

THE PATTERN THAT CONNECTS

Introduction to The Global Vision Planning Manual: Cognitive Process in Self-Organising Systems

Conceptual framework for the collaborative design of the information content of the *Global Vision* feature film, an impressionistic motion picture conceived as a *collective self-portrait of Humankind and the biosphere*. By Michael O'Callaghan.
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How do you feel about the future? Global problems such as climate change, the population explosion, overconsumption, resource depletion, tropical deforestation, desertification, the ozone hole, weapons proliferation, the debt problem, globalisation, unemployment, growing inequity, regional economic and political turbulence, and the possibility of terminal resource wars - amount to an impending crisis of planetary proportions. They threaten us all, and yet we have all contributed to their creation. Viewed in the context of evolution and of history, it seems that Humankind is approaching the moment of truth when its rapidly growing population will either destroy the eco-social system on which its survival depends, or learn how to adapt in a sustainable way to the realities of our planetary biosphere.

Because the crisis is global, is in everyone's self-interest to solve it. And if certain groups behave as if they have a vested interest in seeking gain at the expense of the world, they need our help and compassion for they are surely suffering from a dark illusion. The development of a sustainable society would benefit us all. But most people - especially the 50% of the world population that now lives in cities - find it hard to imagine what a sustainable society would be like. And with good reason, since ecological sustainability has never been part of their history, their mythology, or their experience. Indeed, the ecological, economic and social benefits of a sustainable society almost defy description.

So far, the first steps along the path to sustainability have taken the form of issue-specific movements for the environment, sustainable development, appropriate technology, renewable resources, preventive medicine, humanistic psychology, human rights, women's issues, fair trade, peace, and so on. Like allopathic medicine, however, this type of response is analogous to an attempt to control the symptoms of a disease, while the symptoms continue to worsen. What's needed is a cure. Without a systematic shift towards a more systemic healing approach, these movements offer little hope of reversing the accelerating long-term trend towards eco-social chaos. For despite the local and global efforts currently underway, we are now losing more topsoil, destroying more rainforest, causing the extinction of more species, creating more climate change, increasing the rich-poor gap, sinking deeper into debt, creating more resentment, fostering more fundamentalism and terrorism, losing more civil liberties, squandering far too much money on out-dated military approaches to security, and coming ever closer to the brink of self-annihilation.

Until we recognise the part each one of us is playing in this problem, it may only now be a matter of years until the crisis becomes irreversible. If that happens, the historic opportunity for an ecologically sustainable, democratic form of civilisation may be lost forever. As the ancient Chinese philosopher Lao Tsu said: "The only way to prevent a disaster is to deal with it before it happens".

This conceptual framework for the participatory planning of the Global Vision Project presents a clearly-stated, scientific way of looking at the global crisis which very strongly suggests that the transition to a sustainable form of civilisation could come about much more rapidly - and less expensively - than most people now believe to be the case.

A WHOLE SYSTEMS APPROACH

The language of this conceptual framework is that of General Systems Theory, and Cybernetics. Before we get into the first chapter of the Manual, a few words about these subject are therefore in order here.

General Systems Theory is a body of scientific knowledge which makes use of a common vocabulary to discuss matters that were previously described in the specialised vocabularies of separate disciplines such as ecology, economics and so on, because as Buckminster joked, "God does not have separate departments of physics, chemistry and biology" to describe the Universe.

The word Cybernetics comes from the Greek for *helmsman* - one who steers a ship. Cybernetics is defined as the science of communication and control. It maps the pathways of information by which systems may either be regulated from outside, or regulate themselves from within. The science thus has two main branches: the first one deals with the control of machines, and led to the development of things like computers, automatic navigation systems for spacecraft, guided nuclear missiles, and so-called "smart" weapons. This branch does not concern us here.



The second branch deals with the more complex control processes through which self-organising biological and social systems regulate themselves and adapt to the environment on which their survival depends. This was developed by a small number of thinkers including the great anthropologist and biological philosopher Gregory Bateson (1904 - 1980), shown in the photo to the left. He was the author of *Steps to an Ecology of Mind* (1), *Mind and Nature: A Necessary Unity* (2), and *Angels Fear* (3). In his view, "There is latent in Cybernetics the means of achieving a new and perhaps more human outlook, a means of changing our philosophy of control, and a means of seeing our own follies in wider perspective". (4)

Observing that the Earth's biosphere (including Humankind) is a self-organising system, Bateson remarked that "no part of (such a) cybernetic system can have unilateral control over the whole or any other part."

This Cybernetic law holds true not just for human attempts to control nature, but also to individuals and social groups who - for whatever reason - would like to change the behaviour of others. As Bateson said:

"The myth of power, is of course, a very powerful myth; and probably most people in this world more or less believe in it... But it is still epistemological lunacy and leads inevitably to all sorts of disaster... If we continue to operate in terms of a Cartesian dualism of mind versus matter, we shall probably also come to see the world in terms of God versus man; elite versus people; chosen race versus others; nation versus nation and man versus environment. It is doubtful whether a species having both an advanced technology *and* this strange way of looking at the world can endure... The whole of our thinking about what we are and what other people are has got to be restructured. This is not funny, and I do not know how long we have to do it in. If we continue to operate on the premises that were fashionable during the Pre-Cybernetic era, and which were especially underlined during the Industrial Revolution, which seemed to validate the Darwinian unit of survival, we may have twenty or thirty years before the logical reductio ad absurdum of our old positions destroys us. Nobody knows how long we have, under the present system, before some disaster strikes us, more serious than the destruction of any group of nations. The most important task today is, perhaps, to learn to think in the new way". (5)

Now consider the world-wide movements for peace, sustainability, health, human rights, social justice, etc, from this perspective. Insofar as our approach is limited to attempts to control the symptoms of our global dis-ease, all we are really doing is trying to do modify the behaviour of those whom we may perceive to be responsible for the various problems we want to solve. This pre-Cybernetic way of thinking reinforces the perceptual splitting of Humankind into complementarily antagonistic groups: the ecologists versus the polluters, pacifists versus the arms industry, fair traders versus "free" traders, human rights activists versus totalitarians, progressives versus conservatives, political party A versus political party B, religious fundamentalists versus their enemies, terrorists of the left versus terrorists of the right, "us" against "the system," and vice-versa! Enormous amounts of energy, money and time - intended to make things better - are wasted by both sides in a mutual cancelling-out process of complementary antagonism, such that the overall situation actually gets worse.

But the global problems we face are not really separate from each other, nor from the whole of Humankind which needs to resolve them before it is too late. As of 1997, that's almost six billion people, each one of whom is part of the whole interconnected biosphere-Humankind-culture- technology which constitutes the "system" in question, and that includes you and me and all of our unconscious assumptions, expectations, and beliefs as well.

As Bateson pointed out:

"To *want* control is the pathology! Not that the person can get control, because of course you never do... Man is only a part of larger systems, and the part can never control the whole...

The question of how to transmit our ecological reasoning to those whom we wish to influence - in what seems, to us, to be an ecologically good direction - is (thus) itself an ecological problem". (5)

Carl Jung made the same observation in psychological terms:

"To know where the other person makes a mistake is of little value. It only becomes interesting when you know where *you* make the mistake, for then you can do something about it. What we can improve in others is of doubtful utility as a rule, if, indeed, it has any effect at all." (6)

Cybernetics today is still seen as a minor discipline, rarely taught in universities, and wrongly presumed even by the educated public to be some rarefied pursuit of interest only to esoteric epistemologists back in the 1970s. 2,600 years ago in China however, the poet and philosopher Lao Tsu recognised the self-organising principle immanent in nature, which he called the *Tao*, (meaning *the Way* or *path of least resistance*). Eloquently described in his poem, the *Tao Te Ching*, this essentially Cybernetic idea became the general system theory of Chinese cosmology. (7) Through his mythopoeic vision of the Tao's self-organising function, Cybernetic principles were put into practice - in government, medicine, agriculture and religion - and influenced the culture of that country for thousands of years thereafter. Another insight from China comes to us in the ideogram for "crisis", which as is well known, is a combination of the signs for "danger" and "opportunity".

The Global Vision Planning Manual, then, proposes a way of describing the global crisis - and the manner in which it came about - that reveals opportunities for non-adversarial actions which could have greater effectiveness in healing the underlying source of the global crisis than the efforts at controlling the symptoms currently underway.

This optimistic-sounding premise is based on a simple model of the self-organising pattern-recognition process immanent in every living system, including the unconscious part of those human beings whose behaviour other groups want to change, which I am presenting here for the first time. By focusing on the signal-to-noise ratio within the living

system, this Syntropy Ratio model permits a Cybernetic description of societal evolution which leads to a realisation which may seem naïve until you understand the reason for it: namely, that individual common sense is now the largest untapped resource on the planet! The real naïveté, however, is to imagine that the existing mode of political action is going to be able to solve our crisis for us. The Manual shows why political action as we know it - in the age of the Internet - too often remains stuck in the organised attempt to obtain linear control over non linear eco-social organisations, and is therefore structurally obsolete.

By describing the cultural problem of how to adapt to our new global environment in Cybernetic terms, it appears that the global crisis we face is essentially identical to one which we have encountered seven times before during our long process of biological evolution since the origin of life on Earth some 4.5 billion years ago. The biological track-record of our previous successes should give us hope for the future! In conclusion, this Manual suggests why rather than attempting to *control the symptoms* of the world problematique in a piecemeal and adversarial way, it will be far more efficient, cost-effective, and fun to empower people to see for themselves what they can do to make a difference, or — as Gandhi put it — *to be the change you want to see in the world*.

So: let us start by examining some of the hidden effects of our own perceptions and actions as they travel around the global synergetic geometry of communication circuits within the larger communication system of life on Earth. Gregory Bateson expressed the hope that by becoming more conscious of such connectivity, new information can emerge, and the larger system will, in fact, change subtly.

As Bateson said:

“There is something called learning at a rather small level of organisation.
At a much higher gestalt level, learning is called evolution.”

Notes:

1. Bateson, Gregory. Steps To An Ecology Of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology. Ballantine Books / Random House, New York, 1972. Republished with a foreword by Mary Catherine Bateson, University of Chicago Press, 2000. ISBN-10: 0226039056. ISBN-13: 978-0226039053.
2. Bateson, Gregory. Mind and Nature: A Necessary Unity. (Advances in Systems Theory, Complexity, and the Human Sciences). E.P. Dutton, New York, 1979. Bantam, 1980. ISBN-10: 0553137247. ISBN-13: 978-0553137248.
3. Bateson, Gregory and Mary Catherine. Angels Fear: Towards an Epistemology of the Sacred. Bantam, 1988. ISBN-10: 0553345818. ISBN-13: 978-0553345810.
4. Bateson, Gregory. Steps to an Ecology of Mind (see note 1 above).
5. Bateson, Gregory. Ecology and Flexibility in Urban Civilization, in Steps To An Ecology Of Mind (see note 1 above).
6. Jung, Carl. Man And His Symbols. Dell, 1968. ISBN-10: 0440351839. ISBN-13: 978-0440351832.
7. Lao Tsu, Tao Te Ching, 6th. century B.C.E.; translated from the Mandarin by Gia-Fu Feng and Jane English, Wildwood House, London, 1972. Republished by Vintage, 1997. ISBN-10: 0679776192. ISBN-13: 978-0679776192.