The entire range of living matter on Earth from whales to viruses and from oaks to algae could be regarded as constituting a single living entity capable of maintaining the Earth’s atmosphere to suit its overall needs and endowed with faculties and powers far beyond those of its constituent parts.

Gaia is a thin spherical shell of matter that surrounds the incandescent interior; it begins where the crustal rocks meet the magma of the Earth’s hot interior, about 100 miles below the surface, and proceeds another 100 miles outwards through the ocean and air to the even hotter thermosphere at the edge of space. It includes the biosphere and is a dynamic physiological system that has kept our planet fit for life for over three billion years. I call Gaia a physiological system because it appears to have the unconscious goal of regulating the climate and the chemistry at a comfortable state for life. Its goals are not set points but adjustable for whatever is the current environment and adaptable to whatever forms of life it carries.

I think that we reject the evidence that our world is changing because we are still…tribal carnivores. We are programmed by our inheritance to see other living things as mainly something to eat, and we care more about our national tribe than anything else. We will even give our lives for it and are quite ready to kill other humans in the cruellest of ways for the good of our tribe. We still find alien the concept that we and the rest of life, from bacteria to whales, are parts of the much larger and diverse entity, the living Earth.

James Lovelock