

Revolution to a Gaian Economy

'The planet takes care of us, not we of it.'

Lynn Margulis : Distinguished Professor of Microbiology (1938-2011)

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...there is a dawning realisation that the covid pandemic, climate change and loss of biodiversity are all symptoms of a growing crisis brought on by the way our species behaves towards nature...

...what's becoming obvious as the crisis continues and ordinary people become more and more disillusioned with the behaviour of politicians and economists and business leaders, is that a few tweaks to 'business as usual' won't get us out of the mess...this is a 'big shit, big fan' moment and things will have to change radically...

...as it happens, there's already a revolution under way, a revolution which provides us with the opportunity to change our ways and to 'come of age' as a truly social species, sparking a 'Renaissance in Earth System Living', a true flourishing of human potential within the deep context of the evolving Earth system, the system we call Gaia...

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...in their book 'Revolutions That Made the Earth', Tim Lenton and Andy Watson, both Professors of Earth System Science, point out that:

'In its long history, the Earth system has undergone several cataclysmic upheavals..the planet is in the midst of yet another upheaval...this time we are the irresponsible new organisms, equivalent to the cyanobacteria, about to change the planet forever.'

...this is a revolution which affects the whole of the planet, and Lenton and Watson advise us to get on board...

'our best hope now is to embrace revolution...close the recycling loops we have opened, and restore stability.'

...Lynn Margulis puts it more forcefully...

'People may expand, plundering and pillaging the Amazon, ignoring most of the biosphere, but the history of cells says we can't keep it up for long. To survive even a small fraction of the time of the symbiotic bacterial settlers of the oceans and the Earth, people will have to change.'

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...perhaps surprisingly, at the heart of this need for change is our current economic system... it is only relatively recently that trading on stock markets has become a virtually instant global phenomenon and this has divorced much economic activity from local places and from real time...global traders resemble gamblers in a giant glittering casino who have lost all contact with the people who are affected by their addictive transactions...but the impact on people is only part of the problem...there is something much more dangerous lurking in the shadows of the casino...

...don't be fooled by this seemingly measured description of it from Lenton and Watson...

'...our current economic valuation system doesn't make Earth system sense...'

...Earth system 'sense' has been accumulating for around three thousand six hundred million years...our current economic valuation system has its roots in stock markets which have only been around for about 300 years...

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...consumer capitalism, which drives global economic activity, is founded on the concepts of 'competition', 'market forces' and 'survival of the fittest'...but the scientific world view of Gaia Theory shows us that these may be very shaky foundations on which to build an economic system because the Earth system doesn't really work like that...as Lynn Margulis observes...

'The view of evolution as chronic bloody competition among individuals and species, a popular distortion of Darwin's notion of 'survival of the fittest', dissolves before a new view of continual co-operation, strong interaction and mutual dependence among life forms.'

...this view reinforces what we all know intuitively, that we really are 'all in this together', not in the hollow sense of the politician's mantra, but in a deep sense of sharing with all other life forms what Lynn Margulis calls this '*subtle, aesthetic, ancient and exquisitely resilient planetary system*'....

...the Earth system is open to abundant energy from the sun, but it is effectively closed to new material, so recycling the available materials is vital to the continued evolution of Gaia...but this is recycling on a scale not so far envisaged by consumer capitalism...

'Gaia, the living Earth far transcends any single organism or even any population. One organism's waste is another's food. Failing to distinguish anyone's food from someone else's waste, the Gaian system recycles matter on the global level.' Lynn Margulis

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...consumer capitalism measures its success by the profit it makes from selling things to as many people as possible by any available means, and it tends to ignore the effects its

activities are having on the rest of the planetary system...when it comes to recycling, capitalism has failed to see that it isn't just the waste that needs to be recycled but all the produce of the system, including the 'wealth', the assets, that consumer capitalism creates...why?...

...a 2006 UN survey showed that: *'the richest 10% of adults accounted for 85% of the world total of global assets'*...from a Gaian perspective, these assets come from three sources: the planet's natural resources, which are finite, the activities of all Gaian organisms, including the skills and labour of a human workforce, which require continual food, rest, shelter and a healthy, balanced environment, and the planet's ability to recycle waste products...if the Gaian system is to continue to provide these services then these 'assets' need to be recycled...it's clear from the UN figures that 85% of the assets are not being recycled so it comes as no surprise that all parts of the Gaian system, the natural resources, the healthy diversity and functioning of organisms, and the planet's ability to process the waste (e.g. CO₂ emissions), are all showing signs of stress...

...the creation of wealth is a resource for keeping the dynamics of the economic system going...but what happens if the recycling loop is not closed and most of the wealth becomes concentrated into isolated areas and effectively taken out of the system?...during the next cycle, the system is trying to generate more wealth with fewer resources, and this builds up over successive cycles until the system starts to manifest symptoms of stress in terms of environmental degradation, species loss, and in human terms, poverty, homelessness, refugees, increasing government borrowing, and ordinary people getting deeper into debt against the hope of future wealth...

...but that level of future wealth will never come because each time more wealth is created a large proportion of it is taken out of the resource pool and concentrated into the hands of a few (10% of the global population owns 85% of the wealth)...the wealth is there globally, but it has to be appreciated for its true value as a resource, as a product of the whole system which involves raw materials, the bacterial communities that run the carbon cycle, the nitrogen cycle and the oxygen cycle, all organisms which make up dynamic ecosystems, as well as human endeavour, creativity and labour, and the sources of energy... in effect it has to be treated as a commons, a 'common wealth'...concentrating vast amounts of wealth in the hands of a few is like a few bees suddenly deciding they're going to cream off most of the honey each year and stash it away for their own private use and not allow it to play its full part in the cyclical evolution of the bee colony superorganism...

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'We are in mute, incontrovertible partnership with the photosynthetic organisms that feed us, the gas producers that provide oxygen, and the heterotrophic bacteria and fungi that remove and convert our waste. No political will or technological advance can dissolve that partnership.' Lynn Margulis

...we don't pay the cyanobacteria to keep making the oxygen for us to breathe, or the mitochondria in each of our cells to burn that oxygen so we can stay alive, but without their

continual activities over 3,600 million years we could never have evolved as a species, nor gone on to invent consumer capitalism, an economic valuation system which understands so little about how Gaia really works that it doesn't make Earth system sense...

*'In Gaia we are just another species
neither the owners nor the stewards of this planet.
Our future depends much more upon a right relationship with Gaia
than with the never-ending drama of human interest.'*

James Lovelock

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