

***Evolution* by Stephen Baxter**

Part One

I am alive, marginally conscious, huddling in a hole in the ground, while giant creatures with their thunderous roars and colossal thirty-ton bodies shake the earth above me. It is 150 million years B.C.

I am in the trees, safe from a whole new set of nasty and cunning predators below, ready to scurry down whenever the coast is clear, to quickly locate, gobble down, and fill my belly with tasty bugs, eggs, lizards, and berries. It is 20 million BC.

I am running across the open savannah, naked, sweating, now almost six feet tall, fully erect with a much bigger brain, on the look out for Smilodon who would rip my flesh apart with his six-inch front teeth and eat out my liver. I am also watching out for my ape-man cousins who would clobber me unconscious with their primitive rock tools and eat my liver out as well. It is 1 million BC.

Life is hide-and-peek, duck-and-dodge. Life consumes life. Life procreates. Life protects its own kind. In all its agitation and ferocity, life keeps evolving.

I am living through the harrowing experiences of my ancestors, the complex, capricious, and perpetually dangerous saga of the evolution of mammals and primates, told in the flesh-and-blood, tooth-and-claw, dirt-and-soot, first-person perspective--through the eyes of the animals. I am about half way through Stephen Baxter's novel *Evolution*. Baxter, as he has done in his great futuristic epics (such as *Vacuum Diagrams* and the *Manifold Trilogy*) that span millions and billions of years, has created in *Evolution* an immense historical narrative extending from the deep past into the far future, all of it told through the lives of the creatures who lived it. Baxter paints very big pictures. In this novel, he tells the story of our evolution, our history, our struggles, our deaths, our fears and cumulative triumphs from the earliest beginnings of tiny furry animals who hid in terror, in the muck and mire with the worms, while the dinosaurs ruled the land, the sea, and the air.

But futurist questions emerge within the saga as it unfolds. What have we learned? What are the neurological and instinctual underpinnings that have been built into our

nature? Where is it all heading? Will we make it? Species come and go in life's drama like the flickering of fireflies. The future of evolution is an adventure into the arena of unending uncertainty.

I am now moving into part two of the novel. Neanderthal, powerful like a bear and smelling like one, has just met the tall, skinny, childlike-looking "people" who make tools out of bones (the wonder of it!). I am at 130 thousand BC.

Part Two

If you want to feel deep in your gut--to experience with your vicarious senses, to smell and taste it, the living pulsation of evolution--this is the book to read. Baxter is amazingly good at creating the visceral and naturalistic feel of the struggle of life, woven together with an ongoing broadly painted description of the evolution of nature and the earth. His description of the comet hitting the earth and the resulting ecological catastrophe that wiped out the dinosaurs is excellent--tragic, powerful, and jolting to the mind and the senses. You are there.

In Part One of this review, we were moving forward in evolutionary time circa 100,000 BC. Modern homo sapiens (that is, our direct genetic ancestors) had only recently come on the scene and these early homo sapiens were making initial contact with their northern genetic cousins, *Neanderthals*.

I was into describing for you the grand saga of our history laid out in Stephen Baxter's **Evolution**. I have now finished Baxter's book, which eventually moves into the present, chronicling the downfall of modern civilization, and then sails forth into the far distant future circa 500 million AD. Ultimately the novel is tragic in scope--but on a big, cosmic scale. All of our intelligence, gadgetry and economic power and wealth is not sufficient to maintain itself and modern humans pass into oblivion--into the "dark backward abyss of time."

But along the way, the story told of our lives (the life of humanity) is very moving and thought provoking. The chapter titled "Mother of Her People" recounts the life of the female human (circa 60,000 BC) who creates tattoos; witchcraft; totems and taboos; myth, animism, and superstition; grammar; and shamanism--a woman tormented by

migraines, powerful visual hallucinations, and obsessed with understanding the connections between things. She is the genius who seeds modern human culture.

In later chapters, Baxter describes the lives of Cro-Magnon humans living through one of the Ice Ages in Europe; the death of the last Neanderthal (we killed him); the rise of agriculture and cities, which is accompanied by the emergence of drunkenness as a way to cope with the drudgery and monotony of settling into cities and working the fields; and the adventures of a Roman scientist (circa 400 AD) in search of dinosaur bones--he gets it; he understands the grand panorama of history--but the light is snuffed out for over a thousand years.

On the other side of the present, intelligence wanes and civilization falls; our descendants go back to the trees and their brains shrink; rats, pigs, and goats evolve into the dominant mammal life forms; one of our lines becomes domesticated by the rats; and in the far distant future, our very distant genetic children realize a symbiotic and totally dependent relationship with a new species of trees--trees that are our mothers--our wombs--who raise and feed us, who, in essence, give birth to us. Yet, as the sun is swelling and turning red and the earth is drying up and dying (circa 500 million AD), a metal sphere comes floating down out of the sky looking for the creatures who made it and sent it off into space millions and millions of years ago. Evolution reminded me of the ending of Wells' *The Time Machine*. A consciousness expanding trip. Bleak and sad, poignant and humbling.