environmental protection, and social security for all.*

"This hand represents the world as it is now," said **Dana Meadows** (Sustainability Institute and Environmental Studies Program, Dartmouth College, USA), holding one hand down low, "and this hand (much higher) represents the world we truly want." Then she stretched a rubber band from the lower hand to the higher, to illustrate that when there's a long distance between present reality and ultimate vision, keeping in touch with both creates TENSION.

As she continued to stretch the rubber band, it became plain that this tension is hard to hold. One way to relieve it is to SNAP and let go of vision (so the rubber band just flops around in the lower hand). People who do this call themselves "realists." They could also be called pessimists or cynics. They spend their time reciting the faults of the present system and have no belief in, patience with, nor sense of direction toward, the ideal.

Or you can SNAP in the other direction, lose touch with present reality and flop around up high in the ideal. People who do this are ungrounded, flaky, escapists. They can tell you how things ought to be, but have no sense of how to get there from here, because they're not paying much attention to here.

Most of us don't relieve the tension between vision and reality by snapping; we just reduce it a bit by simultaneously lowering our expectations and shielding ourselves from the fullness of the present. If we don't let ourselves see the world quite as it really is, especially its pain and suffering, and if we don't expect it to actually become as good as we want it to be, then we bring the tension down to a level we can bear. It is, however, only enough tension to motivate half-hearted efforts. What it takes to summon the effort to move the world all the way from where it is now to where we would really like it to be is the ability to HOLD THE FULL TENSION.

Hence, said Dana, there is a need to see and document the troubles and dangers and stupidities and cru-

elties of the world (which social critics in general and environmentalists in particular are quite good at) AND to describe as clearly and often as possible the vision of what we want the world to be. A vision of a sustainable world is necessary, so we know not only what direction to move away from, but what direction to go toward.

The articulation of vision is a powerful act. Vision attracts and inspires people (at the same time it automatically calls forth criticism and cynicism). When vision is combined with a commitment to make that vision happen, especially if both vision and commitment are shared by many people, strong forces can be created and great things can happen — though the working out of the vision may be full of surprises.

As an example of how visions work out, take the original vision that started the Balaton Group. (At this point Dana pulled out overheads she had made in 1981.) The purpose statement then was:

- to preserve and enhance the natural resource systems of the planet,
- to enable people to solve their own problems in their own ways, appropriate to their own cultures and ecosystems,
- to create the conditions in which people can and will manage their resources to meet their needs sufficiently, reliably, equitably, and sustainably.

The intended results — a more specific idea of the path toward the vision — were to find or create a group of resource analysis centers in all parts of the world, each serving its own region with high quality data, methods, analysis, and communication, and to link them in a mutually supportive network. Each center would be in close touch with policymakers and with resource managers (meaning farmers, fishers, loggers, miners). It would be funded partly by consulting contracts and partly by endowment, so it could take on projects on behalf of people who couldn't pay. It would communicate skillfully, and it would constantly train new leaders. The network would pass around learning, tools, analyses, ideas, models, and funding. It would hold international meetings and communicate through international computer links (which, in 1981, was still only a vision).

That was the founding vision. The first meeting, held in the Hotel Petrol in Csopak on Lake Balaton in 1982, included 30 people from 9 countries. Now, after 18 years, it's time to evaluate how well the vision has been realized. Here is Dana's assessment:

- The network has grown and thrived.
- Its emphasis shifted early on from centers to people. That happened because, especially in the remaining Cold War years of the 1980s, several centers failed or lost their direction. We decided that our loyalty was with the people who carried the commitment to sustainability, not to the centers.
- The network chose to keep a low profile, to shine the spotlight on its members and their achievements, not on the network itself. (Not a part of the original vision.)
- It kept a low budget with no fixed assets and a very informal administration.
- Ideas and information generated by and passed around the Balaton Group are shared directly with hundreds of people and indirectly with millions around the world, through the teaching and consulting, writing and media appearances of many members.
- Balaton Group members, many of them young and comparatively unknown, have shown a tendency to rise to important places (and to fall from important places).
- Separately and together they have produced specific results, far beyond what was originally envisioned. They have written laws, trained students, killed dams and power plants, saved megawatts of energy. They have protected land, built "green" buildings, conserved water, empowered communities. They have turned out books, indicators, games, workshops, team-building exercises, seminars, songs — and even centers. In fact at the moment Balaton Group members seem to be in a very fruitful period for envisioning and founding new sustainability centers.
- The geographic representation has been uneven, with too few members from Africa and Latin America, and proportionately too many from the U.S. and some European countries.
- Attempts at forming regional networks produced interesting meetings with much learning, and good themes for later global meetings, but no ongoing regional networks.
- The Balaton Group became a powerful learning organization, building up and weaving together a wealth of shared intellectual capital, concepts that reach from science to spirit — probably the most comprehensive

and clear understanding of sustainability that exists anywhere on the planet.

- Completely unforeseen in the vision was the dense web of deep friendships and mutual service that evolved — the Balaton Magic — the love.

- Also unforeseen, and perhaps the Balaton Group's greatest achievement so far, was the evolution and demonstration of a new kind of organization, a "chaordic" one, a combination of chaos and order, one that is non-hierarchical, decentralized, self-organizing, efficient, inexpensive, informal, mutually supportive, dedicated to large shared values, and built on trust.

And, Dana pointed out, pulling the tension back into the rubber band, the world is still unsustainable, unjust, and violent. The vision is far from realized. It is time for the Balaton Group to re-vision, to re-vise itself and to re-commit to whatever is appropriate not for 1981, but for now.

She concluded with a few tentative lessons about the general process of visioning:

- Vision unfolds in surprising ways. The path is never clear, and sometimes it leads in totally unexpected directions — but in directions (if the tension is held and the vision is kept clear) that do serve the vision.

- Vision brings out the best in people. Serving a noble cause, one that comes from their hearts and souls, makes people nicer than they would otherwise be.

- Vision attracts people, motivates them, empowers them, strengthens them.

- It is hard to account for all the results of a visionary enterprise. They may be so dispersed, traveling along so many channels for so long that the original visionaries never actually see the results. (Gandhi was the inspiration for the nonviolent campaigns of Martin Luther King, but Gandhi never heard of Martin Luther King.)

- It is impossible to explain or predict exactly how visions work to produce results.

- Shared vision inspires self-organization.

- Vision gets you into all kinds of difficulties and messes — but then, if the vision is held, it shows you the way out again.

- Vision automatically stimulates criticism and doubt — the articulation of a vision produces almost automatic responses telling why that vision can never happen, or what obstacles are in the way.

- Manifesting a vision, making it happen, requires steady applications of money, work, courage, and love.

- The vision must be constantly revisited, restated, refined, re-sourced. Almost every day it must be re-invigorated, or it will die away.

- A vision goes nowhere without commitment. To say "I want peace in the world" without any commitment to that result, is to accomplish nothing. To say "I want peace in the world" with deep commitment to that result is to start miracles.

If we learn nothing else from this meeting, Dana said, I hope we learn to be comfortable in the space of vision, learn to use vision as a deliberate tool, and to encourage, rather than damp, the visions of others. Then she brought out the Vision Damping Penalty Pouch, a green bag into which meeting participants were invited to put a penalty (currency of any nation, amount dictated by the conscience of the offender) whenever, during the meeting, they found themselves questioning or doubting or dampening the vision of another. (Plenty of contributions were made. At the end of the meeting the accumulated funds were passed on to the resthouse staff — at least for a thank-you, perhaps to encourage their own visions at a difficult time for them.)

* * *

There is now a lack of grand ideas in the world, said **Marius de Geus** (University of Leiden, the Netherlands). A vision of an environmentally responsible society, a society in harmony with nature, is badly needed. But "utopian thinking" is widely discredited, especially in politics. In this era of pragmatism, post-modernism, and distrust of all ideologies, visioning is equated with daydreaming, romance, fantasy.

From Plato's *Republic* (around 400 BC.) throughout Western history there is a long line of thought experiments, in which someone invents a model society without the weaknesses of the current society. From Thomas More through Bacon, Thoreau, Bellamy, Morris, Kropotkin, Huxley, Skinner, Callenbach, Bookchin, these utopias usually take the form of a story, which includes a detailed description of a world with no problems, no short-

ages, no injustice. Each of them is a disguised critique of the society of the author.

Some utopias, such as Bacon's *New Atlantis* or Bellamy's *Looking Backward* depict utopias of affluence and technical progress, where people dominate the environment and nature is an instrument for human purposes. Others, such as Callenbach's *Ecotopia*, do not equate abundance with happiness. They show societies of conscious relinquishment, where needs are limited and contact with nature is important to human satisfaction.

Ecological utopias should neither be under- or over-estimated. They have their weaknesses, and their importance.

On the side of weaknesses, they generally describe a *static* society at peace, in equilibrium, with little change or movement — not realistic, not really desirable. They tend to be separated, *isolated* on an island or in a remote rural area, far from bad influences. It is as if the authors see them in a delicate, easily disturbed balance. These are *vulnerable* societies. They also tend to contain only a *limited variety* of lifestyles; there is only one right way to live, usually doing sober, conventional creative or productive activities. There is no silliness or spontaneity. These utopias also tend to *undervalue luxury* — they don't acknowledge that most people like ease and comfort and convenience.

There is also *too little discussion of implementation*. These utopias seem to have been created all at once with a complete blueprint, a grand intellectual, all-seeing design that makes everything work perfectly. A more modest model of social change might describe a transition, guided by a compass, not a blueprint, an instrument to show the general direction through passages of uncertainty and unforeseen events. A whole society is too complex to plan thoroughly. In any case, it can't be built anew from nothing. The current system can't be just stopped. We have to rebuild the ship while it is at sea (and in troubled waters), we can't put it in a drydock for overhauling. So the utopias are not much help in telling us how to proceed from where we are.

On the other hand, we need utopias. They can be guiding stars, inspiring more sustainable choices. They insert the long-term view into the public discourse. They force others, including critics, to think about where society is going and where it should go. They challenge the reader to reflect upon strategies and models and goals. They stimulate the imagination and invite participation — would I like to live in this world? what kind of world would I like to live in?. They can be entertaining, imaginative, pictorial, colorful, exciting, providing clear images of a possible future, giving a virtual experience of an imaginary world.

What they *should* be like is movies, not static pictures. We need ecological utopias that are more flexible, supple, and dynamic, showing a society not in equilibrium but in evolution, making profound adaptations, even making mistakes, and testing and correcting as it goes. We need a *learning* utopia, one that depicts not an ideal end-state, but an ideal process of experimentation and intelligent adaptation.

Ecological utopias are so obviously needed that the Dutch Commission for International Cooperation and Sustainable Development is sponsoring debates and meetings about "ecological dream societies and imaginative visions." The Commission feels that without a broader, more comprehensive view of a future desirable society, there will be no compass to steer in a sustainable direction.

Marius ended by pleading for "a more modest model of utopia, not to use as the perfect building plan, but as a politico-navigational compass. Ecological utopias can serve as a distant point of orientation and influence the course of concrete decision-making, repeatedly inspiring people to make more environmentally friendly choices. Long live the critical, imaginative, and inspiring ecotopias!"

* * *

**Niels Meyer** (Department of Buildings and Energy, Technical University of Denmark) started with a "personal vision story" of what has inspired his work over the past many years. He was for 20 years a solid-state physicist, then in 1972 attended a workshop on *Limits to Growth*. In 1973 he sponsored such a workshop in Denmark (at which **Joan Davis**, among others, connected with the systems-sustainability network), and in 1974 he spent a sabbatical at Dartmouth, after which he founded a group on System Dynamics and Energy Modeling. He has been teaching, infiltrating government agencies, and shooting down megalomaniacal energy and economic schemes ever since, and he has written his own popular vision for a sustainable, humane society, called *Revolt from the Center*.

Niels's personal strategy in working out his vision has been to combine establishment work with NGO work. He has been president of the Danish Academy of Technical Sciences, has promoted the Danish windpower program, has chaired the Danish Committee on Renewable Energy Sources, was on the U.N. Committee on Renewables, and many other official boards. At the same time he has been active in the very non-establishment peace movement, the anti-nuclear-power movement, and in opposition to the terms by which the EU economy and the liberalized electricity markets have been formed.

Niels's presentation on long-term global energy scenarios with zero greenhouse gas emissions was derived from a new analysis for the Danish Energy Agency by Bent Sørensen of Roskilde University. This is a very detailed GIS study that works to make a spatial match between energy supply and demand (and that allows the quantification of an interesting indicator — energy flow per unit of land area.). Its time horizon is 50 years; its space horizon is the whole world, divided into six regions. Sørensen puts forth one demand scenario and four supply scenarios.

The demand scenario assumes a population by 2050 of 9.4 billion, 74% of which lives in urban areas. The scenario sets targets for adequate food, water, security and health care for all people, and from those targets and the appropriate population estimates, it calculates energy demand for seven different economic sectors. It assumes that by 2050 the average equipment used will have energy efficiency equal to the best on the market today — roughly a factor four improvement. Assumed per capita end-use demand in 2050 for the northern industrial countries is 1272 W/person; for Latin America 800 (because of less space heating), for China and India 814 (because of more space cooling). Sørensen does not manage to produce scenarios that actually provide all energy needs by 2050 — Africa, in particular, lags behind with only 290 W/person (which is still more than a doubling over today's value — and it assumes a tripling of Africa's population).

The supply scenarios, all of which could theoretically satisfy this demand scenario are:

- Clean Fossil. This assumes absorption of carbon dioxide from flue gases and sequestration in the deep ocean, plus the transformation of fossil fuels to hydrogen. Sørensen concludes that this scenario bears many technical uncertainties, would have high costs, and is still over the longer term unsustainable because of fuel depletion. The use of fossil fuels is only a short parenthesis in the history of humankind — no point in prolonging it; let's move on.

- Safe Nuclear. At present nuclear power provides 18% of global electricity. This scenario assumes that future reactors are no bigger than 100 MW, to make them easier to contain, and that accelerators transform plutonium waste to less dangerous and less long-lived products. Necessary waste storage time is reduced from 10,000 to 500 years, but that's still too long. This option would be very expensive, because design would have to "go back to square one." However thorium and uranium resources could sustain this scenario for 1000 years.

- Renewables. There are two scenarios here, one centralized (in large solar and wind energy parks), the other decentralized (on roofs and farms everywhere.) The main sources are solar thermal and electric, wind, biomass (from both agricultural waste and energy crops, whose competition for land with food crops is taken into account), and small hydro. Geothermal is not taken into account. The centralized model uses GIS information to locate huge PV farms (with an assumed 15% efficiency) in desert areas. Half of the solar electricity is converted to hydrogen for storage and transport. Windpower is assumed to be locatable offshore to a depth of 20 m. The decentralized scenario assumes that 1% of urban areas, 0.01% of cropland, 1% of rangeland and 5% of desert and wastelands are used for collecting solar energy.

- The decentralized scenario is just barely possible, but vulnerable. Even a small change in assumptions renders it insufficient to supply the assumed demand. Combining it with some centralized facilities makes it more resilient. Given the geographic distribution of supply and demand, global energy and food trade will be necessary. The development of fuel cells running on hydrogen is important to this scenario.

So, Niels said, there is a "hard vision," based on considerable data and technical analysis. It could be possible in fifty years' time to greatly improve energy sufficiency, with a larger population, and with renewables alone. Now how to get there from here?

The main barriers are the WTO, OECD, EU, USA, and Japan. They all have the wrong priorities and vision. They are dominated by large corporations, they promote heedless consumerism, they believe in the ideology of the free market, and they care little for the environment or for equity. The only counterforces are the NGOs (and I'm not so sure about them, said Niels, they can't become too acceptable and lose their edge) and the consumer organizations — which are demonstrating their power in opposing genetically modified foods at the moment. Another counterforce could be national demonstrations of alternative visions. This can probably only be done by small countries, such as the Nordic countries, Holland, New Zealand, Hungary, Costa Rica, or parts of countries such as Vermont, Goa, Kerala. A precondition for these places to realize a renewable energy vision will have to be looser ties to the WTO, EU, OECD, and other "free trade" networks.

So to end on a visionary note, Niels proposed the formation of a new organization within the United Nations — AHSN — the Alliance of Humane and Sustainable Nations. Nations joining this alliance would pledge:

- to devote at least 2% of their GNP for international aid to the poor,
- to keep military expenses minimal, for defense purposes only,
- to promote high equity within their borders and no forced unemployment,
- to develop sustainable agriculture and energy systems.

**Dennis Meadows** pointed out in reaction to Sørensen's scenarios that the latest projections from the World3 model show a population peak at 8 billion, not over 9 billion, and only one more doubling of industrial output. Under these conditions the decentralized option would become more possible.

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**Christopher Flavin** (Worldwatch Institute, USA) started his energy vision with assumptions similar to Sørensen's: that the population will be 8-10 billion, that there will be a 4-6-fold increase in final energy *services*, that those energy services will be delivered at least 4 times more efficiently, and that carbon dioxide emissions must be reduced by at least 80% to stabilize the global climate. Working backward from these specifications, he comes out with a vision of a practical, achievable, sustainable energy system that would be as different from ours today as ours today is from the energy system of the 1890s, before there was any concept of the automobile taking over the world.

The energy mix and technology of this energy vision are not, says Chris, the interesting part. The interesting part would be how it would feel to *live* in it. That can't be spelled out in detail — no vision can be spelled out in detail — but basic outlines can be seen.

Chris envisions a hydrogen-electric economy. Given the age of information, services, and electronics, factories that are computer controlled, where power can't be allowed to shut down even for a minute, an age where cleanliness, efficiency and reliability are demanded, very resilient electric systems will take on a growing share of the energy burden. Hydrogen will replace both petroleum and natural gas. Hydrogen is the most abundant substance in the universe; there is an enormous quantity available from $H_2O$ and it produces $H_20$ again when burned — so the system can be cyclical and emissions-free.

Hydrogen is already used extensively — Germany even has a hydrogen pipeline to serve industry — so there is plenty of expertise in storing, moving, and handling it. Safety is probably less an issue than with gasoline, even in hydrogen-powered cars or planes.

The problem is the *cost* of producing hydrogen from water and the *cost* of the fuel cell that will burn it. Hydrogen is made from water with electrolysis, which requires a renewable electricity source — probably photovoltaic or wind — that is cheap and efficient. Fuel cells are already widely and reliably used in space, but they are still made, as Amory Lovins says, by hand by PhDs, so they are very expensive. They chemically recombine hydrogen with oxygen (air), generating in the process water, electrons, and heat. Present fuel cells can operate at an efficiency of 60-70% and can be made at any scale, from palm-top to megawatts. If both the heat and electricity they produce can be put to use, the energy efficiency can rise to 80-90%.

The fuel cell will be the silicon chip of the hydrogen era, the hot new industry at the heart of many essential products. It will replace both the internal combustion engine in cars and the steam-cycle electric generator in power plants. The car market is currently driving the technology — fuel cell driven cars will probably appear in 2003 or 2004. The household market will start at about the same time. The trick will be to engineer fuel cell systems so they can match electricity and heat loads. For example, heat pumps might be used in the waste heat stream, or waste heat might be used for cooling. Eventually, a household will be able to purchase a mass-produced (and hence inexpensive) system that automatically provides electricity, cooling, hot water, and space heat.

There is no limit to the decentralization of this technology. The entire energy system could be driven by scattered fuel cells in cars and houses, with no baseload power plants at all. Such a system could be much more flexible and resilient — it is unlikely, for example, that a storm or earthquake would knock out power to a whole neighborhood or region.

In the interim, natural gas, $CH_4$ could be the source of hydrogen, which would still give off $CO_2$, but 70% less than the full fossil-fuel economy. Eventually all hydrogen could be made from PV, hydro, and wind. Suburbs and rural areas could get all the energy they need from their own roofs. Cities, with their high energy-use densities, would have to import hydrogen from solar or wind farms. But there would be no need for intercontinental energy grids. Energy might travel an average of 500 km, instead of the 5000 km it travels today.

In this vision would there still be an electricity grid? asked **Dana Meadows**.

Chris answered that in countries where the grid is already built, the marginal cost of operating and maintaining it is very low. So there would be a high incentive, and maybe some good stability reasons, for keeping it. Where there is not already a grid, it will be much cheaper to move hydrogen than to build a grid.

What about poor parts of the world? asked **Jorje Zalles**. Are they about to be flooded with discarded and inefficient energy technologies, while the rich countries hook up to hydrogen?

The companies that are aggressively competing to capture the hydrogen and fuel cells markets understand that the biggest market for them is in the developing countries, Chris said. The choice is up to those countries. If they put emissions controls in place, old technologies will be unaffordable and new ones will come in fast. But if they look only at short-term costs instead of life-cycle costs, they'll end up paying more and getting the old technologies.

How will this energy system fit into the global trade system? asked **Jørgen Nørgard?**

It could fit into any kind of trade system, said Chris. It can be done on many scales.

**Aromar Revi** asked about regulation and market control.

It will still be needed, Chris said. Supply lines will still be a natural monopoly. Our old regulatory system gave us big centralized plants and nukes. Deregulation is breaking that up. Now a new regulatory system is needed to take away perverse subsidies and encourage sustainable, clean energy. We don't need a totally free market, we need a sensible, controlled market.

**Niels Meyer** said it would be dangerous *not* to develop this system through national planning. The market, with its time horizon of maybe 5 years, could make serious mistakes.

Denmark with 5 million people could do that kind of planning, Chris answered. But the U.S. experience with national energy planning has been disastrous. I prefer a model like the internet, an unplanned system with extreme competition and lots of innovation. When told that that attitude was "very American," Chris replied, "I have no faith that any large government in the world can manage this energy transition."

This technology has two attributes that could punish the poor, **Dennis Meadows** pointed out. First it has a low fixed cost and high marginal cost instead of the reverse. So a rich guy in Mexico City could install it without helping to create hookups for the poor. And second there doesn't seem any possibility of an OPEC controlled by poor-country suppliers.

An energy system can't solve all social problems, Chris replied. The current energy system is also not particularly helpful to the poor. Most developing countries don't have indigenous fossil fuel reserves. Most import both equipment and fuels. The hydrogen technology is coming out of rich countries, and the intellectual property rights will be owned by the rich. But it could be mass-produced anywhere. And most tropical countries are rich in wind, sun, and hydro resources for making hydrogen.

**DAY TWO: Water, Forests, Food**

*People are re-becoming natives of their place.*

*I want clean air and water, a very healthy environment. We need to have more open space. The world that is developing is the opposite of what I want.*

*Every scrap of urban land is permacultured into something green and useful: garden, fish pond, bird sanctuary, water filtration, edible landscape.*

*The world will be green, with thick forests and teeming wildlife.*

*A world without hunger, where everyone has equal and unrestricted opportunity to grow and prosper. Population stabilization within the carrying capacity and efficient recycling of natural resources to meet all legitimate human needs.*

**Joe Alcamo** (Environmental Systems Analysis, University of Kassel, Germany) reported to us from the World Commission on Water for the 21st Century, which asked for a vision of world water sufficiency to be presented at the World Water Forum, to be held in Holland next year. A scenario panel was constituted through the Stockholm Environment Institute; Joe is a member of the panel. He is using his WaterGAP model to work out a desirable water future.

The WaterGAP model keeps track of 1100 watersheds on a grid-cell basis. It takes in exogenous assumptions about future population, income, and climate in order to calculate both water use and water availability. It signals water stress when country-level water withdrawals exceed 40 percent of water availability.

The time horizon for the scenarios is 2025, and it is assumed that there will be no major change in climate (an assumption that obviously could be tested with further model runs). It is assumed that water use increases with income, as people acquire washing machines, etc., but also that the water intensity of the economy improves with time, as more efficient machines are developed.

In the BAU (business as usual) run both withdrawals and water stress increase. More efficient technologies are overwhelmed by population and income growth. The main factor contributing to water stress is not domestic use, but irrigation.

So a 40-40 target run was worked out — one that requires that no country exceeds the 40% withdrawal target and that guarantees every person in the world at least 40 liters per day of clean water. The assumptions necessary to produce this result were:

- water subsidies are removed and replaced by water pricing,
- water efficiency technologies are rapidly transferred to all parts of the world,
- all stakeholders participate in water management decisions,
- there is a shift away from consumerism,
- appliances become much more efficient,
- leaks are reduced,
- industrial water is highly recycled,
- there is a shift to renewable energy sources (which implies much less water lost in cooling towers for steam-cycle electricity),
- there is a rapid shift to more efficient irrigation techniques,
- meat consumption goes down,
- irrigation is shifted to areas with water excess.

As a consequence the 40-liter sufficiency target can be met in all countries. There would still be a few stressed watersheds, however. And water, agriculture, and energy systems would have to look quite different from today's.

How would the transition to less meat-eating be made? **Joan Davis** asked.

Actually there is a fight within the water community about that, Joe acknowledged. The agricultural folks are calling for more meat production and much more irrigation. But very few watersheds can support that.

What about climate change?

The climate models are indicating that about 60% of the world's land area could have increases in precipitation, so that could help the water situation, said Joe. Unfortunately, the places where we can expect a precipitation decrease are already some of the driest places.

* * *

What is going wrong with our forests? asked **Gerardo Budowksi** (U.N. University for Peace, Costa Rica), and he provided a long list:

- An alarming loss of biodiversity, not only because of the absolute loss of forest, but because of its fragmentation and the high-grading of the best timber, leaving the rest behind.

- Population growth and higher material expectations leading to more consumption of forest products,

- Government policies aimed at short-term income at the cost of sustainability and equity.

- Climate change, shifting life zones, especially in temperate zones with flat topography, where an increase of one degree in temperature may require a tree migration of several hundred miles — farther than a tree can send its seeds.

- Destructive fires, likely to be repeated.

- Two billion people dependent on firewood.

- Acid rain and other pollution.

- The loss of indigenous knowledge about how to live in the forest sustainably.

- The gap between the law and its actual implementation.

- The retention of wasteful traditional practices after the forests are no longer plentiful.

On the other hand, there are many encouraging developments:

- Much more money for conservation and for encouraging better forest management. (The United Nations system is spending 500 times more for these purposes than it did in 1970. The Global Environmental Fund is spending $1 billion a year, the World Wildlife Fund $300 million, IUCN $10 million.

- Recognition of the value of non-timber forest products (mushrooms, fruits, nuts, rattan) and the spread of ideas such as social forestry and extractive reserves.

- Successful protected areas, including private reserves.

- Successful reforestation, even of large-scale denuded areas, sometimes in the form of high-productivity forest plantations, which can also supply enough timber to take pressure away from the natural forest — but plantations must be done carefully, NOT at the expense of the natural forest.

- Recognition of the value of secondary forest. (Costa Rica used to speak of being only 28% forested, but that counted only primary forest. Now, considering secondary forest growing back, we know the actual cover is 40% forest.)

- A dramatic increase in forestry education and subsidies for local communities.

- Recognition of the value of carbon sequestration, and the possibility of actual payments for this.

- More training and research focused on the value of the standing forest (for flood and drought protection, species habitat, etc.).

- Incentives for forest protection and for reforestation. (There have been some abuses of these programs. We are learning.)

- Sustainable forestry becoming defined and certified through the Forest Stewardship Council and other bodies.

There remaining some ongoing controversial issues. Is paying for carbon sequestration in another country (so you can go on consuming fossil fuels) really ethical? Can or should large plantations contain just a single tree species? Should any more cutting at all be permitted in old-growth forests? (Says Gerardo, a tropical forest is like an elephant or a lion, worth much more alive than dead.) Can laws and government bring about the necessary changes? (The record is very mixed. Governments can be very corrupt.)

Gerardo's vision:

- There is a poster hanging on the wall of every forestry company and every forest ministry listing the 10 basic principles of responsible forest management.

- There is widespread awareness of the shrinking forests and growing understanding that unsustainable practices can't continue.

- Better plantation management increases production per hectare and reduces pressure on natural forests.

- Harvest techniques become much more efficient.

- Tropical countries (which can grow wood at the rate of 100 cubic meters per hectare per year, compared to temperate rates of 2-5 cubic meters per year) become the world's forest product suppliers.

- Decision makers will see more clearly the connection between forests and other kinds of welfare.

And all this will lead to:

| Instead of: | Balaton Group proposes |
|---|---|
| 1. Short term thinking | Planning for future generations |
| 2. Accepting exponential growth | Promoting a dynamic equilibrium |
| 3. Indifference and fatalism: there is nothing we can - or should - do | Concern, commitment, personal involvement, team working in solving problems |
| 4. Reacting to catastrophes | Pro-acting, modeling to better understand, defusing, building resilience |
| 5. Accepting or condoning uniformity trends (biological and cultural) | Promoting and conserving biologic and cultural diversity |
| 6. Emphasis on quantity | Quality is fundamental |
| 7. Business as usual or projecting the past indefinitely into the future | Innovation, promoting desirable changes watching exponential phenomena |
| 8. Self promotion | Sharing and improving other people's lives |
| 9. Only one way of dealing with problems attitude | Exploring different scenarios; keeping options open |
| 10. Allowing overshoot and collapse (also: allowing the crossing of critical thresholds) | Promoting a sustainable flow of goods and services; avoiding collapse |

**Lucia Liu Severinghaus** asked whether the harvest of non-timber products is sustainable. Gerardo answered that hundreds of products, foods, medicines, dyes, perfumes can be harvested from a forest, but usually only the local population knows how to do it sustainably.

**David Berry** asked why plantations can't contain many trees species. Usually one or two species outcompete the others, said Gerardo. "I have tried." But if a single species, even an exotic one, is planted not too thickly, birds and bats will bring in seeds of native species and a semi-natural forest can grow. It's hard to plant a tree polyculture, but possible to create the conditions that will produce one naturally. The tropical forest is not programmed to produce wood; it's programmed to produce biodiversity.

I worry about the demand side, said **Chris Flavin**. One of the largest disparities in per capita consumption is in the use of wood products. The developing countries use only 5% as much per person as the industrialized countries. Does this mean that the pressure on the world's forests could go up by a factor of 20?

If so, said Gerardo, it will have to be met by plantations. I didn't use to believe this, but now I think there is a tremendous future in plantations. Teak, for example, is being planted all over now. What we mainly have to do is try to keep all options open.

* * *

**Henk Moll** (Center for Environment and Energy, University of Groningen, the Netherlands) started with the sources of his personal vision: *Silent Spring* in high school bringing the concept of ecology, *Limits to Growth* and the philosophy of science and systems theory in college. High energy physics combined with a personal lifestyle of vegetarianism, no drivers license, and an assignment on energy conservation for the city of Groningen, which put an end to the high energy physics and led to a career in education instead. At the University some experience in building wind turbines and opposing nuclear power plants. Finally at Groningen and working with Wouter Biesiot on energy input-output data to understand the direct and indirect effects of household consumption patterns.

These studies show that as total household expenditures rise, total energy consumption can rise by a factor of four — but at each expenditure level there is a variation of plus or minus 25% — so there is a strong element of individual choice. Also as household expenditure goes up, the direct energy intensity (MJ/guilder) goes down, while indirect stays constant.

Food consumption varies greatly in energy intensity, rising from a low for vegetables and fruit in season, to higher intensity for dairy and meat products, and highest of all for greenhouse-grown produce, preserved food, and food in restaurants (which is 10 times more energy intensive than food prepared at home). People are unaware of these differences, or even of where their food comes from. They will happily eat fresh vegetables from nearby, or greenhouse tomatoes, or green beans imported from Egypt.

Henk envisions a food system with a neighborhood food center offering a local green menu, serving highly aware green consumers who appreciate local food and seasonal variety. (No globalization.) This system would increase the hedonic value, the pleasure of good food. Fresh, local organic food would not be the highest priced; perverse subsidies (on greenhouses, on air freight) would be removed. Consumers would be educated about nutrition and about the environmental impacts of the food they eat. And there would be many restaurants serving sustainable options for "food-loose" households (that don't eat at home.)

**Aromar Revi** said we have to remember that food = nutrition = well-being. The modern world breaks all these linkages; they have to be restored. That requires more than just focusing on technicalities.

**Laszlo Pinter** — Food provides the most intimate connection between the individual and the planet. The more people live in cities, the more that connection is broken.

**Lucia Liu Severinghaus** — That's why I like Henk's vision. He's focusing on consumer and food habits and ways to connect city people back to the earth.

**DAY THREE: Transport, Economics, Trade**

*We will have smaller homes, more beautiful communities, ample public parks and bike paths, locally grown food (for the most part), more trains, more products that are designed for permanence, smaller shops, no billboards, and bike racks on buses and trains.*

*People drive little golf-car-like vehicles with extremely efficient methane or veggie-oil engines that run on little winding tracks — there's moss between the tracks.*

*Nine-to-five till 65 no longer exists. People have plenty of time for celebration.*

*Wealth benefits all stakeholders, not just stockholders.*

*There is no such thing as the standard of living in one community being maintained at the expense of the quality of life in another community.*

*Tools, furniture and structures are built to last between 100 and 2000 years.*

*Economics is a thing of the past and money has been outmoded. People help each other without feeling that they need something in return.*

*We want a world that honors and appreciates the international flow of goods while also upholding local economies and cultures.*

**Hermann Knoflacher** (University of Vienna) started with some new graphs (in English even!) from an MIT paper called "The Future Mobility of the World Population." One of them shows conclusively that average daily travel time is constant over a wide range of GDP/capita. The average person spends 1.1 hour per day traveling. The mean single trip time is 7-8 minutes. Half of all travel time is spent in trips under 20 minutes. The percent of income paid for transportation is also essentially constant over all incomes. As per capita traffic volume increases, the share of all traffic in high-speed modes (car, train, plane) rises greatly, the share in low-speed modes (walking, bicycle) goes way down.

The MIT study uses information like this to make a projection of travel in the year 2050. It assumes that the average world citizen then will travel as much as the average industrial world citizen does now. This, said Hermann, is the unfortunate vision in the brains of all the people.

Travel behavior is derived from personal behavior, which is, we all know, derived from system structure. Present transport system structures are artificial, the result of crazy assumptions by scientists and engineers. They are justified by the goal of saving time, but the data show clearly that no time is saved. The whole structure is based upon nonsense.

"An unplanned characteristic of a car is that it removes all traces of altruism from its driver." That is because, says Hermann, the car takes us back in body position and ancient memory to being four-legged beasts. Worse than that, it fools our ancient memory, because it takes us half as much energy as walking to sit in a car, but we go 20 times faster. Our perceived reality, learned in our muscles over hundreds of thousands of years of evolution, has nothing to do with our actual reality. We have no accurate sense of how much space we take up, what we spew out our back ends, or how we endanger ourselves and each other. We are acting and choosing on the basis of perceptions that hide reality. In a formal systems sense, therefore, we are addicted.

In the car culture only 2% of outdoor activity takes place in the immediate neighborhood, 98% takes place a driving distance away. In a walking culture 90% of activity takes place in the neighborhood. To use **Manfred Max-Neef's** description of human needs, in the car culture we identify ourselves as *being* a driver, *having* a car, *doing* driving, and *interacting* with the machine and the road — not with the neighborhood or the people.

How can we get ourselves out of this system? An interesting design feature of old cities, formed during the time of walking, is that an interesting or useful place occurs roughly every 220 meters. That is about at the limit of the human tolerance for walking. Here is a simple leverage point — and a big chance for the developing countries to get something right that the industrial countries have gotten wrong. *Make people keep their cars at least 220 meters from their houses*. And make the entrance to a public transport system closer than that.

Do that, and an efficient, less car-intensive transportation system will come to pass.

Wouldn't it create a huge counter-reaction? asked **Wim Hafkamp**. A Dutch proposal for a toll system on roads caused outrage. People expect free parking and free roads everywhere.

Of course, said Hermann. All laws of humane treatment of animals says you are not allowed to torture them. If you trap people in a car culture and then tax them for it, this is torture. They will resist as any addict will resist the removal of the addictive substance. Nevertheless, it can be done. Vienna, after 15 years of arguing and resistance, has finally put a big tax on public park-

ing places — much higher for malls — and the money is used for public transport to make stores in the city center (a pedestrian zone) more accessible.

We have to get it into everyone's heads that a car culture is an absolutely unhygienic culture, one that spits out pollution and eats up land. It is like spitting on the floor, something society should not allow for good public health reasons. We want to build a society, not a hunting camp.

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My vision, said **Dana Meadows** (Sustainability Institute) is that some day all the forest products companies — Mitsubishi and International Paper, MacMillan-Bloedel and Weyerhaeuser — and all the forest activists — Rainforest Action Network and Greenpeace and Earth First! — and the indigenous people who live in forests and the loggers and the paper mill workers who work there will all come TOGETHER to the WTO and the IMF and to their various national governments and say TOGETHER, "Here! These are the laws and regulations and trade rules that will turn the forest industry into one that will provide renewable resources in a sustainable way, that will amply reward all who work in the industry, and that will preserve forest-based ecosystems. You enact and enforce these laws right now!"

The WTO and the governments would have no choice but to do it.

Then I picture all the participants in other commodity chains — coffee and bananas and sugar and wheat and beef and metal mining and fisheries — all products that are taken from the earth and that, therefore, are the prime points of impact of the human economy on the earth — will come together in the same way, and demand that their commodity systems be restructured to be sustainable and equitable.

The only way I know to make that vision happen is to build a common understanding among all the stakeholders in a commodity system of the way their entire system works, and of the leverage points that will make it work better. That is the project the Sustainability Institute is just beginning. We have started with three commodities: corn, forest products, and shrimp (they were first three to get funding). They show the typical behaviors of all commodity systems:

1. Growth in production to the point of unsustainable use of the resource base. (Caused by the positive feedback loops of capital and population growth, often combined with the tragedy of the commons.)

2. Declining price, even in the face of increasing scarcity of the resource. (Because of competition around the goal of low price, very long feedback loops from the source in the earth down the chain to the consumer, and a systemic tendency for governments to step in and subsidize failing commodity economies, thereby hiding still longer the signals of scarcity.)

3. Unstable price around the downward trend, regular cycles and irregular spikes or plunges in prices. (From a "beer game" sort of structure, where a small variation at one end of a long supply chain propagates down the chain, amplifying itself as it goes. Typically producers at the point of extraction are swung around harder than consumers at the other end, because the whole chain works to keep prices steady and low for consumers.

4. Systematic impoverishment of producers at the beginning of the chain. (Farmers, miners, loggers, and fishers are usually right at the point of bankruptcy everywhere in the world — often it's only government subsidies that keep them in business — and at the same time processors, shippers, and retailers farther along the supply chain are making money. Commodity systems manage to pass both risks and costs down to the producer end of the chain through a variety of "success to the successful" and other perverse system structures.)

The first task of the Institute is to model the three commodity systems to understand what are the systems structures that create these behaviors and — more important — the leverage points by which the behaviors could be altered to make the commodity chains more sustainable, stable, and equitable to the extracting communities at the commodities' sources. The second task is to do that not in isolation, but with the help of advisory boards of participants in the actual commodity systems — farmers, paper mill executives, foresters, shrimp fishers and farmers (because aquacultured shrimp is rapidly increasing to replace falling wild catches) and so forth. The modelers need the help of the people who know the system, in order to get the models right. At the same time the people in the system learn along with the modelers how the system is structured, why it works the way it does, and how various system changes might change (or not) the system's behavior).

Doing the modeling with the people in the system is turning out to be an adventure, said Dana. In some cases they won't all agree to meet together (shrimp retailers with environmentalists, for example). Sometimes it's easy to talk to one end of the chain (corn farmers) but not the middle or the end (the huge company Cargill, which stores

and ships grain, and Archer Daniels Midland, which processes corn into corn starch, corn syrup, ethanol, and other products). And sometimes (with the forest products industry in New England, we have interested, enthusiastic participants from the whole system.

This is still very much work in progress.

I'm not sure I share your initial vision, said **Chris Flavin**, while putting a contribution into the Vision Dampening Penalty Bag. It seems to me the problem is commodification itself, the very idea of shipping products around the globe, mixing them together, removing all sense of where they come from and how they were produced, and therefore all feedback about ecological or social impacts. Rather than reform commodity systems so they work better, wouldn't it be better not to HAVE commodity systems?

Our team, and many of the stakeholders in the systems, talk about that option all the time, said Dana. We instinctively prefer that kind of solution too — production directly for local consumption, direct information flows between producers and consumers, no middlemen creaming off profit. But we're also confronted by the fact that the people of New England could never use all the forest products that can be produced in New England, and the people of the Midwest could never eat all the food that can be grown there. Commodity-producing regions are typically sparsely populated and typically able to produce a LOT of particular commodities. There will probably always have to be commodity trading systems, ideally fewer than now, with shorter supply chains than now. But I don't think we have the option of un-commodifying everything.

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**Hilary French** (Worldwatch Institute) started her personal story with a class at Dartmouth in the mid-1980s at which she read *State of the World '85*. That led her to work for Worldwatch, producing *State of the World* reports herself.

"Globalization" means different things to different people. To Hilary it means:

- Increasing product flows, trade rising rapidly (though still less than 16% of gross world product),
- Private capital flows to developing countries now overwhelming aid flows (though private flows declined sharply over the last few years of Asian economic turndown — about half of capital flows are portfolio investments, which tend to flow in fast and flow out fast),
- Information flows — email, internet, the web,
- Ecological flows, from greenhouse gases to bio-invasions by displaced species.

All these flows are going up, and in the process creating all kinds of problems. The global economic crisis of the past few years can actually be seen as a moment of opportunity. It made clear the lack of adequate regulation and started up calls for a completely new international regulatory system.

How should the evolving global economy be structured? Please be aware, said Hilary, that my vision here will concentrate on the global level, knowing how important the local level is. Vibrant, sustainable local economies are absolutely necessary. But globalization is also already here, happening, unlikely to be reversed or stopped entirely. We need to get it structured right.

The challenges of the new structure are:

- It will have to stop putting pressure on ecosystems,
- It can't allow environmental degradation to be systematically transferred to the most vulnerable countries with the lowest regulatory environment,
- If one country tries to internalize environmental costs, that can't be a signal for its companies to raise the specter of competitiveness and therefore to oppose the internalization.
- The WTO, one of the first institutions of a new world government, is based on an extremely narrow set of values (growth over all). I have no problem with the idea of world government, said Hilary, but this is like the whole United States being run by the Commerce Department. The WTO is out of control in a way unforeseen by most people (not unforeseen by environmentalists).

There are also opportunities that come with the globalizing trend:

- It can help disseminate cleaner technologies. China is now the number one maker of compact fluorescent bulbs. India is becoming a leader in wind power.
- It spreads useful information, from better monitoring and modeling (for example with regard to ozone depletion and greenhouse gas accumulation), to strengthening international networks of NGOs (such as Balaton).

So what's the vision?

We need a wholesale rethinking of international institutions and governance. There is a role for some sort of trade organization, one that enforces the original idea of non-discrimination, but not one that tries to enforce uniform national policies, reaching within borders to standardize laws. WTO rules must be revised to incorporate the precautionary principle (instead of the opposite), greater transparency and openness. This November the next WTO negotiations will take place in Seattle, and the NGOs are mobilizing to protest its current practices.

The World Bank and IMF traditionally funded projects, but now their more important role, given the growth in private flows, is in influencing government policies. They could become more influential in instituting green accounting and in pushing for green subsidies and brown taxes.

The private sector should start seeing poor environmental stewardship as a financial risk. Environmental disclosure should be as important as financial disclosure.

Environmental governance has to be strengthened to balance economic governance. International environmental treaties are rising in number exponentially, but most have no teeth. They need enforcement mechanisms and funding (which could come from a Tobin tax on currency exchange transactions, or from a global carbon tax, or a tax on international air travel). UNEP could be turned into a world environmental regulatory organization.

There is also an exponential rise in NGOs, some of which, like the Forest Stewardship Council and the Marine Stewardship Council, are setting up new rules for economic exchange. Governance is not just for governments to do.

In short, the global economy is now outpacing the development of the global *society*. The work that needs to be done is in developing the society. The environment needs to be a key component of this society's values and concern. The Balaton Group is an important part of this process — ahead of its time — but hopefully not by much.

China's compact fluorescents and India windmills could have been done as bilateral projects, said **Jørgen Nørgard**. We don't need a WTO for this.

Has a Tobin tax ever actually been applied? asked **Samantha Graham**. Not internationally, Hilary replied, but if there were just a 0.05% tax on currency transactions, that would slow down speculation and currency instabilities, and it would raise $150 billion annually to fund good international governance.

We keep separating in our discussion economic and environmental governance, said **Michael Ochieng Odhiambo**. They have to be brought together. Otherwise you have the Commerce Department view of the world dominating everything.

The WTO director three years from now will be the current Thai deputy prime minister, said **Chirapol Sintunawa**. Is there anything I can do? Any gentle educational package I can pass on?

Meanwhile the immediate incoming head is a New Zealander, said **John Peet**, and he happens to be immune to new information. If he can't destroy the WTO, nobody can. Why do we allow the abstract construct of trade to supersede all *real* system needs, anyway?

**Garry Peterson** pointed out that because of trade and traffic, the mobility of species over pre-industrial levels has been increased by a factor of $10^4$-$10^6$. That issue is hardly even addressed in ecology, much less in trade agreements. It's not possible for people to "manage" a resource on a global level, and especially not to design in or to preserve resilience. The holistic approach isn't a better commodity system or a world environmental regime, it's decommodification (like in the wine industry), diversity of source and label, local differentiation.

**DAY FOUR: Education, Mindsets, Culture**

*In 50 years we will have regular rituals to give thanks, to show love, to lift up local heroes, to hear the stories of elders about the ways of the past and the stories of our children about their dreams of the future. More of us will remember the words to many songs and the steps to local dances. We will be less fearful of death.*

*I would like a lively intellectual life, creativeness and widespread participation in the arts. Our lives now are filled by too much ugliness, dirt, and vulgarity.*

*A large number of people have been trained in the skills of empathy, so we can neutralize the cycles of violence ravaging human communities.*

*Every human being takes an hour a day in solitude: reading, meditating, praying, daydreaming, napping, whatever it takes to replenish the soul. Dreams and visions that arise during this period are especially valued.*

*An interesting, creative world where people work, dream, and spend their leisure time writing, studying, communicating, reading, star-gazing, making music or films.*

**Chirapol Sintunawa** (Faculty for Resources and Environmental, Mahidol University, Thailand) first participated in a Balaton meeting in 1983 (the second meeting). In 1984 he made a presentation about protecting a national park by helping the poor villagers around the park to have better lives without poaching the wildlife. One project he was starting was to protect the farmers from liver fluke infections by helping them to build sanitary toilets. A collection was taken up by the group to help Chirapol buy the metal molds from which the villagers could cast concrete toilet. In 1984 and 1985 184 Balaton toilets were built in Thailand. **Joe Alcamo's** wedding then provided 22 more.

In 1986 Chirapol got involved in rehabilitation projects in coal-mining areas and in campaigns to reduce forest product utilization by city dwellers. In 1987 and 88 he and his students did energy audits on farms all over Thailand. ("I can't sleep at night," we remember Chirapol saying then, "Thinking about those poor farmers."

Chirapol founded his nonprofit organization ADEQ in 1989, to disseminate information on environmental protection and energy conservation. That began the training programs — for students, monks, journalists, teachers, NGOs, government officials — lighting up compact fluorescent light bulbs, measuring the per-minute flow of efficient shower heads, sitting in a small plastic greenhouse to understand the greenhouse effect.

These activities started making Chirapol well known. In 1990 he became advisor to the Minister of Public Health, and to the Parliamentary Committee on Environment, and to the Governor of Bangkok. The trainings continued. The Green Hotel activities started, teaching hotels how to save water and energy. By 1996 there were six converted rice barges floating around Thailand with displays about energy conservation, and big long containers pulled by trucks doing the same. More than 200,000 people visited these road shows in one year. Chirapol was advising the Prime Minister and the National Energy Policy Office and conducting campaigns at Christmas and other holidays, trying to advise against senseless consumerism.

Most recently have come clever TV ads about how to "divide by two" — cut energy consumption in half. The Green Leaf program now ranks hotels with from one to five green leaves, depending upon how efficiently they use energy and water and recycle wastes. (122 hotels are participating.) Inspired by the Balaton Group's Sasakawa team-building project, ADEQ is building a training center for environmental education in Karchanaburi province, near the bridge on the River Kwai. Chirapol is working with architects to design more energy efficient houses (the Prime Minister is going to build and live in the cheapest one), and with Thai International Airways on greening their operations. Next he has his eye on hospitals and schools.

"At every Balaton meeting, I walk up the stairs from the final banquet and I think on the plane all the way home, how can I use what I have learned at home?" Chirapol said.

He showed pictures of his hotel campaign. His students working in the hotel laundry to study how to save energy. Potted plants instead of cut flowers. In a hot climate you don't need to heat a blow-dryer, you only need to blow it. More daylighting. No night-time tennis playing. A rooftop nursery to raise decorative plants and cool and insulate the roof. Bake bread after midnight to avoid the peak electricity demand. Compact fluorescent bulbs. Buffets so you take only what you can eat and don't waste food. A green menu of seasonal, local food. Brown rice saves 60% of milling energy. Drink fresh juice instead of bottled beverages. Compost food waste for the nursery.

What would happen to Thailand, if you were run over by a bus? asked **John Peet**.

I have many, many students and former students, said Chirapol.

**David Berry** asked, how do you overcome cultural obstacles, like preferring white rice instead of brown?

Brown rice *was* the old culture, said Chirapol.

How do you find leverage points? asked **Garry Peterson**.

I give people the toilet *molds*, not the toilets, said Chirapol. I try to help people help themselves. I show them how to save money. You work all day to get 1000 *baht*, and then you leave the lights on when you leave the room, and 1000 *baht* flies right out of your pocket. Policymakers are busy, they don't listen, don't read. I don't try to bombard them, just to give them one simple lesson at the right time. I spend more time with consumers; it's easier to change their behavior.

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My vision is that people will learn to have more secure and thriving lives on lower ecological footprints, said **Mathis Wackernagel** (Redefining Progress, San Francisco).

Why can't we live with limits? Once I was on a bicycle trip and I normally spent about $12 a day for food, but one day someone gave me a $40 voucher, so I immediately ate $39.85 worth of food. We expand happily into our niches. We are driven to grow by structural economic necessity, by political pressure (nobody ever runs on a ticket of doing *less*), and by insecurity (we amass wealth to protect ourselves from something.)

How do we develop a vision with limits? Lovable limits? How do we even come to see that we need and use and welcome all kinds of limits? Every game has rules that make it both challenging and fair, and those rules are limits. We love coming to Balaton because people can't reach us, so we can think and learn — we like that limit. We can't live without limits.

I work on limits through the device of indicators, said Mathis. I work on national level and individual level indicators, because I think they're easier than the in-between municipal level indicators. The sustainability indicators movement isn't getting very far yet, because it's forgetting its *purpose* (to measure sustainability, to warn of unsustainability), because its *framework* is weak (we have to move from being librarians to being plumbers, with an awareness of what is connected to what), because it has no *theory of social change* (information alone is not enough), and because there is little thought about the *next step*. After indicators, then what?

To get back to sustainability, the next generation of indicators has to concentrate on ultimate means and ultimate ends — how satisfying are people's lives, and are they within the bounds of nature? The economy is just a translation mechanism from nature to satisfying lives. The economy exists within the society, which exists within the biosphere. It's important to keep communicating that vision. That's why the World Bank's three kinds of capital (economic, social, natural) or three equivalent circles (economy, society, nature) are not quite right. They give the economy too much importance.

How can we monitor the fit of the human endeavor within the means of nature? That's what the ecological footprint tries to do. Given the current world population and the area of productive land, we each get an average of 2.0 hectares to supply all our needs, and to absorb all our wastes. (That's allowing 12% of the land to be preserved for biodiversity — probably not nearly enough.) The actual world average per capita ecological footprint is 2.4 hectares, so we've already overshot. We can maintain that excess only by drawing down natural capital. And of course some footprints are far bigger than average. The footprint of the average German is 4.8 hectares, the average Dutch is 5.9, the average Swede is 6.5, the average New Zealander is 8.2, the average Australian is 10.0, the average American is 10.9

The trouble is, you can pass your ecological limit without a blinking red light going on. (At which point Mathis brought out a blinking red light to put against his graph. Then he started blowing up a balloon, bigger, bigger, BIGGER. Is bigger always better? he asked, as the people in the front row began to cringe. We can exhaust even renewable resources, he said, as he picked up some grapes and ate them, and waved their empty stalks at us. See? They don't spontaneously regenerate.) How can you bring it onto the public agenda, when people don't even understand overshoot?

We need indicators like the ecological footprint that imply no value judgments, only the assumption that the earth doesn't grow. Here's what happening to the ultimate means and the ultimate ends, now the choice of what to do is yours. We need commitment, prompts, norms, communication, incentives. We need to shift from supply-side sustainability (producing more efficiently, but producing more) to demand-side sustainability.

Sustainability has to get at least as exciting as soccer. (And soccer has limits.) Let's have a competition. Who can build the best quality of life on two hectares?

* * *

In 1967 I was a chemical engineer for the biggest oil company in England, said **John Peet** (Department of Chemical and Process Engineering, University of Canterbury, New Zealand). Then there was a big tanker crash, the *Torrey Canyon*. Somebody in Whitehall suggested cleaning it up by setting it on fire. Which they did, by bombing it. Someone should have asked a chemical engineer; we could have said that only 20% of crude oil burns at atmospheric pressure and temperature. So a big mess was left. My company got a contract to produce vast amounts of detergent and made a big profit. The ecosystem was wiped out. That was my awakening.

Cut to five years ago in Christchurch, New Zealand, where John is an engineering professor and general irritant on sustainability matters. An organization called the Sustainable Cities Trust was founded, with partner organizations in other parts of New Zealand and the USA. Its purpose was to encourage green development, community enterprises, quality of life indicators, and a process called the Canterbury Dialogues.

The Dialogues were necessary, because it became clear that there was no shared vision. "Most people seemed to agree on a general sense of direction, but there was no coherent view of where we wanted to go." The project started by gathering business leaders, who reported some pieces of a common vision to the city government. Then government officials joined the discussion, with an intention to involve other people and groups as well.

Five meetings were held, each with a plenary speaker followed by group discussions. Participation was patchy, the process was too top-down-driven. It became clear that citizens were highly interested in environmental and social factors, while business was interested mainly in economic factors.

One of the outcomes was a strong effort on indicators. The newspaper put out a survey (answered by only 900 of the 300,000 people of the city) asking people to rate their quality of life and to check off areas that need to be addressed and measured to improve quality of life. (Options ranged from air quality — the most frequent complaint — to business growth, energy, governance, housing, transportation, water, waste.) The options most often checked pointed to important indicators. Now the newspaper is coming out with a new indicator each Monday.

For example, one indicator is the amount of rubbish dumped in the landfill (as opposed to recycled or composted). A goal is set at zero dumping by 2020, and yearly progress since 1989 is plotted. There is indeed progress — recycling has reduced landfill waste by 25%. Then there is a "what can I do?" box that advocates reduce, reuse, recycle.

The process is still unfolding, said John, but there is some visible ratcheting up of awareness and willingness to discuss some important issues.

The process has stimulated John and his wife Katherine to write their own vision, which, for the moment they are keeping in the background of the public process:

ALL PEOPLE have their BASIC NEEDS SATISFIED
so they can LIVE IN DIGNITY
in HEALTHY COMMUNITIES
while having MINIMUM ADVERSE IMPACT
on NATURAL SYSTEMS
NOW and in the FUTURE.

Why are you keeping that nice statement in the background? asked **Dana Meadows**.

We don't want to interfere with the process, said John.

**Laszlo Pinter** pointed out that many community based indicator projects put no emphasis on global issues. How to build that in? Make a specific working group on it? Make sure leaders point to it?

It's essential, said John, but I don't know how to do it.

What lessons have you learned from this process so far? asked **Marius de Geus**.

To spend more time fundraising without letting funders take control or rush the schedule, said John. To involve more community groups. To do more homework.

* * *

**Alan AtKisson** (AtKisson & Associates, USA) started out with the rubber band again, without a word, holding it in the tension between the present reality and the vision. How long do you suppose we can hold this tension? he asked. Let us remember that ideas don't always have to be communicated through words.

I was born in 1960 in Mexico, Missouri, said Alan. My first words at the age of two were "sustainable development." In 1976 I got my first job, as a talking Christmas tree in a department store — Bruce the Spruce. In 1979 I was infected by *The Limits to Growth*. In 1982 I went to New York and worked on public melodic systems (songs) and in 1988 became editor of *In Context*, a great opportunity to become a generalist of sustainability and to meet many of the people in the field. In 1990 I got involved in Sustainable Seattle, a community indicator project that has now spread to many other communities.

In 1992 I graduated (got fired) and became an independent consultant. In 1999 I found my first client ever to pay in advance (the city of Orlando, where I grew up). In 2002 I made my first animated musical about sustainability. In 2010 my consulting company bought out McKinsey and Touche-Ross. In 2024 I was indicted for subversion by the WTO. In 2169 I underwent a complete biological rejuvenation with photosynthetic implantations and now I need to consume nothing but sunlight.

Visions are very powerful. All our current problems are the result of somebody's vision. Everyone believes that what they are doing is the right thing to do. Balaton meetings are always a source of vision — I left last year's with a new vision of writing a recap of *Limits to Growth*, in an entirely different mode, for an entirely different audience — and this year that vision has already come into being! (See the book review later in this *Bulletin*.)

My vision of a sustainable world may not look much like a Balaton meeting, but it will have absorbed into everyday consciousness the kind of ideas and intellectual capital being built by the Balaton Group. That capital is becoming so well established that I suggest we can already condense it into simple icons that stand for complex ideas. So here is a start — you can add to it — of a Balaton Iconographic Lexicon:

So here's how to get across Balaton ideas using these icons:

Systems theory leads to better understanding of good indicators and to the compass of sustainability. And to innovation-diffusion theory and the team-building workshops. And to the "Gilman equation" of social change (the perceived new benefits of the new system, minus the perceived lost benefits of the old system have to be greater than the perceived cost of change.)

And furthermore good indicators are leverage points, leading to innovation, which works through the innovation-diffusion process creeping through the whole system to WILD-ASS CREATIVITY, ENERGY AND ENTHUSIASM, which leads straight to SUSTAINABILITY!

See how easy this new iconographic language is? Some day, ages from now, to record the history of how the world made the transformation to sustainability, they will carve the following obelisk, which will be easily understandable by then to everyone in the world:

"Hey, no fair," said people in the audience at that point in **Alan's** presentation. That's an **Aro** graph!"

The point of it is, said Alan, we *can* achieve sustainability. It's happening now. The power of exponentiality is working for us. The world is getting ever more thrilling. The big problem of the future will be what to do with all this wild-ass creativity, energy, and enthusiasm!

**A**fter I wrote *Revolt from the Center*, people said what a dull world your vision would be, said **Niels Meyer**. But I don't see why it should be dull.

**Jørgen Nørgard** added, my vision is not a world without problems, but a world with problems that are manageable.

We need to add an icon for Gaia, said **Jorje Zalles**.

And one for biodiversity, said **Lucia Liu Severinghaus**.

We've finally returned to myth, said **Aromar Revi**. Iconography was always in the power of the priests. They always kept it from the people. Now we're giving it back to the people.

Globalization with the right consciousness can open choices instead of closing them, said **Melita Rogelj**. It can take us out of systems that punish us for the desires we actually have.

It can open up what **Henk** calls hedonic choices, said **Alan**, as he stretched the rubber band horizontally and sent it flying into space.

**DAY FIVE: Visions being Manifested by Balaton Group Members**

*A sustainable society feels it is responsible for the well-being of the entire world. It has an active, conscious respect for the planet and its inhabitants. Every living being, not just humans, has enough, not too much or too little. A sense of security governs the quality of life of every individual.*

*A sustainable society needs all people to contribute to develop the society as a whole in a manner that does not discourage the participation and progress of other people. It requires equal opportunities for all and a fair spread of resources among people — all resources, natural, human, financial, etc.*

*We will love the things we have and we will take care of them. More of us will make things with our hands. More of us will dig in the dirt. We will have less, but more of what we have will be beautiful. Plastic will be gone.*

*We will have more public servants and fewer power seekers. We will have courageous leaders who inspire us.*

**Anupam Saraph** started with the tension in the rubber band again and asked, what pulls the impulse for change back down to accommodate with reality? What keeps change from happening? How to make change happen in forestry, transport, energy? People need help in making their visions happen

So he is starting the Institute for Change Research. It will be located in Goa, a small state on the west coast of India, where it could be possible to have an enormous impact. Goa is still green and beautiful; it could really be sustainable. (And Anupam has good connections with its ministry.

The mission statement for the Institute is: *to search for deeper insights into the motive forces of change and to transform these insights into capacity for actions that alter the rates or direction of change*. The Institute will pursue this mission by conducting research, fostering inventions and innovations that empower individuals, and providing opportunities for safe environments to explore alternative options. Its techniques will include system dynamics, syslogic, and the general theory of the organization of systems, simulation models and games, and the design and development of e-systems, including e-referendums and e-visioning.

The Institute for Change Research has a small interim office in Goa and is now negotiating for land. Goa is a one-hour flight from Mumbai (we were all interested in how to get to these prospective centers.

* * *

**Jorje Zalles** envisions an NGO in Quito, Ecuador, called Holistica, a macro-evolutionary node of *Homo Sapiens Planetarius*, which means those persons who see themselves as global citizens and not as the most important life-form on the planet. The objective of Holistica is to facilitate the emergence of ever more *Homo Sapiens Planetarius*. The premise is that humans are an awe-inspiring life form, capable of abstract thought, language, and great feats of invention. Will the hominid that thinks continue to think itself to death? Or will it become a responsible steward of all life forms in full evolutionary splendor?

The work plan of Holistica will be organized around three goals: 1) economic profitability (in sustainable natural resource management, 2) social fairness (in consolidating and institutionalizing real democracy, and 3) environmental sustainability (with an emphasis on emerging ornithology in the Third World).

* * *

**Michael Ochieng Odhiambo** has put his law profession to work to found in Nakuru, Kenya, a new organization called RECONCILE, also known as the Resources Conflict Institute. He and his group use conflict as an entry point to look at the need for better management of resources. Politicians don't really solve resource problems, they just politicize them. People need a way of solving their own problems.

The Institute's activities are:

- Research and publications on traditional systems and institutions for the management and resolution of conflicts, to understand how they can help address current and emerging conflicts,

- Provision of training to communities and individuals in conflict management, with a view to building capacity for the peaceful resolution of resource conflicts,

- Provision of legal advice and services to resource-dependent communities to empower them in the protection and enforcement of their rights to natural resources.

We tried to get an African regional Balaton going, said Michael, but now I think we should make use of Balaton ideas in our own place. That is what RECONCILE is trying to do.

By the way, he threw in, in response to earlier comments in the group about forgiving Third World debt, forgiving African debt is just another way for our leaders to get more money. People who borrow should pay back.

* * *

**Dana Meadows** briefly described the vision she is working on, a 110-hectare organic farm in Hartland, Vermont, a 22-household cohousing group called Cobb Hill there, designing small, very green houses clustered on 2 hectares, and, in the old farmhouse, the Sustainability Institute, a new think/do tank with four main areas of activity: 1) analysis of sustainable resource systems (of which the commodity work is one example); 2) practical demonstrations, tests, and documentation of ways of more sustainable living (of which Cobb Hill is one example); 3) widespread communication and education about lessons learned from the analysis and demonstrations; and 4) networking and leadership development.

The land is bought, the Cobb Hill community is designed and is presently trying to arrange all the necessary permits to build. Fourteen of the 22 housing units are spoken for. (For more information, see www.coopsports.com/cobbhill.) Beyond the hardware of the houses, solar collectors, and efficient energy systems, the community is also practicing the software of community — the skills of conflict resolution and consensus decision-making. As a gift from Cobb Hill to the Balaton Group, Dana shared a list of 16 guidelines that the community posts whenever they have a decision-making session. The guidelines are not easy to follow, but following them greatly enhances group discussions.

1. Test assumptions and inferences. (For example, if you assume that someone is angry or displeased, check to see if they really are.)

2. Share all relevant information.

3. Focus on interests, not positions. (That means don't start with "I think we should drill the well THERE." Start with "I am interested in keeping the well as far away from the agricultural field as possible, because state regulations won't let us spread manure near the well.")

4. Be specific — use examples.

5. Agree on what important words mean.

6. Explain the reasons behind one's statements, questions, and actions.

7. Disagree openly with any member of the group. (Don't hide or swallow your disagreement, or bring it up three weeks after the discussion is over and the decision made.)

8. Make statements, then invite questions and comments.

9. Jointly design ways to test disagreements and solutions. (This is a very powerful guidelines. If you're arguing over whether banks will allow mortgages for composting toilets, don't just argue, go ask some banks.)

10. Discuss undiscussable issues.

11. Keep the discussion focused.

12. Do not take cheap shots or otherwise distract the group. (Cheap shots are personal insults, often disguised as jokes, that are usually irrelevant to the point being discussed and are only designed to make someone feel bad.)

13. Participate in all phases of the process.

14. Exchange relevant information with nongroup members.

15. Make decisions by consensus. (If even one person disagrees, explore openly and lovingly the reason for the disagreement and try to design around it. Deciding by majority vote is equivalent to telling the minority that they don't count in the community.)

16. Do self-critiques.

* * *

**Bert deVries, Dennis Meadows** and **Wim Hafkamp** described the project they are bringing into being in the south of France. First, a vision written by Bert a year ago:

"August 2002. In the morning sun some 25 people sit on a large terrace having their breakfast. They are participating in the 21st annual Balaton Group meeting, held at the chateau La Taillede in the Tech valley in the south of France. The sun casts sharp contrasts of light and dark on the mountains, and to the southeast the Mediterranean shimmers in the morning light. Some participants have used the opportunity to visit beautiful places in the region: Carcassonne, Albi, Montpellier, places with a long and turbulent history. Not everyone had read **Betty's** careful description of how to find the chateau, so some are still wandering around. **Hartmut** arrived by hang-glider all the way from Austria (for which he made it into the Guinness Book of Records). **John** managed to organize another sabbatical year around his visit."

"So the 21st annual Balaton meeting officially started in the mild evening climate with a joint concert given by the Balaton Bard **Alan** and the local band Musique Cathare. Some participants became so overwhelmed by history and the Corbiere wine that they were no longer able to contribute intellectually to this year's topic: *The Here and Now of Sustainability*."

"Already in April of the year 2000, as soon as **Dennis** had overcome all his Y2K problems at home and was willing to take the risk of traveling, the new owners of La Taillede started organizing a series of small Balaton Group writing sessions; rooms were offered to tourists; conference rooms were made available at reasonable prices for NGOs of all sorts, after careful screening, of course. Already there were signs that the chateau would become a holiday resort for mixed combinations of Balatonians."

"The solemn pledge to keep the European Balaton community a very sustainable place led to vigorous debates. The first signals of sustainability competition **with Amory Lovins's** and **Dana's** and **Aro's** sustainability havens emerged. Fortunately, discussions soon shifted to more scientific issues, such as the question of how many times **Jørgen's** Extremely Efficient Refrigerator could be hauled around the globe before it is less energy-efficient than buying a BoschPhil at your local store."

"Now in August 2002, plans are becoming reality. Hot water for cooking and washing comes from flat solar collectors. Heating on chilly evenings in spring or fall is provided from locally cut fuelwood. PV panels — the region is one of the sunniest in Europe — almost all electricity requirements, including the recharging the electric car, which is just now going down the valley to pick up the last stragglers coming in for the Balaton meeting."

That's the vision; here are the facts. La Taillede is a 600 year old farm in a region whose human history goes back over one hundred thousand years. The main house was initially constructed in 1407, on 51 hectares of fertile land. It lies at 960 meters altitude in the Tech Valley, the southernmost valley of France just north of the Spanish border. This is the sunniest region in France with over 330 days each year of clear skies.

The farm is comprised of three different buildings. There are two modern apartments in the main building. Everything else needs total reconstruction! The final designs for the center have not been established. But as one example, after 2-3 years of building, the center could offer:

- 4-5 large apartments (100 - 110 sq. m.),
- 5 small apartments (35 - 40 sq. m.),
- 5 dormitory rooms each with two beds,
- 1 library/computer room,
- 1 seminar room for 15 participants,
- a kitchen and dining area for 30-50 people,
- a 100 sq.m. commons area with fireplace and related facilities, and
- a 900 sq. m. conference room.

A modern, European-standard camping ground 20 minutes walk from the main house offers additionally 16 beds in small houses, a restaurant for more than 50, and toilets/showers/cooking facilities to support several hundred in tents.

Just 25 minutes walk from the house is Corsavy, a traditional stone village perched on the forested side of a mountain. It offers three restaurants, a food shop, and various sports facilities. Driving 15 minutes from the house brings one to Arles-sur-Tech, an old Catalon village with two hotels, several restaurants, a shop with international newspapers, and all shops and services and connections to the public bus lines.

The house is 45 minutes drive from the Mediterranean and about 60 minutes from major ski resorts. It lies within 2 km of the GR-10, the hiking trail that leads in 45 days from the Atlantic to the Mediterranean. An

excellent hang gliding site is about 20 minutes drive up into the mountains.

It is envisioned to be a place where Balaton Group members can go, alone or with friends, colleagues, or family members, for periods of several days to several months. It would be a site for reading, research, writing, brainstorming, and recreation. If this place develops as hoped, Balaton Group members could generally expect to find several of their friends in residence on the site whenever they visit. A web site calendar will be maintained so it is easy to check who and what programs are at the center on any specific dates.

From Barcelona airport it is a 2 1/2 hour drive. From the Perpignan airport or train station there is a bus; it is a 45 minute drive. A train which stops at Charles de Gaulle airport also goes in several hours to Perpignan.

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**Joan Davis's** new visionary center is just ten minutes by bus from the Zurich airport, or by train from the Zurich main station.

Joan's path toward her current vision started in 1972 at a Swiss federal research institute, where **Dennis Meadows** came to give a talk on *Limits to Growth*. "I was a narrow-minded technocrat," said Joan. "My world didn't change, but the background and framework changed completely."

She started a project of the Swiss National Science Foundation on sustainability. She had been looking at the nutrient loading of Swiss rivers; now she followed the source of those nutrients back to agricultural practices and food choices. She followed the source still farther back, to sometime perhaps about the beginning of the industrial revolution, when the powerful worldview of water as the font of all life was turned into the view of water as a humble molecule, to be used for any human purpose.

Now recently retired from that federal research institute, Joan is founding a new consulting practice called ARC — Aquatics Research and Consultancy. She sees it literally as an arc, a bridge between regions, cultures, industry, science and citizens, today and tomorrow. It will combine a clear purpose, practical products and processes, and vision.

The vision is to recognize water again as what it really is, the basis of life — to cloak water with the protective ideas of respect and sacralization. Never to accept pollution of water, or harm to water.

That means a culture that doesn't simply swallow without objection stuff like the green revolution — or like hypercars, which eliminate bad conscience about mobility while still keeping us in the four-legged posture, still taking up too much space as we move, still unsatisfied with where we are and moving too fast to where we think we want to be. A culture that knows how to *be* in the present, to shape a viable future.

The financial side of this vision is still working itself out, but, Joan said, I believe that money comes as a result of values and goals and shouldn't be a value or goal in itself.

Notice that the Balaton Group is not only founding many new centers, said A**lan AtKisson**, but also many new consulting practices.

I always appreciate the way Joan walks her talk, said **Joan DuToit.** It will be good to have this demonstration center on water.

* * *

Celebration of a Passing and a New Birth, was the title of **Aromar Revi**'s presentation. Visions are compelling and beautiful, and we have to see the dark side, he said. Once several years ago, when we were in Joan's house visioning the Balaton Group in the year 2000, what I saw was that we would be walking together in a forest; we would talk to each other between meetings by videophone; and someone beloved to the group would die and we would go through a major transition. And that third one has happened, with the loss of Wouter, and is happening with the current transition.

Vision is more than articulating what we truly want and saying it so many times that it becomes "true."

VISION IS THE GIFT OF "SEEING" THE UNMANIFEST
AND THE POWER TO BE
A PERFECTLY TRANSPARENT INSTRUMENT
IN THE MANIFESTATION.

We can draw our typical Balaton graph of sustainability versus overshoot and collapse versus other possible scenarios. The kinds of interests and skills needed are very different in different parts of this unfolding. Clearly we have to stay open to other ways of doing things. Though the collapse, if it happens, would be completely unimaginable, and horrible.

But that's not the whole picture. What if we plot on a log scale ALL lives, human and nonhuman, and their possible scenarios? Remember each notch upward on this scale is a factor of 10 — this is the *real* drawdown.

Rome had an average of 30 million people for 500 years — a total of 15 billion person-years. Egypt had 10 million over 3000 years — a total of 30 billion person-years. The world as a whole, from the beginning of human history has sheltered somewhere between 400 and 800 billion person-years. Over the next 100 years, if a real collapse of a population of over 6 billion, we could lose 600 person-years — the equivalent of all the human life that has been lived up till now. That's the real stake — the immense lost potential. Let that sink in for a moment.

Are people all that important? Well if we now plot log lives (all kinds of lives) over log time, we can imagine the whole human adventure as an astounding "signature" emitted by this planet for however long it lasts. The possible overshoot and collapse we worry about is just a small blip in that signal. When we talk of sustainability, we're really talking about the future of evolution. Why don't we ever talk explicitly about that?

My greatest teacher is my small daughter Kaholi. She recently lost her grandfather, and she said, "My grandfather has become a star. You can't see him just now, he's behind the clouds. He loves to play with water." Once when she saw a meteor streak overhead, she said, "That's a naughty star. He's been playing out in the sky, and his mother just called him home to be born." And another time she asked, "When I become a star, where will my body go?"

She's being more profound than she knows. We are all made of star stuff. She likes to play the game of "who is my mama's mama's mama's mama?" A monkey. A starfish. A tree. A star. "What happens when a star dies?" she asks.

IN THE BOUNDLESS SPACE BETWEEN THE STARS,
THE EARTH IS A LOCUS OF EVOLUTION.
SO MAY BE THE BALATONS OF THE WORLD.

We don't know what the hell we're doing with the planet. We have lots of interesting hypotheses. Einstein and others have trained their powerful intuition to pick up insights. There are signs of a scale-shift, of something very fundamental emerging. Think of the ferment of the present -day idea-sphere, with all these notions jumbling around in our shared consciousness!

- People (plus their artifacts) versus the rest of life,
- Energy exploding from mass with the power of the speed of light squared (Hiroshima, fission, fusion),
- Outer space — the final frontier, we are not limited to the earth (this is a powerful vision), we must maintain stewardship until Contact,
- Past space — Jurassic Park, the wisdom of the cyanobacteria, there are almost no visible limits to backward time,
- Inner space — from the disturbed inner passions that cause genocide to the calmness of integral yoga,
- Present space — from the strip-mining of the biosphere to the ecology of Gaia,
- Society — from the tyranny of the market to the transformation of the patriarchy.

Where is all this mess going? Aro offered a Balaton Vision, or maybe a Balaton Mission:

TO HEAL THE BREACH BETWEEN
HEAVEN AND EARTH,
MALE AND FEMALE,
OUTER AND INNER,
THERE/THEREAFTER and HERE/NOW
IN ORDER TO RELEASE HUMANITY'S SHACKLES
ON THE CO-EVOLUTION OF THE EARTH,
HER LIFE, AND HER CONSCIOUSNESS

We can add to **Alan's** iconography a new symbol for this vision — the Daly triangle with something added to represent the descent of something as yet unmanifest.

If a crash, Balaton could be a refugia, a second or third Foundation (beyond sustainability) or a diaspora.

And so the circle closes. Without the darkness, there is no light.

Where do visions come from? asked **Niels Meyer**. I think my visions come from brutal experiences in life, which cause me to imagine and long for the opposite. I can see in Hitler the undivine; I can see in Gandhi the divine.

Vision is founded on hope, said **Michael Ochieng Odhiambo**. The hopes of the majority are never realized by the minority. What we need is hope on every level, and that implies a diversity of visions. We don't need one all-encompassing Balaton vision, except perhaps that we should try to enhance everyone's opportunity for being able to be fully human. You can't add to humanness, but you can refrain from subtracting from it.

**Bert deVries** said, twenty years ago my vision would have been non-dark. But now I know that whatever I don't see, it is *me* who doesn't see it. There will be suffering; there will be evil. It makes no sense for me to say I would like peace, when my own inner peace isn't stable or predictable. A vision from an unaware mind is just mind-stuff. The media are filling us with still more, very confusing mind-stuff. It seems that I can only commit myself to focusing more on my own inner and outer world.

**Tamas Fleischer** said, Aro's lecture was more about reality than about vision. The reality of the Balaton Group is always what's shocking and new. You know, you can turn that rubber band image upside down. Too much insistence on a vision can drag down emergent reality.

I'm thinking about how to use vision with all the young leaders in LEAD, said **Gillian Martin-Mehers**. Is it an art or a science? Are some people better at it than others? Can you learn it? Is visioning enough, or a first step? Can you get anywhere without it? I think every single person has a vision. We have to somehow learn to share them.

**Jørgen Nørgard** added, the modern market economy is all about keeping real vision from coming true, and about selling false vision. They know very well how to control "consumers' free choice." The enemy of vision is not people, it's the system.

All these visions are too sweet, said **Genady Golubev**. We have to take into account the grim reality that exists right now. Think of the events in Kosovo and Serbia. Fifteen of the most developed, democratic nations tried to punish one nation — not just one misguided leader, but a whole nation.

*I guess the world that we want is so deeply different from the world that we live in, it even hurts to talk of it. How can we gently keep on asking, lest people forget to dream?*

*You are confronting me with the dissonance between my actions and my vision. I'm forced to realize that what I am doing is contrary to what I would expect to do in the world I desire.*

*Every vision I thought of was so impractical. I couldn't come up with anything practical.*

*This was hard!*

*This was very interesting to do. I'm sure I'll think of millions more little things to put in my vision.*

*THANK YOU for providing the impetus for creating my vision. It was so fun!*

# Balaton Business

Summary of Steering Committee Meetings at Balaton, by **Niels I. Meyer**
Main decisions only are reported on:

Finances and Fund Raising:

We have about 10,000 US dollars in a NH-bank, and 24,000 Swiss Francs related to the Balaton hotel in Zurich. The last sum should be reserved to compensate Joan Davis and to support the next steering committee meeting in December. It was decided to create a Fund Raising Committee with a goal of raising 100,000 US dollars for the next annual meeting. The committee will consist of the following persons: **Alan** (coordinator), **Hermann, Wim, Jorje, David , Joan dT,** and **Gillian.**

Balaton Bulletin:

It was discussed whether we could get along with an electronic version only. This may be possible in the long range, but today some people will require a paper copy. This could be managed in a decentralized way where regional "electronic" people provided paper copies for the limited number of persons in their region requiring this. The next issue of the *Bulletin* should ask people who need paper copies to inform the coordinator of the editorial committee.

The Editorial Committee will consist of the following persons: **Niels** (coordinator), **Joan dT, Chirapol, Carlos, Hermann** and **Gillian**.

It was hoped that **Diana Wright** could still assist with the lay-out.

Steering committee meeting:

The Steering Committee emphasized the importance of the presence of **Dana** at the next mid-term meeting, but acknowledged the practical problems in connection with her move to Cobb Hill. The possibility of having the meeting in Vermont was discussed but was given up as it would not really solve the problem for Dana.

It was decided to have the next mid-term meeting at December 10 to 12 in **Joan's** house in Zurich.

Central Administration:

**Dana** and **Dennis** continue as formal directors of INRIC and **Dana** and **Betty** manages the (few) necessary transactions in that relation. **Alan** volunteered to take over relevant practical INRIC jobs if they could reduce the burden on **Dana.**

The Steering Committee wanted to continue the employment of **Betty** and the load of work involved would have to be negotiated with Betty (who can easily find other customers). The load would probably be somewhat reduced in connection with the planned decentralization of the management of the annual meetings.

Annual Meeting 2000:

It was proposed by **Aromar** and **Bert** that the next meeting should focus on the IPCC scenarios and the means of making them operational as already decided at the mid-term meeting in Zurich in 1998. This proposal was supported by the Steering Committee.

**Aromar** volunteered to manage the next meeting in India together with **Bert** and **Anupam**. This was also supported by the Steering Committee.

Web-site:

**Wim** has volunteered to make a proposal for the layout of the Balaton web-site. It was proposed that the Fund Raising Committee should attempt to get money in support of the Web-site as a general information source.

List serve:

The list serve should continue and be activated in relation to structured discussions. This could be managed by the Editorial Committee. A few of the hundred members of the list serve seem to be in need of more self-criticism in relation to the amount of messages. **Alan** will have a friendly discussion with one of these mass-producing members.

Next annual meeting:

The new Steering Committee (SC) confirmed the proposal to have the next meeting in India focusing on the IPCC scenarios and the possibilities of making a sustainable scenario operational. Proposals from **Jørgen** and **Niels** to include special sessions on biomass and liberalized energy markets were supported by the SC. Details concerning place and program will be resolved at the mid-term meeting in December.

The question of accompanying family members at the annual meeting was resolved with a decision of "business as usual", i.e. no encouragement of families in this relation, but exceptions could be made in special cases.

The next annual meeting will be canceled if the Fund Raising Committee cannot raise at least 30,000 US dollars. Hopefully the decision in this relation could be made at the mid-term meeting.

The organizers of the annual meeting will attempt to secure the best circumstances in relation to avoiding illnesses from water and food. They will supply information on necessary vaccinations (malaria etc.).

General organizational matters:

Nanda will coordinate SC business.

The SC members are encouraged to use an e-mail conference to inform each other on the development of SC activities.

As result of an election of all members present on the last day of the meeting, the steering committee members, with the dates of their terms' expiration are:

Steering Committee — **Zoltan Lontay** and **Gillian Martin-Mehers** —2002

**Joan DuToit** and **Chirapol Sintunawa** — 2001

**Nanda Gilden** and **Aromar Revi** — 2000

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**Reports from the Working Groups**

The Mechanics and Strategies of Constructing Visions

Participants: **Gerardo Budowski, Tamas Fleischer, Marius de Geus, Nanda Gilden, Samantha Graham, John Peet, Garry Peterson, Laszlo Pinter, Dana Meadows**, others??

Sometimes visions come to people spontaneously, without a special effort. However, visions, particularly those involving organizations often need to be elicited, explained, nurtured and put into practice through more formalized processes. Some sort of formalized visioning is used in many organizations both in the private and public sectors around the world. Regardless of the circumstances, the basic conditions for true visioning are trust and the willingness and ability to understand different perspectives.

**Marius de Geus** gave details of working with private companies in the Netherlands. Participants in these visioning exercises were asked to prepare by consulting colleagues and writing down key elements of a vision for their organization prior to the actual visioning session. The process often resulted in profoundly surprising results, such as a vision of the world with no money presented by the representative of a major bank.

He also talked about the visioning process based on the very recent example of the Dutch Commission of Sustainable Development (NCDO, Amsterdam), dealing more with regions and communities. In these cases the visioning exercise required a committee to manage and facilitate the process and to create the right atmosphere to loosen minds and increase creativity. The committee's action starts by contacting participants in the mail regarding the purpose of the visioning exercise, followed by informal visits and one-on-one conversations with would-be participants. Elements of the vision are defined through a facilitated meeting at the organization that results in a written summary of a draft vision document, presented to the committee. At this stage there are usually many alternative, and not necessary cohesive vision elements. These are compiled and presented back to participants in a book or report of visions. Refinement, clarification and synthesis of vision elements requires iterative steps, but participation in these discussions is exactly the mechanism through which people can not only develop but also synchronize and internalize the vision and create a snowball effect.

**Laszlo Pinter** talked about the Vision 2020 initiative of the City of Winnipeg in Canada that started with a series of conversations with city officials on the need to develop a system of indicators to measure and report on changes in the quality of life over time. Over a period of about two years the scope of the project became broader. The city decided to integrate the indicator initiative in the official Plan Winnipeg review process, the official strategic development plan. They also made a decision that before indicators are identified a series of vision statements should be identified that define high quality of life for citizens in a number of categories, such as safety, property, infrastructure, environment, health and education, economy and transportation. The vision statements were developed in a series of public meetings involving the following steps: introduction and initiative background, brainstorming of vision statements, ranking, debriefing and summary. Vision statements help define specific objectives and provided the basis for indicator selection.

Beyond process and mechanics the essence of visioning is 'imagining' and 'visualizing'. This includes the act of envisioning, immersion in and description of imaginary situations, structures and processes as if they were reality. **Dana Meadows** talked about meditative visioning described in "The Fifth Discipline" of Peter Senge. Meditative visioning can deal with sectors of the economy but get down to the molecular scale of sustainable chemistry or describe the future in systemic terms - e.g. a resilient system - or even based purely on aesthetic qualities as it was done by William Morris (News from Nowhere) in the late XIXth century.

## Lovable Limits: What Are the Most Humane, Appealing, and Even Thrilling Ways To Curb Human Demand?

A short report from an underground workshop at Lake Balaton by Mathis Wackernagel (wackernagel@rprogress.org)

The biosphere's capacity to regenerate resources and to absorb waste is limited. And humanity is expanding its resource throughput with little apparent inclination to change course. A lot of people beyond the Balaton Group recognize this as a fundamental contradiction with potentially catastrophic consequences.

But many forces drive people to continue this expansion, including:

a) structurally hardwired growth imperatives (if we want full employment while making workers more and more productive, the only way out is to increase their output and consequently their consumption).

b) conflict resolution in the public domain that builds on promising more rather than redistributing what already exists. There is far more political support for expansion than for curbing overall demand. How many people knock on a politician's door saying "let's do less"?

c) perverse incentives, perhaps the saddest forces of all. That's how incentives work now. Recognizing the danger of collective overshoot, we shield ourselves and our individual families by amassing personal wealth (an example of the unfortunately named "tragedy of commons").

All these positive feedback loops keep economic expansion going. Ecological limits such as the regenerative rate of ecological capacities do not stop it. Nature's inertia allows us to maintain higher rates of exploitation - for some time.

Governments diligently administer this human expansion, keeping the present generation of individuals happy. Wherever some pressure builds up, it is alleviated by removing limitations to expansion. Examples are further global integration, mega water projects, currency convertibility, or MAI-like investment protections.

Still, these expansionary efforts do not result in a growing circumference of our planet. They only help people to access the remaining stock with less effort. But there will be a point, when we have gone far beyond the regenerative capacity of the biosphere, at which it will be exceedingly difficult to access resources and ecological services. Kenneth Boulding pointed this out already thirty years ago with what he called the "Dismal Theorem." Essentially, it states that if the only ultimate check on growth is ecological misery, then the human economy will grow until the situation is miserable enough to stall expansion (Bartlett, 1997). If this theorem is true, he said, technological advances to help overcome ecological constraints will provide space for further expansion and, sooner or later, increase the total sum of misery. Only by constraining human expansionism with humane obstacles can the "Dismal Theorem" be proven untrue.

What might these constraints look like? Nature has a rich menu card from which we can choose. How about climate change leading to a spectacular reduction of agricultural capacity as an appetizer? As an entrée some nasty emerging germs getting all excited about this abundant food source: people! And water shortage for dessert (or shall I say desert)?

Obviously we humans could also limit ourselves through nuclear war, devastating pollution, and other variations on the theme such as deforestation, overfishing, erosion, or species extinction.

Or … and here is the good news … we could outrun nature and chose our preferred limits before nature can play its cards. That's the idea. Let's find limits to human expansion that we prefer over nature's possible choices.

**Dana Meadows** points out that the framing of "our limits versus nature's limits" does not work since this trade-off between, let's say, curbing human demand versus accepting mass starvation is not perceived as an inevitable one. And she may be right. Why should we limit ourselves today and not tomorrow? Let's face it, today we have hardly any responsibilities to limit ourselves, our economic expansion, or our reproduction. In fact, we may feel more pressure to expand than to retract.

Therefore we need to go even a step further: let's find limits that we treasure. We call them "lovable limits". This means that we need to find limits that are far more attractive than our present situation. Impossible? Perhaps not.

To start, some metaphors of limits we cherish. For example, people get married — limiting themselves to one partner. And many do this quite happily. Religious practices include limitations, and these activities are dearly held on to. Games require restrictions: some simple rules that make the engagement interesting. Severe design restrictions make the architecture or the product far more fascinating. There is thrill in doing something with a very limited set of ingredients (wow,

we had only an onion, a bit of vinegar and some rice left at the end of the camping trip; you would not believe what a wonderful dish we were able to cook with this…).

**Marius de Geus** said he liked the limitations he built into his life when writing his last book: no e-mail, no phone, and no visits. Some like being restricted by society in their smoking since it helps them to deal with their addiction. But let's get even more practical. My experience tells me that we can only react to physical or experiential limits. In other words, what we need are speed bumps, not road signs. In Switzerland, they are designing these speed bumps as if they were public art, and the majority adores these lovable limits. In Mexico, they have limited bus speed by installing above the driver an annoying control light enhanced by a shrill beeper. It lights up when the bus exceeds 60 mph. This mobilizes the forceful but silent social pressure from the passengers and makes the driver slow down. Buses now hardly exceed the imposed speed limit. And bus passenger fatalities have declined sharply.

How else can we develop lovable limits? Greenbelts around cities? I personally love Herman Knoflacher's restriction to let cars park no closer than 220 meter from the destination. I am sure there are many ways to make responsibilities more visible.

This little report on lovable limits is merely a beginning. Its purpose was to get you salivating. Actually, it is a call for finding the most lovable limits. Please let me know if you come across any other ones you adore.

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Working Group on Collaborating for Teaching and Research Purposes
**(Reported by** Samantha Graham**)**

**Pavla, Tamas, Marius, Anupam, Joseph, Garry** and **Samantha** compared notes in some form or another on who we're teaching, at what levels, in what languages and what curricula. The most obvious synergies were between Anupam's Masters program in India and the Centre for Human Ecology's Masters in Edinburgh, which I will follow up on once we have our new MSc fully launched this January. (CHE students going to India, and ideally Anupam's coming to Scotland to do the research component of their Masters seems the most likely at this stage - funding possibilities to be explored). Other possibilities were to learn from each others' curricula and teaching styles by spending time on each others courses - only easy if we're speaking the same language! I figure this type of exchange will evolve if it's appealing to each of us individually. There's also a standing invitation to you to bring your students to Findhorn if the eco-village side of the place dove-tails with your course or your students' research interests - we get many students coming through the place, from architecture programs to building, geography, environmental studies and community studies.

The web site address for the eco-village project is www. findhorn.org/ecovil/

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Liberalized Energy Markets and Sustainable Development

Participants: **Chris Flavin, Carlos Quesada, Jørgen Nørgard, Zoltan Lontay, Gerardo Budowski, Hilary French, Niels Meyer.**

Consequences and possibilities were discussed, based on experiences from Denmark, USA, Hungary, and Costa Rica.

In Europe wind power has been a success in three countries, Denmark, Germany and Spain. They have all used the so-called "feed-model," where wind electricity is guaranteed a favorable minimum price. Other EU-countries have used other pricing models, with much less success.

The Danish parliament has recently decided to discard the feed-model and replace it with a "green certificate" model, combined with a government-determined consumer quota for green electricity. It is anticipated that this system may give rise to strongly fluctuating revenues for wind-power producers. In the worst case scenario, it will create serious uncertainties for investors in the Danish wind power sector.

It was proposed to investigate the possibilities for a joint project between Worldwatch Institute and the Danish group to analyze the development in the US and Europe of different models for liberalized energy markets.

Report on the Balaton Group Meeting Discussions Regarding the Center in the South of France.

**Wim Hafkamp, Bert de Vries,** and **Dennis Meadows** presented information on La Taillede, the farm they propose to buy as a retreat, research, and training center that would be useful to Balaton Group members. The following is a brief summary of the facility and of the discussions in Csopak about the proposed relation of the farm to the Balaton Group.

Relation to the Balaton Group

La Taillede will function in many ways like other "Balaton Hotels" that have already been designated by **Joan Davis** and other members - but on a larger scale. It will be privately owned by numerous members for their own purposes and made especially available to other BG members in support of their various programs — research, teaching, and recreation. Over thirty members have offered to invest in La Taillede to help with the construction and to reserve time in its cottages for their own use. The specific responsibilities and rights of anyone making such an investment will be written up precisely, before there is any final commitment and any money changes hands. The deadline for doing this is June 2000.

Balaton Group members will have a special access to La Taillede, but the opposite is not true. Participation in La Taillede as an investor or in some other way will have no influence on the Executive Committee's decisions about membership in the Balaton Group or about participation in the annual meeting. La Taillede will not be the regular site of the Balaton Group meeting, which is currently scheduled for India in 2000. But it will eventually have the facilities required to host a meeting or to accommodate training programs or conferences organized by individual BG members.

La Taillede will not organize its own programs; it exists merely to manage space that is useful to members of the Balaton Group and to others with complementary goals for environment and sustainable development. For example **Dennis Meadows, Gerardo Budowski,** and **Michael Odhiambo** have already had some EXTREMELY preliminary discussions about possibilities of organizing at La Taillede each fall a 3-4 week training program on resource conflict resolution.

Extensive discussions by the Balaton Group Executive Committee at the annual meeting lead to authorization for the La Taillede organizers to use the Balaton listserve for periodic announcements about their progress. They are also authorized to mention support of Balaton Group programs as one justification in their proposals to foundations and other potential sources of funding for reconstruction of the farm. Money for the project will not be passed through INRIC, the Balaton Group's tax-exempt umbrella organization in the US. Instead, several new non-profits will be created in the United States and Europe specifically to partner with and support the French Center.

We are in final stages of negotiating the sales agreement. If there are no unpleasant surprises the title will pass hands in mid December, and the farm will be available for use immediately after that. **Wim, Bert,** and **Dennis** all expect to spend part of their sabbatical leaves at La Taillede this fall and next year. Construction will start in earnest next summer, and there would be plenty of opportunities for anyone who would like to volunteer their labor in return for free lodging and the chance to learn traditional construction skills. It will take at least two years to accomplish all the plans. La Taillede will immediately offer lodging to small groups; it will take five years to determine whether the facility will mature into an important resource for the Balaton Group.

# A Vision for a Sustainable Food System
# by Elizabeth Henderson

*( Elizabeth Henderson of Rose Valley Farm in New York state was one of the founders of subscription farming — also called community supported agriculture or CSA — in the United States. She is the author of a book on community supported agriculture called* Sharing the Harvest, *Chelsea Green Publishing, 1999.)*

In a sustainable food system, every child will have the opportunity to share in a garden and to learn how to raise and preserve food. Every adult, including the unemployed and the homeless, will have the choice of participating in growing food through an urban garden, a few hours on a community farm, or by receiving training as a professional farmer and financing to establish a full or part-time farm enterprise. Training will include an understanding of ecology, practical skills for growing, marketing, and working with other people, and holistic management of resources.

We will establish reasonable limits to farm acreage per family and to coherent regions for the production and distribution of food staples. The average bite of food will travel much less than 1200 miles from field to mouth. That need not exclude exotic treats, but the basic foods — grains, beans, potatoes, vegetables — will come from local growers. Fuels from renewable sources will replace polluting petrochemicals.

A dense network of mini-farms will serve each populated area and supply fresh produce year round from gardens and greenhouses. Farmers will grow a diversity of crops in rotation, in ways that do not erode soil. Farm animals will lead lives free from undue stress, pain or suffering, and we will provide for their sustenance in ways that are respectful of the carrying capacity of the land. An enormous blossoming of biological controls and of the understanding of plant/soil interactions will make toxic chemicals unnecessary for pest control.

Farmers and consumers will have a variety of marketing choices: cooperatives, buying clubs, farmers markets, farm subscriptions. A food banking system will store supplies for local emergencies, or to ship to other regions where shortages occur.

The children of farm families will want to stay on the farm. Vital rural communities will become distinctive cultural centers. Processing plants and community kitchens and storage facilities will make it possible to preserve local food for year-round use. There will be an array of delicious local cheeses, breads, fruit drinks, wines, beers, and other specialty items. Organic wastes will be efficiently composted and returned to the soil.

Access to a healthy and sufficient supply of food will be considered a primary human right. Instead of billions of dollars to subsidize mega-farms, subsidies will go to low-income families as food stamps, so they can buy food, even at higher prices. So-called “externalities” such as soil erosion, water pollution, and the depletion of non-renewable resources will be factored into the price of food. Farmers will be economically secure, especially farmers that are environmentally responsible. Throughout the food system, farmers and workers will have safe working conditions and decent pay.

We can create a global cooperative where human beings from diverse ethnic groups exchange seeds and recipes, instead of bullets and missiles.

# The Vegetable and Fruit Subscription
# by Wim Hafkamp

*(The food system vision described above by Elizabeth Henderson is already becoming manifest in small patches in many parts of the world. A CSA farm already operates out of **Dana Meadows's** house in New England. And in Holland Wim Hafkamp is a subscriber to such a farm. Here is his description of how it works.)*

**What is It?**

Every week the organic food store in my part of the town of Delft provides me with two bags. One has some five or six different vegetables, including fresh lettuce. The other has five or so different fruits. All are organically grown. As I pick this up, I pay for next week. If I leave for a vacation, I skip one or more weeks.

Both the vegetable and the fruit packets are put together and distributed (by truck to various pick-up points) by an organization called ODIN. ODIN buys produce from a large group of farmers within and outside the Netherlands. They receive a good price, have an "open day" once a year and a dependable income. We pay a good price, $6.25 per packet, medium size. There's also a large size for families and a small for single persons.

This arrangement has drastically changed our purchase behavior. We no longer go to the supermarket once a week to stock up. Rather, when we go pick up our packet at the organic food store, we buy a lot of other organic products: pasta, rice, millet, cheeses, breads, sauces, etc.

**Why do We Subscribe?**

There are six reasons:

1. It is enough. Enough for a week. In the supermarket I would often buy too much. It took up too much refrigerator space, it would rot and affect other products, and I wasted money. And I don't have to walk around the produce department in the supermarket agonizing over what to buy; a nice variety is picked out for me every week.

2. Surprises. New foods and old ones. We get things we have never seen before, such as "earth pear" (the root of the sunflower). We get products we had forgotten about, such as red beets.

3. Recipes. With each packet comes an information sheet. On one side it has recipes, so we know how to prepare new products, and we learn new ways to prepare old products like cabbage that we've seen once too often. Many of these recipes are sent to ODIN by customers. They match the week's delivery, so we're always certain we have the necessary ingredients.

4. Source information. The other side of the sheet gives details of where the products come from. Which farmer, where, comments from the farmers. How they dealt with insects or frost. Their future plans for their farms. Impressive. It gives us "vegetables with feeling." This is de-commodification.

5. Taste. Many people ask me why I don't emphasize the taste of ecological produce. Maybe it's my taste buds, but overall I don't think it tastes that much better. But then I can't taste the pesticides and chemical fertilizer in orthodox products. And I happen to think that taste is more association than physical sensation. But at home we agree that ever since we started with this subscription, we often come to the kitchen and smell the carrots, the vegetables, the cooking in progress, and say "that smells good!" It probably has to do with shorter supply lines and fresher stuff.

6. Organic farming. There's one thing we value highly. That is knowing that the produce was grown on an organic farm. No misuse of pesticides and fertilizers. Crop rotation. Wide variety of crops. Respect for nature and species on and around the farm. Conscious use of energy and water, etc., etc.

# Taking a Position Vs. Taking a Stand
## by Lynn Twist

*(The first thing a vision requires, in order to become manifest, is someone to take a stand for it — not a position, but a stand. Lynn Twist was one of the founders of The Hunger Project. She is now a consultant, speaker, and author. This article is excerpted from the Fall 1999 issue of* Yes! *magazine.)*

Over two thousand years ago, the mathematician Archimedes said, "Give me a place to stand, and I'll move the world." Taking a stand is a way of living and being that draws on a place within yourself that is at the very heart of who you are. When you take a stand, you find your place in the universe, and you have the capacity to move the world.

Stand-takers have lived in every era of history. Many of them never held public office, but they changed history through the sheer power, integrity, and authenticity of who they became as a result of the stand they took. Remarkable human beings such as Mother Theresa, Dr. Jane Goodall, Marion Wright Edelman, Nelson Mandela, and Vaclav Havel lived their lives from stands they took that transcended their identities or their personal opinions.

I had the privilege to be in South Africa during the final days of apartheid. It was clear that apartheid was composed of a multitude of "positions." When people take a position, it immediately creates an opposition, just as left creates right, up creates down, right creates wrong, bad creates good. Positionality itself can create a strained environment flooded with force, opinions, anger, resentments, prejudice, and even hatred.

In South Africa the environment was shut down — almost intractable. Then, while he was still in prison, Nelson Mandela took a stand. He came to the realization that in any liberation movement, it is as important to liberate the oppressors as it is to liberate the oppressed. The oppressors have to shut down their hearts, their access to their own spirit and their own humanity in order to hate. Because of that, they are as much in prison as the oppressed.

When Mandela took this stand, he created an environment that elevated everyone's thinking. Even President F.W. De Klerk, his former enemy, opened up to profound dialogue. The shift from an environmental caught up in positions to one inspired by a stand was central to the miracle of the end of apartheid.

A stand such as Mandela's is almost like a magnetic field for greatness and truth. In the presence of someone who has taken a powerful stand, new qualities, new visions, and new clarity become accessible to everyone.

When you have taken a stand with your life, you see the world as the remarkable, unlimited possibility that it is. People see themselves through your eyes in new ways; they become more authentic in your presence, because they know you see them for who they really are. The negativity, the dysfunction, the positionality begin to fall away. They feel heard and known.

Taking a position does not create an environmental of inclusiveness and tolerance; instead it creates even greater levels of entrenchment, often by insisting that for me to be right, you must be wrong.

Taking a stand does not preclude taking a position. One needs to take a position from time to time to get things done or to make a point. But when a stand is taken, it inspires everyone. It elevates the quality of the conversation and engenders integrity, alignment, and trust. Taking a stand can shape a person's life and actions. It can give him or her access to profound truths that empower the emergence of new paradigms and a shift in the course of history.

# Millennial Opportunities for the Balaton Group
## by Aromar Revi

*(This mid-July email message from Aro may be the only full-fledged Revi-consciousness disquisition we'll ever get in his own writing, so we preserve it for posterity here. It's full of vision for the Balaton Group, plus plenty of Revi-humor.)*

I've been rather quiet on the listserv for the last few months, partially because I've been in a lot of places where e-mail is unheard of (there are still places like that !), doing some inner work and waiting for the 'right' time to say what needs to be said.

This is in response to **Dana's** (its finally come !) watershed message on BG futures. It also draws upon various other 'dialogues' over the last couple of years, plus sections from messages, that I almost e-mailed but never did.

I've been 'watching' in my mind's eye the plateau/ limit on the current BG 'logistic-curve' approaching for a quite while now. My vote for the last inflexion point was BTL c. 1992. The fascinating (systemic) thing for me, has been our ability to parry the feedback (or more precisely significant discussion of it) individually and collectively.

I agree with **Hartmut** that this is an excellent opportunity at Creative Destruction. Unfortunately, in spite of being a wonderful systems concept, it's rather painful to participate in.. In spite of where we are. I would still argue for a relatively stable transition, because all our major assets (except funding), especially relationships, are intact.

In spite of our contempt for them, we may want to learn a few systems lessons on stable transitions from corporations, governments and even organized religions. I would argue for a graded transition strategy — this means getting rapidly beyond all the major phases of near-death (Ref: Kubler-Ross): denial, anger, etc.; taking stock of options; undertaking a shared visioning exercise; developing a plan to implement that vision and an adaptive structure (and management) to enable its manifestation.

Alternatively, we can let the Second Law and heat death take over. But after following the agonized Kosovo discussion (and its ebb post-KFOR) on the listserv and watching a completely unfortunate and rather serious possibility of a nuclear engagement on the Indo-Pakistan border, I'm not sure we want to let the BG (and all it represents) go quietly into the night ...

I've tried to put down the key reasons why I think so. But more important, my intuition says that this is just not the time to disengage.

The challenge is in the group putting its weight behind a process of transition and finding the collective resources to make this possible. Individuals (or a few of us) can keep things moving for a while via sheer will. A self-organizing system, with Dana, Dennis and Betty's wonderful (two-decade long) stewardship this will inevitably seek a transition to a more sustainable form.

### WHAT DOES THE BG STAND FOR ...OR THE SEARCH FOR A STRANGE ATTRACTOR

In a rather short life, I've lived and worked with a number of cultures (ranging from headhunters to street tribes of NY) across three continents. I've also had the opportunity to work and learn from almost as many institutional groups (from insurgents, through local CBOs, landlords, the bureaucracy (local to global), judiciary, various armies, religions, corporations (local to global) and universities). Engagement with each, has brought much richness, depth and variety into this life. It has also brought me into contact with (extra)ordinary people who have strongly influenced my work, thought and life.

So has the BG for me. But (as the Brits say) in a rather different way ..

My conjunction with the BG came through a search for the answers to three simultaneous questions:

a. Is there a science (behind the current art) of 'directed' structural change [which the world desperately seems to be in need of] ? If so, then:

b. How important is integration (micro-to-macro, action-to-emotion-to-thought, personal-to-social group transformation, ends-to-means; biosphere-to-human artifact etc.) between the multiple levels/layers of these changes ? If (important ..), then:

c. How can a group/culture... fruitfully engage with enabling this ?

These are not 'new' questions - they've been asked many times before. But unlike many other people and groups that I know, the BG has attempted to embrace questions like this in a late 20th century context in a unique manner. Not exclusively via the heart or head or

through someone else's ideology or practice, but in a wholly human way, out of our personal and collective experience.

It is the apparently contradictory but systemic processes, the unstated but heard; the unvisualised but seen; the untouched but felt, that makes Balaton ... and sets it at another level of engagement.

Not that we don't have our asymmetries and biases: strong North Atlantic (male) presence [powerfully balanced by a smaller number of women and other culture members]; little representation from East Asia, Africa, Australia and Oceania, South America. No representation from the Francophone world. Little social science representation (except a few economists). Little representation from those active in governments, the judiciary, MNCs, money brokers and the organized religions. Many egalitarians, few individualists, even fewer hierarchists, no fatalists and a few aspiring hermits...

In a world drowning in the concrete, base and linear, it is no wonder that communicating this is an in-vivo crossing of the paradigmatic veil-event horizon.

Hence, for those of us who are not endowed with extra-sensory abilities outside Balaton portals, disengagement or virtualisation over a long period would mean slow death of a kind.

My hypothesis, is that in the organizational theory of the 21st century, groups like the BG (if it transforms and survives) will be seen as a precursor trans/post-modern institution — much as we view the Impressionists today, or as the Sangha was in Buddha's time...

Hence if we are part of the beginnings of an organizational structure of the future, why not capitalize on it? Why not give form to it now? Why draw ourselves into existentialist knots?

**BG: A RESOURCE ASSESSMENT (1999)**

Strengths/Achievements and Opportunity

1. Two-decade long (almost) engagement with global (and local) transformational and sustainability issues in both theory and practice; mind and heart, personal and collective action across a quarter (?) of the world's countries and 500/1000 (directly?) people

   Opportunity: Ashoka is pretty good and so are a lot of other enabling global networks, but I don't know any (bias showing through!) that have the breadth, depth and vision of the BG

2. Participant and Witness to the global transformation from LTG to BTL; development to SD; a bi-polar to a uni-polar to a multi-polar world (my hope)

   Opportunity: translating this experience, even if it is just onto paper, or the Web could enable huge multipliers, not to talk of policy, process etc.

3. Mean time ahead of (the leaders) on the curve: 5 years. Inference from range of Csopak topics and issues engaged with: e.g. Climate Change (1988); Consumption; Time etc.

   Opportunity: keep the dialogue going, help produce disseminable outputs (e.. Hartmut's and Dana's books) and provide tangible services to the real world (e.g. teaching-learning advice) How else can the transition be enable before limits are breached ?

4. Establishment of a sustainable trans-disciplinary, trans-cultural, multi-level humanistic learning environment that can engage with long-range, ill-defined questions across the soft-hard; local-global; east-west/north-south (and more) spectra. (We're better at that now than before - the 1990s BG transition)
5. Possession of powerful set of paradigm-shift-enabling tools, practices and experience, widely shared and operationalised across the network

   Joint Opportunity (4+5): to lead and define the paradigm shift in leading disciplines and practices. Organizing and re-presenting what we are doing individually and severally. This will require a frame and structure to enable coherence (with apologies to the Laser)

6. Carefully selected (and nurtured) individual and institutional membership at global best-quality/practice standards.

   Opportunity: If I were a North American-style CEO asked to evaluate a turn-around corporate opportunity (!) the BG would look like a pretty good bet — not much cash, but lots of intellectual and social capital and goodwill lying all over the place !

7. A priceless network of shared human vision, experience and relationships that will (my contention) stand the test of time, war, famine, climate change, patriarchy etc. — the cornucopia that (possible) overshoot(s) will bring to us.

Opportunity: Both the overshoot and the sigmoid-approach-to-equilibrium models will need this wisdom-pool to survive — let the Second Law not take it before its time.

Weaknesses/Threats to Survival/Viability

1. Designed to be an invisible, self-organizing network built around personal relationships.

2. Process of member selection opaque to the outside world. Seen to be like a 'secret society.'

3. Lack of viable form, structure, programs and management as perceived in the mainstream world.

4. Lack of 'productive' output and services.

5. Little ability to describe process and capitalize assets.

6. Identity strongly driven by a single annual event and intermediate communication, occasional joint projects.

7. Operations run on a low annual budget. No corpus, nor strategic or business plan.

8. Overloaded central node and event holding the network together.

WE NEED TO TRANSFORM THESE WEAKNESSES INTO STRENGTHS.

MORE THAN ENOUGH OF US HAVE DONE THIS REPEATEDLY IN OUR PROFESSIONAL AND PERSONAL LIVES. WHY NOT IN THIS CONTEXT?

OR IN ANOTHER VOICE

we-ourselves are the bridge
from the future-past to
the here-now
from the us-them to
the being-becoming
as Wouter reminds us
we are the changer-unchanged
the wakeful-dreamer
why shun the light of a new dawn
because the moon has set?
she will return with a vision of the depths
from the darkened face of the earth

(UN)LEARNING FROM THE SOUTH/EAST

Given all this real life and e-mail angst, I think that the BG has a lot to learn from day-to-day models of survival and sustainability from the South. The BG situation maps pretty well onto a description of a low-level equilibrium trap (caricature - but aren't most of our models!):

a. very high on human, social (and natural) capital,

b. low in physical/financial capital;

c. hence undervalued in a global market that only values some capital stocks;

d. hence unable to capitalize, raise finance/ credit/foreign aid;

e. hence facing low self-esteem, intellectual capital/top management flight,

f. hence facing crises of governance, viability, survival.

(not completing the causal loop for obvious reasons)

If most of the women of the world, Africa, Russia, part of South and Central America, South Asia etc. can survive the challenges of modernization under much worse odds, I'm sure we can get our act together enough to effect a smooth, successful and effective transition of structure, form and stewardship.

**CAVEATS**

There is no easy (or part-time) path to sustainability (either intellectually, financially or physically). Its manifestation is directly linked to our personal integration and commitment to the transformation.

Nor is there an atomistic path (me, mine and my backyard) to transformation — that is the least I've learnt from Gandhi (esp. with long delay, non-linear processes).

A (vibrant) platform for change is like an endangered species in a world — an evolutionary opportunity lost (to paraphrase **Alan**) for a "hundred million years."

And for the ascetics: the Buddha was truly post-modern — returned to the world after attaining nirvana. I for one am far from getting there, and the crutch of the Sangha (read BG) is the ferry-boat to the 'other' shore.

One of the greatest strengths-weaknesses of the BG is its ability to build scenarios for the Rest of the World, but the obverse is also our disability — to act on these insights for ourselves. Many options/scenarios/visions have been placed on the BGSC table, but unlike the Topic for each year's meeting that magically manifests itself, the question of the BG future has been usually gently sidestepped — except for the last couple of years.

Now that the moment of truth (the realization of imminent mortality) is upon us, it may be useful to revisit the most important scenarios (tongue in cheek), build a thought experiment around our favorite indicators and examine their orientors for viability.

After all not many groups of people have an immortal ballad written in their honor (thanks to **Alan AtKisson**)

## Millenial Scenarios for the Balaton Group

(with apologies to **Hartmut Bossel**, who only claimed the first two letters of the Western alphabet for his scenarios, to the *Mahabharata* where recursive narrative was mastered for the first time [my reluctance to convert this into a multi-layer hypertext document], and to **Wim, Joan** and **Dennis** our wise-people of this idiom)

*Scenario BGAU (BG As Usual) or the Egalitarian Tribal Totem (see self-referral ahead)*

In honor of the new millennium (and declining oil [and bullish renewable] stocks) a Nobel prize for sustainability is instituted, which is jointly awarded to two Balaton and one Global Watch institution.

The first institution situated loosely in the general location of New Hampshire (following its heart) votes to transfer its prize money towards the Race to Save Our Planet and continues its unflinching support of an strange endangered global tribe, hotel and tree along a lake (at which the tribe was last sighted) somewhere in Central Europe.

The second looks for an optimal factor of hundred solution in the Race to Clean Up My Backyard.

While the third makes the history books with a historic sustainability re-investment: a LBO of UNEP, the cash strapped ex-UN agency.

News update: the Nobel Sustainability Prize committee has expressed its inability to provide second-order funding to lost tribes, which puts the New Hampshire crew into a bit of a dilemma.

Meanwhile: After braving many plagues, famines, scenarios and years in the desert, the lost tribes (last sighted in NATO territory in Central Europe) finally arrive at the heights overlooking the promised land of sustainability, to find much of the open space already staked out by various competing tribes: MNCs, the media and prospective (GO AL GO) and retrospective (GRO WHO GO) politicians.

In spite of their initial shock, at not being the first in this holy landscape, their unflinching faith in the godhead of Systemic Sustainability and his consort Voluntary Simplicity sees them through (in spite of some sniping at the door on multicultural perspectives, karma, complexity theory and a few other unholy diversions)

Sadly an old prophesy returns through a forgotten feedback loop: THOU SHALL NOT COMMIT A CIRCULAR REFERENCE (i.e. those who saw the light and led the march cannot enter, without having served twenty years in an ecovillage).

The tribes in spite of their heightened awareness and awesome armory of systems ballistics are confused.

Which is a higher order orientor: Survival or self-fulfillment?

Which way is up in the transcendental triangle: ultimate ends or ultimate means (an open door to the nearest funding agency)?

The tribal shaman are severely challenged as the logistic break-point appears in all its glory:

will it be overshoot and collapse?

a second law and entropy death?

or a catastrophic phase-transition to sustainable transformation?

They split into clans to confer on an age old question. To seek a colorful vision ...:

Who are we ? Where do we come from? Where are we going?

Clans choose their 'places' according to their tradition and capacity. Some retire to the quiet of their rooms, others take long walks, swim or take boat rides with various companions, the warrior clans stake their claim to the sauna and bar space, and herald their rituals with various (coffee and other) songs..

Slowly but surely, the totem animals of each clan appear, in deference to their magical qualities and the direction they will take the tribe in the future. They are christened: Scenarios - each with their cryptic call-sign and drinking song.

*Scenario ROG (Rich Old Geezers - also called the Revenge of the Endocrine Disruptors)*

The Royal (Individualist) Totem: suggests termination of the legal entity, maintaining on-going personal (professional) relationships through e-mail, occasional short bi-lateral projects funded by existing institutes, visits to ex-BG hotels and slow but graceful decline into sustainable senility (e.g. Club Of Rome).

% of tribe in favor: Moderate
Implementability: Default option:
Risk: None
Cost: High
Volunteers: Geezers

*Scenario ROL (Rich Old Ladies - also called the GDP Reprise)*

A Dreamer (Fatalist) totem: A closet admirer/rich old lady from the North Atlantic/remorse stricken Japanese real estate tycoon/overwhelmed foundation director finally sees the light of sustainability hovering overhead the tribes and hands over a number of million $, which is then used as a corpus whose interest funds 21st century meetings, since the clan has learnt the lesson of not depleting non-renewable capital stocks.

% of tribe in favor: Very high
Implementability: Difficult
Risk: Very high
Cost: Very low
Volunteers: One or a few young ladies

*Scenario SIB (Small is Beautiful - also called Share your Water of Life)*

A gentile (Egalitarian) totem: which stands for pooling article, book and lecture royalties (till they last) with frequent flier miles, to have small once-in-n-year meetings (based on a sustainable RoR of [n-1]) and find a good fund manager so that net savings can go to help poor people in need (because the tribe can't go back into the desert again to save them)

% of tribe in favor: Moderate
Implementability: Moderately difficult
Risk: Moderate
Cost: Low
Volunteers: A few egalitarians

*Scenario SFC (Second Foundation Chateau - also called the Coffee (drinkers) song)*

An entrepreneurial (Individualist + Hierarchist) totem: that stands for establishing a global time-share chateau chain with premium space for old geezers, discounted options for young geezers and derivatives for the Rest of the World (RoW). In reality a secret society to ensure that the Age of Empire and Growth merchants don't overpower the First Foundation and Ecovillagers with their superior numbers, monies and throughput. Essential qualifications for members: gaming and simulation (of rebuilding the world by reconstructing your own house (sorry, chateau!))

% of tribe in favor: Low
Implementability: Moderately difficult
Risk: High
Cost: Very high
Volunteers: A few entrepreneurs

*Scenario FF (Freddie Fungus and a song of the same name)*

The Symbiotic (Individualist + Hierarchist) totem: suggests a find-a-suitable-(LEAD)-to-an-appropriate-(Alice)-network-to-graft-existing-resources-(Freddie)-to-form-a-(lichen)-symbiotic-divide-and-rule-strategy to take over the world (or at least ensure survival of your human/social capital and gene pool).

% of tribe in favor: Lowish
Implementability: Moderately easy
Risk: High
Cost: Very low
Volunteers: One

*Scenario SINRIC (Subsidiarised International Network of Resource Information Centers or I Love Therefore We Are)*

A fundamentalist Egalitarian totem: suggests a network of various centers/projects based on the New Hampshire Law of Subsidiarity: From Each according to Her Capacity (and volunteers come first). The successor institutions would build on the large corpus of good-will and good-feeling generated by the predecessor and no cash in the bank whatsoever.

% of tribe in favor: High
Implementability: Moderately easy
Risk: Moderate
Cost: Low
Volunteers: Unknown

*<u>Scenario BF</u> (Balaton Foundation or A Whole Lotta Selling Going On !)*

The Peter Principle (hierarchist) totem: based on the well tested principle of international Finance - When They Don't Fund You, its Time to Start Funding Them. Involves establishing a functioning structure, programs around an existing (INRIC/SI) base, building a brand, coast-to-coast social marketing to build a multimillion $ corpus that can fund meetings, SINRIC, Balaton Fellows and even a couple of chateaus.

% of tribe in favor: Probably high
Implementability: Very Difficult
Risk: Very high
Cost: Very high
Volunteers: A few hierarchists

*<u>Scenario STCN</u> (Sustainable Transformation Consulting Network or the ID [Innovation Diffusion] Song(book))*

The rare Post-Corporations-Rule-the-World (Individualist + egalitarian) totem: based on the principle that some people in the world are now ready to absorb our values, advice and expertise on the post-BTL transitions and pay for them, based on the Think Locally Earn Globally principle. Part of the proceeds from this process can fund meetings, exchange projects, fellows and eventually various chateaus.

% of tribe in favor: Probably low
Implementability: Difficult
Risk: High
Cost: High
Volunteers: A few individualist egalitarians

*<u>Scenario VSI</u> (Virtual Sustainability Institute or the Return of the Rainbow Warriors )*

The Web (cultural theoretic tour de force) totem: based on the homeopathic principles of dematerialize, decentralize and potentiate the network via the WWW, Internet, Telephony Camp-on, IRC (camp on keyboard on various issues) and final Internet broadband HoloConferencing, where virtual images of tribe members can interact in a virtual model of a famous tree and hotel in Central Europe, where the tribe was last sighted in persona.

[BTW a caveat on virtual organizations: face-to-face oral cultures tend to be a little reticent in 'rushing-in-where-angels-fear-to-tread' on IRC, chat-lines and even on e-mail. My personal projection is that video-conf will change that, but time will tell !]

% of tribe in favor: Unknown
Implementability: Moderately easy
Risk: Moderate
Cost: Low
Volunteers: Unknown

*<u>Scenario CD&SO</u> (Creative Destruction & Self-Organization also called the Extinction Blues or Mama who brought my System Down !)*

The Systems (Hermit) Ecologists totem: that seeks simplicity, harmony and peace in the search for the holy grail of Sustainable Development through Creative Destruction, leaving a blank institutional phase space for various cellular automata and agents from the Systems zoo to write their orientor history through personal realization on the path to Scenario B.

% of tribe in favor: Very low
Implementability: Default Option
Risk: Low
Cost: Infinitely high
Volunteers: A few fatalists

*<u>Scenario MS</u> (Millennial Swansong or Balaton ! Balaton ! (in Chinese Tiger style))*

The Valhalla (Fatalist) totem: based on the principle that 'if they didn't hear you while they were alive then they will listen and cheer while you go down.' A large pay-your-way week-long party around a tree located in a certain village in Central Europe to which all past BG members and other surviving aspirants: (Mandela, Havel, Gorbachev, Gore) are invited in Sept 2000.

% of tribe in favor: Unknown
Implementability: Possible Default Option
Risk: Low
Cost: High
Volunteers: A few fatalists and an individualist

**My vote goes (in order) to:**

1. Sustainable Transformation Consulting Network with a target to produce a net profit of USD 75,000 to 100,000 to fund all BG + wish list activities. At a conservative mean consulting rate of USD 750 a day x 15 members x 20 days (10% of work time in a year) = $ 225,000 per year x 50% contribution/post-expense profit = USD 112,500 per year.

2. Virtual Sustainability Institute on the Internet with once in 'n' year meetings around specially funded topics. This will be technology intensive and hence possibly exclude those without Internet/bandwidth access to take videoconferencing etc. This would also have significant multipliers to the outside world and is (hopefully) fundable

3. SINRIC - a full circle on the INRIC conception, but with 20 years capital and networking skills behind it.

4. I'm not sure I will be able to buy into the Second Foundation Chateau, but I'll sure try and visit there once in a while.

**Seeing the "true" nature of the beast**

In my humble opinion, the BG is more than a loose and extended connection of friends who drink together once a year and will continue to do so as long as their appetite for good ideas, comradeship, song and alcohol (in that order) is not sated. Nor is it just a surrogate global family, filling our complex lives with identity, meaning and relationship.

It may have started somewhat that away (I'm being unfair - because I wasn't even there!) but it has self-organized into being a lot more than that.

This is a real case of the Whole Being More Than the Sum of its Parts. We are confusing the essential part of our anatomy: NH group, INRIC, an annual meeting, newsletter etc. with the nature of the beast.

I suggest that we address this issue a little more systemically and systematically, with our collective rationality, will, and personal commitment on time and pocketbooks.

**In summary:**

1. If each of us can make a small but clear commitment of time, intellectual, physical/ financial and emotional resources,

2. If each of us can make a clear commitment to a shared vision and structure to implement it,

3. We're up and flying.

4. It only takes a handful of salt to effect a paradigm change (Ref: see Gandhi by Attenborough, if you've forgotten how simple (and difficult) it is to change the world)

# Book Reviews
# by Dana Meadows

*It is an amazing time for great new sustainability books! Three just out are must-reads for Balaton folks.*

***Believing Cassandra*** **by Alan AtKisson,** Chelsea Green Publishing Company, White River Junction VT, 1999.

We have always talked of trying to write down in one place the ideas and ways of thinking about sustainability compiled by the Balaton Group over many years. The feedback structure of overshoot and collapse. **Michael Thompson's** four cultural types. **Alan AtKisson's** innovation-diffusion theory. The tragedy of the commons. Good news stories. Sustainability indicators. The Daly rules. Exponential growth.

Now **Alan** has done the job for us. Furthermore he has made his book funny and human and personal and approachable. His discourses about the state of the world are interspersed with vignettes from his life. Careening down a Malaysian road at night, in a storm, in a bus with no lights and no windshield wipers. Singing to appreciative cows at the great organic farm Hermannsdorf in Germany. Swimming in Lake Balaton with a thunderstorm on the horizon. This book is about the great issues, challenges, and puzzles of unsustainability and, more importantly, about what one person's life is like, when it is lived from a stand for sustainability.

You will find many Balaton friends and relations in the book, from **Dennis** and **Dana Meadows to Vicki Robin**, Lester Brown, **Robert Gilman, Joan Davis** — even the TARGETS model. You will find Al Gore taking a stand for the environment and then walking away from it. You'll find the lyrics to "Dead Planet Blues." (**Alan** has just recorded a new CD, to be sold as an optional accompaniment to the book, with all our favorite funny and unfunny AtKisson songs.)

Maybe best of all, you'll find a whole chapter on the word "sustainable," defining it, legitimizing it, embedding it in the public consciousness. Here's just one passage from that remarkable chapter:

*Sustainability is a deceptively simple word for an extremely complex idea. Complexity, to those who have trouble understanding or accepting a new concept, often gets mistaken for vagueness. But sustainability is anything but vague. It is just very challenging, because it is such a radically new way of thinking. Sustainability wraps economics, ecology, social and personal well-being together in one package. It ties the package up with system dynamics and mails the whole thing decades or even centuries into the future. No wonder it's had a hard time making it to Main Street.*

*But the complexity — and the polysyllabic extravagance — of the term "sustainability" does not mean that the word should be abandoned. Eventually this idea will catch on. History is full of examples of new and complex ideas overturning the old order, often against seemingly long odds. An example is democracy.*

Then **Alan** goes into a funny riff in which he imagines a courtier of King George III ridiculing the idea of democracy, because it's hard to define, unattainable, too complicated, unworkable, opposed by powerful interest groups, and embraced only by a few small, scattered, marginalized, unorganized social activists. "What foolishness; where could that possibly lead?"

Watch out, George III, Exxon, Monsanto, and the WTO!

I'm sure I don't have to write more here to enthuse Balaton readers about this book. It will make you laugh and cry. You will hand it to your family, your students, your colleagues to explain what your life is about and to inspire them to join you. **Alan** has done a wonderful service to the Balaton Group and to the visions the Balaton Group serves by writing this graceful, clear, courageous book.

***Natural Capitalism*** by Paul Hawken, **Amory Lovins**, and **Hunter Lovins**,
Little Brown and Company, Boston, 1999.

Yes! It's finally here! If you ever wished you could write fast enough to get down everything **Amory** says in one of his fire-hose-volume lectures, now he, with a lot of help from good friends Paul and Hunter, has written it down for us.

Balaton Group members will be very familiar with the basic concepts of this book, which focus on least-cost, end-use technologies, radical tunneling-under apparent short-term obstacles into stunning breakthroughs, and the kind of carefully footnoted optimism, complete with physical demonstrations of possibility, that are so characteristic of the Lovinses. The book is totally visionary and conveys beautifully the full sense of sustainability that the BG shares. And it is studded with real-life examples. I don't see how anyone could read this book and come out the other end thinking that sustainability is in any way impossible, or even difficult. Seems to me they'd have to come out roaring to get there as quickly as possible.

I just got a call from a guy I met at a wedding once — I don't know him well — who just *had* to talk to me, because he had just been reading this book, and he was on fire with ideas and excitement! Obviously this is another book to hand to your friends, and especially your friends in the business world, to share your own visions and passions.

It is also a book full of ammunition for those of us who already "get it." So many examples, so well documented, so many terrific numbers and facts. For example (taken just from the chapter called "Nature's Filaments," which is primarily about forest products):

- Patagonia, a $165 million/year clothing company, uses only organic cotton in its merchandise.

- In spite of the electronic information age, the world now uses five times more paper than it did in 1950.

- A typical paper mill requires the equivalent of a 75-acre (30-hectare) clearcut every day to feed it.

- The average American office worker uses a new sheet of paper every 12 minutes.

- A Chicago job-placement firm has actually succeeded in eliminating all paper use by going fully electronic. A Danish firm has reduced its paper use by 30-50%.

- In Para, Brazil, improvements in harvest practice and in sawmill efficiency allowed the same amount of lumber to be produced while harvesting 45% fewer trees.

- In one year a company called Big City Forest in New York City turned 54,000 discarded wooden shipping pallets into 50,000 recycled pallets plus some furniture and saved 1500 tons of wood and $500,000 in expenses for local businesses.

You get the picture. In addition to the chapters we would all expect, on energy and hypercars, there are also upbeat chapters on food production, forest products, water use, and making markets work.

This book, like all the works of its three wonderful authors, is a sustained exercise in vision, and in pointing out constantly how vision is actually manifesting all around us all the time, in ways that are practical and even profitable. Here is its conclusion:

*Away from the shrill divisiveness of media and politics, people are remarkably consistent in what kind of future they envision for their children and grandchildren. The potential outcome of natural capitalism and sustainability also aligns almost perfectly with what American voters are saying: They want better schools, a better environment, safer communities, family-wage jobs, more economic security, stronger family support, lower taxes, more effective government, and more local control.*

*Natural capitalism is not about fomenting social upheaval. On the contrary, that is the consequence that will surely arise if fundamental social and environmental problems are not responsibly addressed. Natural capitalism is about choices we can make that can start to tip economic and social outcomes in positive directions. And it is already occurring — because it is necessary, possible, and practical.*

***Birth of the Chaordic Age,*** by Dee Hock, Berret-Koehler Publishers, San Francisco, 1999.

Dee Hock is a person I can hardly wait to introduce to the Balaton Group. He is the founder of VISA, the credit card system, which is a very strange beast for a company that does hundreds of billions of dollars worth of global business every year. No one owns it. You cannot buy shares on any stock exchange. Dee and the other founders never paid themselves millions of dollars for their services. No one tries to make it grow by a certain percent every year; if it grows, it is only because it meets a real need in the world. In fact VISA, though it was founded by a bank very much interested in making profit, does not have the purpose of making profit. It only has the purpose of freeing up transactions, so businesses can be sure of payments and consumers can carry and spend money more conveniently.

Dee calls VISA a "chaordic" organization, and here is how he defines that word:

***chaord*** *(KAY' ord) from* ***chaos*** *(Greek and Latin:formless, primordial nature; utter confusion; utterly without order or arrangements) and* ***order*** *(Middle English, Old French: regular arrangement in accordance with rules.*

1. *Any self-organizing, self-governing, adaptive, nonlinear, complex organization, community, or system, whether physical, biological or social, the behavior of which harmoniously combines characteristics of both chaos and order.*

2. *An entity whose behavior exhibits observable patterns and probabilities not governed or explained by its constituent parts.*

3. *Any chaotically ordered complex.*

4. *An entity characterized by the fundamental organizing principles of evolution and nature.*

Now you see why this is a Balaton book!

VISA works like the Internet, like Alcoholics Anonymous, like the Balaton Group. It is a non-hierarchical network, in VISA's case a network of banks. To belong they must all follow a set of guidelines that are obviously necessary in order to make the whole system work to everyone's advantage. The main purpose for the small central administration is simply to be sure everyone is following the rules.

Dee's book is the history of how this organization arose out of a banking world that was not thinking of producing anything like it. It's a story of the total transformation of a real and malfunctioning economic organization. And it's interlarded with Dee's quirky personal comments and philosophies. Here is a small sample:

*The nonmonetary exchange of value is the most effective, constructive system ever devised. Evolution and nature have been perfecting it for thousands of millennia. It requires no currency, contract, government, laws, courts, police, economists, lawyers, accountants. It does not require anointed or certified experts at all. It requires only ordinary, caring people.*

*True community requires proximity; continual, direct contact and interaction between the people, place, and things of which it is composed. Throughout history the fundamental building block, the quintessential community, has always been the family. It is there that the greatest nonmonetary exchange of value takes place. It is there that the most powerful nonmaterial values are created and exchanged. It is from that community, for better or worse, that all others are formed. The nonmonetary exchange of value is the very heart and soul of community, and community is the inescapable, essential element of civil society.*

Now that he is retired from VISA, Dee is applying chaordic principles to other organizations, in every case with an eye toward transformation to true purpose and real social and environmental value. He is working with an association of fisherman in New England, who have crashed their fishery. (Under the pain of that experience and Dee's visionary guidance, they have just written a new mission statement for their organization — to foster the full health and complexity of the whole marine ecosystem!) He is trying to bring the totally deranged U.S. health care system back to its long-forgotten purpose of curing illness and promoting health. He's working with a coalition of religions to see if they might reduce religious strife.

Read the book. You might come out seeing, with Dee, a new vision of human organizations that actually work, in a non-hierarchical, self-organizing, adaptive way, to fill real human needs in a way that honors, protects, and learns from the planetary systems that evolved us.

## Announcements

**John Peet** would like to direct our attention to the INES 2000 Conference website at <http://www.ines2000.org> "I think some of our European BG members could find it interesting and worth participating in."

**Samantha Graham** announces:

If anyone needs/wants to see what's happening on the Australian scene, the web site for the Institute for Sustainable Futures is www.isf.uts.edu.au/news.html

## News from the Members

A post-meeting note from **Samantha Graham:**

I just returned from a week-long conference/summer school in Delft on "Developing the Economy from Within." Of all the keynote speakers to be there, we had the pleasure of hearing from **Wim** and **Marius**!!! Small world! It was great to see them both again - so soon! **Tjeerd Deelstra** of the International Institute for the Urban Environment was the co-organizer of the program and he sends greetings to the Balaton Group!

Here is a report on the Summer School on Creating Local Sustainable Employment, Delft, Netherlands, 18-24th September, 1999:

This was an intensive week sponsored by DG 5 (the European Commission's Department for Industrial Relations, Employment and Social Affairs) and run by the International Institute for the Urban Environment. They gathered 40 folk from all over Europe to learn about, discuss and debate issues associated with the role of the 3rd system and small to medium enterprises (SMEs) in creating local sustainable employment. The 3rd system is variously defined, however the core notion is that enterprises in this realm have come into existence out of necessity, due to market failure; that is, neither the private sector nor government institutions are able to meet the needs of the growing unemployed, disenfranchised or socially excluded.

The workshop was the culmination of a long-term project that saw the design and implementation of 3rd sector/social economy initiatives in Leipzig, Genoa, Venice, Bath and Leicester and the wealth of experience amongst the participants led to much discussion on all aspects of setting up such sustainable, holistic projects; addressing visions, developing strategies and action plans, creating partnerships, finding funding, and developing effective communication and marketing. The highlight had to be the two keynote speakers for the week...Wim and Marius!!! If anyone wants more information, please contact me (Sam).

GREAT to meet you all and hope to see you in Edinburgh or Findhorn in the near future.

With love, Sam.

* * *

**Ulrich Loening** writes:

Invitation for Balaton 2001:

We have all discussed the possibilities for holding the 2001 meeting in Scotland. The Scottish Office "would consider favorably" the opportunity to help and I think several other bodies would also. There are some fine old houses, castles, mansions, with extensive grounds and woods, to choose from. Although it will obviously not be easy to keep up the quality of Hotel Petrol, we can certainly arrange appropriate catering, facilities and so on. Everyone is excited in expectation!

I know Costa Rica is the other option for 2001; we need to plan now which meetings to hold where, remembering that 2002 is another Earth Summit, which may influence what we do.

Centre for Human Ecology MSc.:

The details and final approvals for validation of our MSc course with the Open University took a bit longer, but is now finally approved. The first group of 17 students have just spent a wonderful (their words) weekend with us, to get to know each other and us. The course proper will start in January. Full time it is one year or half time, two years, which most have chosen. The course will run as a partly "open" university through emails and telephones; but the essential is the residential periods, of a week to start and several week-ends later. There are 3 core modules, on "Unifying concepts of Ecology", "Ecology, Self & Community: and Exploration of Values", and "Action for Transformation" and a choice of optional modules; a field course of two weeks and a research - dissertation taking 4 months if full time. We need a few more students; some loan help may be available. Please get in touch with

Irene Gardiner <registrar@callnetuk.com>
or Centre for Human Ecology, 12 Roseneath Place, Edinburgh EH9 1JB.
Tel 44 (0)131 624 1974; fax 44(0)131 624 1973 .

Balaton Futures:

I wrote a few notes for **Sam Graham** to take to the meeting; they were only partly used and maybe could be considered further:

Since we all "teach" in some way, be it public, students, politicians, communities, and sustainable cities, the new Balaton can become a Global Ecological Education Facility. After all, that is what the Group is already. The Group would:

Provide an output or product that people recognize, aside from its actual academic endeavors

Encourage the ethos of head, heart and hand

Require continued "research" (in the true meaning of cycling ideas) and so

Involve continued collaboration between participating institutes or people

Thereby become influential as a group

Stimulate meetings or workshops where specific topics and general ones and undefinable mixtures of these, can be argued, as ever · Allow the Beast, which is more than the sum of its parts, to develop

Need some structuring and formalizing,

Turn Balaton into a new proposal for funding

Oh, and it will rest heavily on its cultural, intellectual capital, which means that **Dana**, **Dennis, Joan, Bert, Niels, Chirapol, Aro**, and all, will not be able to retire from being inspirers!!

What can a Global Ecological Education Facility do?

Exchange and develop ideas, materials, much as now but more so

Help stimulate appropriate courses in existing institutions, and start new ones

Push the conventional institutes into broadening their remits (much like **Tom Kelly's** work on the Tallois Declaration, and as Unesco tried to do)

Help unconventional centers in their work (as BG does now)

It could run somewhat like the Open University, internationally; there are precedents

Develop core curriculum materials

Perhaps even create an evolving PhD international program ·

Provide a global information source for PG students, much as we once tried with lists of existing courses;

Thereby help fulfill a growing demand (not for environmental sciences, but for what Balaton, and our CHE, offers)

Provide a background to other activities, especially Aro's first vote, a Sustainable Transformation Consulting Network

What are the difficulties, brick walls, (stone ones in Scotland),dangers, problems?

no monolithic multinational corporation is intended; indeed must be avoided

rich diversity, cultural, national, curricula, may be threatened but must be maintained

New funding needed; but it is a new proposal which would find favor with almost all possible sources, including, in addition to foundations, WB, ENEP, UNESCO, EU, Aid and development agencies,

Much work is needed to develop it, but the essential core exists now.

This proposal could turn into both a BGAU as well as BGLF (Balaton Group Leap Forward) at the same time!

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**Gillian Martin-Mehers** emails:

I have just a few lines of news...I am here with Dennis and Masayo Hasegawa at a LEAD Regional Training Session in Kuta, Bali, Indonesia. We have just completed a 5 day train-the-trainer course to transfer the content and methodology of the "Creating High Performance Teams for Sustainable Development" workshop (systems thinking, teambuilding and concepts of SD) which was originally financed by Masayo at Sasakawa, and developed by the team of Balaton and non-Balaton members **(Chirapol Sintunawa, Carlos Quesada, Valdis Bisters, Pavla Polechova, Enrique Campos, Milan Caha**, and others). It is really wonderful to see so many new and young LEAD trainers be both exposed and excited by the material, as well as committed to starting to integrate it in the LEAD Programs around the world. This is turning out to be a great con-

tribution from the Balaton Group to LEAD!

On a more personal note, I am very honored to be a new member of the Balaton Steering Committee, as well as one of the people on the Committee headed by **Alan** who will work on finding funding for the group. I greatly look forward to the challenge and to working with the group closely during the next three years.

* * *

Welcome news from **John Mothibi**:

The 1997 Balaton Group Meeting turned out to be an intensive university program for me! Since that time, I had to re-start my PhD thesis as I was undoubtedly on the wrong path. The information from the group meeting and from the Balaton Listserve has significantly directed my thesis. I am submitting the thesis for external examination in two weeks.

From my own personal experience I have found my academic development on the issues of sustainable development for developing countries to be co-joined with my own personal development — the love for nature, the love for fellow human beings, the humble desire to assist locally to the global goal of sustainable development.

I believe the continuation of the work of Balaton Group is important not only to me but also to fellow aspirants in developing countries desiring to help their countries but not knowing how.

I will start working next month at the University of Botswana. My desire is not necessarily to attend another Balaton meeting, for the memories of the 1997 Balaton Group are still amazingly fresh, but that the continuation of the work of Balaton may positively change the lives of other people from developing countries as it did for me.

Love, John

John Mothibi
School of Engineering Management
Faculty of Engineering
University of Cape Town
Rondebosch 7700

* * *

**Laszlo Pinter** had an interesting post-meeting experience:

I spent a wonderful few hours with **John Peet** and **Carlos** in Budapest on the last day and we visited the newly opened Labyrinth under Castle Hill. It's a very unique place that includes 'fossils' from the future, e.g. a 'fossilized' print of a television set, a human footprint (wearing sneakers), a computer keyboard, a giant Coca Cole bottle etc. with a conclusion that people of this age must have lived a strange and wasteful lifestyle.

It was a perfect end to this year's BG meeting.

# Stories, Quotes, Jokes

## Visionary Quotes and Quotes about Vision

*The most dangerous thing is not the theft of effort*
*the most dangerous is not the beating of the police*
*the most dangerous is not the fist greedy for half ripe fruit*
*The most dangerous is*
*the peace settling on a corpse*
*the absence of pangs, the bearing of pain*
*to go to work from home*
*and to go home from work*
*the most dangerous is for our dreams to die*
*The most dangerous is that time that*
*although moving through your effort*
*stands still for your attention*
*The most dangerous are those eyes*
*which remain icy though they see all*
*whose sight forgets to kiss the world with love*
*those that drink the ordinariness of daily activity*
*those that lose themselves in the circular trap of objectiveless duplication*
*The most dangerous thing is not the theft of effort*
*the most dangerous is not the beating of the police*
*the most dangerous is not the fist greedy for half ripe fruit*
*The most dangerous thing is for death to come,*
*not to oneself, but to one's ability to dream...*

by Pash, translated by **Anupam Saraph**

*Where the mind is without fear and the head is held high*
*Where knowledge is free*
*Where the world has not been broken up into fragments*
*By narrow domestic walls*
*Where words come out from the depth of truth*
*Where tireless striving stretches its arms towards perfection*
*Where the clear stream of reason has not lost its way*
*Into the dreary desert sand of dead habit*
*Where the mind is led forward by thee*
*Into ever-widening thought and action*
*Into that heaven of freedom, my Father, let my country awake*

Rabindranath Tagore, *Geetanjali*

*You are what your deep, driving desire is.*
*As your desire is, so is your will.*
*As you will is, so is your deed.*
*As your deed is, so is your destiny*

*The Upanishads*, As Translated by Eknath Easwaran

*When you discover the truth, it is always beautiful,*
*and beautiful for everyone with no one left out.*

Buckminster Fuller

*(The following quotes are borrowed with gratitude from the book* Ecological Utopias *by* ***Marius de Geus****.)*

*The utopian vision provides the indispensable fundamentalist well of inspiration from which green activists, even the most reformist and respectable, need continually to draw. Green reformers need a radically alternative picture of post-industrial society, they need deep ecological visionaries, they need the phantom studies of the sustainable society, and they need, paradoxically, occasionally, to be brought down to earth and to be reminded about limits to growth.*

Andrew Dobson, *Green Political Thought*

*The power of utopian thinking, properly conceived as a vision of a new society that questions all the presuppositions of the present-day society, is its inherent ability to see the future in terms of radically new forms and values.*

Murray Bookchin, *Toward an Ecological Society*

*I consider what I call Utopianism an attractive and, indeed, an all too attractive theory; for I also consider it dangerous and pernicious. It is, I believe, self-defeating, and it leads to violence. That it is self-defeating is connected with the fact that it is impossible to determine ends scientifically. There is no scientific way of choosing between two ends.*

Karl Popper, *Conjectures and Refutations.*

*The utopian imagination, at its most radical, invades the prevailing concept of reality, undermines certainties about what humans must always be like, and casts doubt upon the inevitabilities of the relations of everyday life.*

Stephen Coleman, "*The Uses of Utopia, History and Imagination"*

*We need not agree upon any definite utopia, but should thrash out limited programs of political priorities within the framework of present political conflicts. Our questions are of the form "what should be a greener line in politics at the moment within issue x and how could it be realized?" rather than on the form "What would be the deep green line of politics within issue x?" Green is dynamic and comparative, never absolute or idealistic.*

Arne Naess, *Community and Lifestyle*

*Our age is an age of compromises, of half-measures, of the lesser evil. Visionaries are derided or despised and "practical men" rule our lives. We no longer seek radical solutions to the evils of society, but reforms; we no longer try to abolish crime, but are contented with criminal reforms; we do not try to abolish starvation, but to set up world-wide charitable organizations. At a time when man is so concerned with what is practicable and capable of immediate realization, it might be a salutary exercise to turn to men who have dreamt of Utopias, who have rejected everything which did not comply with their ideal of perfection.*

Marie Louise Berneri, *Journey through Utopia*