

## Earth and Life

Daisyworld: James Lovelock and Gaia

## Caption: James Lovelock

I see the Earth as more than just a mixture of living things and inanimate matter. I see it as a tightly coupled entity where the evolution of the living things and the evolution of the inorganic matter constitute a single and totally inseparable process. It's a whole system. Somehow or other life appeared on Earth. I don't give a damn if it was somebody put it here, whether it was a waste bin cast aside by some visiting spacecraft, or whether God fiddled around with the chemicals and started it, or whether it dropped out from space as Fred Hoyle would have us believe. Somehow or other it started here.

At that time the Earth must have been just right for a little, otherwise it wouldn't have survived, but the Earth was evolving geochemically and quite remorselessly towards, although it would take a long time, a state like Mars or Venus, and utterly impossible for life. So life arrived just at the right moment, so to speak. Gaia is the name that I give to the system that is the Earth's, it's also the name of the theory of the Earth as a system, which is I suppose saying the same thing in other words. Gaia got its name in the oddest of ways. Many years ago I used to live in a village called Bower Chalke in southern Wiltshire, and a near neighbour of mine was that novelist, William Golding, and he and I were good friends, and we used to go for walks around the village talking about philosophical things and that, and when the idea of Gaia came into my mind – I didn't call it Gaia then of course – I was telling him about it, how I thought the Earth was a self-regulating system and that the organisms somehow were involved in this process of self-regulation - and he rather liked the idea, and he said to me well, you'd better give it a proper name, so I said what do you suggest? He said I'd call it Gaia, and for twenty minutes we walked on, I was very puzzled because I thought he'd said the word 'G-Y-R-E', those great whirls that go round and round in the ocean, and I could see that it was a circular thought that I had in my mind, and I thought 'gyre' was going a bit far, and then he suddenly said no, no, no, I meant 'G-A-I-A', Gaia, the Greek name for the Earth's goddess, and of course that I accepted.

## Voice Over

So, how did it all begin?