

The Gaia Hypothesis

As the economist Vilfredo Pareto said, “Give me a fruitful error any time, full of seeds, bursting with its own corrections”, perhaps the Gaia theory is coined in error, but it is a much needed hypothesis in order for the world to be viewed from a different angle. The Gaia hypothesis is an ecological theory that proposes that the living matter of planet Earth functions like a single organism. The scientific community remains divided about the Gaia Theory. Many well-known scientists argue that since they know of no way to test Gaia scientifically, it is little more than a metaphoric phenomena that cannot be explained mechanistically.

Dr. James Lovelock is known as the father of the theory, postulating it in 1972. However, the notion of Gaia is not new. In a way it started about 200 years ago, in 1789, in an Edinburgh lecture given by Dr. Black, the discoverer of carbon dioxide. He gave the lecture on behalf of James Hutton, who was ill at the time, who had written, “I consider the Earth to be a super-organism and that it’s proper study should be by physiology”. Hutton is rightly named the father of geology, but he was more than this. He was the first scientist to challenge seriously the notion that the Earth and all upon it were created intact as described in the Old Testament. He did so through his own evolutionary theory, called uniformitarianism, in which he proposed that the material environment is continuously recycled at a more or less steady state, with origins in the remote past. Hutton’s wholesome view of our planet as a superorganism that participated in the recycling of the rocks faded away while Darwin’s great vision of the evolution of the species of organisms by natural selection gradually took over.

Dr. Lovelock, less known also for creating the electron capture detector, has recently been on the press supporting nuclear energy. He, as most of us are, is concerned about what is commonly feared as the ‘tipping point’ in climate change, post which Gaia, the ‘grandmother earth’ may not be able to recover from to self-regulate. It is ironic that the concept was first iterated by the discoverer of carbon dioxide, the very gas that seems to be causing this age-old grandmother to be working harder than perhaps ever before to continue to provide liveable conditions to its umbilical tenants.

Source: The Evolving Gaia Theory, James Lovelock: Paper presented at the United Nations University, Tokyo, Japan 1992

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