Ravin' Evermore

by

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caveat lector

If you'd like to read the previous essay in this series, then ask for *The Lone Raver*.

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Two little children, five years old,
Marie the gentle and Charlie the bold.
Sweet and bright and quaintly wise,
Angels both, in their mother's eyes.

But you, if you follow my verse, will see
That they were as human as human can be
And hadn't yet learned the maturer art
Of hiding the self of the finite heart.

One day they found in their romp and play
Two little rabbits, soft and gray.
Soft and gray and just of a size,
As like each other as your two eyes.

All day long the children made love
To the dear little rabbits, their treasure trove.
They kissed and hugged them until the night
Brought to the coneys a glad respite.

But too much fondling doesn't agree
With a rabbit's nature, as we shall see.
For ere the light of another day
Had chased the shadows of night away,

One little pet had gone to the Shades
Or, let us hope, to perennial glades
Brighter and softer than any below,
A heaven where good little rabbits go.

The living and dead lay side by side
And still as alike as before one died.
And it chanced that the children came singly to view
The pets they had dreamed of all the night through.

First came Charlie and, with sad surprise,
Beheld the dead with streaming eyes.
Howe'er, consolingly, he said,
"Poor Marie! Her rabbit's dead!"

Then came Marie, and stood aghast
And kissed and caressed it but, at last,
Found voice to say while her young heart bled,
"I'm sorry for Charlie. His rabbit's dead!"

—author unknown
quoted to me by Poppa

…and this essay is dedicated to

Marie the Gentle and Charlie the Bold,

who live in all of us

Ravin' Evermore.

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Me, Po' Edgar, and The Ravin'

Quoth the Raven, "Stop his ravin'!"
Quoth po' Edgar, "Nevermore!"
"Don't you know," implored the Raven
"That the man is misbehavin'?"
"Don't you know," replied po' Edgar
"That's what writer's work is for?"

"No!" objected Mr. Raven!
"Writin' ain't for misbehavin'!
It's for love, and lore, and more!
That's the thing that writin's for."

"You're a bird brain" said po' Edgar
"It's too bad," continued Edgar
"That I ever wrote, demented,
of a bird so argumented
of an aviary scented
pesky argumentive bore!"

"But you did," the bird insisted,
"And the pen can't be resisted!
I might be a little twisted,
But I'm here to stay and more!
Once the moving hand has written
And the pen has deeply bitten
And the mind with words are smitten
No one is the same no more!"

At that point I tired of waiting
For those two to start abating
All the chatter, all the baiting,
So I showed them to the door,
Where po' Edgar looked about 'im,
Wonderin' why the bird would doubt 'im,
And the bird just flew away.
I guess that he was kinda sore.
Edgar couldn't help but mutter
and I guess I wondered what're
They both hoping to accomplish?
What the hell were they here for?

Now they're gone, but they inspired me,
Even though they finally tired me,
Just the same, they really wired me.
Think I'll write a little more.
Guess I'm not so bad. I might'r
might not be your favorite writer,
But I might be somewhat brighter
It would trigger my igniter,
Dedicate me to my chore,
If I got some little prize'r
Got extolled up to the skys'r
(Hoping that you're not a miser),
Got some cash like from a geyser.
I'd be grateful evermore.

Dr. Doom

> No observation, however simple, can be made except by those predisposed to make it.
>
> —Vry, in *Helliconia Spring*
> by Brian W. Aldiss

Poppa liked to tell the story of a particular cat. The cat was owned by Dr. Adrean Spear, a Biology Professor at the University of Texas. The cat was hit by a car and one of the cat's rear legs was paralyzed. Dr. Spear had a friend who was a veterinarian, to whom he took the cat for treatment. The veterinarian pronounced its doom. "We must," announced the veterinarian, "either amputate the injured leg or kill the cat. The damaged nerve in its back won't regenerate."

Dr. Spear didn't want the cat to lose its leg and he kind of liked the animal so he didn't want it killed, either. He also (privately) had the suspicion that the nerve might, indeed, regenerate its damaged portion, so he took the cat home. After several months, he noticed the cat using the leg. He took the cat back to the veterinarian who said, "Well, I'll be darned! I never saw that happen before!"

"Of course not!" said Dr. Spear. "You always either killed the cat or cut off its leg!"

The story was an early lesson to me. I saw in it the possibility that there are other choices than the ones presented. It taught me that there's more than one way to skin a ca — no, excuse me, there's more than one way to look at things. Much later, I came to understand that our choices are sometimes limited by design and to our detriment. Eventually, I realized another implication of the story. A doctor can't charge for a home cure.

The Daughter and the Dilemma

> The gods help them that help themselves.
>
> —from *Hercules and the Wagoner*
> by Aesop

It's amazing how that attitude of limited choices gets around. When my daughter Catherine was a child, I had a discussion with her about a certain obnoxious woman that we knew. Catherine asked me if I'd rather die of some disease or marry the woman. Why do people think that way? I explained to Catherine that I had other choices and that we shouldn't limit ourselves to choosing from only undesirable things. I told her that I was going to live in good health, without the woman. After that, I diversified. I lived in even better health without lots of women.

Choices associated with women bring to mind the sad story, possibly apocryphal, of an unfortunate Jewish captive of the Germans. As the story goes, a Nazi handed the woman a loaded weapon and told her to kill one of her two children. He promised her that the other child would thereafter be spared. However, he assured her that if she refused to kill one or the other of them, then he would kill both of them. Facing her two quietly waiting children and confronted by a cruel choice, the woman failed to recognize a third alternative. Armed, she could have tried to shoot the Nazi. Even if she had failed, everyone present, even the Nazi, would have learned a valuable lesson about alternatives.

Dull Eye Not See Forked Tongue

> There are more things in heaven and earth, Horatio,
> Than are dreamt of in your philosophy.
>
> —from *Hamlet*
> by William Shakespeare (1564—1616)

I learned a lot from Grandma. She had a profound influence on me, maybe even more so than Robert A. Heinlein. She told me once, before I even started school, that there were two main differences between white boys and Indian boys. She was raised, I believe, in Oklahoma, so maybe she knew the differences. She said that if you asked a white boy a question and he didn't want to tell the truth, then he would lie. An Indian boy, she said, would refuse to answer rather than tell a lie. She also told me that white boys weren't observant. She said that an Indian boy saw everything around him but that a white boy could go somewhere and not even be able to tell you, after he returned, what he'd seen while he was there.

Her opinions might have been colored a little by cynicism but they impressed me nonetheless. I've tried to live up to the standard of the Indians, as described to me by Grandma. I've never lied without being aware of it, and uneasy about it, and I've tried not to lie at all if I could avoid it. Being truthful isn't always easy but, in my case, being observant was even more difficult because I had extremely poor vision, and I didn't know it.

Writing Lesson

> Human subtlety…will never devise an invention more beautiful, more simple or more direct than does nature, because in her inventions nothing is lacking, and nothing is superfluous. —from *The Notebooks* by Leonardo da Vinci (1452—1519)

This fable is attributed to C. Northcote Parkinson. I don't remember where I got it so I'll have to present it here without credit. I offer my apologies to the original source.

> …the United Nations awarded identical contracts to two corporations: Trans-World-Products, and the Sam Botts Co. Each was given $1,000,000 and told to design a writing machine that would be truly suited to African countries: the device was to be capable of writing in small letters or large, in English, French, German, or Swahili. It was to withstand tropical dampness and floods.
>
> The Trans-World-Products engineers went to work with a will. They used up all the money and time allowed. They produced a 200-lb. stainless-steel machine, housed in a fiberglass container which included a rechargeable battery, a 5-year desiccant cartridge, flotation gear, and a 100-page maintenance manual written in twelve languages. Although the first model cost over $100,000 to build, later units could be mass-produced, it was claimed, for only $1,500. The device was a marvel to behold, and the world was lavish with its praise. The president of the company was given a 15% salary increase, the department heads were given bigger offices. Even the stockholders in the company felt ennobled by being involved in such a successful and altruistic project. TWP's final report (in four volumes, and weighing 8 lbs.) is available in all major libraries.
>
> The Sam Botts Co. took no visible action for many months. Old man Botts said nothing to his department heads. He asked no one for help. He built nothing. Day after day he sat in his small office staring off into space. Finally, he mailed off a small package (a manila envelope, which required 20¢ postage) to the sponsoring agency. The envelope contained an ordinary Faber Co. wooden pencil, a check for $990,000, and a brief note which read: 'This machine—pencil—meets the requirements: it writes in any language, is unaffected by damp climates, and, when caught in a flood, floats. Am returning the money we didn't need. Yours truly, S. Botts.'
>
> The sponsoring agency was furious with Botts. The press ridiculed him. The stockholders felt crushed. They cut his salary and eventually eased him out of the company entirely.
>
> "Today, there are 3,237,000,000 wooden pencils in use in Africa. No second TWP machine was ever built.

I heard another similar story. I don't remember the source. However, according to the tale as it was told to me, NASA spent thousands of dollars to develop ball-point pens that would write in zero gravity. The Russians, on the other hand, used pencils. I don't know if either story is true but even if they aren't, there's a lesson in them. There's more than one way to solve a problem. It's mostly a matter of understanding the choices.

Because I Say So

> When solving a problem, it helps if you already know the answer.
>
> —*The Expected Answer Principle*
> author unknown

We often accept without question whatever people tell us, especially if they bill themselves as experts. For example, nobody questions the theory that temperature is a direct measure of energy content. That's what your high school teacher told you and he should know. After all, he learned it in high school. But what if just the opposite was true? What if temperature was an inverse measure of energy content? Just off of the top of my head, I'll suggest a new theory of temperature as an example of a different way of looking at things. If it turns out to be a credible theory, then so much the bother.

Suppose that matter is normally very "loose". Suppose that it tends to move randomly, to be without form, to be void, and to have darkness upon the face of it. (Let's call this the Genesis Theory, by God!) If that was true, then energy might be required to hold matter into a certain shape or configuration. According to this theory, solid matter would contain a relatively large amount of energy per unit of matter. As it lost energy, solid matter would lose consistency and become a liquid. If it lost even more energy, then it would become a gas and float away. The natural tendency of matter would be to dissipate. Thus, an expanding column of mercury or alcohol in a thermometer would measure a loss of energy, not an increase of energy. There's a charming, almost a poetic, appeal to this theory. It equates matter and energy in such a way that they go hand in hand. Denser matter, more energy. Diffuse matter, less energy. A mathematical development of this theory might lead to new and fascinating explanations of why stars contain so much energy. We've all been told that stars release energy because of the concentration of matter. Maybe the stars exist because the energy is what's holding them together. Maybe supernovas don't release energy as a result of explosion. Maybe they explode as a result of released energy. Conventional nuclear theory might be reversed. The destruction of a little matter is presumed to release a lot of energy ($E=MC^2$). What if the release of a lot of energy causes the destruction of a little matter ($E=MC^2$)? Those equations probably don't mean the same thing at all but how would you notice the difference by just looking at the dumb equations? Mathematics is filled with fiction.[1]

1 See my essay, *There's An Arrow In The Logic -or- Maybe Pie Are Square, Maybe Not*

Up, Up and Away

> It is not a foregone conclusion ... that the problem [*of the origin of the universe*] has a scientific solution. For instance, an enclosure in which the air has been stirred gives, after some delay, no clue on the nature or the time of the stirring. All memory of the event within the system has been lost. —Gerard P. Kuiper, astronomer
> University of Arizona

You think our astronomers' finely fabricated speculations defeat my impromptu theory of temperature? Stars couldn't possibly work that way? Let me suggest an exercise in comparative analogy. Imagine an individual who'd never seen or even remotely imagined the possibility of people. He'd never even heard of such a critter. Suppose that you placed this individual by a door and opened and closed the door very quickly, allowing him about a second or so to observe what was on the other side. Suppose that beyond the door was the biggest auditorium ever, filled with people — short, tall, old, black, white, middle-aged, newborn, healthy, deceased, diseased, some sitting, some dancing, some doing other things, etc. — a completely random collection of our kind. Suppose that you then told the individual to devise a theory to explain people. What do you suppose that he'd imagine? You can't even guess. It would depend on his own experience and imagination. What could he learn about us by observing a random collection for one second? He wouldn't know if the white ones turned black with age or if the dancing ones evolved from the sedentary ones. He wouldn't know if sitting down meant that their backs were broken or if standing up meant that they were stuck that way. He wouldn't know if the ones with dresses naturally attracted the little ones or if perhaps the little ones were parasites, maybe some kind of leeches hooked onto the big soft sore spots that they caused on the fronts of their victims.

Now imagine a bunch of astronomers. Imagine that they've spent a few years looking at things that last billions of years, come in lots of different kinds, and change very slowly. Imagine that the astronomers all started out knowing absolutely nothing about those things (stars, galaxies, nebulae, etc.) and saw a whole bunch of different kinds of them, all at once. They've briefly glimpsed the biggest auditorium ever, filled with a random collection of something about which they didn't know anything and they've dreamed up some theories to explain it all.

When I was a child, Grandma told me that she'd once seen a star shining through the dark part of a crescent moon. She was sure that the star had been within the circle of the moon. Who can say for sure what she didn't see? Scientists can be vicious with people who propose unusual things or who challenge accepted beliefs. They can be downright condescending and insulting with someone who can't put a little BS behind his name. Poppa taught me what BS means. Then he taught me that MS means More of the Same, and PhD means Piled Higher and Deeper. In college, I observed that the process of getting a "higher education" sometimes amounts to learning more and more about less and less while understanding less and less about more and more. I don't know what Grandma saw but it seems likely to me that something made a very bright light, quite recently as such things go, on the near side of the moon.

Scientific theories become sacred. Scientific disciplines (and I use the word with some reservations) become shrouded in complex mathematical camouflage[2] and defended by cliquish jargon. Is the red shift really a Doppler shift or is there a simpler answer? I believe that the red shift isn't a Doppler shift. I believe that the photons have simply lost energy along the way and that the only way that a photon can lose energy is to undergo a reduction in frequency, which we see as the red shift. The energy loss is a spontaneous thing, like radioactive decay, and has an extremely low probability of occurrence. The lost energy becomes primal matter, strewn thinly along the photon's path, replenishing the eternal universe. The visual horizon of the universe is defined by how far a photon travels before it's frequency falls to zero.[3]

Or, here's another theory of the red shift. The mathematical description of energy (or whatever) versus speed shows an asymptote at the speed of light. Scientists tell us that the asymptote means that travel faster than the speed of light is impossible. Well, why? Plots of asymptotic functions exist both above and below the asymptote. It seems more likely to me that travel at the speed of light is impossible but that travel either above or below the speed of light is possible. However, this new theory of the red shift isn't concerned with speeds that are possible but with the one that isn't.

I call this the Laundry Theory, because I developed it while I was folding my laundry one morning.[4] Consider a photon. It travels at the speed of light. It must. Otherwise it isn't a photon. Yet, travel at the speed of light is forbidden.[5] That makes photons pretty darned improbable. Now consider time dilation. The theory is that something moving at the speed of light will experience exactly zero time while the rest of the universe experiences exactly infinite time. That means that, for the photon, there isn't any time. It leaves its source and arrives at its destination in exactly the same instant, with no time in between. As far as the photon can tell, it doesn't exist. That makes photons even less probable. Given those two considerations, it seems likely that photons probably don't exist at all but, since we can see, they do anyway. They're very improbable but they exist anyway.

Now consider this. Photons exist, from our point of view, for hundreds of billions of years. It seems like they're really stretching things, so far as their probability of existence goes. Something that's highly improbable and doesn't even believe in its own existence probably won't exist for very long and, the longer it exists, the less probable it will probably be. (Fun, isn't it?) So far as I'm aware, nobody has ever been able to resolve whether photons are a wave phenomenon or a particle phenomenon. They seem to exhibit properties of both. Here's my theory. They're neither. Photons are a probability phenomenon and the longer they exist the less probable they become. We perceive the decrease in probability as the red shift. When they become sufficiently

2 Again, see *There's An Arrow In The Logic -or- Maybe Pie Are Square, Maybe Not*

3 See my essay, *Cosmology and the Law of Parsimony*.

4 Monday, April 22, 1991

5 Okay, okay! **Matter** can't travel at the speed of light. We keep quibbling over the relationship between matter and energy. Maybe matter and energy are exactly the same thing, just traveling at different speeds. I think that it's a quibble and I'm going to continue the essay as if this footnote had never existed.

improbable then they shift all the way to zero and disappear. That explains the red shift and defines the visual horizon of the universe, beyond which we cannot see. The theory has a poetic charm that I like a lot and it made folding my laundry seem to go a lot faster that morning.

How can otherwise intelligent scientists advocate such a stupid idea as the Big Bang theory? It's like advocating an explosion while denying that the dynamite existed first, had to come from somewhere, and had to have a place in which to explode. The universe has always been here. It is eternal. Beginning and ending are boundary concepts and necessarily imply something on the other side of the boundary. Even if the Big Bang is supposed to be only an interregnum between one universe and the next then that's only another way of saying that the universe has always been here and always will be. It will never end. If it was going to end then it would already have done so. To impose upon the universe our little human limitations of birth and death is anthropomorphism on a cosmic scale.

In ancient times, people believed that the Earth was at the exact center of the universe. Surprisingly, they were correct. I'll go even further. I, personally, am at the exact center of the universe. Here's the reason. Point any direction that you want to point. Given infinity, there's exactly as much of the universe in that direction as there is in any other direction that you can point. That is, there's exactly the same amount of the universe in any direction from where you are, no matter where you are. Thus, given infinity, every point in the entire universe is at the exact center of the universe.

Simplicity in science, as in other things, is a lost art. Should we really believe that the big red stars come from the hot blue ones then turn into the little white ones? On the other hand, should we just consider the stars to be a beautiful and mysterious thing to watch at night while sitting close to someone soft and wonderful? Which approach to star-gazing is likely to result in the most joy in the world? Why should we believe that "logic" is better than intuition as a path to understanding?

See Dick and Jane Run

> The universe is not only stranger than we imagine, it is stranger than we can imagine. —*Haldane's Law*

Grandma was the first one to notice my vision problem. I was, I believe, about 4 years old at the time and we were on a trip somewhere. She and I were in the back seat where she could keep me entertained. She was trying to show me various things along the road and I couldn't see a lot of what she was trying to show me. For example, I couldn't distinguish cows from horses, in the fields. She decided that I couldn't see properly. Her opinions were sometimes poorly received and, as I recall, that one was rejected outright. She was sure of herself and argued stoutly that I needed glasses, causing a major fracas.

Eventually, I got the glasses but not until I was over 10 years old. By then, I was well behind my peers academically, and otherwise, and I didn't catch up for more than twenty years. I suspect that, during the early years of my education (make

what you will of the word) before I got my glasses, people believed that I had a learning disability. If so, then they were correct. I couldn't see. I couldn't see what was written on the blackboard. I couldn't even see what was printed on the page of the book on my desk. I used to read with my forehead resting on my fists, one fist on the other, and the bottom fist on the book. I had to get my eyes that close to the page before I could read the words. The teacher thought that I was asleep.

I still remember getting my first glasses. I have two memories of the event. I remember sitting in a chair while the doctor talked to Poppa and Poppa said, "My God! Are the boy's eyes that bad? No wonder he can't see!" Then I remember walking out of the door of the optometrist's office, wearing my new glasses for the first time. I remember looking across the street. That was the first time in my life that I ever knew that you could see the branches on the trees.

Making Monkeys of Themselves

A fool must now and then be right, by chance.
—from *Conversation*
by William Cowper (1731—1800)

For years, the religious nuts and the scientific nuts have been arguing creation versus evolution.[6] The scientific nuts won't admit that God might have created the world with the fossils in place, as a test of faith. The religious nuts won't concede that God might have used evolution as a handy tool, just because He felt like it. The religious nuts must love their dogma a lot more than their God and the scientific nuts must love their tenets a lot more than their science. Otherwise, they'd each leave the other alone and simply live their lives.

Maybe God is Limited by *Noblesse Oblige,* or maybe not, but I expect that He can still make a few Choices about how He runs His creations. If He wants us to evolve, then we'll change from something into something else. If he wants to create a planet with fossils, then what's to stop him?

Here's a conundrum for the religious nuts. Is God limited? If not, then He can encompass all possible universes. That means that He can't possibly create a universe so large that He can't encompass it. But if He can't create a universe that large, then that's a limit on what He can create, so He's limited. Religious nuts, go figure.[7] In my opinion, it's a pointless conundrum. I don't believe that God created the universe. I believe that God exists within the universe, just like the rest of us.

Amidst the brouhaha, some ideas have been overlooked. At least I haven't seen them in the literature. Presuming that life arose spontaneously, then it must be possible for life to arise spontaneously. Who can argue with that? If it's possible once, then it's possible more than once. What? UnGodly thought! More than one sacred spontaneous generation of life? Not on your Holy Bunsen burner! Now I'll have both the religious nuts and the scientific nuts after me. Clarence Darrow and William Jennings Bryan can both turn over in their graves.

6 Check the famous "Monkey Trial" (1925) in Dayton, Tennessee.

7 Thank you, Jonathan, for the conundrum.

Sorry guys, but there's no reason why I have to be related to spiders. Maybe their ancestors and mine came from completely different spontaneous origins and their adenine, cytosine, and so forth, just happens to look like mine. I also question the charts that I saw back when I was in school that arrange the animal kingdom in the form of an evolutionary tree, starting with the amoeba and ending with us. How could we possibly evolve from amoebas? They're contemporary occupants of the planet. Not only that, they've been through countlessly more generations of evolution than we have. Well anyway, it seems that they have since they have a higher generation rate than we do. So, if there's anything to the evolution theory then amoebas are a more likely end product than we are. Also consider that, unlike us, they're not fouling their own nest so maybe they're more intelligent. On the other hand, maybe intelligence is a deficiency that they've outgrown. Maybe that's why they've headed south. Maybe they're just trying to put as much evolutionary distance as possible between us and them, to get themselves as far as possible from our environmental niche before we destroy it. Finally, before we discount them because of their small size, recall that our reproduction depends upon little critters of comparably small size while the amoebas don't need giants to make more amoebas. I'm reminded of the theory that a human being is nothing more than a gamete's method of producing more gametes. If so, then amoebas are more efficient.

There isn't any reason whatsoever to assume that all life on Earth arose from a common ancestor or that all life originated at the same time. There need not have been a single magic instant and location that was uniquely suited to the spontaneous generation of life. For ages, and at countless locations, conducive conditions probably existed, if they ever did.[8]

Here's another interesting idea. Why does life have to spontaneously arise in the ocean? Why couldn't it happen in the blood stream of an already existing critter? Some animals live a long time, maybe even a hundred years. That might be a long time in the evolutionary history of a microbe fresh off of the theological drawing board. Just think! Within your own body, at this very instant, the AIDS virus could be spontaneously generating!

Dinosaurs were (allegedly) the dominant life form on this planet for about 200 million years. Whatever murky inducement to the development of intelligence there is, it might as well have existed then as now. Two hundred million years is a long, **long** time. Conventional doctrine is that we developed from whatever precursor birthed us in maybe two million years. If that's true, then there could have been a hundred species of intelligent dinosaurs that evolved to our level and then destroyed themselves during the reign of the dinosaurs. We'd never know that they'd done it unless they left some durable relics. Maybe they built things out of stones. Dinosaurs were big. Right? And strong. Maybe the Egyptians didn't build those pyramids.

8 Maybe they still do. Would we recognize new, spontaneous life if it arose today? Most likely, we'd exterminate it.

"Ooow Harold! What a horrible bug! Where's the Raid?"

Birds of a Feather

> All progress is based upon a universal innate desire on the part of every organism to live beyond its income. —from *Notebooks* by Samuel Butler

So there they are, the religious nuts and the scientific nuts, yelling at each other and at everyone else about evolution. The scientific nuts even know how it happened. Natural selection, they say. In England, there supposedly was (and presumably still is) a species of moths of which most individuals were white. A few individuals were grey. After the industrial revolution, the air filled with grey soot and grey moths had a survival advantage over white moths. After a while, more of the moths were grey and fewer of them were white. That, some folks like to say, was evolution.

Now wait a minute. Where's the evolution? What new trait came into existence? Nothing changed except the proportions of things that were already there. I think that those people are doing more than clouding the air. I think that they're muddying the water. I believe that evolution and natural selection aren't exactly as they've been presented.

One big problem is with natural selection. The problem is that it doesn't promote evolution. When it operates at all, natural selection eliminates characteristics. It allows the survival of only those creatures possessing the most advantageous behavior. If natural selection operated continuously, then there would eventually exist one kind of predator, one kind of herbivore, one kind of scavenger, one kind of food plant, and one kind of bacteria to break it all down. Each would be the most marvelous possible predator, herbivore, or whatever. Natural selection would have eliminated all of the others. The next change in conditions would eliminate those and all life would be extinct. Fortunately, natural selection doesn't operate at all times and in all places. Survival of the fittest is a myth. Survival of all of the fit enough is closer to the truth. Otherwise, where would you be? But even that is only half of the truth. The other half of the truth comes from another question. What is it that the survivors are fit enough to do? They're fit enough to reproduce, of course. Religious nuts beware. If sex is dirty, then you're at an evolutionary disadvantage.

Evolution is the addition to a species of new abilities with survival advantages. I didn't say new characteristics. I said new **abilities** with survival advantages. Evolution doesn't deal with characteristics. It deals with behavior. When creatures that were piebald grow stripes, that isn't evolution unless a stripped color pattern (a characteristic) enables a new **and useful** ability. Consider a miniature pink and brown stripped woolly mammoth hiding in a carton of Neapolitan ice cream in your freezer. There's evolution for you. Of course, if the critter can't live on ice cream, then it'll die. As Hamlet said, there's the rub. When a non-flying creature learns to fly, that isn't evolution unless flying is useful. If hurricane conditions are normal, then flying will be eliminated by natural selection. The realization that evolution consists not of changed characteristics, but of changed behavior, casts the whole concept in an entirely different light. One might even call it a horse of a different color. Then again, one might not.

As opposed to mere characteristics, abilities require the coordination of many associated characteristics. Take flying, for example. A "primitive" creature that lacked the ability to fly could not become a bird just by jumping out of a tree. Many coordinated and complimentary changes must develop **simultaneously**. I said **<u>simultaneously</u>**. It's fur must become feathers.[9] How many genes must be modified in very precise ways to accomplish that? A feather is an extremely precise and specialized appendage. The critter's bones must become hollow, to reduce weight. Feathers on front legs don't help, so the front legs must become wings. That alone is a formidable change in structure. Associated behavioral changes must take place. For example, without front legs the beast can't live in holes in the ground any more because it can't dig them. That means that it must figure out how to build nests and do so before the next mating season. After all of that, if its tail happens to be prehensile instead of aerodynamic then the creature will still be a failure, just like the miniature pink and brown stripped woolly mammoth that couldn't live on ice cream. Don't try to object on behalf of the oddball birds that don't fly or that live on the ground. I'm talking about birds and, in general, they fly and they nest in trees. If they got that way by evolving from creatures that were adapted to living on the ground, then they had to go through all of those changes <u>simultaneously</u>. If they didn't do that, then they failed. Since there are birds and since there previously weren't any birds, they did it somehow.

All of those behavioral and somatic changes reflect genetic changes. Thousands of genes might be involved. Knowing, as we do, that genetic mutations are basically random, and usually harmful, it staggers the imagination and boggles the mind to realize that allegedly knowledgeable scientists have usually ascribed evolution to genetic mutations guided by natural selection. Most mutations are eliminated, not condoned, by natural selection. The useful accumulation of the thousands of random changes needed to accomplish the advent of some new behavior with survival value is enormously unlikely and certainly opposed by natural selection. Any one of the new characteristics, by itself, would be a deformity. For example, a leg converted into a wing but without the other changes wouldn't be a wing at all. It would be a crippled leg. Natural selection, by itself, would not allow any such partial development of a new ability. It's enough to make you speculate that evolution couldn't possibly happen except with Divine Guidance.

<u>Not Seeing is Not Believing</u>

> In any closed mathematical system there are an infinite number of true theorems which, though contained within the original system, cannot be deduced from it.
>
> —an unattributed restatement of Gödel's Incompleteness Theorem [10]

The glasses helped, but not enough. I recall from the sixth grade my friends playing softball at the Harmony Elementary School while I stood behind the backstop

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9 So what if bats don't have feathers! Birds do and they had to develop them somehow. Bats don't disprove my argument.

10 For any self-consistent recursive axiomatic system powerful enough to describe the arithmetic of the natural numbers (for example Peano arithmetic), there are true propositions about the naturals that cannot be proved from the axioms. —from *Wikipedia*

with an extra ball. There I stood, throwing it straight up into the air and trying to catch it when it came back down. Straight up, straight down, and sometimes I even caught it. In later years, the doctors told me that my glasses correct my vision as much as it can be corrected with glasses. Yet from a bicycle, when wearing my glasses, I can't even tell a seam in the sidewalk from an edge of the sidewalk until it's too late to stop. I didn't get my contact lenses until I was about 30 years old and before I got them I didn't know that I still couldn't see properly. I thought that the glasses had solved the problem. Before I got my contact lenses, I didn't know that it was possible to look across the street and see that the trees had leaves. Now that I have the lenses, can I see? Once wrong, twice cautious. Twice wrong, very cautious. It gives me a reason to pause and to ponder.

Plenty Diverse

> The future of mankind lies waiting for those who will come to understand their lives and take up their responsibilities to all living things.
>
> —from *God Is Red: A Native View of Religion*
> Vine Victor Deloria, Jr., A Standing Rock Sioux (1933—2005)

What of the human condition? The situation doesn't seem to be getting much attention, but we're taking the human species into a veritable labyrinth of genetic nonconformity. Do you see anyone being "weeded out"? We're giving diseased or handicapped people a special nurturing that amounts almost to reverence. The more disabling their condition, the more we care for them. There's almost no elimination of any deficiency from the human genome. Everyone can have kids and even if they can't they can anyway. The medical solutions to infertility or maybe even to lack of interest for all that I know are being hotly (perhaps I should say studiously) pursued. Thus, we pass on every imaginable defect. We even pass on the inability to continue passing them on. It seems like madness at first glance. Of course, with overpopulation being our number one big bang problem, maybe perpetuation of infertility is a last ditch instinctive effort of the species to save itself from itself. Who can say for sure? Scientific nuts, go figure!

Imagine, however, a time of plenty. The weather is fine. The seasons march in orderly progression, the rain falls, the sun shines, the soil is fertile, and life is everywhere. The land is lush. Grain and fruit bend all of the twigs and branches. Herbivores are fat. Predators are lazy. Scavengers just lie at the bottoms of hills and wait for dead things to roll into their mouths. There isn't any competition for survival. In such a setting, natural selection wouldn't have a chance. Anything could survive and probably would. Every variation, however bizarre, could still nibble for its lunch. Nothing would starve and everything would reproduce. Mutations could accumulate and recombine and eugenics would be a laugh. It wouldn't matter if some reptile, half-evolved into a bird, had crippled front legs that looked a lot like wings. Given sufficient generations, any imaginable combination of such things could happen. Such diversity might provide many unimportant new abilities that could be crucially important if conditions changed in just the right way. Given such diversity, and the onset of hard times, natural selection might be able to accomplish something. Such alternating cycles of plenty and adversity, causing genetic cycles of diversification and selection, are

a possible modus operandi for the evolution of species unless, of course, God created the world as it is a few thousand years ago.[11]

On the other hand, maybe that theory's wrong, too. Here's another one. I call it the Breakfast Theory because I thought of it one morning while I was eating my breakfast.[12] Suppose that your genes contain a complete and perfect record of everything that ever happened to every ancestor that you ever had, clear back to the Primordial Slime. Remember him? Anyway, that's a heck of a lot of data. It would take a heck of a lot of memory to store it. Maybe as much as is contained in the human genome. Wow! That explains why species evolve toward greater complexity. They're adding storage. Species that don't evolve fast enough, and get complex enough, run out of storage, don't have enough room for themselves, and forget to remember themselves. That is, they become extinct. That means that we're not really responsible for the extinctions of all of those species that we've destroyed. We simply changed their environments so that a lot of new and different things began to happen to them, and their descendants ran out of storage for the rush of new data. We're no more guilty than a change in climate. Hummm. I don't know. Maybe not. Oh well, back to the...

…alternating cycles theory and the human problem. What we're presently doing to ourselves represents a period of diversification.[13] Among all of this diversity there might actually be new but presently unimportant abilities. How can we predict what new conditions might occur, causing a new (but unappreciated) behavior to have survival value? How can we know what weird characteristic, in unimaginable combination with unpredictable others, might lead to incredible folks who can survive the next adversity? We don't even know what the next adversity will be but we know that it'll happen. It always does. One day, we or our descendants will face grueling realities that no one ever imagined and maybe if we (or they) are diverse enough then some of us (or of them) will survive. If so, then the species will have evolved another step toward its unknown destiny. What will it take to survive? I suggest that you watch the folks who crawl out of the cars in the blue-label parking spaces. Maybe a color-blind albino with anemia, no legs, a Pacemaker, and a hole in his throat might be the prototype for the new man. You pays your money and you takes your chances.

Seeing to the Beat of a Different Light

Given infinity, all things are equally probable.
—Hawking's Postulate

What do you see when you observe with poor vision? I suppose that everyone will have a different reaction. When Grandma gave me the goals of honesty and observation, I was about 4 years old. For the next 26 or so years, I tried to observe things that I couldn't see very well. My innocent efforts to pierce the unsuspected veil about me caused me to observe more carefully, trying all the harder to do what

11 It would be IMPOSSIBLE to prove that He didn't. IMPOSSIBLE. He's a lot smarter than we are! Scientific nuts, go figure!

12 Monday, August 8, 1991

13 Even if God did create the world as is, a few thousand years ago, it's been evolving ever since and nobody can prove that it hasn't. Religious nuts, go figure!

seemed to be so easy for everyone else. It was common knowledge that I walked around with my head in a cloud. My self-esteem suffered for many years. However, I was busily observing and I learned to see by a different light.

I can't help but to wonder about someone who doesn't recognize, for example, the likely consequences of allowing a baby St. Bernard to run and jump into his lap. As the pup is bent, so grows the dog. People who do that kind of thing are the same ones who don't understand consequences. Does cheap and universal health insurance adversely affect the availability of medical treatment? Do minimum wage requirements encourage unemployment? Do zoning requirements force you to own a car? Does mandatory garbage collection threaten the rain forests? I can see the possibility of such connections. The puzzling thing is that they're so invisible to other people.

Given infinity, all things are equally improbable.
—My Response to *Hawking's Postulate*

Blind Obedience

> It may surprise you, but in many ways Russians can be fiercely independent. But our system, 75 years of socialism, has produced a people who wish to be led, who wish the government to tell them what is right, and what is wrong. They rely on the government to keep in check their baser instincts, their selfishness, their greed, so they no longer have to make those judgments themselves.... So, now we control most of the world and we don't have enough competent people to run it. We're failing, because our system has produced a people who don't understand the idea of choice. They can't make an independent decision. Always, everything must be checked with the next level and then the next until finally it's safely within the government....
>
> —KGB colonel Andrei Denisov
> in the (much underrated) miniseries *Amerika*

I recall one result of some long-ago survey, taken when I was a youngster. When asked what they wanted for their sons, almost every mother questioned said that she'd be proud of her son if he became President. Almost every mother questioned also said that she'd be disappointed if her son went into politics. The idea of choice is more complex than you might imagine. Basic to it, first and foremost, is the realization that there are choices.[14] As children, we were all told to do something "because I said so!" That's an appalling reason. It absolutely denies the concept of choice and sets the submissive mold upon a child. The lesson will follow him from kindergarten to the corporation in which he'll eventually slave his life away. A more careful explanation (" 'cause if yez eats yer spinach yez'll gitz the vitamins yez needs.") won't make the brat like spinach but it will teach him that choices exist and maybe even that there are consequences that follow from the choices.

In Amerika today, people wish to be led. They wish the government to tell them what is right and what is wrong. They don't understand the idea of choice and they've learned to rely on the government to make their choices for them. What's the answer? At this point, I don't believe that there is one. We can't get there from here.

14 There was the lady who was hard of hearing and had 12 kids. Every night, her husband would come to bed and say, "Well, do you want to go to sleep, or What?" Since she was hard of hearing she'd always say, "What?!" so instead of going to sleep they'd *What* for a while.

Instead, we have to go somewhere else first and start over. Maybe that will be the basis of the next Ravings Essay. Maybe not. It's a choice that I have to make. Meanwhile, here's a bit of good advice to ponder when you're tempted by expediency.

> It's easy to drift with the current swift, you just lie in your boat and dream.
> But in nature's plan, it takes a real man to paddle a boat upstream.
>
> —author unknown
> quoted to me by Poppa

And here's another.

> God, give us grace to accept with serenity the things that cannot be changed, courage to change the things which should be changed, and the wisdom to distinguish the one from the other. —from *The Serenity Prayer* , [1934] by Reinhold Niebuhr (1892—1971)

The problem there, of course, is the large number of situations that fit into both of the first two categories. What ya gonna do?

And finally,

> May God grant us the will to seek the light, the skill to find it, the courage to choose it, and the wisdom to make it endure. —Keeper of the Light at *Pharos*

If you'd like to read the next essay in this series, then ask for
More Adventures of The Lone Raver!

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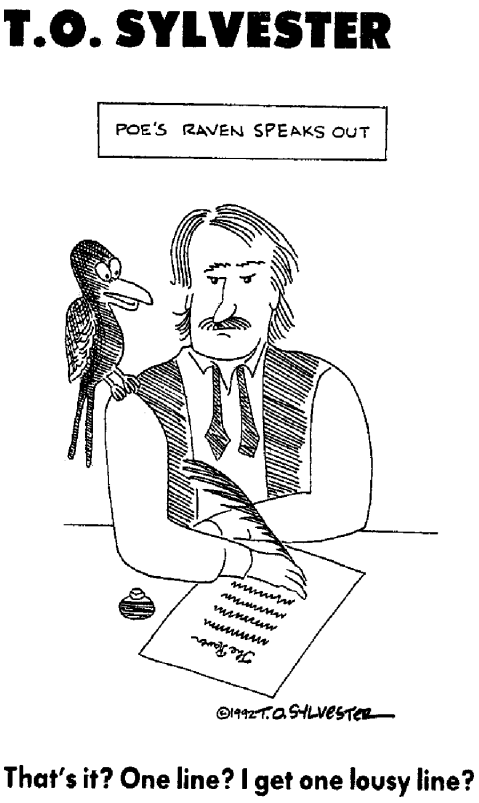

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