BOOK REVIEW

The Spirit in the Gene:

Humanity's Proud Illusion and the Laws of Nature

Reg Morrison

Our extraordinary usurpation of habitat, resources, and waste sinks is one clear indicator of human success as a life form on earth according to the author of this great book. (1999, Cornell University Press) Morrison explores various attributes of humans, compares them with those of other life forms, and analyses current theories of evolutionary development on earth. He makes a strong case that our massive brainpower, linguistic abilities, and self-reflective consciousness are complemented to a great degree by an ingrained tendency to believe in mystical or supernatural phenomena. This includes our boundless faith in human potential, and our social cohesiveness centered on family, tribe, and culture. It seems as if there is a dominant genie at work encompassing our creativity, perseverance, and fulfillment.

"Compared to other primates we were seriously under endowed except in one respect - our brain. But the close collaboration that eventually developed between human language and our so-called spirituality not only compensated for our physical shortcomings but also became an evolutionary asset...that would turn this disinherited, endangered primate into a superior survivor...that would one day manage to meddle with the evolutionary process itself." (p. 257)

According to Morrison, we share with all mammals the living of a "double life." Sensory experiences and a "complex pastiche of memories, fears, and expectations" make up what he calls "an invisible landscape." Phenomenologists, a school of philosophy including Edmund Husserl and M. Merleau-Ponty, examined experienced reality as a composite abstraction reported from experiences. The process is rather like detailed introspection, and is of course language dependent. Morrison believes that most of our important decisions (one could argue all) occur in the inner landscape, connected by our animal instincts and perceptions to the world.

This is not mind-body dualism in the traditional sense. It is the belief that subjectivity and hard wiring jointly play a dominant role in human life. Subject-object dualism is more to the point. Morrison adds that humans err in believing that their decisions are mainly "cortical and rational." Our communication, planning, and teamwork skills combined with our instinct and emotional makeup made homo-erectus "an imaginative, resourceful adventurer."

Although not a primary focus, the issue of free will versus determinism is woven through the book:

"Animals cannot help but sing, dance, mate, and fight in obedience to their genetically directed notions of territorial proprietorship and sexuality. And we are no exception...All our literature, music, art, drama, history, law, and legend has been wholly founded on our genetically engineered misperceptions." (p.258)

Nature, of which we are a part, undergoes periods of lesser and greater change, sometimes referred to as punctuated equilibrium. There are responses to changes at all levels in earth's partially open planetary system. Solar and other forms of radiation enter our atmosphere, as do asteroids containing ice, minerals, and perhaps the basis for life itself. Gravitational energy influences tides and is said to affect biological cycles. Daylight periods and climate do not obey human commands. Human freedoms are in reality constrained by innumerable factors, and perhaps limited in scope. Yet, in life, we can experience existential angst engendered by our perception of freedom as overwhelming.

I agree with Morrison that uncertainty about the unknown, causal linkages, the future, reciprocal love, personal health and security, etc. combine with the human emotional makeup to engender a 'value endowment' by us of extraordinary, supernatural qualities to aspects of our experience and imagination. The highly valued and greatly feared attain this special status. Evolution selected this behavior, as it is estimated that 80% or more humans currently affirm a sphere of a supernatural. It must, therefore, have served our forefathers well, or the trait would have become vestigial or counterproductive and have been de-selected. Morrison claims that it served (and serves) us too well. It has

become our Achilles heel, and is related to thinking with our loins another naturally selected trait.

The long term upshot of this selection for "significance, spirituality, and the supernatural" is, according to Morrison, the basis for our coming decline if not demise. We wrote many religious and social codes; one in particular commanded us to subdue nature and to multiply our kind. We have been all too obedient in following our own rules; we are the most successful mammal on earth. Biodiversity and habitat health, prerequisites for human sustainability, are being undermined by our success. Local civilizations have failed in the past from overexpansion, but with globalization and interdependence we might all fail at once.

Now that I've spoiled your day, you might ask why this review is appearing in Innovation Journal. Three reasons I offer are 1. the excellent analysis of innovative success in a nearly empty, prehistoric human world, 2. the current challenge to override some of our (vestigial?) hard wiring with new forms of innovation, and 3. Morrison sees artistic creativity, aesthetic appreciation, love and lust, as dominated by the mystical, emotional realm - perhaps innovation and problem solving straddle the rational and the mystical.

Whether necessity, inspiration, the need for ego gratification, or other drivers are key to the creative process, our hard wiring lurks as a precondition. Human history is marked by countless innovative successes from the wheel, through the harnessing of various energy sources, shipbuilding, agricultural development, water and waste system development, mechanization, medical technology, communication technology, computers, etc. Mortality rates declined rapidly during the past century, and life spans have greatly increased in many areas of the globe. Now, in Morrison's and my view humans are challenged to somehow innovate sustainable shrinkage. The information exists to optimize our future; our hard wiring has so far provided massive interference to successful implementation.

Morrison says he wouldn't want to live without the mystical aspects of life. But he can't see the requisite rebalancing of our psyches occurring in time to prevent a crash. Frankly, neither can I. But to all you innovators

out there, I shout a wake-up call. Here's the toughest challenge man has ever faced. There is no greater calling if your genes are to perpetuate.