Peering at the Edges of a Unified Concept of the Earth

by Ryan Milton

Earth: The Biography

Washington, D.C.: National Geographic Society, 2008DVD of 5-episode miniseries, 230 min., \$29.95 (Available at http://shopngvideos.com/products/earth_the_biography_2)

It is in human nature to want to know why we are on Earth and what processes led to our being here. This internal drive also implies that human beings choose to progress beyond our current existence. That is the nature of discovery. When I was in high school, National Geographic was where research often began for preparing "authoritative science projects," and therefore I was eager to again be enlightened with National Geographic's new miniseries, Earth: The Biography. But upon reviewing this series, it became clear that the producers did not want their viewers to develop a better scientific understanding; instead, they wanted to create an emotional, unscientific, antihuman ideology.

This miniseries covers five areas of nature: the atmosphere, the oceans, ice, volcanoes, and something they call "the rare Earth." Over millennia, these natural forces shape and mold the surface of the Earth, "drive the climate," distribute and create all the greenhouse gases, and are intertwined as natural forces to protect life and regulate the environment on a local as well as a global scale. For as long as the geological history can show, massive changes have occurred, frequently in the form of natural disasters: a great meteor that killed all the dinosaurs, or huge vol-



canic eruptions that burned up Earth's forests, or oceans that dried up and wiped out the animal life. Nonetheless, as shown, the vibrant Earth has been able to recreate all the ecosystems and even new species of complex life.

Many questions remain to this day about the beginning of the Earth and the

development of life. This series presents a weak version of Johannes Kepler's harmonic orientation of the Solar System, where the relationship of each planet to the Sun and to each of the other planets defines the basis for our unique Earth. Unfortunately, National Geographic's scientists produced no unifying

idea of planetary beginning and the unfolding of the three phase spaces of life, the abiotic, the biotic, and the noetic, as Russian biogeophysicist Vladimir Vernadsky showed as one elegant gestalt.

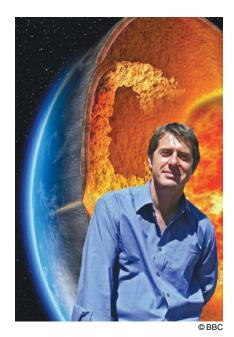
Fascinating Examples

Although lacking that higher scientific idea, Earth: The Biography does peer at



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Fissures in the ground through a port hole in the Afar region of Ethiopia.



Dr. lain Stewart, host of Earth: The Biography, in front of computer-generated imagery depicting the perpetual convection

core to its crust.

the edges of such a unified concept. Much basis for the composition of land, air, and water are shown in the films to be the results of both the hot, violent creation of Earth through the initial, "chance" collision of two planets, and then the ice age from roughly 700 million years ago. The combination of these Earth-changing processes is depicted through some fascinating examples, both real (spectacular) photos and animations.

of hot plumes of rock from the Earth's

- The massive hot lava lake in the crater of the active volcano Erta Ale in Ethiopia, gives the viewer an excellent look at the creation and destruction of the Earth's surface in a "fast-forward" representation of the flowing, cooler crust, floating and then sinking under, as new Earth is created.
- National Geographic animates the terrific effect on the Earth of the ice age of 700 million years ago, when massive glaciers covered huge portions of the Northern Hemisphere of the globe, below present-day Ohio. The viewer is shown the skyline of New York City from a distance, in order to see the dip in the Midtown area. That dip is the soft sediment that replaced the bedrock moved by the flow of

the massive ice-age glaciers.

- We are shown volcano-heated springs of highly toxic water that sustain "worlds within worlds" of microbial life at 75° C, which may have been the basis for the first life on Earth.
- The first life to photosynthesize light into energy and oxygen were the strombolites, bacteria which form hard, rounded mounds from the slime they secrete, and which began as far back as 4 billion years ago.
- Phytoplankton are another key species that greatly affects life on the planet. These single-celled creatures are the first to be eaten in the food chain, yet they have a mass effect, in vast "blooms" that can be seen from space through photosynthesis. Phytoplankton create roughly 50 percent of all planetary oxygen—more than all the jungles and forests combined!

Embedded in the "Earth Science 101" storyline is another subtle theme regarding Nature's other inhabitant: humankind. The viewer is uncomfortably informed that human growth may be the one thing violating the pristine equilibrium. How could this occur? You guessed it: global warming.

Narrator lain Stewart comments that although great glaciers can level mountains, or that the warm Gulf Steam may have caused the last great ice age that ravaged the Earth, these forces are no match for human beings' ability to change the planet—presumably for the worse, because no other view is given. In passing, however, Stewart does admit that conditions *have barely* changed on the Earth since humans first walked the planet.

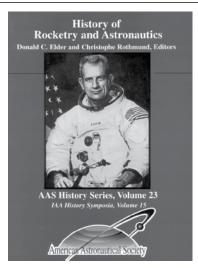
The thoughtful viewer will find it inconsistent to represent mankind's relatively short existence on Earth as a force greater than planetary interactions and lengthy geologic processes, and thus as automatically destructive. The viewer will also find that he is required to be too dependent on assertions and beliefs, rather than demonstrated principles.

One such example is in the film called "Rare Earth." In order to present the global warming argument, the narrator develops the relationship of the Earth's core to the atmosphere and shows how that affects carbon dioxide. The Earth's atmosphere is regulated by the magnetic field generated by the Earth's iron core. Over time, molten magma rises from the Earth's core and moves the Earth's plates, narrator Stewart says: "Where the plates collide, volcanic eruptions are caused that release carbon dioxide into the atmosphere. Today we think of carbon dioxide as a dangerous greenhouse gas that leads to global warming," Stewart says, "but throughout Earth's long history, carbon dioxide has played a vital role in keeping the Earth at the right temperature for com-



Dune Sea in the Namib Desert, Namibia.

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Banks of coral off the coast of Oahu, Hawaii.

plex life to survive." The film then continues to note that the world's jungles and forests absorb 25 percent of all the carbon dioxide that is produced and the more carbon dioxide there is, the faster the trees absorb it and grow!

Finally, after continuing to note this kind of happy relationship, the film concludes with the claim that humankind is "pumping" greenhouse gases into the atmosphere at a destructive rate, and endangering this rather hardy planet, and that this is a far more powerful effect than the fantastic process Stewart just described! Nothing is presented regarding human intervention that shows that a primitive existence is far worse than a modern existence, such as the obvious difference between burning jungle biomass for subsistence farming or drug crop cultivation, versus the potential for nuclear power or water management for advanced agricultural cultivation.

To be fair, the flow of the theory is not as compact as I represent here, but National Geographic finally brings it home, stating that scientists agree that human influence is so great that there is now a new geologic age, the Anthropocene Era—or, in other words, the "not-so-great," human era. This is far from the tone of the great Russian scientist Vernadsky and his idea of the Noösphere, where human ingenuity will expand and develop the Biosphere to a higher level of existence and fruitfulness, as man's natural mission.

Instead of asserting that there are new directions in which human creativity can direct the Solar System's development, the film leaves the viewer with the harrowing thought that human beings will destroy themselves by "pumping greenhouse gases" into the atmosphere, but that in a short million years, Mother Nature will recreate herself, albeit, without us.

A Negative Cycle

Although much of National Geographic's science about the atmosphere, the oceans, and the climate is certainly true and revealing, I could not help but feel as if I were being led into a cycle of fear, then relief and rage, about many of the potential catastrophes facing the planet because of mankind's existence. All of the fancy animations just keep you watching, so that you get that "Old Time religion," that it were better if there were really not so many people to mess with Nature's own harsh cycles.

What is ironic about this negative view of mankind, is that the film's scientists cannot see in their own examples that it is the living process that creates the most significant effects—mostly for the better—on Earth. Water, and even the air we breathe, are fossils of life, as Lyndon La-Rouche has shown [for example, see "Project Genesis," this issue, p. 21—ed.]. Abiotic and biotic life can be continuously developed by increasing the noetic effect through human development and intervention.