

.CHE Lecture Series, Autumn 2001  
27 Nov. 2001. Ulrich Loening  
cartoons like this here.

## **6. Old assumptions and new directions of progress are questioned**

### **Conclusions so far**

I started this series with Frank Fraser Darling's critique, that our very humanness dooms us and that we are not prepared to defer to the final logic, that civilisation is an ultimate contradiction. The talks up to now have examined the nature of that contradiction. I looked especially at how deeply within human society, are buried the origins of behaviour that in the end, despite its successes, have led to a collision course between human development and the abilities of the planet to support it. I hinted at ways in which this problematique might be resolved. Resolution might be much more difficult if the ultimate sources of trouble are built into "our very humanness", the genetic inheritance of our species, behaviour patterns that now are no longer appropriate. Many social institutions were and are now, designed expressly to overcome base instincts that could be disruptive. But many social institutions were also developed in very different situations and environments from our own. As we all recognise, the time for a re-think, back to basics, is now.

Cartoon, epilogue of development of America

The question then becomes whether a gradual evolution of ways of living is sufficient to create a more sustainable and satisfactory world community, or whether more revolutionary changes are needed.

Whether it was our genetic inheritance or our cultural inheritance or both, that contributed to present problems, would not in practice much affect action that has to be taken; only the social infrastructure can be changed.

Whether revolutionary or not, the axioms under which we operate need re-assessing and mostly changing. That indeed is the major task of bodies like CHE. Look back at the scale of past development. The Renaissance started the expansion of Europe, the birth of a new science and the domination of the world. It was in effect a revolution. And it was recent, only 20 life times past, only 20 lots of families from grandpa to grandchild. That is not long to

start a new way of life, expand it globally, come up against bio-physical limits and face challenges to the democracy and governance that grew up painfully during the short period. It took only half that time to expand to create global impacts. No wonder there are some problems now, with little time as yet to create solutions and new ways forward.

The new revolution needs to be like the old - not violent but powerful and gradual. We need to think of it as a new renaissance. So it is right that another ecological group should be born, The New Renaissance Group. It has published a book to highlight the issues, *Where Next?* It met in Edinburgh in July and published a report for change. I will use some of this material for this talk.

New Renaissance Group cover sheet.

### **Why is revolutionary change needed?**

The previous talks summarised the ways in which damaging human behaviour is deeply imbedded in cultures. These ways include thinking and acting in linear fashion; seeing narrow cause and effect relationships at the cost of inter-acting systems; producing vast amounts of wastes and being dependant on fossil energy sources. Human activities threaten biosphere support services and increase ecological fragilities. Civilisation is now predicated on continued growth, expressed in economic systems which originated from in-built humanness, and which bear no relation to reality on the ground. Practically no systems of negative feed-back have been put in place, to replace those of nature that have been overcome. Attempts to live frugally, to remove poverty or bless the poor, have failed, although they have been promoted over thousands of years by most religions and cultures. All these things need to change, especially the all-pervading global strategy, supported on economic growth.

David Fleming at the NR meeting, put it differently: “that a decentralised, localised economy is inevitable and we resist it at our peril. He compared society to a complex system which, when it breaks down, usually does so in many ways at the same time and struggles on until, like a ball rolling slowly towards a cliff-top, it finally slips over into a new paradigm.” “Previous civilisations had depended on growth. In each case, it became increasingly difficult to sustain such growth and then to sustain their large scale, leading eventually to collapse. Western civilisation will also collapse, he said, but in this case the environmental damage will be much more severe and global.”

Some people continue to argue that such basic wrongs can be put right through improvements in the existing strategies, although they were the ultimate sources of the wrongs. A strong body of opinion, from the Hudson Institute with Herman Kahn and Julian Simons, to just now a young Danish economist, has maintained that human ingenuity has always solved things in the past, and can do so again. At least this criticism ensures continued review of where we stand.

Cartoon of rubbish

My reply to those critics is that yes, human ingenuity can do it again, but that new ingenuity can only be effective if it is matched to the problem. The problems are now not resource, nor technical, ones. The same old ways will not resolve them. The new ingenuity has to address the new situation. And that is now ecological and social. After all, survival of the fittest really means survival of the most fitting. Being technically successful over nature is no longer the most fitting thing to do. That job has been done and achieved. The need now is to use that experience to do it fittingly. That amounts to a revolution.

The difficulty of changing course drastically was seen dramatically in the break-up of the Soviet Union. The apparent attempts to create a new, free-market democratic society failed when all aspects of governance failed simultaneously. That was not the way to make change.

**Fundamental Contradictions: Incompatible demands and options; the barriers to change.**

Look at the following limiting factors to progress: (Duncan Poore, NR)

1. the denial that problems exist and/or the assumption that there are easy solutions;
2. non-recognition that conventional economic growth cannot continue indefinitely;
3. the inability to recognise environmental limits, e.g. population, oil supply, water, climate change, which are all interconnected;
4. the inability to control advances in technology, which have their own dynamic of application, as with GM crops;
5. the lack of will to reduce gross inequalities; indeed an economic systems that creates inequalities;

6. insufficient resolution to establish mechanisms to maintain peace and economic stability;
  7. the absence of a code of ethics to regulate the above issues;
  8. the failure of education to develop beyond self-defeating segmentation of knowledge and the passing on of the old damaging approaches.
- Education has to convey conservatism yet promote a new radicalism

### **Why change is so difficult to achieve. The nature of progress**

All the above barriers to change rest on the system which as a whole has its own dynamic. Once a pathway has established, its characteristics are self-supporting and self promoting. It becomes difficult to change direction. We need to examine this to see how fundamental this is.

All levels of the hierarchy of the biosphere including human societies, develop along a path that is partly defined by the way they start. As I explained in an earlier talk, every organism, plant or animal, every ecosystem and every human culture can only achieve an adult or mature or climax state, by growing from some lesser beginning. One can never assemble the whole from the parts, like a machine. And if broken, one cannot usually re-assemble the broken bits. Humpty Dumpty really cannot be put together. Development, not construction or assembly, then is the way.

The direction of development is somehow self-maintaining, self correcting. Waddington used the word homeorhesis to describe flow in a definable direction, and likened such flow to a ball rolling down a valley. The ball can be displaced, away from the bottom up the sides of the valley, and in general will return. Only if the push was large enough, can it roll over the top into another valley. Waddington gave the Greek name chreod to flow along a pathway. The valley can be steep and the flow tightly confined, or wide leaving large variations. Most hierarchical systems, like all ecosystems and most human society, follow this general rule of self-maintained homeorhesis.

Wad's chreod diagram

It is easy to see examples: once you start manufacturing cars and agree to drive on the left, you define road structures, city development, overcrowding, pollution, social inequities and so on. An aspect of development is set. What has started becomes self-reinforcing.

A clear example, important for today, is the way the Bretton Woods institutions were set up, the WB, the IMF and what is now the WTO. Based on new-found USA power and established assumptions about economic growth, these institutions developed their own momentum and encouraged the corporate global economy. John Maynard Keynes stressed the need to limit trade and to help the world's poor. He lost and we are left with bodies and myths that are now inappropriate. Will improvement and modification be sufficient to make the required changes?

### **The major decision making blockages in economics and governance**

Sustainable development is not only an oxymoron, a contradiction in terms; it is not only abused in meaning (if indeed it ever had any real meaning). It actually begs the question, it maintains the present basic assumption that life can continue as normal, provided we become more caring of the environment and over equity for all peoples. SD has hidden within it, that assumptions about "how we live, where we live, and indeed whether we live" (Wally N'Dow, Habitat II) can remain in place provided appropriate environmental care leaves the planet with the same opportunities for our descendants as we enjoyed.

Once having set up systems which depend on material growth, on continued increased production and consumption, it becomes difficult for national or international organisations that co-ordinated economic activities to transform their approaches. By adding environmental clauses into the WTO, for example, the worst may be mitigated but the processes continue. Indeed, mitigation may prolong survival of the worst features of the so-called liberal free-market economy. I say, so called, because of course it is not liberal or free, but dominated by the rich northern populations using their corporations as the means. I put it like that – the corporations which some of us don't like, which infiltrate education and research, which spread poverty, could do nothing without support from all of us.

The global market cartoon

If we are stuck in that chreod, drastic action will be needed to get out of it and into another valley.

What we are up against is something like this: (David Fleming):

- *Denial*: no notice but rather denial, e.g. the oil peak has been officially denied for 30 years;
- *Centralisation*: increasing centralisation, concentration and transport dependency;
- *Ignorance*: a poorly informed public, and correspondingly irrelevant political debate;
- *Dislocation*: dismantling of local and particularly national identities; and
- *Diktat*: crushing of local initiatives by bureaucratic regulation.  
Cartoon, shooting

DF said we must look forward to build a new renaissance of the locality, rediscover a sense of place, and rediscover trust. Centralisation is as much a symptom of the waning of a great civilisation as are the crises of energy, food and climate. To address the core problem will require intensive debate but also fortitude.”

But there are opportunities for change. Sociologist Anthony Giddens’s studies of “Structuration” show how society determines directions of progress. This has been little applied to ecological change.

Making the changes seems to require at least three conditions:

1. Some sort of catastrophe; one might hope that it be not too great and it must be visible to those that do not suffer from it. The present daily deaths of thousands of children seems not enough or not visible enough.
2. A charismatic leader or collective organisation that can lead the way.
3. The pressure from the grass roots of society for change.

## **Education**

Every organisation, with any particular interest, always imagines that more and better education will enable the public to understand what it is about and to accept what it is doing. The nuclear industry has a long history of trying to educate the public in the belief that nuclear power would then be more accepted, and the government is just now starting to promote that again. The biotechnology industry similarly imagined that a more understanding public would accept GM foods. Each interest is likely to see the others as biased, as subverting the understanding of kids at school, and creating damaging long-term habits. Why should environmental education not suffer from the same inadequacies?

There is a simplistic ideal of balanced opinions: if one side of a strong argument is presented, then look also at the other, to balance them. I do not see them like that. Balance cannot be obtained by pitting a one-sided argument, often with vested interests behind it, against a general, ethical and scientific opinion which has been carefully researched. I cannot accept that the ecological NGO's, whose interest usually is none other than the ways by which humans can live better on the planet and whose work has covered wide-ranging issues, can be pitted against a particular group on grounds of 'balance.' The biotech or agro-chemical industries are not opposites of the organic agriculture movements, even though they are pitted against each other. You achieve balance by striving for it.

Cartoon, balance in education

In this situation, it is not acceptable for particular interests, especially commercial ones, to supply materials to the formal education system, like the Biotechnology Industry Organisation's magazines called "Our World." These documents present the TV "Tomorrows World" view of science – the technical wonders that can be achieved. The wonders of nature are missing.

cartoon

However, formal education is but a minor part of societies' educational influences. The greater part comes from informal cultural influences and from the media and advertising. The overwhelming message is far from objective and far from balanced: it is to buy more, spend more, consume more, and be forever unsatisfied with what you have and wanting to go one better. This is drummed into us not just by adverts and media, but equally by perfectly respectable broadsheets like the Financial Times and The Economist. All assume that continued economic growth is the only way to survive, and extol every growth, regarding any reduction as catastrophic. So the City is maintained in its comfortable myths. The need for education for the educated is as strong as ever.

This applies at all levels, throughout life, from all media. Edinburgh City Council for example, is just now starting a promotion for sustainable development with a slogan, "Do a little, achieve a lot." That is, recycle things, minimise waste and so on. But the world's message is also do a little, achieve a lot: go shopping, spend, borrow to do so, fly off on holiday.

These two opposites highlight the fundamental unresolved paradox of our age: that the world economy depends on doing precisely the wrong thing.

Cartoon, the balanced economy

Education then, at any level, has the double task of handing on our culture and educating to change it.

Education alone cannot therefore overcome the cultural norms of our times. It is stuck like everything else, in the wrong chreod.

### **New Visions and fulfilling human needs.**

Before we go further, it seems necessary to try to envision where an ecological and social revolution might take one. The initial impetus for change came from planetary degradation and increasing disparities of living standards. But now one has to ask: What is it that one is striving to achieve? We do not readily speak of vision, because that would seem to impose some cultural norm on society, *us* telling *them* how to behave.

Cartoon, biovision

I suspect it is this fear of dictating to others that prevents proper visioning of what is possible. The best we get, and it is indeed a full and fine set of visions, are those such as The Earth Charter. This is a list of wishes for a better world, of general aims with which few would disagree and most would welcome. But it says nothing about how to achieve these aims and nothing about how to bring about different solutions for the world's different cultures, which yet have the common aim of living sustainably and not off natural capital.

Anthropologists have described the broad visions, world views of ecological sanity, in many of the remaining un-acculterated tribes. We continue to admire the native Americans for their social and ecological wisdom. Somehow, the tight control, which their society maintains over itself, is not so much discussed. I doubt that we would find it acceptable.

Therefore, apart from visions, sustainability indicators, and resource accounting, another approach is needed to evaluate what can be done to satisfy fundamental human needs. It is amazing analysis is that indeed one can make a taxonomy of needs that is universal, crosses different cultures. *Fundamental human needs are finite, few and classifiable. They are the same in all cultures*



*and in all historical periods. What changes, both over time and through cultures, is the way or the means by which the needs are satisfied. ...What is culturally determined are not the fundamental human needs, but the satisfiers for these needs.*

Manfred list nine fundamental needs, developed from the psychologist Maslow's:

Subsistence, Protection, Affection, Understanding, Participation, Idleness, Creation, Identity and Freedom.

Each of these are matched through the existential needs of Being, Having, Doing and Interacting.

That gives one a matrix of four ways in which 9 needs might be satisfied, a box of 36 options. In effect, the analysis is a check list for communities of all sorts to get together and work out what it is that they are striving for. The assumption that more money would cure all is rejected in favour of a basic look at what makes life good, what makes one happy. A poverty in any need becomes in essence a pathology; one can be rich in one aspect and poor in another. A society can suffer from multiple poverties. A society poor in money may have huge wealth otherwise. Winona La Duke, the Native American activist for First Peoples rights, commented: our wealth was the source of our poverty. The Ladhaki peoples did not know the concept of poverty until they became incorporated into the western economy. Manfred's analyses were originally stimulated by the plights of Pacific West coast fishing villages, which lost their livelihoods to international fishing. Yet the analysis has proved as valuable to help rich business interests in Sweden understand their poverties as for the conventionally poor.

Cartoon, being happy

Just as some examples: satisfiers are not at all necessarily economic goods; they may be forms of organisation, values and norms, political structures, all of which are in a permanent state of tension between consolidation and change.

One can identify satisfiers which are actually violators, such as the arms race failing to properly satisfy the need for protection and destroying many other satisfiers.

One can have pseudo satisfiers, such as fashions and fads which seemingly satisfy the needs for identity, but only at a shallow level.

Inhibiting satisfiers perversely prevent what is intended such as

commercial TV in satisfying leisure inhibits understanding, creation, identity. Synergic satisfiers are the ones to search for, to satisfy multiple needs: such as breast feeding instead of bottle feeding, which satisfies protection, affection and identity in addition to subsistence.

This approach to human scale development, provides a method for communities to judge their own condition, choose the own future directions. It is in no way prescriptive. It just provides a simple way to help one to think things out.

The chosen path can then be tested against the bio-physical possibilities of the planet – can what is needed be provided. And the tools for that, in modeling of resources and ecological services, are similarly available.

All this is available, Given the will. But let me quote from a radio 4 program: an archbishop in Brazil said “When I give food to the poor, I am hailed as a saint; when I ask why the poor are hungry, I am criticised as a communist” We do not want to know. Denial remains.

But one is in the position to fulfil what Andrew Bennett said there were four key points of interest to DFID:

- 1 What are the links between environment and poverty –can we define how they interact?
- 2 How do we measure if we are going in the right direction?
- 3 Why can't we work better with some of the NGOs, when goals are often similar?
- 4 How do we stop Rio +10 being really boring?

Here at CHE and in hundreds of other NGO's, we can tell you, Andrew!

### **Practical Actions are also long term**

As in all these talks, agriculture provides my prime examples. The source of food and the methods of its production are as much a characteristic and vital property of the food, as its physical contents. One could compare our food for adults with mother's milk for babies:- breast feeding provides, as we saw, more than food. The ability to separate our food supplies from our society may be regarded as a success story, just as the possibility to bottle-

feed is. But an important aspect of life is thereby lost. Therefore, quite apart from any technical criticism of the global free market proposed for agriculture by the WTO, there is a deep social, human aspect that is lost by turning food into a mere commodity. Do you invite your business colleague to a lunch of monopolistically grown mass processed junk food? Quality can be maintained only by growing locally, adding few exotics, and respecting your meal in both the ecological and social meanings.

Maybe that is idealistic. But a similar story emerges in looking at the material. Sustainable forms of agriculture, in many variations world-wide, have consistently shown how they are capable of feeding the local populations. They depend on a mix of experience from their cultures and biological understanding, and sometimes newly bred varieties including disease resistant ones, soil conservation techniques which are being better understood, and so on. In this country, Jules Pretty has documented the successes. No-one can say how the world will be fed this century. I find the case for ecologically sensitive ways that take account of more of the whole science overwhelming. But change will not be made overnight. For many years, there will be a mixture of conventional agro-chemical and organic methods. Both will improve over time. Agriculture will again become Agri-Culture, enriching life by providing synergic satisfiers for all cultures!

Cartoons, and Jules Pretty book.

What is needed most vitally however, is that the conventional and its associated powerful global economic structure does not prevent the expansion of the new regenerative agriculture. And it will do that by its very nature, since it turns food into a single traded commodity dependant also on trade intellectual property, prevention of local protection for small producers and so on. That is why that most powerful creed of monoculture globalisation must be controlled. The growing public pressure suggests that this might succeed.

Cartoon, the future

If that can be done, then agriculture provides a case, where the revolution to a new direction might take effect gradually, where transition becomes possible and the intermediate stages are viable. It is the central case study for change, leading towards a truly new economic order, a richer more genuine life, and the integrity of the biosphere. It can lead the way to ecological modernisation, which might be the catch phrase for the next stages after sustainable development.

The New Renaissance Group at its meeting in July this year in Edinburgh, made the following recommendations: In effect, my talks have enlarged on each of them.

**Economic signals and measures are vital to achieve a sustainable human future. Accordingly we recommend that: -**

- **Official bodies should adopt and promulgate quality of life indices to replace purely material indices of economic success.**
- **Developed countries should take a lead in reducing consumption of material resources and in lessening their ecological footprints elsewhere.**
- **The conservation of wild and cultivated biodiversity should be seen to be of the utmost value, both for the present and the unknown future.**
- **National accounts should include statements of natural resource depletion and use of ecological services where measurable.**
- **Fiscal policies should favour measures that encourage conservation of resources and penalise those that waste or pollute.**
- **Perverse subsidies and price distortions should be phased out.**

**We recommend the following: -**

- **the establishment of a global elected assembly within the UN framework to hold to account the principal world institutions, including the WTO, IMF and World Bank;**
- **the formation of a Global Economic Commission to play an international role equivalent to that of the regulatory bodies in advanced economies;**
- **the establishment of a World Environment Organisation, embracing the UN Environment Programme and the Commission on Sustainable Development, to provide, among other things, an umbrella for the many existing environmental conventions, leading to mergers where appropriate;**
- **the rationalisation of UN development and aid bodies under the leadership of UNDP;**
- **measures to improve the transparency of international ‘summits’, notably the G8 and European Union Council ; and**
- **steps to ensure that the ‘democratic deficit’ is not managed solely by admitting well-resourced single issue non-governmental organisations, valuable though these are.**

**We therefore recommend:-**

- **the involvement of the faith communities, thinkers and artists in developing and promulgating a global ethic along the lines proposed, building on existing work;**
- **the development of public interest media channels, both television and Internet, which have the fostering of an equitable and sustainable human future as their main objective;**
- **promoting a revolution in thinking, making the quest for a more sustainable way of living central to education at all levels and fostering research to bring it about, and**
- **an annual independent monitoring report on resource use and progress towards sustainability, bringing together data from the global economic, development, resource use, human rights and environmental agencies, presented in a form which the media and general public can easily follow.**