

The Gaia Hypothesis and its Ethical Implications : Does Nature Have Rights?

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My background is theatre, music and education, so I was naturally drawn to the social and cultural implications of Gaia science.

I want to set the scene by looking at the title of the seminar and the question it poses :
'The Gaia Hypothesis and its Ethical Implications - Does Nature Have Rights?'

Now we are all familiar with the dimensions of time and space, dimensions which provide the framework for all our behaviour. We can play around with the ideas of space and time and dream of time travel and so on, but on a practical moment-to-moment basis we have to live within the parameters of space and time, we are essentially here and now.

The scientific work of Lovelock and Margulis reveals another dimension, what we can call 'the Gaia dimension', the dimension of the continually emerging dynamic relationship between life and the planet, the dimension of 'Gaia nature'.

Which brings us to the question: Does nature have rights?' Let's rephrase it 'does time have rights? Does space have rights? These questions clearly don't make sense, and in the same way, if we ask 'does nature have rights' there is something much deeper going on. What's going on is the fact that the Gaia dimension is a much more complex notion than 'a nature that has rights'.

What excites me about realising that the Gaia science world view is a dimension is that suddenly we can see how we created the polycrises we are facing as well as discovering a positive model for how we can transition to a sustainable and equitable future for our species within the planetary system, while we still have the time.

Let's dive into the Gaia dimension with this quote from Lovelock:

'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.' JL AG p14

There are three fundamental aspects of the Gaia dimension here:

1 : we are 'in Gaia'; because it's a dimension, like space or time, we can't choose to be in it or not; we are born into it and we are recycled back into it when we die; and we share the dimension with all other species

2 : we don't own the planet nor are we stewards of it, in the same way that we don't own space or time

3 : for our species there are two 'realities' going on, a 'right relationship with Gaia' , and the 'never-ending drama of human interest'

and it's this last one which is the most important for understanding how we created the polycrises we are facing. This is the historian Harari's description of the two realities: (play clip)

Once we realise that the 'never ending drama of human interest' is the source of our problems and that it is being played out through realities 'which exist only in our imaginations', we can more easily identify the features in the 'real reality' of the Gaia dimension which we need to use to kick start the transition to living in a 'right relationship with Gaia'.

The Gaia system has existed for 3,600 million years, since life became established as a planet wide phenomenon; life has never died out and all living organisms, however complex, are related to the first bacteria:

'There is no evidence to show that human beings are the supreme stewards of life on Earth. (aside: 'neither the owners nor the stewards'). But there is evidence to show that we are recombined from powerful bacterial communities with a multibillion-year-old history. We are part of an intricate network that comes from the original bacterial takeover of the Earth'. LM & DS M p36

Given this deep connection to everything that's gone before, let's look at some of the radical 'real realities' of how the Gaia system works:

First, 'Life is social. It exists in communities and collectives. You and I are both composed of a collection of organs and tissues; the organs are made up of billions of living cells, each of which can also live independently. Then the cells themselves, as Lynn Margulis has shown, are communities of micro-organisms that once lived free.' JL AG p18

Even the apparently 'individual you' is in fact a consortium of co-operating symbiotic communities; so we have already started on the transition by seeing humans not as 'individual people doing their own thing' but as 'communities of organisms embedded in the dynamic planetary system of Gaia'. In a deep way you are Gaia and you are Gaiaing all the time.

Next, 'all living organisms live somewhere'; the 'somewhere' provides all the needs for the organism to stay alive and thrive, the organism and its somewhere are intricately integrated and intimately inseparable; this relationship exists at all scales, from the microcosm to the whole planet:

'An organelle inside an amoeba within the intestinal tract of a mammal in the forest on this planet lives in a world within many worlds. Each provides its own frame of reference and its own reality.' LM M p126

We are obviously creating most of our problems in the 'mammal in the forest' frame of reference, that is the organism and its immediate environment scale, but problems like obesity suggest we're not too good at the 'intestinal tract to mammal' scale either.

Thirdly : all organisms are equally evolved:

'From the paramecium to the human race, all life forms are meticulously organised, sophisticated aggregates of evolving microbial life. Bacteria occupy and are indispensable to every known living structure on the Earth today. Having survived in an unbroken line from the beginnings of life, all organisms today are equally evolved.' LM M p28

The 'never ending drama of human interest' runs entirely on the fictions that some organisms are 'worth more' than others. One glimpse at a thriving forest ecosystem dispels this myth. Lynn also describes these equally evolved organisms' as '*permutations of the wisdom of the biosphere*' and as such all organisms have something unique to offer to the community they are embedded in;

'Biodiversity is an absolute requirement for Gaian persistence. There is no favoured species list.' LM SP p154

Finally, the Gaia system thrives by recycling both the wealth and the waste it produces:

'Gaia is the genius of recycling...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.' LM SP p148-9; p152

In terms of transitioning from the 'never ending drama of human interest' to a right relationship with Gaia', recycling is a core issue. In their book 'Revolutions that Made the Earth', Tim Lenton and Andy Watson, both of whom worked closely with Lovelock and our now Professors in the Global Systems Institute at Exeter University, wrote: '*Our current economic valuation system doesn't make Earth system sense*' - in other words, '*Our current economic valuation system doesn't make Gaia sense*'.

But economics now influences all human activity. Here's Harari on the subject. (play Harari 2). So, are we doomed? Not necessarily. There are two main reasons why '*Our current economic valuation system doesn't make Gaia sense*'. Economics is not a product of nature, it's a product of the imaginations of Adam Smith and others who only saw the role of Gaia nature as an 'externality' to human economic activity rather than the central provider of wealth and the 'genius of recycling'. Also, a large proportion of created wealth 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 is not 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 essential chemical cycles, all organisms which make up dynamic ecosystems, as well as human endeavour, creativity and labour, and the sources of energy. In effect, in the Gaia dimension 'wealth' can be seen 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.

Economics is not a product of nature, it's a product of our imaginations and so we can re-imagine it. We can make a rapid transition to self reliant and sustainable communities if we instigate a global wealth recycling scheme to build the sustainable infrastructure needed and then provide everybody in the community with a more than adequate living income for their contribution to the community, whatever that may be.

To sum up, the Gaia dimension exposes the fact that humans are living in two 'realities' at the same time, and this is the root cause of our failure to respond adequately to natural crises. In the 'real reality', natural systems are continually adapting and changing to keep the conditions on the planet in a dynamic balance so that life can continue to evolve. On the other hand, the 'fictional realities' invented by humans, such as politics, economics and nation states are prevented from changing and adapting by political dogmas and an economic system which was designed on the assumption that nature would always cope with our waste and provide all the resources we need for continuous economic growth.

Our current political, economic and cultural systems focus on individual success at any cost and an unequal distribution of created 'wealth'. They have evolved from the unfounded belief that humans are separate from, and superior to, the rest of the natural world and are justified by misinterpretations of Darwin's notion of 'survival of the fittest'. This view lies behind the rise of 'charismatic' politicians with immense power and apparent disregard for the consequences of their actions, not only for other people, but more importantly, for the natural systems which sustain all life on the planet. These beliefs are inappropriate for the crises we now face.

We urgently need to expose the limitations of the fictional realities which are dictating our current behaviour and shift to basing our actions on the dynamics which have been driving the Gaia planetary system for 3,600 million years. We need to create regenerative communities which are sustained by regenerative agriculture and financed by regenerative economics. We need to build resilience into the cyclical evolution of our social, economic and political systems by empowering people to design and create local scale communities which are largely self-reliant in energy production, waste management, food supply, health care and education.

The Gaia perspective has been in the public domain since the 1980s and whilst Gaia science is now widely accepted in academia as a tool for investigating the problems we are encountering in our relationship with the natural world, it's importance is hardly mentioned at the grass roots, cultural level. If we are to succeed in changing things for the better, we need a 'cultural revolution' based on the world view provided by the Gaia dimension, where all inclusive, equitable and sustainable communities are everywhere.

And, as a postscript, the great Chinese philosopher Chuang Tzu would have reminded us:

'The Gaia of which we speak is not the real Gaia'

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