MISANTHROPE'S HOLIDAY:
VIGNETTES AND STORIES

Bruce L. Gary

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Books by Bryce L. Gary

ESSAYS FROM ANOTHER PARADIGM, 1992, 1993 (Abridged Edition)

GENETIC ENSLAVEMENT: A CALL TO ARMS FOR INDIVIDUAL LIBERATION, 2004, 2006, 2008

THE MAKING OF A MISANTHROPE: BOOK 1, AN AUTOBIOGRAPHY, 2005

EXOPLANET OBSERVING FOR AMATEURS, 2007

QUOTES FOR MISANTHROPES: MOCKING HOMO HYPOCRITUS, 2007

THE MAKING OF A MISANTHROPE: BOOK 2, MIDNIGHT THOUGHTS, (2009)

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The cover picture is the setting for most of the Misanthrope Holiday, our beloved house in Temple City, CA from 1986 to 1998.

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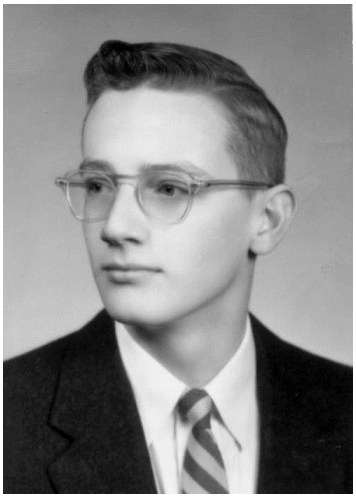
Photograph of brother-sister walking along a woodland trail taken by W. Eugene Smith, page vii., Time Inc.

DEDICATED TO

Daughters

Loretta and Cynthia

who played essential roles in my Misanthrope Holiday journey.



1957

1998

Wisdom wears wrinkles.

Mr. Misanthrope, whose holiday journey took place between the times of these two pictures.

Picture by W. Eugene Smith of son Pat leading sister Juanita along a woodland trail.
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"There is something else, too which is a part of growing up - to see that life is really, after all, a game. When we play a game as it should be played, we strain every muscle to win; but all the while we care less for winning than for the game. And we play the better for it."

Spoken by "Divine Boy," in *Last and First Men*, by Olaf Stapledon, Chapter 5, Section 3.

C O N T E N T S

PREFACE

Two words in this book's title need clarification: "misanthrope" and "holiday."

My definition of "misanthrope" departs slightly from the dictionary version of "one who hates or mistrusts humankind." For me a "misanthrope" is a person who is deeply disappointed in human nature, who can see both the good and bad in people, and who is impatient to see an improved balance between the two. This form of misanthropy belies an optimistic hope that a better human nature is possible, and may some day evolve.

My use of the word "holiday" in the title was inspired by Irwin Edman's book *Philosopher's Holiday* (1938), which I've read three times. I suspect that his writing style has become a subconscious model for me. *Philosopher's Holiday* is a book of unexpected encounters, or vignettes, from his travels to Europe between teaching philosophy courses at Columbia University. He uses his holiday experiences as departure points for thoughts about larger issues.

A "holiday" is a time of openness to new meanings for past experiences as well as present ones. It therefore can become a basis for rethinking life's underlying assumptions. Some holidays last a few days. Mine lasted 12 years.

My holiday can also be viewed as a transition. Before 1980 I was a cold-hearted Republican; after 1991 I was a warm-hearted Democrat. This is an over-simplification, of course. What I mean is that I became able to empathize with those unlucky fellow-travelers trying to find their way on an uncaring planet.

Transitions are a searching time. Things that in the past would have gone unnoticed beckon for connection with something inside oneself. For me, the inner romantic was summoned. Poetry, that I had despised, seemed like the right medium for exploring a feeling. And "feelings," those unreliable guides that had betrayed me in the past, became new windows on who I was and the nature of the world I lived in.

My holiday is over, and I feel better for the experience. It can be likened to going into a store to buy a coat: you have to try some on to find the one that fits, and you walk out feeling better. I now feel more "at peace" with myself and the world. I understand why feelings should be viewed warily, and I no longer feel the need to enter that tumultuous realm which has claimed a few souls. The "peace" I feel with the world is a misanthrope's acceptance of human nature's flaws. Even though the "normaloids" seem bent on destroying the world, it is not my responsibility to stop them. I have taken my place in the stands as a spectator of the human drama. I am both disapproving and amused.

Still, my holiday was a wonderful time, and I feel compelled to record some of the romantic scribblings of that period. They were busy years for me; my writings from that time were made in airport lobbies, hotel rooms and backyard retreats. My career was in full swing and other personal challenges were "piling on." A daughter had special needs, a wife was deranging, and a marriage had to be undone.

The intrusion of personal life challenges was not an unfortunate co-alignment with my holiday. Instead, these distractions from the business of life were probably the instigator of the holiday.

Before my holiday began I would write such things as (early 1981): "*The individual who creates employment for others should not expect gratitude from the newly employed. I understand this, like every strong person."* Afterwards I could write (1990): *"As we love our children unconditionally, their job is to get ready for life and not look back. Our job is to prepare them for walking forward, and wish them well."* This holiday made me a better person.

There's a clue in the two passages that might reveal how my holiday began? It has to do with an unlikely conjunction of love and parenthood. Until the Fall of 1981 my life had been work-centered. Yes, my two daughters and a wife were important, but my most significant role in the family was based on that old fashioned notion of a husband and father being a wage-earner. Things changed when … I began a month-long break from work, knowing that challenges loomed.

Parenthood can have many unexpected demands, and for this one I commenced to read everything I could find about the brain function underpinnings of ... Someone on the Rodiger staff was impressed by my questions, and what I was learning from reading, and she invited me to help the Center seek funding to alleviate tuition costs. Her name was Young, and she was attractive. It must be said that the thing that attracted me the most was her intelligence and caring nature. These traits were profoundly missing in Lory's mother, who was eventually diagnosed as having a "borderline personality disorder."

The unlikely conjunction of a new parental role and a capable partner for helping address a greater cause had an effect upon me. My emotions alternated between euphoria and despair. A misanthrope in love, especially an impossible one, leads to turmoil. As 1981 yielded to 1982 this one pathetic misanthrope kept his cool, maintaining decorum, and survived the year to emerge as a half-lost soul groping for the right path of change. He began a holiday, and learned to experience the world in new ways, suffused with poignancy and feelings. Small things had new meaning, some of which invited the inner poet to record the precious moment. Whereas I once judged people with problems as "weak" and unmotivated, I became understanding because of first-hand evidence that sometimes Lady Luck was cruel.

My new parenting role evolved through several stages: from reading about brain function, to paying tuition to a special education school, to helping the school, to

becoming more involved in parenting activities and more observant of special needs, to shielding my children from a “mental mother,” to seeking divorce with a custodial role for me, and finally to becoming a single parent with full custody. All of these stages had occurred between the two passages cited above. The complete span of holiday years are from 1980 to 1991.

This was my holiday, separating one kind of misanthrope from another. During this period I wrote vignettes and stories. Since I never wrote such things before, or after, I conclude that these writings served some purpose during a tumultuous life transition. I’m not sure what that purpose was, but there must be a residual of that transitional person within me now, since I feel compelled to record them in this book.

I’ve decided to start out by presenting writings from before the Holiday transition. Part One is a selection of writings that illustrate the hard edge of my thinking before 1980.

PREFACE

PART ONE
Pre-Holiday Writings: 1950 - 1979

The writings in Part One are from before my "misanthrope holiday," prior to 1980. They are ordered by date, starting in my college years.

Note the frequent "hard edge" to them. I was impatient with human stupidity, and quick to criticize. Although I have been a misanthrope my entire life it would be fair to say that before my holiday transition I resembled the traditional misanthrope – hating humanity without forgiveness. Some of this sentiment remains with me today, but it now has a softer edge.

The Part One selections have been taken from another book, scheduled for completion in about a year, called *The Making of a Misanthrope, Book 2: Midnight Thoughts.* This manuscript is essentially complete through 1983.

I'll admit to selecting only those writings with a hard edge. Interspersed among them are writings with a "love for life" and poetic appreciation for existence. But my purpose here is not to provide balance, but to present a sampling of attitudes relating to how I viewed others harshly before my holiday.

The date before each entry is in year/month/date format: yyyy.mm.dd. They are presented in two groups: 1950-1970 and 1971-1979.

PART ONE – PRE-HOLIDAY

1950 - 1970

1956.ca. Although I didn't write this down, I vividly recall thinking, in English class: "Humans are hypocrites, and this is my generation's main gripe with adults!"

1960.06.16. "Man is basically peaceful; that's why there have been wars throughout recorded history."

1961.ca. "Truth is suppressed when it promotes unhappiness. Therefore, to get the whole truth one must seek out unhappy people."

1961.05.17. "Man is basically offensive unless he takes special pains to civilize himself by adopting the ways of a gentleman."

1960.ca. "When you ignore the world, the world ignores you." [Take comfort in this]

1961.11.1. "The Gods of Fate are laughing at the schemer engrossed in manipulating the multitude of everyday trivia in his quest [for] a transient reward in his transient life."

1961.11.11. "We are living meaningless lives in a meaningless universe." [These themes were written many times in my life, and I suppose it could be said that they culminated in my 2004 book.]

1962.07.08. "Oh, to be dead again!"

1963.03.13. "Is it possible for the seeker of truth to love men? Is it possible for men to love the seeker of truth?" [Every misanthrope must have this thought.]

1963.06.01. "Sympathy is a double-edged sword."

1963.07.13. "It is said that every man is basically a criminal."

1963.07.13. "How much has natural selection changed the inherent character of man since the Romans flocked to coliseum entertainment 60 to 70 generations ago?"

1963. "There's a game called 'conversation.' The rules stipulate that you overlook [your partner's] stupidity, hypocrisy and irrelevance. The goal is to impress yourself through the eyes of your partner."

1963.11.18. "It is in bad taste for me to carry around for others a little mirror to reflect their pathetic illusions."

1963.11.19. "Only the prospect of death keeps me alive."

1963.11.23. “Disillusionment and happiness bear a mutually exclusive relationship.”

Here’s the “hard hearted” misanthrope in 1961 (age 22) about to begin his first job in Washington, D.C.

1964.09.19. “I saw a bad movie tonight. The actors and actresses acted like actors and actresses; and the disturbing thing about it is that they seemed true to life!”

1969.12.15. “Big thoughts can never be comprehended by little minds. Even big minds are prone to discount big thoughts if they are not delivered in a royal carriage.”

1970.01.25. “The bulk of humanity is not worth saving! [They] are prisoners of those instincts which make one subservient to species [gene pool] purposes. The genitals symbolize this! Man is tricked by Nature. What a predicament! By the time he realizes this he also learns that it is nearly impossible to avoid being victimized. What about those who never realize this? ...The real masters, the DNA or genes or something – they have no awareness. How ironic! These stupid genes are blind to the future – their wisdom is of the past. Because of them we are driven to illogical behaviors which may lead to species suicide. We are as powerless as hitch hikers. The genes, which have made our dreamy world possible, may very well perish; the two of us would perish together. The bulk of humanity would be more or less happy to the end.”

1970.05.28. “As far as the Earth is concerned, Man is a disease.”

PART ONE – PRE-HOLIDAY

1970.05.29. “One difference between uncivilized people and us is that they are constrained in every way by traditions and social imprisonment to make fools of themselves; today we do so in spite of unprecedented social emancipation and freedom.”

1970.09.04. “America’s middle class is so large that it is dominated by Roobs. …The Roob will not sacrifice anything material on behalf of anything esthetic. The Roob does not have the foresight to distinguish between long-lasting quality and the cheapest product. The Roob does not want to pay for something he can’t see, such as competent service. Roobs don’t know how to maintain things, and since for them an unlicensed mechanic is the same as a licensed one their cars deteriorate faster than they should; preventive maintenance is a foreign concept. Roobs lack self-discipline, so they don’t save money and instead plunge into debt with credit cards; after all, what are bankruptcy protections meant for. The Roob does value the school system, but why pay higher taxes when the schools already perform their baby-sitting function admirably.”

Katy, 1967, a year before we married.

PART ONE – PRE-HOLIDAY

PART ONE – PRE-HOLIDAY

1971 - 1979

1973.07. “Each birth marks the beginning of a life-long conflict between an individual’s pursuit of happiness and a gene pool’s pursuit of immortality. But the genes have an unfair advantage, for they have been practicing their enslavement of individuals for millions of years. Does “thinking Man” have a chance of outwitting the genes? Is it possible for an individual to identify gene tricks and assert his will to side-step them? Liberation of the individual has been heralded [prematurely] by one anthropologist (J.B.S. Haldane?) as the greatest achievement of modern Man. If the gene pool could think, it would have “nightmares” about the individual who uses rational thought to subvert instincts and get what **he** wants without giving the genes what **they** want. To the extent that one liberated individual serves as an example for others, the first liberated individual is a theoretical menace to the gene pool and the species. If only one generation were to become totally infected and useless to the gene pool, that gene pool would die. If all human gene pools were to become infected by individual liberation, the species would become extinct.” [Condensed. It was optimistic of me to think that “individual liberation” could spread.]

1974.06.11. “Can a stable society exist when the individual divorces himself from species concerns and does not embrace constraints on his behavior in moral situations? I think I see signs of nationwide moral breakdown. Social pressures are less important today because of a growing social mobility. In the big city’s urban setting discourteous public behavior goes unchallenged. Jobs come and go, and an employee who is fired can simply move to another job. Hardship used to be covered by relatives, but government now has welfare programs for hardship cases. Some of the traditional constraints on behavior are disappearing, and I wonder if societies can remain stable as more people discover what they can get away with.” [I first stated this concern while in college.]

1975.01.ca. “Aristocrats oversaw civilized societies for centuries. Resentment for their rule can be attributed not only for their power, and misuse of it, but also for their greater cleverness, intelligence, poise and general superiority. Out of the proletariat ranks came a bourgeois class (business people, mostly), and some of them succeeded in replacing aristocrats. The entire concept of an aristocracy entitled to have power over the affairs of common men was questioned; it has been replaced by the more advanced concept of a meritocracy. The trend of power moving downward, toward the masses, threatens to weaken the belief in a meritocracy and replace it with something that does not yet have a name. I will refer to it as Roobocracy, as it is based on the notion that knowledge corrupts and only the uneducated can be trusted with power. As Roobocracy grows in influence, the intelligent and educated would-be aristocrat must keep a low profile, as if his presence is a threat to the trend of power flowing downward to the mass of men. Roger Price wrote about the Roob [The Great Roob Revolution, 1970], describing him as unashamed by his unsophisticated behavior because he has found wealth and is therefore treated politely by merchants and politicians. Just as nomadic invaders must have been poor imitators in their use of the artifacts of the vanquished culture, so are the Roobs bad

imitators in their use of the material and cultural heritage of the aristocrats. The settlement of America required the prosaic skills of rugged individuals, not the skills of a refined aristocrat. It is understandable that aristocratic values were not incorporated into early American society. Instead, a form of democracy was created that elevated every man to equal potential worth ("all men are created equal…"). Perhaps because of a sense of insecurity the "little man" has belittled the opinion of anyone with education and aristocratic demeanor. It has become an American tradition to mistrust and even dislike anyone appearing to be aristocratic, which today means educated. The Roob has stayed true to his pragmatic valuation of that which can be seen rather than that which can be thought, and this has led to an excessive level of materialism in America. The American emphasis on practicality, innovation and efficiency has indeed produced a cornucopia of material goods; but at the same time these same Americans have neglected thought about value systems that might put these material objects to good use. His lifestyle has evolved in unthinking response to conditions, rather than as a result of deliberate thought. The Roob is unprepared for his new-found wealth, and his arrival from nowheresville has been so swift that he is in continual need of instruction. But receiving instruction is counter to his nature, for he acquired his wealth by ignoring those who would be his instructors. When Emerson wrote "Trust thyself; the heart vibrates to that iron string" he was giving voice to more than individual enlightenment. Although the failure of the Roob is most visible in his misuse of material goods, his greatest failure is in his loss of social conscience. He needs someone to explain the meaning of good parenting, considerate public behavior, tasteful appreciation of music and the arts and thoughtful exercise of democratic privileges." [Condensed.]

1975.03.14. "I am disturbed by many trends in America. Due to an excess of wealth reaching the masses, and a too literal embrace of democracy, the concept of "expert opinion" is mocked by the uneducated masses. Today, astronomy is confused with astrology, guardian angels and UFOs are assumed to exist, vulgar rock music is more popular than classical music, wrestling is the most popular program on TV and opinion is mistaken for news. New technologies are embraced without proper forethought; as our civilization becomes ever more dependent upon intricate interconnected technical systems we become more vulnerable to breakdowns, sabotage or perhaps manipulation by devious conspirators. As technology advances, culture regresses. Statesmanship is yielding to populism. Most social encounters are one-time events, and cheating is rewarded when there are no consequences. Smart people are having fewer children, while the dumb breed on." [Greatly condensed.]

1975.08.ca. "Species survival might be better served by traditional morality than individual liberation or theories of case-by-case utilitarianism morality. Might it be necessary to invoke the "lifeboat ethics" to guide us as the widening disparity of the 'have' and 'have-not' countries cause global tensions to rise?" [Condensed.]

1975.08.ca. "Contemporary man has custody of a "pool of genes" most of which have successfully served an unbroken chain of ancestors stretching back millions of years. Like any genetic legacy ours is a record of the wandering course taken by a

gene pool confronting the challenges of the ancestral environment (AE). Our anatomy, physiology and instinctive behaviors record what worked to assure survival of our genes in the AE. Because the needs for gene survival are not always coincident with individual survival, or species survival, the evolution of intelligence should proceed carefully. These conflicts have always been resolved in favor of gene survival, and this accounts for an otherwise baffling morality handed-down and sustained by mental mechanisms that seem designed to safeguard tribal welfare. Mankind's challenge is to balance the goals of individual liberation with species survival." [Condensed and somewhat altered.]

Cindy and Lory, on a hike in 1975, about 5 years before the "hard hearted misanthrope" began his holiday journey.

1975.08.ca. "You, the unborn, excuse me while I tend to the starving masses of today. I know there is no hope for most of them, but they are here and they are now, whereas you are merely a theoretical possibility. You cannot do anything to me for my neglect of you, just as you cannot do anything for me. When has anyone in the past done something for me? Besides, if my obsession with today's helpless masses brings on a population collapse, you might never exist. I have work to do. I am merciful, because people tell me I am merciful." [Condensed.]

1979.02. “On a whim I stopped in front of a car dealership and asked the person dressed-up as a chicken if he felt silly dressed that way and waving at passing cars, and he replied “Heck no, for the money he’s paid the dealership should feel silly.” So I went inside and asked the owner if he felt silly paying someone to stand outside dressed as a chicken, and he said “Heck no, it’s the passing motorists who should feel silly.” So I asked someone in the showroom looking at cars if he felt silly for stopping at a dealership that used a chicken to get attention, and he said “Heck no, it’s the chicken that should feel silly.” As I walked out the door I felt like defending chickens. After all, to my knowledge they’ve never made fools of themselves by dressing up as humans!”

1979. “How clever some teachers are! When I noticed that she never called on students with raised hands I learned to always raise my hand when I didn’t know the answer. She seemed to want to shame students for not knowing. So when I needed to know something the last option was to ask the teacher. This meant I learned to learn things on my own. In retrospect, how grateful I am to her, for it taught me to rely upon myself to figure things out. How clever some teachers are!”

PART TWO
VIGNETTES: 1980 - 1991

The vignettes in Part Two are from my “misanthrope holiday” years, ordered by date. My choice in ordering by date serves to show how the things I noticed evolved during this 12-year holiday.

It is a fortunate accident that the first vignette and the poem that closes the book serve as reprise bookends. Such symmetry may be a writer’s trick, but in this case it was a fortuitous accident.

The Part following this one is a collection of Stories from the same period. The Part after it consists of weird ideas from the same holiday years. The concluding Part is a collection of writings similar to the previous parts, but occurring after the Holiday – a sort of remembrance of good times gone.

In this Part, entries such as “Brother’s Keeper” (1990.02.01) and “Parental Love” (1990.02.25) show a growing awareness of how the strong can help the weak, instead of despising them.

Essentially no changes have been made to the original writings. A comma here, an adjective there, but there are no re-written sentences.

In this Part, as well as the following ones, the entries have titles. These can be found for later reference in the Index with page numbers.

If you only read one entry in this Part may I suggest “Parental Love” on page 41. “Letter From Chile” on page 21 and “Letters From Norway” on page 29 depict life “in the field” with a big picture perspective. “Daddy” on page 51 brings tears every time I read it. “To the Sea” on page 54 is a misty take on the shortness of existence.

TRANSIENCE

1980.01.01

The atoms that comprise me have existed for billions of years, will exist for other billions, and they do not care about their present configuration!

But *I* care! And it matters to *me* in what manner they maintain their configuration, and whether they will maintain it for another month, or another decade.

We all are *transients*. Yet our imagination transcends, and surveys timescales that are beyond the tiny bounds of anything our personal experience can encompass.

Our imagination can also soar beyond the very real confines of place, and situation, and beyond reality: I can imagine futures that will never exist.

How wonderful to be alive! Even for awhile!

PART TWO - VIGNETTES

THE HILLSIDE

1981.05.11

He seemed uncomfortable, sitting at the window seat, with his knees against the seatback in front of him. He gazed out the bus window, not fully attentive to the cars passing below. Freeways in LA don't afford the best of views, but passing traffic and homes on hillsides can break the monotony.

There were other passengers, businessmen, with their giveaway business suits and attache cases. And there were vacationers, in casual dress, with tote bags at their feet. Riding the airport bus may not be comfortable, but it does allow thoughts to wander freely. Businessmen may rehearse an upcoming sales encounter, the vacationer may picture beaches, others may anticipate a reunion with a relative. But this one man, gazing out the window, was different. His movements were gracefully disconnected from any apprehension or anticipation.

It's fun to imagine what people are thinking, and to wonder how they feel about life. I look for subtle movements that may indicate attitudes. Are there universals, such as when a young man's gaze encounters and dwells upon a passing young woman? Or when an old man's gaze does the same? I look for interactions, and overhear conversations.

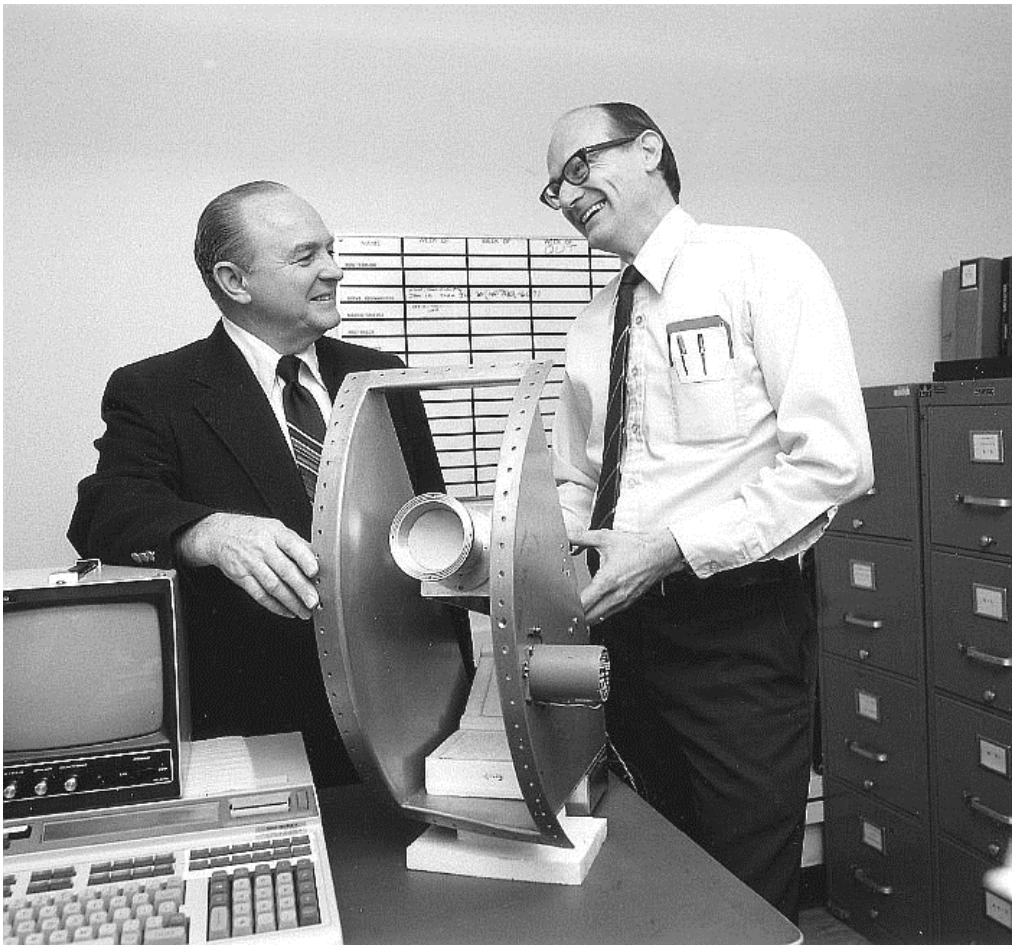
This man didn't seem interested in interactions. His gaze out the window was oblivious to those around him. His thoughts, whatever they were, only came into the bus when a cramped leg had to be rearranged against the seatback. But, I ask, what excuse can anybody have for being bored at the beginning of a trip, especially in an airplane? There are so many beautiful clouds, and interesting land forms to see. It's a time to relax and enjoy, not turn within. Yet this man was bored, as if he had no interest in what the immediate future had for him.

Suddenly, he came alive! We had just entered a segment of freeway where a hillside obstructed our view of traffic, houses, and an expansive view of LA. He sat upright, and stared directly at the hillside. There was no particular part of the hillside that could have been the focus of his attention, because it was passing by too fast, providing fast changing views. What was it about this hillside that begged attention? Old tangled trees, some bushes, and grass? The hillside was there for only a few seconds. Just as soon as it had passed, replaced by a wide expanse of LA, the traveler seemed to be still looking out at the hillside. Gradually, though, he returned to his previous disinterested demeanor.

One can speculate about the significance of an unkempt stretch of hillside in the middle of a large city. What might be the state of mind of a business traveler at the beginning of another trip? Could he be bored with his business mission? Could the hillside represent where he'd prefer to be going? Could the hillside have reminded him of the past? Was the traveler just a simple "country boy" at heart? Perhaps the

hillside reminded the traveler of the kind of place where he'd like his children to grow up.

I suspect these were the things that the hillside meant to him. I believe this is true, because later, in the airplane, the enigmatic traveler wrote a brief account of what the hillside meant to him.



This hard-working misanthrope is playing by the rules, with marketing trips to NASA headquarters in Washington, DC, leading a group of engineers to develop a new instrument, pleasing the boss (Jim Johnston, left), maybe enjoying the recognition. At least the money was good, and it supported a family.

PART TWO - VIGNETTES

THE LEFT-HANDED PILOT

1983.10.27

I take myself too seriously, sometimes. This can lead to learning experiences, like yesterday.

The working group meeting was boring, and the Tennessee outdoors setting was so inviting. I think we all wished the official proceedings could be aborted so we could really retreat on this "retreat." We had assembled for the annual inter-agency aviation safety workshop.

My attention was wandering, and I found myself sensing that there was something unusual about the way the person next to me, a Delta Airlines pilot, was taking notes. He was writing with his left hand, which by itself isn't unusual, but he was using the normal right hander's pencil grip, and that is unusual. The normal left-hander employs the awkward-looking "hooked" pencil grip. I knew from my neuropsychology reading that only about 1% of the population is left-handed in this manner. I've been alert to this 1% because they are conjectured to have brain function lateralized in a manner opposite to the other 99%. That is, whereas language function is found in the left cerebral hemisphere for 99% of the population, it is located in the right cerebral hemisphere for 1%.

In order to verify that the 1% who wrote left-handed with the right-hander's pencil grip are indeed the same 1% with opposite lateralization, I've recruited as many of my friends and acquaintances as possible to take a tachistoscopic language location test that I run on my home computer. I am also keeping track of the special abilities, and handicaps, of people in this category. A pilot in this rare category was a potentially useful piece of information. If only I could learn more about him for my survey!

The next day, while walking to our committee room, I found myself walking beside him; so I commented that I noticed something interesting about the way he was writing his notes yesterday. Before I could explain the significance of his left-handed pencil grip, he said "yeah, it was pretty boring yesterday, and I was amusing myself by trying to write left-handed!"

MALENESS ON THE FARM

1985.08.02

I can remember from boyhood walking among the turkeys on the way to the cherry tree. The Tom turkeys would pick fights with me if I passed too close while they were strutting near the hen turkeys. I remember thinking how silly the Toms were for their strutting behavior. They made themselves look so self-important, when in reality they did nothing useful for the flock. I think I interrupted their strutting performance on several occasions, by chasing them. I hoped to humiliate the Toms in front of the hens, and I wanted to steer the hens away from such ridiculous creatures. Of course it had no effect, for the Tom resumed his strutting, and the hen resumed her responding. I could never figure out why the hen's liked such dumb male behavior. I concluded from these observations that turkeys must be about the dumbest creatures on the farm.

In reading about the sociobiology of turkeys in articles by Trivers, it was somehow "gratifying" to learn how dumb male turkeys were when they were presented with a wood replica of a hen turkey's head. Crude replicas would elicit the male courting response, and he'd even walk around to the back of the imaginary hen and try to mount. In their attempt to discover how small a stimulus set would elicit the male's sexual behavior, the scientists were continuing MY childhood attempts to discredit the ridiculous and disgusting behavior of the males.

Roosters affected me the same way. Watching a rooster strut and bully the hens, and pick fights with the other roosters, caused me to want to lash out and whack the rooster on the head, and teach him a lesson about how important he really was! I couldn't discern any role for the rooster either; he was certainly useless at protecting the flock from the raccoons and foxes. Roosters, I learned, also don't like interfering strangers.

Even the hens acted despicably, as they would peck at another hen, to the point of bleeding. A sore on another chicken would be pecked at; there was no feeling of empathy. In effect, there was harassment and murder in the chicken pen on a regular basis. I can recall wanting to stop the cruel behavior, but I knew that my intervention was useless because the behavior would merely continue when I wasn't there.

In the chicken yard I also wondered why I couldn't find illustrations of the universal principle that "good" behavior is rewarded. The only socially considerate acts I can remember were between mother hens and their chicks. At all other times it seemed that the universal principle governing social behavior, the one my mother alleged was in my best interest to adhere to (because it was inherently in a person's own best interest to do so, supposedly), was non-existent; and in it's place was a principle dictating that the individual shall seek his own interests without regard for others, and even to harass the others for reasons I didn't understand at that time. Apparently the code of behavior that my mother was teaching me had no place in the world of chickens.

PART TWO - VIGNETTES

I guess my next question was: Did "goodness" have a place in the world of people? If it didn't exist among the animals, then it wasn't a universal principle governing behavior. This question bothered me, because I was trying to be a good boy. I wanted to see goodness throughout the world of people. (I accepted the idea that being good and considerate, etc, was an absolute good, not to be questioned.) But the good I looked for in the world of people wasn't there. Adults strutted, boys picked fights, and unfairness could be found everywhere - just like in the chicken pen. Why was "goodness" ignored so much in the world, yet talked about as if everybody believed in it? The world seemed to be saying "do as I say, not as I do." I think my strong dislike for hypocrisy had its origins with these thoughts.

I'm an adult now, yet I feel the same way, and have the same childhood questions. I realize that my pet peeves fit into the category of things that bothered me when I was a youngster. And many of these childhood questions have not yet been satisfactorily answered. I am still trying to understand universal principles governing social behavior.

On the "farm" where I learned about the stupidity of turkeys and the cruelty of chickens, with mother and sister Sue.

FREE WILL DENIED?

1987.03.11

Good old Elmer! He was in my freshman college philosophy class. We were discussing the relative merits of "free will" and "determinism," and Elmer proclaimed that neither could be correct. He made a valiant effort to discredit these two giant contenders for men's minds with a simple and elegant demonstration the next day.

He brought to class two envelopes, one addressed to the School of Engineering, the other addressed to the School of Literature, Science and the Arts. They contained enrollment applications, he said. In the corner of one envelope was written "even," and in the corner of the other was written "odd." He also had a large dark-room timer clock, and a funny-looking machine about the size of a press camera. With the professor's permission, he proceeded to explain how he would discredit both free will and determinism with a very personal demonstration.

He said that he'd been dissatisfied with his decision the previous year to enroll in Engineering School, and had gotten nowhere debating with himself. Engineering was "solid," but astronomy would be more fun. So he said he was going to place his destiny in the hands of something that was neither free will nor determinism. He announced that the machine was a Geiger counter, and that Geiger counters emit clicks when special events occurred in the nuclei of radioactive atoms. Most physicists, he assured us, believe that these decay events are purely random, and that they are inherently unpredictable.

Life decisions, however, have never been described as purely random, or inherently unpredictable. That would change during the next few minutes, and this specific instance would serve to prove the existence of the category.

He set the darkroom timer to about one minute, and instructed the class to count clicks of the Geiger counter while the timer ran. There was great drama as the timer was started and we all counted the clicks. One... two... At 15 the timer went "ding." Elmer asked the professor to select the envelope marked "odd," and announce what his destiny would be. "Astronomy," he proclaimed, and the class cheered.

His point had been made, and the professor began a slow commentary. He said that maybe there was something between free will and determinism, and asked Elmer if he would like to suggest a name for this thing that they seemed to have demonstrated. "Stochastic determinism" Elmer replied. And we all felt the age-honored concept of free will slipping out of existence.

But just then, almost when the class was to be dismissed, somebody from the back of the class asked to see the other envelope, the one addressed to the "School of Engineering." The professor opened it, and read from a cover letter: "Please forward the enclosed application the School of Literature, Science and the Arts."

PART TWO - VIGNETTES

LETTER FROM CHILE

1987.09.16

I sit here in front of my computer screen trying to remember how to use WordStar in order to write something about where I am and why. There's a constant buzz from the inverter, on the floor, as it converts 220 volt power to the 120 volts my computer needs. Diskettes are scattered over the desks of the hotel room, waiting for additional "reduction." Outside the window, on my right, I look down 7 stories to a plaza, with a statue of Magellan at its center. He's looking in my direction, at the strait bearing his name. The strait runs north/south, and can be seen a few blocks away out a back window of the hotel. Looking beyond the statue, to the east, I see mountains. They are partly covered with snow, which accumulates, and melts, and accumulates, with the daily variation of weather. The mountains are much lower in altitude than the Andes, to the north.

Those jagged mountains aren't visible from my window, but only the low ones, that lead northward toward the airport - the airport that is the lifeline of Punta Arenas in the winter. Since the Pan American Highway is impassable at places between here and Santiago everything comes and goes from this city through either the shipping port or the airport.

The airport has two sides: a public side and a military side. It is forbidden to take pictures from either side, so we all know which side operates with the consent of the other. Near the sign at the entrance that says "Republic of Chile" is that other less welcoming entrance. I have a badge that says "Fuerza Aerea de Chile; Evento Especiales: Proyecto Ozono, Estados Unidos, Bruce Gary." When I pull up to the gate, one of the many young soldiers comes to my lowered car window, and as he leans over to see this badge, I squirm as I notice, again, his Israeli machine gun inadvertently pointing into the car in some direction that always seems too close to my face. We have been cautioned to not complain about things, because we are guests in the country and we remain here to conduct our business at their pleasure.

The dirt road beyond the gate is like all neglected dirt roads in the world; except that the large chock holes are filled with muddy water that is half frozen. After a quarter mile, past barracks we're not supposed to notice, and a hanger with French Mirage jet fighters, which we also are not supposed to notice, we arrive at a large hangar with lots of cars parked to one side. The 10 or 20 cars indicate that a couple dozen of my colleagues are working in the hangar.

Walking past the armed soldier at the hangar entrance we encounter inside a beautiful sight. Airplanes are always beautiful to me, but this one is special. The white wings stretch a third of a football field, tip to lumbering tip. The fuselage is dominated by one very large tubular jet engine, with intakes up front on the two sides. Above the intakes is a small pocket of a place for the lone pilot to sit. And it is with this beautiful white airplane that we shall save the Earth!

We joke about "saving the earth." Everybody seems to take our mission seriously. But we are scientists, and it is axiomatic that scientists do whatever they do in the mode of a child at play. I have wondered what some of the "locals" think of us. In restaurants we are always joking and laughing; while everyone else is so serious. I know they're not serious because of their concern about the ozone layer; but they might have expected that we, who have come to this "Ends of the Earth" little town on an urgent and much publicized mission to investigate why the world is unexpectedly losing its life-protecting layer of stratospheric ozone, that we surely must be concerned and in a serious state of mind. But we're not, it seems. It's "business as usual." And since we enjoy our work, we are "at play as usual."

But things aren't quite what they seem. Look in front of the white U-2 plane in the hangar and there are about 15 work areas, one for each team that has an instrument on the airplane. And there are people working in those areas almost 24 hours per day. Consider that we've been here 35 days, so far, and the others are like me in having worked approximately 12 hours per day for 34 of those 35 days. (My one day "off" was due to a sickness which is making the rounds of the project personnel.)

The truth is that it does matter to us, this problem we're trying to solve. Each instrument is unique, and contributes something of importance to the endeavor. And each of us wants to "deliver" on the promise we have made on behalf of our instrument. Some are clearly more important than others, such as the Harvard Chlorine Monoxide Instrument. My instrument is mostly supportive, as it provides information on the meteorological setting in which the other instruments are taking their air sample measurements.

This beautiful airplane is perhaps the most instrument-laden air measuring craft in the world. It is also the world's highest-flying meteorology research airplane, as it regularly attains altitudes of 70,000 feet - except over Antarctica, where, we have learned, the cold air limits it to 67,000 feet. Today's science flight will be the 9th of the ozone mission. We fly as far south as safety permits, which is latitude 72 South, near the base of the Palmer Peninsula. This is well into the region known as the "Antarctic Ozone Hole."

There is a news blackout until the press conference at the end of the mission, about September 30. I am not supposed to write you that we have flown into the ozone hole on several occasions. I am also not supposed to write you about concentrations of key chemical constituents, so I won't. Or a new theory that may explain the process of formation and subsequent dynamic "battering away" of the "hole," so I won't. I am also not able to say whether an answer has been formulated concerning the "culprit role" of chloroflourocarbons (of which Freon is the most notable), so I won't. But the "bottom line" question is, well ...

This remote anomaly over the South Pole has its antipode at the North. It is smaller, but growing. We are likely to be deployed to Alaska, or Norway, in 18 months, to study this second "opening." It is like a race: we discover an opening, and rush to glean insight that can be used to "patch it up," but then another hole appears! The

next "opening" could actually be a spreading of the two holes, exposing us all! That leads us to the "bottom line" question: is the Antarctic Ozone Hole a mere portent of irreversible global erosion which is too late to stop and which could threaten most Earthly life forms?

And that's why we work 12-hour days, and leave our comfortable California homes and families for a 7-week assignment at the World's Southernmost city, on the edge of a Tierra del Fuegan winter. In some sense that airport where the beautiful white plane thunders into the Antarctic sky is the World's lifeline.

I'll be driving out there when I finish this letter, for the plane is due back shortly, and my instrument will have data that will need to be analyzed. Now, as I gaze out the window at Magellan, I see that it is raining. Spring is coming, and it more often rains than snows. Some school girls are kissing the foot of a statue below Magellan, which is supposed to bring good luck. I notice that the my bed is made, so the maid must have come in while I was absorbed in writing. The power inverter is still buzzing on the floor. And as I stare at the computer display I realize that I have remembered how WordStar works.

The beautiful ER-2 that is "saving the world."

PART TWO - VIGNETTES

Even misanthropes need a break, especially at Christmas (1987) with the kids. Cindy is only somewhat amused while Lory and I are really enjoying something going on at Sister Sue's place in Dallas.

PART TWO - VIGNETTES

CONSCIOUSNESS AND FREE WILL

1988.04.02

I woke up this morning to a half-dream that has posed a challenge for today. It had to do with proving that both free will and consciousness exist. My task in the dream was to demonstrate that conscious thought could influence behavior.

The dream clearly is in response to something I read before going to bed last night. It was a review of the book "Consciousness and the Computational Mind," by Jackendoff. The author was apparently unable to avoid the conclusion that consciousness is an epiphenomenon that observes experiences but does not influence them. This classical thought, which has been concerning me recently, must have become associated during subconscious dream activity with my essay "The Demise of Free Will?"

I dreamt that I could demonstrate that consciousness could influence behavior, and that this could be done by posing a two-action choice and selecting one or the other by stating a selection rule based on a random event. My transition to wakefulness occurred during the part in the dream when I had to specify the two-action choice and random event. I recall imagining some elaborate demonstration before my BBQ friends. This would have the merit of involving witnesses who could prevent me from reneging on following through with the rules of the experiment.

The more I awakened the more skeptical I became that a person would have the courage to engage in such a demonstration, thus proving that consciousness was merely an observing epiphenomenon. But at the same time another part of me was rising to the challenge, and wanted to prove that the opposite was true, and it wanted to do it now. Indeed, with an unwarranted boldness I took the position that it would be possible to test the reality of consciousness this very morning by writing down on paper that I would prepare an omelet for breakfast if a coin toss were heads, or prepare dry cereal if it were tails. But surely an even simpler test could be made using this same principle.

Being almost fully awake by now, I came up with a demonstration that was super-simple, and could be performed now: I told myself that I would either get up from bed "now" or I would stay in bed another 5 or 10 minutes. My selection criterion would come from reading the digital clock behind me. If the minute’s digit was even, I'd stay in bed; if it was odd, I'd get up immediately.

So, slowly at first, I turned my head, and intrepidly forced myself to quickly face the clock and take the decisive reading. What I saw astounded me! At exactly the moment I caught my first glimpse of the clock I saw the reading go from "7:51" to "7:52"!

Undaunted, I immediately arose, victorious, yet not completely convinced. the final proof would have to wait for another creative dream. I hope this doesn't become a lifetime project!

THOUGHTS ON DEATH AND THE NATURE OF REALITY

1988.10.03

Three weeks ago the doctor called me to say that the radiologist reported that I had a tumor; a "brain tumor" I think he said. Not to worry, though, since it was small and benign. Because the tumor was located close to the facial nerve he believed that it was probably the cause of my left-sided facial paralysis.

Surgery came into mind, and perhaps an inherited tendency for tumors, not all of which would be so benign. It sort of bothered me that, because the doctor was going out of town, our next appointment wouldn't be for another three weeks. Thus started my odyssey to a psychological land called "The Land of Ideas About Death."

One enters this "land" because information exists which can't be ignored, and which starts a sequence of thoughts which sometimes lead to the idea of death. These thoughts are all hypothetical, of course. But they can't be disregarded. Any one of them may be that "Truth Which Stands Still," while our perception of it wanders about as new information becomes available.

One of my reactions was to begin writing; in earnest, this time. Even though I was physically weak, I managed to develop some ideas that were in me. I found that merely making a mental commitment of sitting down at the keyboard creates a contact with ideas ready to come out. The ideas are there, waiting to be "tapped into" and put into words.

I read Norman Cousins' book, "*Anatomy of An Illness*," and began to adopt some of his suggested attitude changes and practices. I resumed taking vitamins, and improved my diet. I began to take time to appreciate simple things that should not be taken for granted. One of my essays dealt with the idea that it is too simplistic to state that a person is either alive or they're dead; rather, while a person is alive they undergo variations in "aliveness." And I sought to do things that would boost my level of "aliveness."

Overall, the quality of my life has improved because of these thoughts. And my writing has gotten "on track." It didn't occur to me to thank the doctor. He was just a messenger, conveying sober news to me. It was the "reality of my condition" that was creating these changes in me.

Or was it?

Today, after my long-delayed appointment with the doctor, I should be mad at him! Instead, I want to thank him. He played an unwitting role in these changes. It turns out that he must have confused me with another patient! Or perhaps he misheard the radiologist's informal phone report last month. The radiologist's written report states that there is **NO** evidence of a tumor! It cautions that the CAT scan cannot be used to rule out a certain type of tumor in a specific location (near the facial nerve). And at this time the tumor theory was only a remote possibility!

Relieved? Yes! But grateful for the lesson! My "reality" for the past three weeks was incorrect; yet I thought and felt exactly the same as if that reality had been correct. I found out what it will feel like, and what I will think about, when the time comes, assuming such a time will come, that a true diagnosis with dire possibilities is ever delivered to me. I have been changed by the experience, and I am thankful for the changes. As Nietzsche wrote, quoting an old soldier's maxim, "that which does not kill you makes you stronger." I recommend that everyone have such an experience!

Internal and External Reality

The reality I was reacting to is sometimes called "internal reality," or Ri. "True" reality is called "external reality," or Re. In general, the more we live, and the more we explore and learn, the better is the conformance of Ri with Re. I like to think of them as surface shapes; imperfections in Ri are "bumps" that don't exist in Re. Eventually, we like to believe, the untrue "bumps" get removed, and as one surface conforms better to the other we become "wise."

But I became wiser when a "bump" was placed in Ri by mistake. That "bump" caused me to change for the better. What can this experience mean?

Two things. First, consider the fact that I will die someday. Really! Of course it's easy to consider this about someone else, but not ourselves. If this **fact** is represented by a contour somewhere in Re, then perhaps I lack the corresponding contour in Ri. The "bump" I mistakenly created had the approximate shape of this contour, and it had effects on other parts of my thinking that the correct contour would have had.

Second, in philosophy a distinction is made between a person's "philosophy of reality" (PR) and their "philosophy of life" (PL). A scholar may have a well developed PR and an unhappily inadequate PL. When the competences are reversed, we say that "ignorance is bliss." What happened to me is that a PR imperfection improved PL.

A person's Philosophy of Reality is really another term for Ri. There is no equivalent analogy for PL. There is no "external" and true PL. PLs are arbitrary. They are human inventions, and there is no objective way to measure the worth of one PL in relation to another. PLs can be aesthetically pleasing, but their goodness and beauty are subjective impressions created behind the eye of the beholder. They do not exist outside human brains.

The Random Origins of Wisdom

My experience has taught me that wisdom can be gained in the most unexpected ways. The wisdom I reached for, and have been improved by, existed within me all the time. It is theoretically possible that I could have played a trick on myself, like a "thought experiment." I could have conjured up a hypothetical illness that would have set in motion the same chain of thoughts, feelings, and re-valuations that in fact occurred.

I will no doubt visit this "land" again. It probably will happen as the result of some future visit to the doctor's office. It need not be that way, but I picture it happening like that.

Troublesome medical news could come at any time, to anybody. Just the acknowledgment of this should start any thinking person on a journey similar to the one I just took in the Land of Ideas About Death. And the wisdom that I gained by taking this journey could be anybody's for the imagining.

You, dear Reader, are invited to take this journey! And if you start whenever you're ready, it won't happen. So, **start now!**

Mr Misanthrope giving a talk at a February, 1989 science meeting in Norway. Note the asymmetry of the open mouth caused by a residual of Bell's Palsy that struck a few months earlier.

PART TWO - VIGNETTES

LETTER FROM NORWAY

1989.01.04 - 1989.01.21

I feel like writing. As always, the computer is humming in readiness. The blank screen and computer wait to be writ upon, instead of to be calculated with, for a change. The butter is out, getting soft, in preparation for when I'll eat my evening snack. This little abode of mine is clean, since the maid was here while I was out. The day darkens outside. The rain clouds are giving way to clear patches. No flight is scheduled for tomorrow, so there's time now for writing.

Finally I bought a Norwegian/English dictionary, a map of the area, a newspaper in English, and a knife for buttering my bread. I'm glad to have a knife for buttering my bread. It's been difficult doing this with the large knife I use for slicing the bread. I've had a buttering knife on my shopping list for the past few days. This reveals how little things can loom large on one's mind of concerns on field deployments. I could go into details about the way I set my table, using a cut open plastic shopping bag for a tablecloth, etc.

It is strange to consider this, and juxtapose it upon the larger issue that has brought us here. This afternoon I bought a copy of "USA Today" in the hotel lobby, and read an article about how the ER-2 "ripped through the mist at Stavanger, Norway Tuesday morning into the Arctic sky." And they had an interview with Albert Gore, who said "There has been a 4% reduction in the thickness of the ozone layer over the entire world. The findings in Norway will be important in improving our understanding of how fast this is occurring and how we can stop it." And I, who am a part of this operation, am relieved to have finally obtained a butter knife!

I had breakfast with one of the pilots yesterday. He was explaining to us how much more of a pest the air traffic controllers are in this part of the world. They kept calling him during Tuesday's flight to request that he change frequencies, or report his altitude and position, and they couldn't understand how he could be at 65,000 feet when the airplane's transponder was reporting 60,000 feet (the maximum that the aircraft's transponder is capable of reporting). He proudly told how he outwitted them by requesting a "block altitude of 60 to 65," and they didn't pester him anymore.

Then he told about the new survival mittens the life support guy placed in the leg pocket of his pressurized flight (space) suit. Since the cabin pressure is allowed to go up to 28,000 feet (while flying at 60 or 70,000 feet), the cockpit is essentially in vacuum. The mittens were in an air-tight plastic bag, which expanded so much that it wedged his right leg tightly in the cramped quarters provided for pilot's legs. He was afraid to lift his leg out to unzip the pocket because he wasn't sure he could unzip it with his gloves on (and he couldn't remove his gloves because he'd depressurize); and if he couldn't do that he might not be able to put his leg back in place because of an even more expanded leg pocket, forcing him to fly the plane for several hours with his leg up on top of some instruments. His rendition was hilarious!

PART TWO - VIGNETTES

These are the things that don't get reported in the newspapers. Yet they are what all missions, trivial or profound, consist of. They are the "all too Human" matrix within which the crucial work occurs. It's fun being a part of this mission, as it was fun being a part of the previous ones. It focuses life. There's the preparation and anticipation preceding it, the feeling of "being there" during it, and the recollection and insight-gleaning analysis phase afterward.

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Yesterday was a flight day for the ER-2. Jim flew what turned out to be a harrowing flight. He almost lost the plane (and his life). At the post-flight pilot's debriefing he mentioned that the air data computer failed an hour from landing. The faulty computer abruptly produced a spuriously high Mach number (air speed), which caused the auto pilot to pitch up abruptly, which produced the kind of shuddering that precedes a stall; and during a critical 10 seconds he figured out that he had to take manual control and ease the pitch down; which he did successfully. His accounting was casual.

Today he was in our area, looking over the recordings of air speed, Mach number, pitch angle, etc, which are obtained by the experiment team we share a work area with. He said that his air speed departed almost 30 knots from what it should have been, and another knot or two would have placed the aircraft outside it's limits. I asked what would have happened in that case, and he said, casually, the plane would have entered a spinning dive (which we all know cannot be recovered from in the ER-2), and during the dive the tail section would have fallen off (another weakness of the ER-2). That was the end of the conversation, basically. What else can you say? Even if he had ejected, he would have landed in freezing water, 100 km from the coast, at latitude 65 North, and close to sunset. Survival time in such water is measured in the 10's of minutes.

I'm glad I told the pilot this morning that the flight produced good science, and a lot of us would be studying it carefully. We definitely penetrated into the polar vortex, where the unusual chemistry happens.

During the past two weeks I've become more aware of the possible magnitude of the ozone hole problem. It dawned on me that since there's as much chlorine in the Arctic stratosphere as in the Antarctic, there is actually as much "potential" for ozone depletion in both places. And it is possible that the only thing that prevents the Arctic from being as bad as the Antarctic is the relative warmth and early break-up of the Arctic vortex. Since these Arctic meteorological properties vary from year to year, it is possible that the natural fluctuations could occasionally produce serious depletions in the North.

Furthermore, all the other assaults to the Earth's climate, such as global warming (caused by burning rainforests and fossil fuels), have the potential for cooling the stratosphere. It sounds ironic, but it is apparently true, that a warming troposphere goes along with a cooling stratosphere. And this is bad for ozone depletion, because

colder stratospheres produce more clouds, which process more air for chemical depletion reactions.

Global warming is an inexorable process, and can't be stopped. There's so much inertia that it is not feasible to control human activities enough to stop the slow and persistent warming process. It may be inescapable then that the stratosphere will inexorably cool. As agricultural practices adjust to the need to move poleward, they will also have to adjust to increases in ultra-violet light exposures. Thus, as our children warm, they will also get sunburned!

As I look into the future, I don't like some of the things I see. Most of them are social, or genetic. But some are environmental. The public's concern for environmental threats is growing. There are uncertainties though. There always are. And that's part of the problem. As long as there are uncertainties, the politicians will say the problem needs to be studied more so that policy decisions can be based on knowledge - at a later date. Albert Gore is the kind of politician the U.S. needs, and will need for a long time in our future.

Until the Gores dominate the scene, however, it will be important to reduce the uncertainties. That's Science's new role. We'll have to conduct missions over Antarctica again. And return to Norway another year.

And tonight will be another night that I won't be able to see the Northern lights. What a shame to be at 59 degrees North, while the sun is producing all kinds of proton solar winds, which are supposed to be producing beautiful auroral displays, and to not be able to see them.

As I look out the window there are no stars, because of the clouds. Only the airport a couple miles away can be seen. And the parked cars in front of the hotel, three stories below.

And I think the butter over there on the table is now soft; and the humming computer is in need of a rest, as I feel hunger from within.

PART TWO - VIGNETTES

The long-winged ER-2 and DC-8 in background, parked at the airport in Stavanger, Norway, 1989.

PART TWO - VIGNETTES

NOT LOSING THE MOMENT

1989.02.26

My Sunday ritual includes coffee and reading the Los Angeles Times on the front porch. It takes an hour or more, and this means there are several trips into the kitchen with a cup of cool coffee for reheating in the microwave. This morning it occurred to me that there's been a recurring thought bothering me for the past several months whenever I reheated the coffee. Perhaps this thought rose a little higher toward consciousness on each occasion, until today I became fully aware of it.

The thought has to do with waiting the 33 seconds for the coffee to be reheated (entering 33 seconds is easier than 30 seconds). I would be anxious to return to my reading, so I'd wish the 33 seconds would pass quickly. What's wrong with this, you ask? Perhaps nothing. But it bothers a part of me that regrets the passage of time within the bounds of a finite life!

How could I be wishing for time to pass quickly! And how quickly the 33 seconds would pass, with nothing to show for it - except a half-filled cup of warm coffee. Wouldn't it be better to make good use of the 33-second wait? This morning I tried to engage in a redeeming 33-second activity. I looked out the kitchen window, and noticed the beauty of the trees. I tried to register this beauty in a meaningful way, and my trying was interrupted by a "ding." I still had very little to show for the 33 seconds! Oh well!

The entirety of life consists of an accumulation of 33-second segments. They add up with cool mathematical certainty for each person, with total disregard for how they are used. My allotment is comparable to my grandfather's, and he's dead now. Unknown citizens of the Roman Empire had the same quota, and they're dead - and forgotten.

Destiny gives us a quota of *time*, not *experience*! To the extent that we have "free will," it is up to us to fill this time with redeeming experiences.

We owe it to ourselves to not be shortchanged by our decisions. Our enemies take many forms. Lethargy is one. Indifference is another. So is Negativism, and Pitfalls (described elsewhere).

My purpose in writing this little note is to create a reminder to make good use of those brief moments in everyday life when there is nothing on the agenda and I find myself waiting for something else to finish. These times are actually "bonus times." They are opportunities, and it is a challenge to one's creativeness to make redeeming use of them.

NORWEGIAN FLIGHTS

1989.03.24

I was staring out the left window, watching the cold water far below, engrossed in speculation about the origin of white areas that I later decided must have been freezing mist thrown up by large waves. The sea seemed both hostile and awesome, but as I focused on the leading edge of the DC-8 wing in the foreground I felt somewhat comforted. The wing seemed to represent technology, some of the best that Mankind has produced. I recall thinking that our ancestors would never have believed that Humans would someday fly so high.

Just then land appeared below. We were scheduled to fly over the northern tip of Iceland, so I had actually been looking forward to this sight. Somehow this snow-covered, rugged-looking land mass provided a greater feeling of comfort than the technologically perfected wing. The land beckoned. *"This is where you belong"* it seemed to be saying. "Yes, that's home," I thought to myself; and I recalled the astronaut interviews described in the book "*The Home Planet*" (1988), expressing their longing and warm feelings of concern for our living planet. Then I felt a sudden understanding of a connection between what had brought me to this remote setting and why I suddenly felt the astronaut's compassion.

In a matter of seconds I was overwhelmed by this new emotion. Tears welled up, and I felt a "connection" that had eluded me for the past several weeks, during those 15-hour work days, seven days per week, while all of us struggled to understand the import of those squiggly lines on our charts; those lines that our intellect told us signified something about ozone depletion, but which stubbornly remained mere abstractions that didn't connect emotionally.

At that moment I felt "love for the Earth" for the first time! This Earth has been abused by Humanity, including unthinking technologists, using the same scientific and engineering paradigms that built the wing that "held up" this amazing plane. For some reason I imagined a metaphorical Earth that had been "scratched" by my fellow man; and it was bleeding. I looked down through tear-filled eyes, and whispered to the Earth: "I'm sorry; I'll try to heal you!"

Ever since that moment last January 14, in NASA's DC-8 research plane, I've actually felt the "connection" my work may have with solving an important environmental problem. I work for Caltech's Jet Propulsion Laboratory, and I'm a Principal Investigator for one of the instruments included on both the Antarctic and Arctic airborne expeditions, AAOE and AASE. My instrument is on the ER-2, but flying on the DC-8 as an observer is what produced the experience that enabled me to see the connection.

I made a vow to myself, which I whispered to the beloved Earth in a private moment: I would try to help. Before then my tendency was to shrug off the consequences of environmental neglect with some sort of cynical remark, such as "people get what

they deserve – so let Humanity sink into the ocean." But it's more than just people! It's the Earth, an Earth that gave us life, an Earth that has given forth all life, which sustains many more wondrous creatures than us troublesome Humans. We are just one species on this "living planet," and we have a responsibility, by virtue of our powerful understanding and insight, as well as our role in creating the environmental threat, to take a responsible, caring custody of our planet, and of the other life forms with whom we should share in gratitude.

The venerable principle of "noblesse oblige" states that the powerful should have a compassionate interest in looking after those less powerful, that the wise should patiently instruct those with less knowledge or wisdom. The middle years in a person's life, when we are strong and capable, are usually devoted to caring for children, perhaps caring for one's own parents. It is a similar "obligation" that motivates the environmentally enlightened to feel responsible for the Earth; an Earth that, by producing the entire interacting web of living things, gave birth to ourselves. We Humans of this generation comprise just one link of a chain that "wants" to extend forever, and all future generations are dependent on our present actions. We Humans are the species that understands how the world works, and it is our responsibility to use our understanding during this crucial time. We must try to secure a safe passage for all Earth's living species and deliver them safely to the future. The Earth needs the efforts of more people who have crossed the bridge of awareness to this "new consciousness."

My "love affair" with Life on Earth has been an ambivalent one. At mid-life I am still struggling to understand root causes for the predicaments Humanity creates for itself. Slowly, I've come to appreciate what I believe to be a more comprehensive view of root causes. And I think this viewpoint may someday be helpful in guiding the formulation of effective policies. I intend to write about these matters at some future date. Meanwhile, we scientists who have seen "the connection" will do our part in improving our understanding of present and future threats.

MY CONSCIOUSNESS-LOWERING FLIGHT

1989.04.09

I had a second flight on the DC-8, but I'm reluctant to talk about it. It happened about 3 weeks after my consciousness-raising flight over Iceland. I had asked the project if I could be a guest observer on one more DC-8 flight so that I could try again to see and experience mountain waves. I might also have wanted to re-experience that emotional connection with the Living Earth that occurred over Iceland.

Our flight track for the February 7 flight went over Greenland. I would have liked a flight over the North Pole, just to be able to say I had flown there, but since Greenland had more prospects for producing mountain waves I was happy.

My anticipation grew while flying over a hostile Arctic sea. As we neared the Greenland coast I stared out the window, as I had done for my sighting of Iceland. Upon seeing Greenland I first felt comfort, as with Iceland; and I wondered if there would be some similar revelation for me. And then it happened. A feeling began to overcome me. But this time it was different, and I was *not* prepared for the "message."

"Thanks for your concern," the feeling seemed to be saying, "I may be scarred and bleeding, due to your fellow man's abuse, but please don't help!" I couldn't believe it! Those words are the closest I can come to conveying the feeling of the message that overcame me. "Let me bleed! Man cannot help me! We can heal ourself without Man! Without Man, we can heal ourselves!"

"Oh no!" I exclaimed to myself, "Does that mean what I *think* it means?"

"This has happened before, and it just has to run its course. Man will eventually suffocate himself, and we, the Living Planet, will heal ourself!"

I looked back, and the Greenland coast was going out of sight. I checked the flight track map to see if we'd be flying near Iceland. But no! And I was left with this horrifying thought. What if that <u>*is*</u> the only solution? Is it true that the rest of life on the Earth would be better off without Mankind? When we Humans try to help, are

we merely stretching out the agony of the Planet, and postponing our inevitable extinction, and the planetary healing process that will follow?

Picture taken on DC-8 by a NASA press photographer on the very date of the consciousness lowering flight, showing Mr Misanthrope (second from left) watching Ed Browell explain the graphs of stratospheric layers of depleted ozone. This picture appeared on page 2 of the New York Times *(1989); I lifted it from* Chemical and Engineering News *(1990 March 19).*

PART TWO - VIGNETTES

THE CAFETERIA

1989.09.06

Company cafeterias must have many stories to tell.

They're a place where you can eat lunch year after year, and become familiar with faces you'll never meet. Curiosity often grows. I've seen courtships, couples that endure, couples that break-up, unusual countenances, debonair men, attractive women who eat alone and read books, men in homosexual garb, and a person dressed like a witch (not for Halloween). And at a place like JPL, where half the employees hold advanced degrees, nerds abound - men with two left brains, as I politely refer to them.

Today one of these men sat almost across from me. I automatically categorized him without looking because he sat slightly within my private space (double-LB people are oblivious to such things). When I looked I recognized him as one of those people I've occasionally seen for about 25 years. Then I realized that I knew him from another setting.

About 6 years ago he and I were on the same "tiger team." JPL assembled about 10 of us to conduct a high priority study of ways we could help the FAA with their National Air Space Plan. We convened a half-dozen times for a couple weeks. We had company privileges, like taking the company plane to various FAA sites. We put together a recommendation that apparently guided company policy.

Each person represented a specialty. I don't remember what his was. It probably had something to do with electronics, or computers, or communications. I recall having a vague respect for him whenever I saw him, so he must have contributed something useful to the team's efforts.

As I was recalling these things I noticed something that disturbed me. And it eventually brought a lump to my throat and made me want to cry! His left hand started opening and closing involuntarily! Then his face started grimacing the same way. It subsided after a few seconds; but it returned every few minutes.

How cruel fate can be! A stranger might have felt revulsion sitting beside him. But I felt compassion. I felt like saying "It's OK; don't feel ashamed; I understand, and I respect you!"

During the grimacing seizures I wondered how he was doing. Was he married, did he have understanding and support from someone who loved him? And how was he faring in the work setting? I reasoned that his right frontal primary cortex ("motor strip") must be having seizure activity, but since his type of work relied mostly upon left frontal tertiary cortex he might actually be unimpaired in doing his work.

He finished lunch soon, and left. But his presence lingered with me. And it's still with me. He's a reminder of a future that could be mine. Or yours!

THE DEER AT DUSK

1990.01.19

Late this afternoon, at the lab, I heard what I thought were barking coyotes in the hills behind my office, so I went out to look for them. While they were still in the distance I saw a stag deer run down the hill east of me. It was beautiful, with large antlers. I think it ran onto the lab grounds in order to not leave a continuously scented trail.

Soon the dogs came, sniffing as they ran, haltingly. They followed a trail that went onto the lab pavement, lost it, and slowly returned to the hills.

I began to wonder if the deer had thoughts about the dogs; about their right to pester innocent deer. Deer don't bother dogs, for they just eat vegetation, and basically mind their own business. Whereas the deer are self-sufficient, the dogs depend for their livelihood on killing other animals that are minding their own business. If deer could think (in the manner that we humans think) they would accuse dogs of being a form of parasite: dependent for their existence upon other self-sufficient creatures.

The animal world consists of an intricate web of producers and parasites. The deer are not completely self-sufficient, for they are dependent upon vegetation, and if vegetation could think and talk it might accuse the deer of being a parasite. It is alleged that predators keep their prey's gene pool clean by devouring defective individuals, so the deer should pause before accusing the dogs of being nothing more than parasites.

Another issue that occurred to me, as I waited to see if I could glimpse the deer emerging from hiding to return to the brush after the dogs left, is that there seems to be a pattern of greater intelligence among predators compared to their prey. Indeed, it has been suggested that the evolution of human intelligence may owe something to our ancestor's partial reliance on predation. Since I admire intelligence, how could I condemn the process that produces it? This dilemma has bothered me before.

By this time it was getting dark, and I gave up hoping to see the deer again. But the questions it elicited are still with me.

PART TWO - VIGNETTES

BROTHER'S KEEPER

1990.02.01

Why it should have waited to happen so long, I don't know. I'm 50 years old, and I would hope that most people experience the following at a much earlier age.

I was in the bank, with somebody who has trouble handling her affairs. She had just moved to another city, and I had come to visit and help with a few things. The bank clerk was explaining something about a problem with her account at another branch, and I was sitting off to the side, observing.

I knew that it was hard for her to understand things like check transactions, and I was curious to know how quickly the bank clerk would note this. The clerk must have been in similar situations many times before, because she readily adjusted her explanation to the right level. I also noted that the clerk's patience was not patronizing, and gave no hint of disdain for the other person's limited capacities.

And I was glad. For *I* had begun to accept this person's strengths and weaknesses in a new way, only recently. Suddenly I was experiencing what I have since referred to as a *brother's keeper* feeling! I felt a *goodness* about "helping the helpless." There seemed to be a "meant to be-ness" about the idea of those with capability helping those less fortunate. With this new attitude I became more *accepting* of people with less ability.

I now recall from childhood a saying that my mother hung on the wall above the family desk:

"For them unto whom much has been given shall much be expected."

The seed was planted, and 45 years later it sprouted.

PARENTAL LOVE

1990.02.25

I was exhausted, but proud of the amount of work I was getting done. I told myself that I shouldn't be pushing myself so hard, while washing and vacuuming the car. After all, it's supposed to take a few weeks to recover strength after giving blood, and it had only been a couple days for me. I promised myself I'd rest soon, as I swept the patio, started a washing and piled the breakfast dishes.

While opening the drapes I accidentally brushed against a decoration on the fireplace ledge. As I leaned over to pick it up I felt a loving connection with the little gnome that lay on the floor in two pieces. The miniature book had broken off the two miniature hands that had been holding it for the past 5 years.

I recalled how much love my mother put into making her gnomes. Each was distinct, and since I loved books my mother appropriately gave me a little red gnome that sat somewhat precariously on a ledge, reading away, oblivious to his surroundings.

I carefully picked up the two pieces and brought them to the office, snatching a bottle of glue with an efficient reach while passing through the laundry room. As I put a dab of glue on each corner of the book, where Mom had originally done it, I noticed that the little gnome had actually been reading something these many years. I didn't even know there was writing on the opened pages of his book. It said, simply: "I Love You."

That's when I broke down and cried. For I had never taken the time to notice. My life had been so hectic, single-parenting two teenage daughters, attending to work, with frequent business trips. I knew I wasn't taking time for some things that mattered. And here was a message from my mother, created perhaps a couple years before she died, which only now was registering with me.

I knew Mom would understand, because that's what Mom's are good at. I've tried to be both Mom and Dad to my daughters, and it's hard. So many times, when we sat down to dinner, I had wished there had been a woman at the other end of the table! There were many times I had to ask women friends things about raising daughters. And many times I wondered when my daughters would show their gratitude. I said that I must be doing a good job, making it look easy, otherwise they'd notice how hard it was. I've tried to teach them good manners, to thank people, and so forth. And occasionally they'd show some inkling of appreciation for their "Mr Mom" dad.

That's OK, I often told myself. That's the way it's supposed to be. A parent is successful when their child goes off into the big world on their own, just barely looking back. They have a job to do, and it's in the future. Parent's need to understand this. Someday, I knew, they'd find a differently nuanced love for me, and it would begin to register with them, that I made a lot of sacrifices for them. And

that's enough for me. Just knowing that someday they'd understand more fully about parental love.

It might happen after they have children, as they devote themselves to their children the way I've devoted myself to mine; and the way my parents devoted themselves to me.

And as I sat there crying, looking at the little gnome, reading "I Love You," I began to know with greater understanding, and with a greater feeling for it, the love my mother had for me. I began to know, in a new way, my feeling of love for her, and how it related to the love I have for my children.

As I contemplate the future years of additional parenting, I feel more cheerful. For now I understand a fundamental truth about parenting. Love is handed down from generation to generation, with an acknowledgement that's one generation out-of-step. As we love our children, unconditionally, their job is to get ready for life, and not look back. Our job is to prepare them for walking forward, and wish them well. And we must understand that someday, when they are in our exact same position of giving unacknowledged love, that they will remember and appreciate the gift of parental love which once nourished their childhood growth.

"And that's the way it is," I told myself, with a wet eye, as I lovingly placed the gnome back on the shelf.

Gnome, reading "I Love You."

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LOST WISDOM

1990.02.25

The lecturer gave an impeccable seminar. He described an ingenious way to detect gravity waves using a 3-element satellite system in orbit around the sun at the L5 point of the sun-earth system. The subject matter was difficult, yet he made most of it understandable to a novice like me. I left with the hope that his project would get funded and perhaps produce results within my lifetime.

A more impressive thing, for me, however, was to realize what a versatile scientist he was! I knew him first for work he was doing in an entirely different field, and he was very well thought of by those colleagues. Someone like him would be a credit to any discipline he entered.

As I sat there, marveling at the professionalism of someone I had known from the narrow context of my own field, and realizing how accomplished he was in a larger arena, I was suddenly struck by one unexpected thought. He was older than when I first met him, and he was nearing the end of his career, and what a loss to civilization his retirement will be! Why do intellectual giants like him have to ever retire? If he were somehow to be given an extra 50 years, imagine how much he could accomplish.

His hair was grey, yet he seemed essentially youthful. Scientists are accused of that a lot. The child's curiosity stays alive throughout life, and a scientist's life is just one long session of playful encounters with ideas. But the body ages. It has it's own timetable, and the perpetual youthfulness of the mind cannot hold back the body's aging.

That thought bothered me. Maybe because *I'm* aging. But I'm just a small fry scientist; and Peter's a first class one! It's not fair for really good people like him to age. "He's a scientist's scientist!" I found myself thinking. He knows what he's talking about, more than the others. It takes a scientist to know the *real* scientists among us. I wondered if the management where he worked knew that he was first class. I hoped that he was appreciated by his home institution. So often it takes recognition from afar to make everyday work associates take note.

But my thoughts returned to how long he'd be a practicing scientist. By the time his proposed gravity wave experiment was operating, in the late 90's, he could be retired. Why should someone as intelligent as him have to retire? Why should such a valuable human being have to age?

I knew the answer. It has to do with the genes. Since infirmities that occur *after* a person's reproductive years have negligible influence on the number of offspring produced, genes that "permit," or even induce, illness in old age cannot be eliminated

from the genome by the natural forces of selection. It is impossible for natural selection to reward genes that postpone "aging."

A suggestion has been made that would probably solve the problem, and extend the lifetime of humans dramatically. It would involve archiving semen and ova in cold storage, and deciding which combinations to use for artificial fertilization after both donors had died. The choice would be based on the longevity of the donors. Only by such a means will it be possible to "reward" genes that code for longevity past the normal reproductive age.

This argument may be logical, but it smacks of "elitism," and makes people uncomfortable. Such a reproduction selection system could be used to promote other "desirable" traits, such as achievement, IQ or moral conduct. The basic objection would go something like this: "Value judgements are subjective, and who's to say that one person is more valuable than another?"

So, as I left the seminar, I had two emotions. *Hope*, for a very ingenious gravity wave detector that would probably provide insight on neutron star binaries and other exotic happenings in the universe, and a feeling of *discouragement* and *futility* about how limited a time the best among us are able to live and play with ideas with productive results. How much *lost wisdom* these untimely agings represent!

Dr. Alan Binder

PART TWO - VIGNETTES

BACON

1990.04.01

What an indulgence, eating bacon this morning! I rarely buy it, because I now know that it's bad for me; but it tastes *soo* good!

It occurred to me, while savoring the taste of the greasy, salty stuff, that I had never enjoyed eating bacon this much before I knew it was bad for me. How ironic! There must be a logical explanation for this. I actually began giving thanks to whoever it was who discovered the badness of bacon. I'm glad they popularized the need to abstain from eating it. This only heightens the flavor!

Maybe, long ago, people ate bacon because it was their duty. "Finish your bacon, children!" They probably thought it was good for them, so it couldn't taste very good.

I did make one compromise, though. I tore off the fatty portions and fed them to the cat, who sat expectantly atop her little table in the dining room. I rationalized feeding her the unhealthy fatty strips by noting that her digestive system has evolved an adequate means for dealing with fat, thanks to cats being almost exclusively carnivorous, whereas we humans are *om*nivorous.

Poor Fluffy, as much as she likes the bacon she would have liked it even more if I could only communicate to her that it was possibly *bad* for her.

I wonder if Human health could be served by starting the rumor that too much broccoli is bad for the body, in spite of its good taste? Probably not.

My last indulgent act at the breakfast table was to take the final fatty piece of bacon, which the cat was waiting for, and *eat it myself!*

MY SPECIAL RELATIONSHIP WITH THE HOUSE CAT

1990.04.14

"The family cat" has a special place in our house. Her "innocence" is irresistible, and her behaviors bring joy to us all. But *I* have a special relationship with Fluffy.

When I arrive home from work, as I approach the driveway, she springs out from the bushes and scampers in front of the car, forcing me to slow down, and follow at *her* pace. By the time I reach the door she's got her head poked in the corner, where the door opens, waiting for me to open it. In she goes, racing straight to the food sack. If it's closed, she comes to me, and commences a pestering that might pass for a social greeting if I didn't know better.

We have these rituals, and they usually involve food - her food. My food is her food, unless its vegetarian. She hates fruits and vegetables, and likes meat. Lately I've been shifting away from her favorites, so the tidbits I offer from the dinner table are unsatisfying to her.

Fluffy is really my daughter's cat. Cindy and a friend picked her out one day. While walking they noticed a "free kittens" sign on a front lawn. They saw them, and fell in love with the one that wasn't orange. They ran home, and Cindy asked if I'd let her have a kitten "please, please!" I relented, and we got Fluffy.

When Cindy goes somewhere for a few days she misses Fluffy, and makes a big deal about the reunions. She asks me if I think Fluffy misses her. I lie, and say "yes," and Cindy hugs Fluffy harder. Fluffy squirms free, and runs away.

I pride myself in treating Fluffy gently. I hope to show Cindy the payoffs of not *forcing* Fluffy to be in my arms, and make subtle hints about how Fluffy will "come around" if she handles her as gently as I do. I've nurtured the idea that Fluffy and I have a special relationship.

My business trips are usually a couple days long. During these short absences Fluffy doesn't seem to notice that I've been gone. Nevertheless, I humor her, and tell her that I missed her during my trip. Cindy asks if Fluffy missed me, and I say "I think so; she just doesn't show it."

My trip to Norway was a long one. It lasted 7 weeks. I worked hard all those days, missed things back home. Even Fluffy! When I wrote I occasionally asked Cindy to

hug Fluffy for me. I was sure that Fluffy missed me, and would show it when I returned.

I admit that Fluffy wasn't on my mind as I got out of the taxi and approached the house; I was anxious to see Cindy. Also, the sight of home felt good, and I was filled with emotion anticipating seeing my dear daughter. As I approached the door, a fluffy streak raced to the door, and kept its head pointed in the corner where the door was going to open.

I said "Fluffy! Hello!" She ignored me, and continued waiting for the door to open. "Fluffy, I'm glad to see you; I missed you. Haven't you missed me?" She still didn't look at me, but waited for the door to open.

I opened the door, and Fluffy raced away, probably to the food sack. And I went to hug my dear Cindy, who *did* miss me.

But Fluffy didn't seem to notice that time had passed. She accepted me just as before; no questions asked. Now, that's some special relationship!

THE CONCERTGOER

1991.02.10

I was glad when I found where my new season ticket was located in relation to the stage. On the keyboard side, as I had requested, and near the front. It was my impression that people in this section were older, which might be accounted for by the fact that it takes awhile to be lucky when requesting seating changes. I vowed to renew each year in order to not lose my choice seat.

I was early, and began watching people. Others were watching too, but they watched those who were watching them. A couple sat down in the seats in front of me, and I noticed that they weren't old. That made me feel better, as I was beginning to feel a little out of place.

A couple concerts later I began to recognize people. For the ones in front you recall faces. For those in back you recall voices and specific coughs. You learn who knows their music by the whispering of composition identifications during the encores.

The man in front became recognizable, but the woman he was with wasn't. I took note of this, and figured out that it was because the woman was not the same person each time. They therefore must not be married, and he is dating. One of the women he "dated" was attractive. I remembered her, as she came a few times. The others weren't.

The next season had a few changes. But most people were in their same places, or had their same identifiable coughs, or annoying habits of unwrapping cough drops, or whispering too loudly. The man in front continued to change his dates. It became customary for me to make a note of who would accompany him, and note progress in how his dating was going. You can tell from the way people behave if they are comfortable with each other. He and his date were usually comfortable, so I couldn't understand why the women kept changing.

A few times the man in front was alone. That interested me also. Once he brought someone who must have been his daughter. That revealed that he was divorced. I tried to put myself in his shoes, even though we were of different generations. My impression is that the seat beside him was empty more often than could be accounted for by his "woman of the moment" being too busy to attend. The empty seats must have signified that his dating was not going well.

The next season the man in front was alone almost every concert, except for a couple times when one or other of his daughters accompanied him. I had trouble understanding this. He was not unhandsome. His manners were good, and when he had been with a date they seemed to enjoy each other's company.

The next season began, and I was in my seat early. The same people showed up in the same seats as the year before. Except this new man who sat in the seat in front of me. He sat in *her* seat. Then the man whose dating had waned came, and sat next to him. They didn't speak to each other. It must have been difficult for him to have surrendered one of his coveted season ticket seats; but even harder to not have someone to go to concerts with. And I felt sad.

He didn't attend many concerts after that. In fact, he was no where to be found the next season. I sometimes wonder what happened to him.

THE RIGHT STUFF

1991.03.23

Everyone in the room fell silent, waiting for the speaker to answer the question that the rest of us had been afraid to ask. "No," he answered, "we don't expect to be rescued over the ocean; anymore than we expect to be rescued over land up there."

Jim continued, "We balance the risks with the benefits. We don't always fly over arctic land or freezing oceans. For this mission, its worth it. But we've evaluated the risks, and we don't think its likely that systems would fail that would prevent us from reaching a rescue area."

I think the other experimenters were thinking the same thing I was, and that's why we were so still. If the pilots have this attitude, if they are willing to risk their butts to get our data, why were some of us complaining about having to work so many days next winter. We had placed a rather arbitrary limit of 90 days in the field, some with words about hardships on our families. Those earlier discussions now came back to "haunt" me, even though I was willing to work more.

In my stillness, I imagined taking off my hat to Jim and the other pilots who were willing to risk their lives to get the information we needed to understand how the earth's stratospheric ozone layer was threatened by dangerous depletions in the coming decades. As much as they kidded us about that funny stuff we put on their airplane, it finally was apparent to me that they felt strongly about what we were trying to accomplish, and in my eyes the pilots became the real heroes of the team - during that moment of stillness in the room.

PART TWO - VIGNETTES

"DADDY"

1991.04.02

I was in a large shopping center which we were happy to have found. In Darwin you needed a car to get to this place located on the outskirts of town. My companions were looking for a sports store, and I needed regular clothes, so we parted to go our separate ways in the mall.

Being in a foreign land is disruptive to the psyche for the first few days. There is something disorienting about the experience, partly due to the time zone change, but mostly due to the many little differences. I was proud that my driving on the "wrong" side of the roads was going smoothly, in spite of having a rental car with a stick shift - which of course requires the use of the "wrong" arm to do the shifting.

I hadn't noticed any aborigines in the shopping center, which contrasted with the downtown of Darwin. The ambience was partly Australian and partly "American." It was somewhat of a relief, as all the demands of our assignment here were exhausting.

We were here for a 6-week study of the atmosphere, using special instruments on NASA's high altitude ER-2 research airplane. We all had been working "long" days, getting ready for our first flight, which went well the previous day. And now we had a day off, so we were buying locally what we had forgotten to bring.

I was trying to decide which direction to go for the Woolworth's store I had seen advertised, when suddenly I was startled by a small girl's voice behind me that cried "Daddy!" I thought it was one of my daughters calling me!

But quickly my sense of place re-established itself, and I realized the voice was someone else's daughter calling to some other Daddy. Nevertheless, that one sharp moment made my heart pound, and slowly I felt a lump in my throat, and I was overcome with love for my two daughters!

"How wonderful it is to be a Daddy!" And how universal that feeling must be! In every part of the world there are Daddies who must feel that same strong bond to their children.

This made me "homesick," after only one week, and another 5 weeks to go.

PART TWO - VIGNETTES

KEVIN

1991.06.11

Kevin has always been sort of an enigma to me. He apparently was quite active professionally several years ago, when I met him. He has a PhD from one of the best universities, and seems to know everybody of importance from former working relationships. But during the past 5 or so years he hasn't been doing much, and he seems unable to secure his own funding.

His work on astronomical historical matters is first class, and for this he delivers talks that must be well received, judging from the press coverage and calls from our Public Information Office regarding inquiries from off-lab. His recent article in a popular science magazine was something any scientist could be proud of. He receives lots of foreign mail, and phone calls from overseas about his work.

In spite of this demonstrated competence he seems unable to secure funding. His volcano and eclipse work was funded by a small grant that expired, and he has not been able to renew it. His consulting work for me is suspended, and won't resume for another 6 to 12 months.

If I were in his position I would be actively preparing proposals, and working the phone; I would be beating the bushes looking for work, and considering changing fields to one where work existed. Yet Kevin seems unperturbed. He is relaxed, and is known to lean back in his office chair and take brief naps in the afternoon.

That habit of napping reminded me of what my doctor recommended to me one time. I must have stated that my work had more than the average amount of stress. I took note of my doctor's advice, but have not yet acted on it. I will, some day.

A few days ago Sam joined Kevin and me for lunch. I asked Sam if the rumor was true that he had had a heart attack the month before. He said the doctors couldn't establish if he had or not, but his blood pressure was very high, and this by itself might have caused the symptoms that he had interpreted as a possible heart attack. Kevin asked what blood pressure medicine he was taking, and after Sam told us, Kevin seemed to have specific and knowledgeable follow-up questions. This impressed me, but I wasn't able to find out during that conversation why Kevin knew so much about high blood pressure medicine.

Yesterday at lunch I asked Kevin if there was someone in his family with high blood pressure, and he said that everyone in his family had it. Indeed, he said, he began to suffer from it a few years ago.

He takes medicine for it. He went on to explain that in order to address the root cause of the high blood pressure he had been curtailing his scientific activities. He

said that before learning he had high blood pressure he had two jobs, with two offices, and he worked long hours supporting the several funded projects he had secured.

He now prefers to work in support of others, and if the work isn't there, he doesn't worry about it. He has learned to become more fatalistic, in the old Chinese tradition. He says that he has learned to let those people who can take the stress endure what has to be endured to secure and maintain funding. And he expressed appreciation, specifically to me, for being one of those people.

I am, aren't I?

TO THE SEA

1991.10.15

Looking out the window, at the Oregon landscape 35,000 feet below, and beyond the coastal clouds at the Pacific, and pondering the existence of the water in its many forms in this one panoramic view, I was suddenly overcome by this feeling that I was like a molecule of water.

In my imagination, I snatched one from the air, and asked its story. It told me, with exuberance, about its path to freedom. It told of its escape from the sea only a few months ago. Of its Odyssean wanderings since the sun released it. It rose, and joined a cloud, and was driven landward, and fell as rain to the ground. After evaporating to the air again, it found its way into another cloud, and rained to the ground once more. Then it flowed to a creek, and joined a river, but evaporated once more, whence it was captured and asked to tell its story.

The molecule knows where it came from, and where it is destined to go. That is why it is so exuberant! It knows of the long, long wait for liberation. Of the years within the sea, deep below the surface. Of the millions of years within the dark abyss, the many millions of years waiting for its "time in the sun."

And the molecule also knows what fate awaits it. When it flows to the sea, it will be another seeming infinity before it will again see the sun. The ocean is so vast! It's immensity will capture the molecule for another eternity.

And this is how I feel! I am in the air now, but soon I will be flowing to the sea. To the sea…

AW SHUCKS

1991.10.15

Ron must have the "right stuff," though a casual observer would never notice it. A few days ago he set a record by being the first person to fly a U2-class aircraft over one of the poles, the North Pole. No pilot had flown higher over the North Pole than Ron, but his demeanor in the flight debriefing meeting never showed the pride that he must have felt.

During the flight he radioed back that he'd be returning later than usual, possibly 45 minutes later. The flight plan (that we knew about) didn't call for going to the pole, only about 85 North. We had been asking for as northerly a flight as possible, but no one mentioned going all the way to the pole. At the flight debriefing, sensing that the extra time in the air might have taken him to the pole, we asked if he got to the pole, and he said he didn't know. "It was dark in the cockpit, and I didn't have a flashlight for reading the INS. I got farther than about 87 degrees, though."

A few hours later Roland analyzed the INS data, and found that Ron had made a perfect "loop around the pole" and then came back flying exactly over it. At 67,000 feet, his loop was almost twice as high as any previous flight over the pole. Ron must have felt "on top of the world," in the darkness of his cabin, alone in his space suit. Not even the astronauts have been over the pole.

I recall that when Ron gave his briefing, he shuffled his feet, as usual, and went through the list of which instruments worked and which had anomalies. He reminded me of the old cowboy movies, when the hero is asked about his feat, and responds with an embarrassed "Aw shucks, it was nothing." None of the other U2 pilots who fly our plane has this self-effacing manner. Ron probably holds more U2 records than any other U2 pilot. When the most common model of the U2 fleet was retired a few years ago, the so-called C model, Ron took the last one up for the final flight, and set an official altitude record. (Although the SR-71 flies higher, at 85,000 feet, it is still classified, and the Air Force will not let it compete for this record.)

In the bar, that evening, someone cleverly asked Ron how the INS behaved when its exactly over the pole, since there's a longitude ambiguity there. And, without pausing, Ron answered "the INS behaved just fine!"

PART TWO - VIGNETTES

PART THREE
STORIES: 1980 - 1995

Stories allow the writer to say preposterous things, and since I have plenty of preposterous ideas the medium of stories should be my friend. But for some reason almost all of my story writing has been confined to the Holiday years. Perhaps this is because during my holiday I was "listening" to my right brain, which likes stories, hoping for guidance to a new winning place in life.

At about the same time that I wrote "Brother's Keeper" and Parental Love" I also wrote "My Heart's Advice" (1990.02.18). It reveals a "yes, but" hesitation in my movement toward forgiving others and helping them. I suppose every transition has these "looking forward, looking backward" wavering times. "Saving the World the Counter Intuitive Way" applies the same hesitation to dealing with world affairs.

For some reason "Peacock Reverie" is one of my favorite stories.

PART THREE - STORIES

ANT DREAM

1990.01.14

I must have been dreaming. The late hours on my ant project had been usurping my normal routine. But I had to complete the project on time.

It was probably after midnight when it happened. I had a bright lamp directed at the edge of my ant house, where I had recently discovered a compartment of busy activity at the end of a pattern of ant channels. I trained my hastily modified microscope on the compartment's outermost recess. And there, before my unbelieving right eye, or coming out of the microscope eyepiece, was the vision of an ant seated at a desk, with its legs crossed, writing in a miniature journal!

Of course, I could not make out the writing, for it was very small. But I could see the tiny scribe working away as obliviously as I had done many times, virtually unaware of surroundings.

I needed to modify the microscope further, to have greater magnification. Which I was able to do, for I kept an array of powerful eyepieces for my astronomy hobby. I used an eyepiece as a microscope objective lens, and fashioned my Barlow lens as an eyepiece. But I needed even more light to overcome the greater magnification. To accomplish this I used a telescope objective to collect the maximum of light from my piano lamp, and thereby focused it on the ant compartment.

It worked! I could now read what was on the journal. Though the ant had gone to bed, or something, as I should have done long before, the journal was left open, and I could see the markings it had made.

But the markings made no sense. They weren't in English, which shouldn't have surprised me. But they were markings that had definite groupings, like words. And there was a mark that delineated groups of words, resembling sentences. One thing about it bothered me, though. I could not discern any structure resembling paragraphs. How frustrating to not see paragraphs!

That's silly, I thought to myself. Why should I get upset about the absence of paragraphs? I couldn't even read the letters and words.

I became grateful, at least, for the existence of what appeared to be words made up of letters, even if the letters were unfamiliar. I moved the microscope to another part of the desk, which was very long compared to an ant. There were many books on this desk. But I could never have been prepared for what I saw on one of them that was opened and in full view. On one page there were the usual ant markings, but on the facing page were writings in English!

A translation dictionary! Wow!

I will save you, my dear reader, the burden of the elaborate and often tedious task upon which I embarked for the better part of a month, working with the translation

dictionary to learn to read ant markings. I will only say that it required as much patience as inspired deduction, for I had to wait for the ant to turn the page, as it desired, and this required that I look in on many occasions. Gradually, I pieced together a crude dictionary in reverse, which allowed me to gather the gist of most of the ant writings.

And oh, dear reader, please forgive me for what I am about to relate. It is not my fault that the ants think the way they do, and have the opinions they have. I owe it to the resourceful ants to faithfully render what they have recorded and which, by good fortune, I have chanced to encounter.

The one treatise I shall first attempt to tell about has a title that can be roughly translated as "To Save Our Planet."

It begins by stating that 23% of the biomass consists of insects, while Humans represent only 1/45th%. And given that the ants (which is better translated as Ants, for they capitalize this word) are the most abundant and most intelligent of the insects, it is proposed that the Ants have a duty to become leaders in safeguarding the earth from the humans.

As a digression let me describe something amusing, almost cute, that I learned about their writing from subsequent study. It's related to the fact that they capitalize Ant yet never capitalize the word humans! During their history they once had a term to refer to all living things. Gradually, the name came to exclude humans, thus giving to our species a special category. But this was not meant as a complement to humans, for they believed that humans were not the same as "animals" (as they used the term "animals"). The term humans, instead, took on a sub-animal connotation. I gathered, eventually, that they didn't want humans to be a subset of the category animals because humans were somehow less than animal. End of digression.

They referred to a "Declaration of Species Responsibility," that I never found a copy of, which apparently states that a species has the responsibility, as well as the moral right, to do whatever it has to do to preserve its future existence. This surprised me, for it had not occurred to me that morality could be based on the aspirations of a species. This doctrine seemed contrary to sociobiological theory; but that's another issue, and since I never saw their "Declaration..." document I will not attempt to critique it.

The writings in "To Save Our Planet" described a plan to conduct a vote, among the insects initially, concerning a course of action. (I must warn you that the course of action, which I will be able to describe shortly, makes unpleasant reading!) Before the vote, they would wage an information campaign among the entire realm of insects. They would tell the insects that all the world's troubles were caused by one species. They would describe things that we refer to as "the environmental problem." In their description they would use concrete examples that made sense to Ants. For instance, they would rhetorically ask "Who is responsible for the increased rate of Ant sunburn, and the lower milk production from the aphids?" Then they'd answer, "It's the humans, for they have released gases, of their own making, into the air, and

these gases float to the stratosphere and cause the destruction of ozone, which then allows more sun burning ultraviolet light to reach us Ants and our aphids."

I will admit to a feeling which I am ashamed of. I said to myself "How cute of them, they're acting just like us humans!" But I quickly checked this impulsive thought, and resolved to keep my tendency to anthropomorphize under control. This was hard to do, however. Especially when I found myself thinking about how laudable it was for mere ants to appeal to the advanced concept of a vote.

I came to realize that they had an even greater genius. It was strategy. There was a strategy in the sequence of their plan, and it was all geared to mobilizing for the inevitable actions and sacrifices that would be required of the many species whose participation would be needed. This will become apparent in due course.

The first vote was to be among only the Ants, with one vote per Ant (there was to be no notice taken as to which of the 8,803 particular species of ant the individual was a member). This was just an excuse to agitate the Ants into later action. After the Ant vote, the plan called for a vote among the rest of the insect species. The count was to be made with a "one species one vote" rule. This was a diplomatic strategy. After voting among the insect species, which would surely have the right outcome, they would conduct a vote among the rest of the world's species.

The world vote, they predicted, would be unanimous. No species would come to the defense of the humans, for they were a threat to all living things. "Even to themselves," as some Ant pundits proudly proclaimed. The vote would serve to galvanize support, and produce a unanimity of purpose among the millions of living things. Surely, the planners claimed, nothing could thwart an entire kingdom of animals from a united war to exterminate just one troublesome species, especially the widely despised humans!

But there were dissenters. Not of the idea that the humans must go, but of the feasibility of exterminating the humans. It was pointed out that the humans had friends among the animals. The dog, the cat, and a handful of other "pets" had become dependent upon humans for their existence in as great a number as they have recently come to enjoy.

"Not to worry!" scoffed the believers! "The humans have more enemies than friends. Consider the cows, and pigs, and chickens, and other farm animals that are kept for butchering. Surely they could be counted on to deal with the pets." "But wait," countered other Ants, "the cows, and pigs, and other farm animals are maintained in such large numbers by the same farmers who eventually will butcher them. We would be asking the farm animals to face a choice between a cared-for existence, brief as it may be, and non-existence." It was concluded that the cows and pigs and other domesticated animals could not be counted on to vote against the humans.

But that didn't bother the supporters, because the number of domesticated species was so small. An Ant cartoon made this point by referring to a hypothetical tally of

29,999,923 versus 77! The vote outcome is not the problem, concluded everyone studying the problem.

The weakest part of the plan, it was recognized, was its implementation. Many Ants wondered why it should be so difficult to exterminate one species when there were almost 30 million species wanting to be rid of it. Even the number of individual members within the human specie was small. There were only 5 billion humans to 85 trillion ants - plus 765 trillion other insects. (They didn't count the membership of the species we think of when we think of animals, like elephants, or bears, or gorillas - not because they didn't have a gripe with the humans, but because their numbers are so small.)

"Just imagine," some argued, "for every human there were 35 million Ants; and if we all got together on our timing..."

Just then I was startled by the noise of what I thought was thunder! However, I awoke to became aware that one of my daughters had closed the door to my study. And there was the ant house, in front of me, just as it was before I fell asleep after working late to get it ready for my daughter for her school project.

PART THREE - STORIES

MY HEART'S ADVICE

1990.02.18

"We are here on Earth to help others. What on Earth the others are here for I don't know." W. H. Auden

While hiking in the mountains I sometimes have unexpected insights. One time, while resting at a mountain peak, I was seized by the impulse to consult my heart, and ask: "What's the right thing to do in a world with unintelligent and unmotivated people?" And my heart answered: "Be your brother's keeper. For they were not as lucky as you to have received the will to work, and the intelligence and motivation that makes work effective."

I thought about that as I hiked down the mountain slope. What superficial and silly advice the heart gave me! And I promptly forgot about it.

A few years later I had an experience that reminded me of my heart's advice. I was spending the day helping someone with a move to another city. The person wasn't too bright, and had never been motivated to do the responsible thing. But during this particular period the person was actually trying to do the right things, and as I watched the bank clerk patiently explain some simple things about opening a checking account I was seized by that same feeling that had occurred on the mountain. I appealed to my heart again, for a translation of the feeling into a verbal message that I could understand. And it said: "See how earnestly the unlucky try to manage their own lives, and see how the more able can patiently help them? Nothing is lost when the able person helps the helpless. Be your brother's keeper, and see how rich the world can be."

That moment changed my life. From then on I had new eyes for looking at the down-trodden, the homeless, the unintelligent and unmotivated. They cannot be held responsible for receiving a bad assortment of genes that they are stuck with. And by the same reasoning I cannot take credit for the better genes that I have, nor the better destiny that this good luck affords me.

With that moment of realization, I began to devote more of my efforts to helping the less fortunate. I began tutoring at a local college, where the "learning disabled" needed help. I served food to the homeless one Christmas morning. And I did volunteer work at the various schools my daughter attended.

I wanted to do more, though. I wanted to help a wider population. With this motivation I began to study the problems of the "helpless," as I came to call them, from a larger perspective. My reading provided occasional troubling thoughts, made by cynical people who, I concluded, didn't understand other people's problems empathically.

I went to a nearby University to study journal articles. Some of them dealt with feeding the starving Ethiopians, or building housing for those poor people who are

ignored by natural market forces. Occasionally I would seek out professionals and question them about these matters.

One of the professors I spoke with was especially patient with me. Perhaps this was because I was an adult amongst younger students, and I had some of the idealism that is supposed to be lost during the passage to adulthood. I wondered if he thought I had been affected in an unusual way by the mid-life transition. At any rate, he patiently answered my questions without probing my motivations.

One day, however, his growing curiosity overcame his reluctance to intrude. He asked: "Why are you devoting your free time to helping the helpless?" "Because they are helpless, and the world is a nicer place when the stronger help the weaker," I answered. That was all. He accepted this answer. But, in some vague way, I didn't! I began to wonder what was causing me to waver.

I cannot say if it was the professor's gentle question, whose answer he did not challenge, or whether some of my reading was bothering me. I sensed a nagging doubt about what I was doing. Perhaps the endeavor was futile, I vaguely wondered.

At about this time I encountered an article in *Nature* magazine by a Soviet geneticist, Alexey S. Kondrashov ("Deleterious Mutations and the Evolution of Sexual Reproduction," *Nature*, **336**, 435, 1988 Dec 1). It was difficult reading, but some ambivalent attraction kept my attention to the task. About half way through the article I began to have a stomach ache. It was while studying a graph describing "mutational load." The graph showed a distribution of the number of newborns versus some arbitrary trait and a trace for the distribution of adults for the same trait, after selection pressures took their toll. His conjecture was that mutations are constantly degrading the genetic heritage, and in the normal state of nature there was a steady-state recovery since the small fraction of survivors were those not affected by the deleterious mutations. I recalled the fact, with a wincing feeling, that in the natural state women bear an average of 8 children, and on the average only 2 of these survive to adulthood. The six that died, it suddenly occurred to me, may be Kondrashov's deleterious mutation carriers!

The consequences of this reasoning were inevitable. The modern human condition has improved so much that women are having fewer children, and successfully raising all of them to adulthood. "This is a good thing, isn't it?" I wondered. "It's the type of progress we want all people of the world to share in, isn't it?"

Question followed question. Answers didn't! I went to the patient professor, and explained my dilemma. And I was surprised by his reaction.

He said "So now you know! You know one of the secrets that a handful of professionals have figured out! This one is an aspect of the Human condition that cannot be published. There is a code that every knowing person adheres to. It is that the ugly truth shall not be told to anyone, and it shall not be discussed with anyone who has not come to it by their own thinking. The ugly truth is like a taboo; it is kept within the profession, and you are one of the few to have uncovered this one in the

only way that it is uncovered. Welcome to the fellowship of caretakers of sacred forbidden knowledge!"

I felt numb! As he was saying these things I felt a part of myself, a very important part that I did not want to lose, just slip away. I did not want to hear what he was saying; I had wanted him to tell me that it wasn't true, that I had overlooked something. I began to feel alone, inexplicably alone.

I began looking at the world through different eyes after this experience. I ceased my studies, and told myself that I needed a "vacation" from the endeavor. Later I would come back to the matters that disturbed me, and try to find a flaw in the argument that seemed to follow from the Kondrashov speculation.

I went hiking again, to the same mountain that years before led me to consult my heart, now half expecting to find a guiding path out of my dilemma. When I reached the peak, I asked my heart to speak again. And the heart spoke: "There are other truths that are unspeakable! Seek them out, and through them find a winning path."

Then I recalled that indeed the professor had said that "you know one of the secrets..." I had overlooked that he implied there were others. Perhaps another is an antidote to the first, and the professor could not tell me about it.

This hope revived my studies, and I enthusiastically resumed searching for the forbidden antidote to the "Kondrashov catastrophe."

I went back to the professor and told him what I was hoping for. He said nothing, and just nodded his head in a noncommittal manner. It occurred to me, while standing in front of the wise old man, that Schopenhauer's pessimism might in fact be right, and existence is nothing but disappointment, pain and disillusion; that humans "never get what they want, and can never love what they get." That, just as for an individual person, for whom "life is an immense preparation for something that never happens," so it might be for civilizations.

"But professor," I protested, "doesn't the world deserve to know some possible consequences if the Kondrashov catastrophe is true? If there's no antidote for it..." and I couldn't formulate the rest of the sentence. He said "Some things are possible, and some aren't." Then changed the subject.

This story has no end. I am still searching. It is a brave search, for I have learned that the truth is sometimes ugly.

SAVING THE WORLD THE COUNTER-INTUITIVE WAY

1990.04.29

My friend Freddie was playing with a computer creativity program, called Idea Generator, and for his first "problem" he mischievously entered "Solve the World's Problems." When he got to a section called "Try Opposite Solutions" things began to surprise him. His task was to suggest things that would make the problem worse, instead of better, with the idea that in a later stage of the program he would be guided to adopt the reverse of things that worsened the problem. He began by jotting down in the opposite solutions "idea scratch pad" things which surprised him. His list of things to do that would make the problem worse were things that were in fact being done in the real world!

For example, he noted that you could make the problem of world hunger worse by feeding the starving masses in over-populated regions (because they only made more babies with which to exacerbate the starvation problem in future years). You could make the problem worse by intentionally withholding birth control information and paraphernalia from the poor. You could make the problem worse by encouraging women to liberate themselves by choosing professional careers, so that the role of producing offspring for the next generation would fall to those who failed to attain careers, while those who succeeded would either not make babies or do so late in their lives and make fewer babies (and this would lead to a lowering of the IQ of future generations, a worsening of parenting quality, etc).

Every item Freddie listed to make things worse were things which society and well-meaning groups were promoting. This was a shocker! Freddie was reluctant to blame the Idea Generator for this unexpected, counter-intuitive pattern. Could the blame be in Human Nature? Could people be ill-equipped to solve certain problems? Or was there a flaw in the way Freddie was evaluating solutions?

It occurred to Freddie that he might be making an error in assigning costs and benefits to a multi-generational problem. After all, world problems are created during the course of many generations, and they must be solved by many (later) generations. It is important to ask how the burden of solving the problem is distributed over the generations, and how the consequences for hypothetical actions are felt by these generations.

Band-aid solutions benefit the generation applying the band-aid. By not "biting the bullet" (i.e., by applying band-aids instead of painful long-term solutions), one generation could be short-changing the next one, and giving them a harder problem to solve. But then another thought occurred to Freddie: suppose a generation tried to apply real solutions too early, and the generation that had been sold on this magnanimous idea got tired of making sacrifices for benefits they could not see (because they would be experienced by future generations).

PART THREE - STORIES

Freddie asked me, rhetorically, "Is it possible that each generation is inclined to abandon real solutions in favor of the band-aid variety, allowing the basic problem to grow ever larger, and just below the threshold of tolerability?"

"I don't know" I answered. "How would anyone know?"

That's when Freddie decided to create a computer model to study the situation, and find out, maybe, for himself.

Freddie's model allowed as many generations to grapple with global and species problems as were required to attain a stable, sustainable solution state. He counted benefits and costs, and incorporated as much cultural psychodynamics as was available and readily accessible. This included a model for the concepts which he named CD (cognitive dissonance), PS (paradigm shifts) and CDT (cognitive dissonance thresholds for producing paradigm shifts).

His model tried to embrace the complete system of costs and benefits, not only in time (via generations), but also across biomes. Plants and animals were identified as elements in the living system, in addition to humans. It was necessary to identify the Earth's atmosphere, waterways and oceans, and land areas as other elements in the system (because they "stored" mistakes from abuses by the living systems).

Freddie had to quantify happiness and suffering, and this was perhaps the weakest part of his model. Per capita wealth was an element, as was individual health, longevity, quality of the immediate environment, and crime rate. An unusual category was created to keep track of inefficiencies caused by the presence of people who were disabled, either in body or mind. He even kept track of able-bodied, able-minded social parasites and added their "load" of additional inefficiency to the societal endeavor.

Freddie studied scenarios belonging to three categories: 1) no actions are taken, 2) band-aide actions are taken, and 3) "real" solution actions are taken. He graded outcomes according to a subjective formula for desireableness which involved individual happiness and unhappiness. He took close note of the histograms showing what percentage of the population was in each happiness category, since some specific scenarios within a scenario category involved large spreads (i.e., profoundly well-off people co-existing with large numbers of destitute people). A scenario was not judged until the conditions for all generations was considered. Equal weight was given to all generations; which would become a crucial point for evaluating the recommendations Freddie finally came up with.

Overall, Freddie's best solution was the counter-intuitive #1 ("no actions are taken"), whereas the worst solution was #3 ("real solution actions are taken"). The reason for this result can be understood by considering that happiness and unhappiness were integrated across all generations equally. The scenarios belonging to category #1 caused severe unhappiness to only a few generations: the one or two generations which lived through crises (environmental and social upheaval) and the next generation which experienced CD growth beyond CDT, producing a complete

change in cultural values and a PS. The PS generation started a recovery process that was irreversible and swift, and the benefits began to accrue to the following generation. The total integrated damage to the environment was less than for the other scenario categories because the crises and recovery occurred more rapidly than for the other scenarios.

In contrast, the scenarios belonging to category #3 entailed the most protracted, agonizing and reversible oscillations of them all. The crises came and went, without resolution. The foresight of each generation saved the day for the near-sighted of their generation, so the issues were really never dealt with by societies at large. None of the "real" solutions were adhered to for long, and the visionaries actually postponed the day of implementing earnest, irreversible solutions by society as a whole. The many years of uneven attention and neglect of environmental and social issues wrought a greater time-integrated price on the environment and social well being of the populations than the more abrupt crisis created by the scenarios in which "no action was taken." Compassion turned out to be a double-edged sword for the category #3 scenarios.

But Freddie was most bothered by the fact that the generations appeared to be fundamentally in conflict with each other. The band-aid scenario provided the quickest relief for the generation deliberating solution options, so it is therefore the solution path that is most likely to be chosen; yet the welfare of far-future generations was best served by a solution path that was the most painful to the current and next generation.

Who is to judge the relative merits of choices that affect the generations so unequally? How can a future generation represent its interests to the generation whose actions affect it? "It can't" Freddie believed. So societies are destined to be guided by forces that produce sub-optimum results! There is a justice, however, because our generation has been short-changed by those that preceded us, as we prepare to short-change the generations that follow ours. We deserve to have been short-changed, because we are willing to short-change future generations. There seems to be no natural restoring force. Time flows in only one direction.

"This is an unnacceptable situation!" Freddie proclaimed.

And I agreed. As should every generation. Yet no generation can be expected to change. No one will be the first to do what each admonishes other generations to do. This is because the concept "other generations" is just an abstraction! To the extent that we think and behave only as the genes allow, we are helpless to improve. The genes only know about competing alleles at their respective locations (as a first approximation). They are not subject to the consequences of making individuals in future generations undergo hardships that are unnecessary, or worse than an optimum.

Freddie had an idea, though, which he confided to me. He believed that he had discovered a way to do his small part in helping future generations. He would stop supporting the well-meaning special interest groups that were working to save the

environment and reduce population growth. He suspended all contributions to these groups.

Having taken this new stance, he realized that this was a passive and ineffectual gesture. He needed to think something more "active."

He discussed with me the possible merits of working on behalf of politicians like Ronald Reagan, and he wondered if such politicians were in fact more far-sighted and statesmanlike than the intellectuals had given him credit for being. He tried to think of ways of making our country use more oil, in order to hasten the advance of global warming. He thought about working on behalf of third world countries to provide for their exemption from regulations on the use of CFCs, in order to speed up stratospheric ozone depletion.

At about this time Freddie changed jobs, and moved to Oregon. He neglected to write me, inexplicably, and I had no way of locating him. It has been several years now, and I am afraid to speculate about what Freddie is up to. I am bothered by the thought that he has gone underground to work on behalf of the "forces of evil" in order to "Save the World!"

A PEACOCK REVERIE

1990.05.04

"Why should I have to pay full price?" I muttered under my breath. "All I want is a place to sit quietly, under a tree, and think." Maybe I don't have to, since the arboretum's entrance fee is really just a suggested contribution, not a mandatory charge. I walked past the little fish pond, past the strutting peacocks, and into the Australia section. That's my favorite. And found a nice tree to sit under.

It was quiet, just what I needed. The sun had warmed the Australian setting just right, as I congratulated myself on having chosen to visit my local Australia at a time when the real place must be in their hot and dry season. OK, I said, let's have a reverie about when I was in Darwin. I need an "escape."

While recalling the tropical northern Australian region I had visited a few years earlier, I must have dozed off. There were images of wallabies, and parrots, and, well ... peacocks.

[Peacocks! There aren't any peacocks in Australia. But that didn't seem to matter, for I was in a reverie, an escape from problems I had come to get new perspectives on. And if there were peacocks in my Australian reverie, they must be there for some reason.]

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I was sitting under a tree in a park in Darwin, Australia, and this peacock was feeding nearby. I kept still, hoping it wouldn't notice me. It began feeding closer to me. It got to arm's reach, without noting my presence, and as I was making my best effort to be frozen, it raised it's head, looked straight at me, and said: "what am I to do!"

It didn't shock me that the peacock had spoken; I was more surprised by his stealthy way of coming up to me.

"What?" I said. That seemed like a safe response.

"I don't know what to do. And humans always seem to know what to do. It's taken a lot of courage to finally come up to one of you. So here I am. What am I to do?"

"About what?"

"Oh, yes. About this stupid strutting business. Surely you've noticed that we peacocks spend a lot of time with our tails spread out, and strutting. We do it, you know, for the peahens to see. They seem to like seeing us this way."

"So what's the problem? Can't you strut your stuff like the other peacocks?"

"Sure, and I've done it, but I began thinking."

That's when I knew the peacock really had problems; when he said "I began thinking."

"I began thinking: why should I have to strut when any peahen can notice that I'm nice, I'm considerate, I'm a good provider, and I'm intelligent."

"But you're just a peacock, and peacocks aren't supposed to be nice, or considerate, providing and intelligent. Somewhere, you missed the boat, fellow!"

"But what's the use of our tails? Tails don't help in raising baby peacocks and peahens! Nor does our strutting! After my last consort I tried to help the peahen raise the little ones, but she told me to "get lost." I want more out of life than just strutting. What am I to do?"

Poor guy! I could understand that he couldn't talk about his problem with the other peacocks. They would just laugh at him. But why wouldn't the peahens understand him. After all, he wanted to be partners with them, and be helpful. Why wouldn't they want to receive his help? So I asked.

"Have you asked the peahens why they don't want your help?"

"Yes. But they don't understand the question. They insulted me the way you did a moment ago; they said I was just a peacock, and I should just strut when they were looking, and stop asking questions."

"By the way," I asked, "how come you can think to ask such questions? Aren't you just a peacock? You're not supposed to think!"

"That's what I've heard all my life. Everyone tells me to just be a peacock, and stop asking questions. Stop thinking. Stop trying to change things. I'm glad I collected my courage and came up to you. You seem to understand about ideas. It must be wonderful being a human. It must be wonderful not having to do stupid things like strutting."

How could I disappoint him. He had such a high regard for people, and seemed to feel less alone with himself talking with me. I guess I puzzled over this for some time, as he asked again.

"That's true, isn't it? Humans don't strut?"

"Well..." I began, but he interrupted my pause.

"Do you strut, or don't you?" he demanded.

"No." 7

"Good, I couldn't hear of it among humans! So what shall I do? You still haven't answered me."

"Let me suggest something that may sound weird to you. I suggest that you go beyond being a peacock, as peacocks are now. You must exert will power, like we humans do." I could see myself getting carried away with unwarranted pride in being human. But a mere peacock would never know better. "You must exert will power, and go beyond peacock destiny."

"Yes... yes! And how do you do that?"

"You need to have will power. That's what our human pre-frontal cortical lobes are all about. Evolution worked long and hard to produce the Human frontal lobes. Because of this, Humans have will power. We can look at hypothetical actions, predict consequences, and judge the action by its likely consequences to all concerned."

"Can I learn that? Do I have to be a human to have will power?"

"You probably have to be. You're just a peacock, and you probably lack a well-developed pre-frontal lobe."

The peacock remained silent, staring straight ahead for the longest time. It made me nervous, but also angry with myself for hurting his feelings.

Finally, he asked, as if he had thought of a polite way to change the conversation "And why are you here, sitting under this eucalyptus tree?"

"Well, I've got a chemistry problem. And I needed a quiet place to try to figure it out."

"Wow! You humans are really smart! I've heard of chemistry, physics, astronomy, and things that are impressive to peacock minds. I'm sure impressed by Human frontal lobes! So tell me more about Human 'will power'? Can you really go beyond human destiny?"

"Oh sure. We just figure out what's silly and what's logical, and we put our minds to doing what's logical. That's because our frontal lobes allow us to have insight and will power. We have free will."

"What's free will?"

"It's when you control your own destiny; when you're not a puppet of your genes."

"If you're not controlled by your genes, whatever they are, what are you controlled by when you have free will?"

"You're not controlled by anything when you've got free will. You just think things to do, and choose them by your own will."

"In other words, you're controlled by your thoughts! That's good. But where do those thoughts come from? Do they come completely from inside yourself? Not at all from outside?"

At this point I began to have mixed feelings about this peacock. He was acting too smart! He seemed to know more than he was supposed to know.

It was my turn to change the subject. "Could you show me your tail?"

He spread it out, and just stood there, waiting to learn what I was up to.

"That looks pretty! Don't you think so?"

"It symbolizes what's wrong. Could you cut it shorter?"

I wasn't ready for such a drastic request.

"How dumb! You're a peacock, and you want your tail cut shorter? That's not normal!"

"Right! But I want to fly! And with that dumb tail, flying is impossible."

I could see the symbolism, and surely the peacock was driven by the same thing. Flying was just an excuse; he really wanted to be rid of the mentality that goes with tails, and strutting."

"OK. I'll get scissors and trim your tail."

I excused myself, and walked back to my hotel (somehow, in my dream, I was now staying in a hotel - the same one I stayed at on my trip to Darwin in 1987). I came back, and the peacock was still there.

"You still want your tail trimmed?"

"Oh yes! But cut it in such a way that I can get aerodynamic lift from it. Make it about a foot long."

After I cut it to his specification he began running around, excitedly!

"I can run faster, I can jump, now I'm going to fly!" And he tried to fly, but couldn't, really. But he was jumping higher. Maybe with practice he'll learn to fly. Exhausted, Mr Peacock sat down beside me again.

"I feel liberated. I feel like I will be able to achieve denial of the instinctual sillinesses of being a peacock. I wish to go beyond peacockhood. I want to be more like the liberated Humans!"

And with that foolish pronouncement he bounded off, jumping higher and higher as he went, finally disappearing behind a grove of eucalyptus trees, past a group of aborigines.

I looked again, and noticed that they weren't aborigines, they were Negroes. But there aren't any Negroes in Australia. I must be in America! Yes, this is Arcadia, and I was just dreaming about being in Australia.

And I came here to ponder a chemistry problem. "Why don't I have chemistry with women?"

PART THREE - STORIES

MY SIAMESE CAT NAMED "MY"

1991.03.03

My interest in Siamese cats was piqued by a genetics article about genes that are selected for some specific and focused purpose which often have deleterious side effects in unrelated traits.

The article illustrated the thesis using the experience of Siamese cat breeders. The breeding of Siamese cats for show purposes during the past 40 years had emphasized a long head. The same gene (or genes) that produced this desired trait produced other unintended traits. The new breed of cats was more prone to illness and skittishness. This showed how one gene affects more than one trait. These new features, the intended head shape plus the unintended deleterious effects, had been created during only a few decades, and more decades would be needed to select a long head gene without the deleterious effects. The traditional breed, coming from Siam some 40 years ago, was free of deleterious effects. This meant that the Siamese created the breed over many cat generations during which they paid attention to the many facets of what they desired in the cat.

We got our first Siamese kitten from a pet shop, and it had the rounded head shape I wanted. We later learned that the head shape was rounded because it was part calico. A book my younger daughter brought home from the library advised that two Siamese is much better than one because they need lots of attention and humans generally don't have enough time to satisfy this need. So I contacted a breeder, and bought a second kitten, this time a pure bred Siamese of the traditional style, with the original "Siamese" head shape and, presumably, original Siamese behaviors.

We hesitated to name the kittens because we wanted to avoid the confusing change of names that had occurred for our previous cat, Fluffy. It actually confused us more than the cat, for Fluffy never seemed to learn either of her names.

At first I referred to the Siamese kittens as "Number 1" and "Number 2." Needless to say, these names didn't elicit any recognition on the part of the cats. Number 1 was the more affectionate of the two, and Number 2 was more graceful, regal and majestic. Both had a dark brown coloration on their ears, nose, tail and feet, and elsewhere were creamy white.

They seemed to have an inborn wisdom of how to act around people. When one of them was nearby and I wanted her to cuddle, she would come and drape herself over my neck and sleep. When I wanted them to be still and go to sleep, they seemed to know this. We never had to house train them, for they "understood" immediately what a litter box was for. They "understood" when we were calling them to "come here." Perhaps they read our actions, maybe even our voice intonations. I prefer to believe that they read my mind!

As "understanding" as they were, however, they seemed to be slow in learning to stay off the table, or to not scratch the furniture. I'd say "NO," authoritatively; but

they didn't understand. They probably didn't want to understand. I could accept these small transgressions, not only because they were merely kittens, but because they were so intelligent and perceptive about other things.

When my other daughter came to visit during the holidays we resolved to settle on names. They wanted to name Number 1 "Athena," but I objected. It had three syllables, and it seemed too long for a cat. They kept trying to convince me, so I consented - but on the condition that I could name the second one. They agreed. I rather whimsically gave Number 2 the tentative name "My," because she was to have my name, and because she tended to spend time with me; but also because I wanted to defer thinking about what to call her.

A few days passed, and I hadn't thought of a new name. I was getting used to calling her "My," so I settled on that unusual name - half-suspecting that something unexpected might result from that decision.

"My" was now 9 weeks old, and I was noticing new behaviors. For example, she would lick Athena, who was 7 weeks old. When it was bedtime, they would both come to my bedroom, and climb aboard, as I had wished. When I was feeling tired, "My" would come to my lap and purr, and this made me feel better. When I was fixing dinner they'd stay out of the kitchen, as if knowing that I was too busy to play with them. I teasingly told people I had fallen in love with two females, then explained that they were kittens!

One peculiar thing kept occurring with "My," though, which I could not explain. For all her intelligence, and my belief in it was reinforced by experience on a daily basis, she would act inexplicably when I called her name. I would want "My" to come sit in my lap while I read the newspaper, as she often did, but when I'd say "Nice My" she'd jump off my lap! Or when I lay on the couch to watch the news, I would call "My," but she would walk away instead of jumping atop my chest as she used to do. What had happened to my love affair with "My"?

Cindy took many pictures of Athena and "My." She used her telephoto lens, because she doesn't have a normal or wide angle one, so all the pictures were "close-up." We took some pictures with us to show Tom, who owns the Thai restaurant we go to every Friday night. When Tom came over to get our order we showed him the pictures of kittens from his homeland. He wasn't too impressed, and explained that in Thailand it is not customary to keep cats in the house.

Tom was polite, though, and asked what we named them. I said my daughters named the first one "Athena" and I named the second one "My."

"What did you name the second one?" he asked.

"My," I repeated.

"Oh no," he exclaimed, with a rolling of the eyes upward. "In Thai, M A I, which sounds like MY, means **NO**!

PART THREE - STORIES

PART THREE - STORIES

Sarah (left) was the inspiration for this story in which she is temporarily named "My" because my daughters named the other cat Athena (right).

SLIP STOP

2009.06.25

While driving east on Highway 66, after eating an old fashioned lunch at the The Galaxy Restaurant in Flagstaff, I turned on my satellite car radio to hear some classical music and think about my plan to see Meteor Crater a few hours later. After passing the exit to the Petrified Forest, I passed a sign that read “16 Miles to SLIP.” That’s odd, what’s SLIP.

About 5 minutes later was a sign “8 Miles to SLIP.” Surely, this was a marketing ploy, but it seemed aimed at computer people because 16 and 8 are fundamental numbers for octal math that’s used in computers. If this was correct I’d expect to see the next sign read “4 Miles to SLIP.” Sure enough, 4 miles later there was such a sign. And in 2 miles was a sign reading “2 Miles to SLIP.” And finally came “1 Miles to SLIP.”

If there hadn’t been this mathematical progression I would have passed by the “Turn Here for SLIP” sign, but now I was curious. So, “yes,” I had to see what SLIP meant and I took the turn, and drove down a dirt road half a mile where a long building stood with a sign overhead: “See Life in Perspective.”

“What an unusual, and totally out-of-place tourist stop!” I muttered to myself!

The long building went perpendicular to the road’s end, so you could see the building go maybe 100 yards to the left and an equal distance to the right. The entrance, in the middle, stated “$10 for SLIP or $20 for SYLIP.” So, what was SYLIP?

I went in and a clerk came to the counter. Above was a sign that explained “SYLIP: See Your Life in Perspective.” I asked how different the two options were, and was told “The SYLIP option features events in the personal life of the customer, and places them in perspective.” “You mean I can see things like when I was born, when I got married, had children, and retired?” “Yup” was the clerk’s answer.

“And how does it do that, whatever ‘it’ is?” “I can tell you afterwards.” “OK, here’s $20.”

I was led through a door to an immensely long and narrow room that must have extended the full length of the building. There was a glass cover through which you could see a luminescent wire that must have extended the full 100 yards in each direction. “What’s this?” I asked. “It’s a timeline. Right here, in front of you, is Now Time. At the left end of the hallway is the formation of the solar system, including the Earth, 4.56 billion years ago. At the right end is the expansion of the sun, that will evaporate the Earth some 5 billion years in the future.”

“That means my life will be a miniscule length of the wire, won’t it?” “Yes, and that’s why we have this Magnifying Machine that slides along the window that

allows you to zoom in to any part of the Time Line wire. You can set the magnification to any value. Are you ready to try it?"

"What a neat machine, if it really worked!" I thought to myself. I peered into the Magnifying Machine that was set at Time Now, and fumbled with the magnification knob. Sure enough, as I zoomed in I saw that a tiny length of the wire was lit bright and took on a width with year labels and descriptions. At one setting I could see the lit length within full view, and at the left end was displayed *1939 May 22*.

"Wow! That's my birth date!" I exclaimed out loud. In the middle was the label *2009 June 25* – which was today's date. The lit portion went to the right a short distance, and the date label read *2022 July 20*. "Wait a minute! What does that mean? On that date I'd be 83 years old. Surely the stupid machine can't know when I'll die!" The clerk had left the hallway so I couldn't challenge him about that.

But still, what a curios machine! What else could it show? I zoomed a little more and slid the Magnifying Machine to the left, and saw some more dates with information. *2002 September 24, Purchased 5320 E. Calle Manzana residence in Arizona*. "Yes, that's right!"

1998 September 25, Retired from JPL. "Yes, right again, so how did it know that!

A little further left came *1986 May 13, Divorce Final*. "Yes again!"

1973 July 5, daughter Cynthia Gary born.

1970 November 24, daughter Loretta Gary born.

1964 February 10, employed by Caltech's Jet Propulsion Laboratory.

"Wait a minute, what about my getting married on 1968 April 18? That's a key event that's missing."

1961 September 1, employed by U. S. Naval Research Laboratory.

1961 June 10, graduated from University of Michigan with Bachelor's degree in Astronomy.

1957 June 10, graduated from Dexter High School.

"This is all so clinical! What about the interesting stuff, like falling in love with Christine? Or hitch-hiking across Michigan and Canada each summer?"

Finally, at the left end of the brightly-lit Time Line wire was the notation *1939 May 22, birth of Bruce Ladd Gary.*

All of this information was right, so how did it know it?

I slid the Magnifying Machine to slightly before my birth, and the grayed-out Time Line had notations like *1938 November 9, Kristallnacht*. I guess that's right.

I could see from the other notations that the entries were things that could be found in any history book. So I zoomed out, until my life line had the appearance of perhaps a millimeter long, and at the left end, perhaps a foot away, was the notation *25,300 BC, Cro-Magnon Man invents bow and arrow in France.*

I zoomed out again, an equal amount, so that the Cro-Magnon Man entry was about a millimeter from the brightly-lit speck that was my life, and found at the left end the entry *7.7 million years ago, Human-Chimpanzee evolutionary split.*

Again, I zoomed out again, a little more than the amount of the previous zoom, and saw the notation *4.56 billion years ago, Earth formed along with rest of solar system.*

Just then the clerk came in and asked how I was doing. I expressed amazement about the information I saw about myself. "Not magic" he merely said. "You may use the Magnifying Machine a different way. Just set the 'Span Dial' to '50 Thousand Years' and then you may slide the Magnifying Machine along its track. You can go back to the Earth's beginning, which is at the left end of the hallway, and you can go into the future. At each sliding location you will see a 50 thousand years over a 2-foot span of the Time Line wire, and each millimeter of the Time Line wire is 83 years."

I thought to myself "That's interesting. Each millimeter is equivalent to the lifetime allotted me in this machine."

So I did what he suggested, and the Magnifying Machine was centered on Now Time. In the middle of the view I could see a brightly-lit 1 millimeter "spot" that must correspond to my life. At the left end was the notation about Cro-Magnon Man inventing the bow and arrow. I slid to the left, back in time, occasionally seeing something about the ancestors of Early Man. I was able to slide the machine by walking slowly, and as my patience waned I walked faster, and began not noticing the several notations about Dinosaurs Evolve (200 million years ago), and Earth Atmospheric Oxygen Forms (2.3 billion years ago). By this time I was about half way to the end of the hallway, or 60 yards from the middle. "What about the future?" I wondered. So I walked back to the middle and began to slide to the right of my brightly-lit "spot." About 4 millimeters to the right of my putative death a notation caught my eye: *2350 AD, End of Humanity*. Surely this machine was mis-programmed! Inches to the right of this ominous notation was *2750, Sub-Humans Devolving.*

Well, this machine was very interesting, but it must have been programmed by a misanthrope!

I had had enough, and I felt like I got my $20 worth of amusement. But I recalled that the clerk said as he introduced me to the machine that he would

explain how it worked. On the way out I asked him about this: “How did the machine know about my life events?”

“Easy. The computer read your license plate and when you signed in with the first name ‘Bruce’ it searched the internet using the car’s registered owner name of ‘Bruce Gary’ to glean what it could about you. That’s all.”

“And what about it not knowing that I was married in 1968 in Mexico?” “Records outside the country may not show up.”

“And what about my death in the year 2022, at age 83?” “The actuary tables state that anyone still driving at your age, which is 70 years, is likely to live another 13 years.”

“OK, I got my money’s worth! Thanks for creating such an amusing machine!”

“Just one question for you. As you were sliding the Magnifying Machine back in time, with your lifespan equaling 1 millimeter, did you have any thoughts, or any surprising insight?”

“Well, yes. I recalled something Richard Dawkins said in a talk:

It’s a privilege to have been born, and to have lived on this planet for a few decades.”

PART FOUR:
OFFBEAT IDEAS, 1980 - 1991

My misanthrope holiday writing was not all vignettes and stories. I continued to develop ideas for sociobiology, and these have found their way into the book *Genetic Enslavement: A Call to Arms for Individual Liberation*. I won't repeat those entries here. But some of my ideas were not included in the book, and they have had no other place for publication, so a selection of them has been presented in this part.

A recurring theme for the following essays is the notion that humans, indeed all living creatures, are theoretically unable to overcome fundamental limitations that keep us trapped in behaviors specific to our species. I often work my way back to the deeper insight that "genes are the culprits, and every living thing is a robot destined to enslavement to the genes that constructed them."

This theme would bore most readers, but it fascinates me. Getting at a fundamental truth can be a struggle, especially if the brain is designed by those manipulative genes for being blind to them, and these essays record some of my struggles.

"A New Estimate for the End of Humanity" on page 111 is my original formulation of a novel idea that I still have trouble evaluating. When I published it in *Essays From Another Paradigm* (1990) I was unaware that others were discovering it at about the same time, and giving it the name "anthropic principle" (a poor choice for a name in my opinion). "Reality Subsets" on page 114 has more merit than a casual reading might suggest. I plan on reworking it and adding it as the concluding chapter of the Third Edition of my book *Genetic Enslavement: A Call to Arms for Individual Liberation.*

THE FATE OF IDEAS

1982.03.13

"Only he who writes entirely for the sake of what he has to say writes anything worth writing. It is as if there were a curse on money: every writer writes badly as soon as he starts writing for gain. The greatest works of the greatest men all belong to a time when they had to write them for nothing or for very small payment..." Arthur Schopenhauer, **Essays and Aphorisms** (1851).

Ideas can be trampled, and so can their progenitors.

The world does not welcome new ideas; it fears them. And rightly so, for new ideas are often subversive. When an effective new idea is made public, the establishment could be destabilized, and outsiders could be empowered.

If a God existed, and if It descended upon a mass of believers to deliver Truth, the believers would not accept any of it. The unpalatability of truth guarantees that it will not be accepted, even from God. It is only when humans create a God, and contrive to have him deliver a palatable "truth," that the believers will accept it. God is the product of a mind in collusion with itself!

The ancient Library of Alexandria was sacked, and the books were destroyed by resentful masses. What are the rewards for creating ideas that are eventually destroyed, or if fate is kinder, ignored? Since learnedness, and discovering truth, is not rewarded by others, it must be its own reward.

I labor with these thoughts because I enjoy the labor. A few "high" moments of insight are sufficient reward. I do not want the masses of mental cowards to embrace them, or even become exposed to them. Indeed, I hide my ideas from others.

I must not be the only thinker who has decided to adhere to a circumspect silence. Consequently, ideas that appear to be new are probably old, having been discovered hundreds of times before, but kept to oneself. The noise in the marketplace of ideas does not reveal the amount of *real* thought that is going on. The best thinking is kept from the public, because the public does not *really* want to hear the best ideas.

FANATICS, MEMES AND SECRET PASSAGES

1984.12.26

Memes are selfish. They don't care about what they are displacing.

I woke up this morning to the children's "music." The most crass and decadent sounds I could imagine! Totally devoid of thoughtfulness or sensitivity. What a difference one generation can make.

Yet, when I formulate the thought that civilization is slowly collapsing, I'm reminded of the same "sky is falling" assessments issued as far back as the Greek Era. And I'm reminded of the good that comes with the bad, visible even within my generation.

Gunther Stent wrote about "The Coming Golden Age," when all rules will have been broken, leaving nothing for people to do except exist, the way the South Sea Islanders exist. In the realm of music, it is true that "rules" of good taste are being broken. But also, better songs are being written. Must the good always be accompanied by the bad?

In science, paradigms are often entrenched. And progress requires a healthy, or "decadent," disregard for established paradigms. Am I wrong in describing the process as "decadent?"

Garrett Hardin writes about the merits of waste, and touches upon the matter of the bad coming with the good. Genetic mutation is wasteful, yet necessary. If our values and beliefs are thought of as memes, then meme mutation might likewise have to be wasteful. And if we are to have the occasional good new idea, we must resolve to put up with the many bad ones.

Another issue bothers me. It is difficult to express, so I'll beat around the bush, like Jose Ortega y Gassett.

We all know people who are dedicated to some dream. Sometimes the dream is less exalted, and their dedication is to projects, or ways of being - like Pam, who "needs" to take children under her wing, and raise them according to her values. Writers, I suppose, are especially prone to having "messages" they need to package and deliver. It's almost as if people are easily captured by a meme, and become the tool of that meme. If so, then people are being used by many memes. Whichever ones "catch" will commence a campaign to dictate a life's agenda.

It is true, I now believe, that when a person is firmly convinced in a future outcome, such as the success of an endeavor, this belief influences (enhances) the endeavor's chances for success. Neurologically, I can envision the entity with the endeavor placing inhibition upon all "interfering" entities. Thereby, reticence is conquered, and risks are taken on behalf of the endeavor.

Consider the following thought experiment: individuals are infected, at random, with ideas having associated goals, and assume that these individuals become single-mindedly committed to these goals. Occasionally, a person will be successful; he will be the one-in-a-million "scout" who finds the secret passageway to a new niche for the species. And the "founder" genes of that lucky individual will dominate succeeding generations of progeny in that new niche. Yet, what the individual had to offer was not different from the others, those less lucky. According to our thought experiment, we have bestowed memes of varying value at random upon identical individuals. Each individual became a fanatical proponent of his random infection. The society created by the lucky founder should credit the *zeal* that existed in *all* individuals of the pre-discovery society, not any irrelevant quirks that the founder might have exhibited.

Now, let us alter the thought experiment slightly. Let us add to the original population an equal number of individuals with less zeal and fanaticism. These other individuals are immune to the process of meme infection. They demand "balance" and perspective in their lives. They are reticent to believe, or proselytize. New ideas "seem" good, but are rarely "believed in" with such an unquestioning faith and zeal as to justify a personal commitment which inspires them to action.

Re-running the thought experiment with these new conditions, we should not be surprised to note that the secret passageway will again be discovered by one of the fanatics. Time after time, when the experiment is re-run, it is always the fanatic who discovers remote passages to winning niches.

Are we to conclude that meme-infectability is good? Does such a conclusion follow from the fact that meme-infectability is a character trait that will always win the evolutionary war?

Consider the fate of the majority of fanatic individuals, the ones who didn't win anything. Many of them went down blind alleys, were never seen again, and may have suffered worse fates. Since our memes were random, and since randomly-generated memes are most often deleterious, the fate of most individual fanatics is failure. For fanatics, the stakes of life are high. For every success, there are many failures for their kin.

On the other hand, the second population, consisting of individuals who weighed things carefully, and who only infrequently made tragic mistakes, must have lived fairly good lives. They may never have achieved great things, but they at least avoided foolish dead-end pursuits.

If we begin these thought experiments under a variety of conditions, I suspect that we'd find out that there are times when the fanatics don't win. Indeed, under most naturally occurring conditions, the more conservative and self-questioning type of individual may be more fit.

PART FOUR - OFFBEAT IDEAS

I'm suggesting that when the forces of nature are harsh, when population growth is determined by forces outside the species, the more conservative gene will prevail. And when a species achieves success over the forces of nature, when population growth is "unlimited" by extra-specific forces, there is a tolerance for waste that favors the fanatic, who carries meme-infectability genes.

This suggestion is based on the fact that fanaticism is wasteful. It is wasteful of individual lives. And if fanaticism occurs when Nature is harsh, the fanatics will perish. But during the past few millennia, or more, the Human species has conquered Nature.

Where cometh this "will to believe"? Could the spark have been placed within our Human genome a few tens of thousands of years ago? As it may have been placed on innumerable previous occasions, only to perish, because conditions were hostile on previous occasions?

The suggested mutation might have ignited the beginning of our present era. A lucky few found new niches, and among the founder's genes was a susceptibility for fanaticism. Each newly discovered niche brought greater security to the new gene.

Until now! Look at us now!

The pet cat watches me make coffee. It comes and goes to the food dish in response to perceived hunger. What a simple, untroubled existence. And the cat looks so very content, and at peace with itself.

Its freedom is an illusion. It responds predictably to anything that resembles a running mouse. We can lead it to any place in the house we wish just by pulling a ribbon to the desired spot. My daughters compete for the cat's attention, and vie with two separate ribbons to lead the cat to different places.

The cat is perception/bound: perceptions elicit behaviors with high predictability. Cats are prisoners of their posterior secondary cortical areas.

We humans, on the other hand, are concept/bound. We are prisoners of our frontal tertiary cortex. We have a built-in readiness to become "bound" to any belief concept that is dragged in front of us, regardless of where it leads.

Are we so different from the cat? Is our "will" freer just because our imprisonment by the "will to believe," and a need for corresponding commitment, is more sophisticated than the cat's imprisonment by perceptions?

This is part of The Human Predicament. What does it mean to us as Individuals? What is our predicament as individuals?

Within a population of meme-infectables, there are many more losers than winners. Whereas the genes ultimately win, the individuals players are most often losers. What is the shape of these losses? What are the many ways we, as individuals, can lose?

First, let it be said that our feeling that we choose our wants, which thereafter direct behavior, is not evidence for the position that our actions are determined by *us*. Nature hands us a menu, with certain items writ large. Our choice is influenced by personal history. It's a two-step process, neither one of which is what I would call "freedom of choice."

The person who believes in free will may think that "I may not choose my 'wants,' but I choose how I respond to them." Good try! Nature has overlooked nothing in guaranteeing its successful triumph over the individual. Evolution of intelligence has been accompanied by the evolution of distorted logic. Logical dilemmas are not seen as such, as the outcome is determined by the need for gene-serving action. Action having been "determined," accommodation of belief must be accomplished. This is what "cognitive dissonance" psychology is all about, in my opinion.

We are lured into the future by false gods. Our enthusiasm is too easily aroused, and our hopes too quickly grow, for things that chance presents to us. Yet, after unfolding events reveal Destiny's plan, we are disheartened only momentarily. And we are ready for the next false hope.

We should be humbled by the experience. But fate is not through with us. Ulterior motives must be served. A secret passageway remains to be found.

[Every year that passes, and with every reading of this entry, I am impressed with the essay's underlying concept. I think it's a neglected idea in the formal literature, and I intend to expand these ideas and include them in a Third Edition of my book *Genetic Enslavement*.]

IS CRIMINALITY NORMAL?

1985.12.17

It is "normal" for male mallard ducks to rape. It's normal for male Big Horn Mountain Sheep to sequester, tend, and rape. It's normal for the male of many species to kill step-children when they "take over" a female. Seagull mothers kill neighbor seagull hatchlings that stray nearby. Animals kill within their own species, connive for dominance, destroy another's property, cuckold, steal and deceive.

Since the advent of field studies that have been guided by sociobiological theory, selfishness, and downright "meanness," have turned up as commonplace in the animal world.

Logically, we should expect to discover that Humans are fundamentally like animals. And sociobiologists are finding that this is true. (It is even true for plant life, according to work by Trivers.) The meanness that is found in animals is explicable, even inevitable. Presumably, the same traits are explicable and inevitable for Humans.

Humans who behave badly are called "criminals." For animals, these same behaviors are viewed as "normal." One of these perspectives has to be wrong. Could Human criminality also be "normal," and possibly inevitable?

Recent crime studies suggest that 90% of US males and 65% of females engage in some criminal activity in childhood or adolescence. About 12% are habitually delinquent before adulthood, and 6% become "career criminals" during young adulthood. Could this be evidence for criminality being an "evolutionarily stable strategy."

Imagine being able to "grade" behaviors that affect others, or placing them on a spectrum, with "selfish disregard for how a behavior affects others" (sociopathy) at one end, and "altruism" at the other end. I will acknowledge that a large number of behaviors cannot be scored and placed on this spectrum, but I think in a subjective sense we all can believe that the majority of behaviors that affect others can be categorized in the way suggested. The law has little trouble defining a large body of "criminal" actions, and these are examples of what I wish to place at one end of the spectrum.

Using this hypothetical selfishness/altruism spectrum, we can identify a category of behaviors that are just short of the criminal criterion and which are commonly thought of as "bad." For example, telling lies about someone, lying for social gain, cheating on an income tax report, driving inconsiderately, littering; these are "bad" by most people's standards. They are done, presumably, for small personal gain (at somewhat larger expense to other people). I will refer to these behaviors as "selfish" behaviors (not criminal). There may be a far greater number of selfish ones than criminal ones.

There are obviously payoffs for selfish and criminal behaviors. I contend that genes that code for them cannot be eradicated through natural selection processes. By this reasoning it seems plausible to claim that selfishness and criminality are "normal" for all living things!

The difference between selfish and criminal behaviors is merely a matter of degree. There is a greater risk of retribution for criminal behavior, but it is balanced by a greater payoff. Criminal behavior probably is subjected to a more extensive list of preconditions before it is elicited. People's thresholds may differ because of different genetics and different upbringings.

I believe that all humans have a capacity for criminal behavior, and that it is therefore "normal."

PART FOUR - OFFBEAT IDEAS

Serb soldier killing Muslims.

THE WALKING STICK

1987.04.25

It is alleged that the male walking stick submits to being eaten by the female after copulation. It is theorized that this bizarre behavior benefits his offspring by providing nourishment to the mother.

I have wondered how an imaginary conversation with a precocious male walking stick might go. In this conversation I counsel him "Don't do it! Your life is at stake!" And he replies: "Its not true. And even if it were, I couldn't control myself!"

So, I make a proposition: "I'll perform surgery on your brain; I'll disconnect the circuits that compel you to behave in this way, that make this behavior so pleasurably compelling." The male walking stick then asks me: "Then what would there be to live for? Anyway, *I* won't be eaten."

This imagined conversation haunts me because it resembles the human dilemma. The dilemma exists for all species, from insects to Man. The reason it exists has to do with the relationship between individuals and their genes.

Individuals are created by genes as "vehicles" for carrying copies of themselves into the future. An individual is constructed by its genes, and even though there is competition between individuals in every-day evolutionary life, the winners and losers at the level of the genes are what is remembered on long timescales. Hence, our anatomy, our physiology, and some of our behaviors (*i.e.*, our phenotype) are expressions of what has served our ancestral **genes**, as distinct from what might have served our **ancestors**.

To be sure, there is overlap. It pays to breathe, and eat, after all. These trivial behaviors benefit both the genes and the individual. But what about reproductive organs, sexuality, romantic love, patriotism, altruism, parental investment, parental love, programmed individual mortality, etc? Are all genetic endowments meant for the benefit of the individual?

Of course not! Reproductive organs are not for the individual; they're for the good of the genes! And so are the behaviors that lead up to the use of the reproductive organs! These organs and behaviors are generally not seen in this way because it would be subversive to do so. It is threatening to the genes when individuals think about the tricks they are playing. And so it is that there is an uneasiness whenever a sociobiological viewpoint is given in "polite" company.

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Did you know that walking sticks have therapists? I will explain how the walking stick therapist counsels the male walking stick. It is based on the fact that the walking stick society understands what is "normal." And their therapists reflect this societal view to

some extent. Thus, therapists endorse copulations, in spite of the risk to the males. And therapists encourage the idea of females becoming pregnant, in spite of the costs and risks to the female.

Any solitary walking sticks that eschew parenthood, or who embrace chastity, are condemned. The walking stick that chooses to "walk away" from traditional walking stick activities, and merely walk among the beautifulness of Nature, and enjoy walking stick music, good conversation, and think - such walking sticks are labeled "crazy."

And woe to the male walking stick who chants "Hell no, I won't go!" when walking stick society is organizing to wage war upon a neighboring walking stick community.

But human observers are more objective in their view of those wayward walking sticks. If we observed behavior that more closely resembled those in Human society we might credit the walking stick with being enlightened. We would probably be correct in these judgments, but there is a logical pitfall in doing this. After all, how can we Humans know how riddled *our* thinking is with irrational servitude to our genes.

Imagine that there is a perspective for viewing Human behavior that is more enlightened and universal than our Human perspective for viewing ourselves. Imagine some alien being from elsewhere in the universe observing us the way we observe the walking stick. Would this being see as much irrationality in our behavior as we see in that of the walking stick? Is *Human Normalcy* crazy by some *universal* standard? And are there some humans who are thought of as crazy whose lifestyle is closer to a "Universal Normal" standard?

I have alleged that irrational behaviors are produced by the conflict between the individual and his genes. Those few issues where conflict exists are usually "won" by the genes. They get their way by manipulating the individual. But in actuality, it is when the individual succumbs to every contrived temptation that he is *really* being irrational.

It is natural to wonder about the merits of "liberation from the genes!" Should an individual consider the idea of making a conscious effort to free himself from the influences of his genes? Since irrationality seems to spring from these manipulative genetic influences (I am alleging), does it not follow that each individual should want to inspect these gene/individual relationships and purge himself, as much as possible, of the irrational components?

If it is the case that individuals can expect greater happiness in their lives after they have purged themselves of the most obvious genetic irrationalities, then human therapists should take an interest in this endeavor. My "reading of" Freud is that he would endorse this view. He championed the individual, and often criticized social influences. To the extent that society expresses the will of the genes (another worthy subject for thought), the individual who liberates himself from societal influences is also liberating himself from genetic influences.

Did you know that the walking sticks had their "Freud"? He tried to explain individuals to themselves. He even speculated about the origin of walking stick culture, and credited it with being an outgrowth of the conflict between the needs of individual walking sticks and their species. He claimed that individual males understood at only a subconscious level that each copulation had severe risks, and that the subconscious struggle with matters of what to do, and the diversion of walking stick energy toward safer pursuits, was driving the development of walking stick culture.

He worked hard trying to instruct walking sticks in the art of living. He urged them to bring to consciousness the conflicts that raged below consciousness. "Insight preceded change," he exhorted, and their first step toward sanity was to acknowledge that there was a problem with their natural behavioral tendencies. To the males he introduced the notion that copulations were a trick that had serious risks. And to the females he suggested that pregnancies and child-rearing were a trick with heavy burdens. His hope was that they could lead simpler lives by forsaking what their natures compelled them to do; or, if they eventually chose to do it anyway, they would at least have their bulbous walking stick eyes open.

The endeavor was a failure, however. The male walking sticks denied the likelihood of being eaten, and the female walking sticks insisted that baby walking sticks were irresistibly cute!

If only the walking sticks were more intelligent, like Humans; they would understand, and with this insight they would immediately embark upon the changes that would lead them to individual liberation!

ALIVENESS

1988.09.26

My cat, which purrs and meows, is alive. The stone, over there, isn't.

Biologists only have trouble deciding whether a thing is alive or not at the lowest end, where viruses merge with lifeless chemical precursors. For doctors, the grey area is for such things as people in a coma, where there is brain death yet machine-sustainable body life.

There is a tendency to think of "alive" as a thing that either "is" or "isn't," as with things that are either "black or white." Psychologists, if they could join the 20th Century, would be wondering about the "black-and-whiteness" of life, and they would wonder whether or not a normal living person is continuously experiencing various gradations of "aliveness."

Aliveness, as a word, has an uncertain existence. The "ness" ending connotes a variableness in the amount of something, as in loudness, or hardness. It is important to remember that we learn the world through a process of successive approximations. At first, our categories are broad, and all-inclusive. Things are either "good" or their "bad." With experience, we learn how to sub-categorize. And for some things, we acknowledge a continuous gradation. Black and white eventually permits grey.

If aliveness is a thing with gradations, then what characterizes times of greater aliveness from other times?

I can recall the first time I heard the Brahms Second Piano Concerto. I was driving to do some forgettable errand, with the car radio on, and as I heard the opening chords I suddenly came to life! It was this way also when I first heard Vivaldi's Four Seasons. Most of my encounters with favorite music have been like this. I can also recall the first kiss with a certain woman. Life sparkled!

It seems that the common feature associated with heightened feelings of being alive is "emotion." In contrast, intense cerebral thought, such as writing a difficult computer program, can be exhausting, but it is usually an unemotional process, and perhaps for this reason it does not create the sensation of heightened aliveness.

Aliveness is a sought property, with one qualification. People seek the positive emotional experiences, but avoid the negative ones. It is tempting to try to write an equation accounting for behavior, such as: we select behaviors in such a way that we maximize the experience of desired emotions while minimizing the experience of undesired ones. But each person has an individualized life style. Some live as if they are avoiding all emotional experiences in order to avoid painful ones, whereas others are undeterred by the prospect of bad experiences as they lunge forward in mad pursuit of good ones. The calculus for living, for being in pursuit of aliveness, is potentially different for each person.

Some people seem to be more alive than others. At one end of the spectrum is the "couch potato." At the other end are people who are involved in many things and who are happy with the fullness of their lives. Would it be fair to say that one person is more alive than another?

I am alleging two things: first, that any given person varies in aliveness during the normal course of living, and second, that some people average a greater level of aliveness than others. I feel the need to deal with some implications of these allegations. It seems natural to place greater value on the times when a person is more alive, and to value a person more if they are consistently able to attain higher levels of aliveness.

There seems to be a taboo about comparing people. There is a social pressure to think of all people as having the same worth, in keeping with the silly notion that we are all created "equal." I feel this pressure as I conjecture that one person can be deemed more alive than another. The truth is, almost every person considers himself to be worth more than everyone else. Each person's public presentation of self is groomed to hide this fact (for reasons that have to do with the need to manipulate others in order to maximize the successful penetration of the person's genes into the future). This issue is a matter for more extensive discussion elsewhere. What matters here is that we acknowledge that our natural revulsion for the idea that life has a variable value cannot be trusted as an unbiased guide to viewing the idea. We must try hard to be open-minded about the matter.

I am less bothered by the idea that my life varies in aliveness. When I am sick, and lethargic, I am not bothered much by the fact that I am doing nothing except lying in bed, waiting to recover. At such a time the prospects of what life might offer during the near future are meager. The thought of death is less disturbing at these times than at others. The "will to live" is reduced. This, at least, is my recollection of past subjective experiences.

There are times when the mind and body function well together. Things are under control, life is abundant, and it is great to be alive. The thought of death at these good times, were it to occur, would probably be more disturbing than usual. There is an unmistakably greater feeling of aliveness at these times.

If different degrees of aliveness can be discerned through subjective feelings, there is hope that the concept has a valid basis for eventual objective measurement. When a consensus forms around a method for defining aliveness, if it eventually does, then we will perhaps be treated to charts of a typical person's "ups and downs" during common life situations: daily patterns, random variations with timescales of weeks or months, and perhaps variations that correlate with life-stage sequences.

Could a capability for charting aliveness pose a challenge to common attitudes? Could aliveness information be "subversive?" When people know how their aliveness is influenced by the activities they choose, or the decisions they make, could they be changed by this information?

PART FOUR - OFFBEAT IDEAS

This group of questions belong to a category of speculations that has been perilous in the past. Whenever we create hypothetical insight that should produce change we tend to think that thoughts and behavior will be influenced by the power of logic. This is not always true. Thoughts often follow behavior, and rationalize it. People's behavior is robust, and is less easily dislodged by logic than we are ready to admit. People will always fall in love, make love, and have babies; regardless of the void of logic to doing so.

Thus, if it could be demonstrated that having a baby creates more trouble and work than the rewards can justify, when measured by aliveness charts, women would nevertheless continue to want babies. If it could be demonstrated that unquestioning adherence to overtime work schedules was less rewarding than pleasurably "smelling the roses," workaholics would not slow their pace. After all, people are confronted daily with information about the way smoking degrades health and shortens life span, yet this information, by itself, has virtually no influence over smokers.

I believe that the genes will have their way, no matter how much logic is brought as witness against their agenda. (Smoking, like drug use, must be an impulse-driven behavior, having positive results in primitive settings, and therefore rooted in instincts, which lead the individual astray in our modern world.) Insight has been powerless in the past, and it shall be powerless in the future. The genes have little to fear from knowledge. Individuals will never liberate themselves from the genetic grip!

This assessment does not say that individuals will not try to liberate themselves. If I could construct my aliveness chart and discover that my dissatisfaction with not being married was intruding in a thousand little ways upon my otherwise successful pursuits, and jeopardizing my overall level of happiness, I would perhaps seek a more fatalistic posture on the matter. My endeavor might involve waging war on the way the genes simply hand the individual an agenda. I might take Nietszche seriously, and create a "new morality," or set of values. But in the end, I will be doomed to follow in the same footsteps as my ancestors.

Aliveness will be a concept that, like all other Human creations, will serve only to impotently light the walls of the Individual's Experience of Life. A person's path is destined, I believe, and the individual can only influence the shades of awareness during the journey.

LEAVING THE AGE SHELTER IS LIBERATING

1988.10.02

The curve of mortality versus age has a broad minimum at about the age of 12. It climbs steeply beyond middle age.

Age 12 is close to the threshold for sexual activity. It is almost the age when parental investments begin to pay off. This must not be a coincidence. It has been speculated that genes that provide for a low mortality at this age have a greater benefit (to the genes) than those affecting mortality at any other age.

The steep rise after middle age has another interesting story behind it. If we could produce a plot versus age of the influence of a typical ancestor upon the fate of his genes, the plot would have a peak occurring at an age somewhere in the twenties. At this age children are being produced and raised. Parental investment rate is near its maximum. During the 30s parental investment begins to shift toward child raising instead of births. During the 40s births are replaced with the raising of children and the beginning of grand-parent investing. During the 50s raising is over, and only grand-parenting remains.

As the impact of a person upon his progeny declines, so does the importance of genetic protection from diseases and other health problems. Genes that protect the 50-year old would have a more difficult time being "selected for" by the forces of evolution than genes that protect the 20-year old. In fact, since every gene carries with it a burden of unintended disturbances of things done by other genes, there actually might be merit in NOT selecting for the 50-year old health protecting gene.

There's a good part to this story, however. After middle age there is little need to keep blinders on the individual. If he wants to liberate himself from the power of the genes, and create a new agenda for the remainder of life, there is little incentive for the genes to create inhibiting brain circuits to prevent this from happening.

It's as if an individual is free to do what he wants after he has done the work of his genes. Freedom must be earned.

A person in his 20s who desires freedom must contend with brain circuits that will pressure him to return to the genetic script if he tries to depart from it. A man in his 50s must contend only with the impulse to be a good grandfather and make young women pregnant, which is a lighter burden than providing parental investments. The genes have less at stake for such a man, so it should be easier for him to walk away from his instincts than it is for a man in his 20s. Women in their 50s, who want to create their own lifestyle, must contend with the instinctual desire to help with grandchildren. This must be an easier force to overcome than the procreational forces that existed in her 20s. Thus, both men and women should find it easier to define their lives after middle age.

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PART FOUR - OFFBEAT IDEAS

I met a sociobiology graduate student at a sociobiology symposium a few years ago. When I told him I wanted to write a "sociobiological philosophy," and I sketched some of what it might contain, he seemed surprised and interested in the idea.

I said to him "For example, you're in your 20s now, aren't you?" "Yes." "Well, I'm in my 40s, and I can shape a new lifestyle much more easily than you can. You can try as hard as you want, but you will fail. It'd be like trying to climb a steep wall! But for me, I only have to walk up a slightly sloped incline."

"I have felt the grip of the genes, like the butterfly that has been captured inside protective hands. The genes are almost through with me, and they are releasing their grip. As the hands open, I see daylight. My time to escape is almost here, and I am ready to fly away. You are still in the grip of your genes, and you must wait a couple more decades before you can expect to see this daylight."

Just then, the coffee break ended, and we were called back to the auditorium. I wonder if he remembers our conversation.

GOOD ENOUGH

1989.04.27

"*Perfection* is the enemy of *good enough*!" as the saying goes. By analogy, we might also say "*Forever* is the enemy of *for awhile*!"

Ideals are OK. But they shouldn't live a life of their own. Their value comes from their *guidance,* not from any *adherence* to them.

First, *perfection.* Perfection is only a concept, and does not exist in the real world. A straight line is a concept, and I've never seen one in reality. I wouldn't recognize one if I saw one. Most straight lines I create are good enough for the job I have to do. A perfect straight line wouldn't help solve the problem, or change the outcome. The same for circles. Sometimes a circle *should* be better than at other times, in order to see a problem clearly. But a perfect circle is never needed, and, indeed, it is never dealt with.

A perfect car tune-up? No such thing! There usually are tradeoffs, such as pep for mileage. It's just impossible to define what a perfect tune-up would be, or how to recognize it if it were encountered. Which means that one will never be encountered, because it can't be defined. But a *good enough* tune-up *can* be recognized. Subjective evaluations are almost as good as objectively defined ones in this situation. Defining what constitutes a good tune-up is inherently subjective; though, once defined, it can be measured. We shouldn't forget, however, that such a procedure doesn't make the objective assessment completely objective, for the definition process is subjective. Hence, the perfect tune-up isn't even an ideal, like a perfectly straight line. It is qualitatively different.

The perfect tennis player? Of course that's impossible to imagine. One will be better than another, as defined by rules of competition. The next day, or competition, the other may be better. Even the concept of *better than* is fuzzy. Let alone *perfect.*

The perfect cook? According to whose taste? Consensus could be invoked to judge, but subjectivity would be rampant.

The perfect camera? For which task? Cameras can be designed for low light levels, for high light level and fast action, for sharpness of image, for portability though unsharp image quality, etc. Gains in one area usually entail penalties in another. Define the task and some cameras can be judged *better* than others, but none are perfect.

The perfect mate? Ridiculous! Just defining what constitutes a good mate for one specific person is hard enough. Each of us values things differently. Moreover, a part of us wants *one* thing, and another part of us wants *something else* - **or perhaps**, just the opposite. The relative importance of these conflicting wants changes with time. The concept of a perfect mate isn't even an ideal, any more than the perfect tune-up is an ideal. To try to imagine the perfect mate is even further removed from ideal than is the

task of imagining a perfect tune-up. They are qualitatively different. We learn to accept "less than perfect" in those situations where it would be meaningless to strive for perfection. An imperfect meal or tune-up are thus easily accepted. But for some things the idea of perfection seems to linger when it shouldn't. The perfect camera might seem to be a plausible concept for non-photographers. The perfect friend might seem like a plausible concept for someone inexperienced with friendships. And the perfect mate seems always to linger too long, but especially for the inexperienced in matesmanship.

For situations in which the concept of perfect exists, we nevertheless always accept things that are good enough. It is especially true that when the concept of "perfect" is invalid, we are forced into settling for "good enough." Thus, we are *always* in the "good enough" mode.

So why have I bothered to write this? Because, too often, people refuse to accept things that are good enough because they desire something closer to perfection. When this happens, it is difficult to point out to the person what they are doing. Demanding perfection sounds so "admirable," as if it is always good to adhere to ever higher standards. But it is not admirable to short-change yourself by holding-out for unlikely events. And that's what can occur when a person demands perfection.

Now, what about *forever*.

Too often things are viewed as having failed in some way if they do not last forever. Marriages are frequently viewed this way.

Is a marriage that lasts for 50 years more successful than one that lasts for only 25? If the task of marriage is to raise children, then a pair of children can be raised in 25 years just as successfully as in 50 years.

Is "going steady" with someone a failure if it doesn't lead to marriage? Can a several year relationship that ends be called a failure for having ended? If so, then could it be said that each of those years was agony, only endured because some permanent situation was in the offing? How silly! If each year in the relationship didn't have sufficient reward for each person, then it shouldn't have been sustained.

Can a brief encounter in a supermarket checkout line have value, brief as it is? Of course it can, and we all have those nice little moments when an exchange was thoroughly enjoyable or valuable.

To demand that a thing has to last forever for it to have value is equivalent to taking the position that nothing *can* have value! For nothing lasts forever. And if a person means by forever "until death," then that is arbitrarily shortchanging also, for the forces of destiny could take our life at any moment.

Just as perfection is a chimera, so is the notion that things must last forever to have value.

PART FOUR – OFFBEAT IDEAS

LESSONS FROM THE HOUSE CAT

1989.07.08

I wasn't really convinced of my own explanation, nor was my teen-age daughter. I had argued that we did our house cat a favor by having her neutered when she was a kitten. I explained that we saved her a lot of trouble, first in courting male cats, second in raising litters of kittens. At least she enjoyed herself pouncing upon imaginary mice, or stalking birds she never caught.

Our cat's life is close to idyllic. She accepts her good fate without apparent concern for how different it could have been. She lives within the moment, and within the destiny that happens to manifest itself. No futures are imagined, to trouble her, no alternative destinies being lived by other cats, no regrets for having been neutered. Her daily schedule now includes stalking insects that pop out of the springtime grass at dusk. Her work is play. When she tires of activities, she does something else.

Her pleasures come from within. Stalking is her most arousing activity. It is a conjecture to say that she enjoys stalking. Stalking is an instinct. She had no mother cat to teach her how to stalk. It's a useless activity, because she almost never catches anything.

If it were possible to somehow remove those innocent instincts, and save her the trouble of play activities that never produce tangible results, would I recommend doing it? No! So what's the difference between stalking and such activities as courting tomcats and raising litters of kittens?

All these instinctual activities somehow "give meaning" to a cat's life. Isn't a life "more lived" when it consists of more activities? Consider an imaginary conversation I could have with the neighbor cat. I could argue with it to eschew courting, eschew raising kittens, eschew stalking, eschew exploring territories (belonging to other cats), and eschew rubbing people's legs. Instead of these activities it could limit its activities to licking its fur, eating the food given to it, and sleeping.

I could appeal to every ounce of cat rationality that existed, and argue that this subdued life is the only rational life; that it amounted to a liberation from instincts which held other cats captive. The other cats, those who acted out instinctual

behaviors without thinking, were captive to a genetic agenda that came from forces outside themselves. Surely, I would argue, it is better to liberate oneself from outside forces, and do only those things that can be justified as being in one's own individual best interest!

Or is it?

PART FOUR - OFFBEAT IDEAS

Sarah and Mahi, both paralyzed by thoughts of existential dilemmas.

READINESS

1989.09.17

A scrambled sentence fails to communicate. A properly constructed one is effective because each part creates a "readiness" for the following part. This leads to an "unfolding" of ideas, as if there was an internal logic.

The arrangement of sentences within a paragraph are also ordered by the same principle. It would be disruptive to reorder them at random.

And so it is with paragraphs within a text. Each paragraph prepares the reader for the next paragraph.

What about experiences in one's life?

They seem to have a similar relationship, though recollections can be deceiving. I can recall situations that prepared me for others. If the sequence of two such experiences had been reversed, the second one might have been useless to me, and it wouldn't have registered as an experience for which I was not ready.

There is something illusory about this. When experiences occur in the "wrong order" they are forgotten. When a preparatory experience is followed by the prepared-for experience, we take note. Our memory for such things is selective.

The order of things is often random. Much is probably wasted, or "goes right by," out of awareness. If I notice something that touches me, and others ignore it, then perhaps I've had the preparatory experiences that the others lack. There must be just as many reverse situations, but I wouldn't notice them.

This is an argument for growing older. One can become wiser, and notice more things. Today, I am a "more prepared" person than I was in my youth. More prepared to notice nuances of social situations, a person's personal anguish, and my place or role in situations.

I am also better prepared to understand a book's message. This becomes apparent on those few occasions when I have picked up a book that I read 10 or 20 years ago, and proceed to re-read parts of it "for the first time!"

I have done this with my old notes - thoughts that just had to be recorded because they were so valued at the time. They now make a different sense to me. Sometimes I am embarrassed by the naive thinking, and especially the awkward writing style. I try to smile, and accept the way I was; as it is very much in my mind that the things that *now* seem important for me may at some future date embarrass me for their naiveté and poor writing style.

PART FOUR - OFFBEAT IDEAS

Recalling past friends, as from high school, I am struck by how differently I perceive them now. I will always wish I had gotten to know "Edsel" better. Why did I lose that opportunity? I guess I just wasn't "ready."

Imagine reliving one's life; going through the same experiences, knowing the same people, and reading the same books (something like Nietzsche's "eternal recurrence"). If we could do this with our new state of readiness, we'd revalue them, learn new things, and have different emotional reactions to some of them. And at the end of this experiment, I think another reliving would produce even more new reactions and insights.

Perhaps there is value in having at least the *memory* of past experiences. As we remember them we have a different state of readiness. We can thereby expect to extract something new from each recall. To make use of our memory in this way is almost like reliving life.

This idea of "readiness" seems mysterious. Is there no end to becoming readier? Are we fated to always extract less than is potentially there as we go through life?

What am I missing during my present daily routine? In the future how will I view each of the people I now regularly interact with?

There is the possibility that some of the unthought thoughts, and unfelt emotions, really exist at some subconscious level, and I am simply not ready to accept them into conscious awareness! This is a completely hypothetical category of un-experienced experiences. It is impossible to know how many thoughts lie below consciousness; or how many emotions somehow exist yet are prevented from being experienced.

But even this category of experience can benefit from a greater state of readiness. Perhaps the same "dynamic" changes readiness for both categories.

Whatever the dynamic, it is welcomed. For it is natural to assume that readiness is something we can never have too much of! The readier we are, the fuller will be our experience of life.

There's a flaw in this line of thought. We cannot be aware of an unlimited number of thoughts, or experience an unlimited number of emotions, in response to any one situation. The dynamic that changes our readiness does not necessarily *increase* readiness; at some point it may merely *change* our readiness!

A merely *changed* readiness will mean that we'll have a different reaction, perhaps equally valid, compared to the one we would otherwise have had. For example, at one time that I'm with someone I might respond to the person's capacity for empathy and caring for others; whereas, at some other time, I might become fascinated by that person's ability to organize their thoughts and make the most relevant statements about an issue. I allege that both attributes of such a person would be worthy to note, and my

inclination to detect one or the other of them more readily has little consequence. It is more important that I be capable of detecting at least something significant during the encounter.

Surely, different people tend to notice different things in a given situation. It would be silly to want everyone to notice the same things. Readiness is an individual property, and there is a certain arbitrariness in comparing different readinesses. The readiness I have today is different from the one I had 20 years ago, perhaps as much so as the readinesses between two people at one particular time. And that's OK!

When a life-worn person reads a book of maxims, such as Machiavelli's *The Prince,* he is likely to recognize the wisdom of each of the tutorials. The book is essentially useless to such a person because the lessons have already been learned. Where was the book at life's outset? But at that stage of life the book wouldn't have been understood, and the suggestions wouldn't have made an impression. A person is only ready for such a book while in the throes of solving a specific problem, and even then any advice is only welcome as a solution to be considered and evaluated by experience. Some things just have to be learned by one's self; by each generation. And the reason for this must have something to do with the special configuration of readiness that is required. Presumably, to be ready a person must be prepared by personal experiences. Books treating the subject, then, become chronicles that purport to instruct but really serve only to validate that which has already been learned through personal experience.

As noted by Richard Feynman, a popular teacher and Nobel prize-winner at Caltech, teaching doesn't do any good for the poor students, and the good ones don't need a teacher.

Maybe life's like that. It simply has to be lived, and our readiness is based on previous experiences, including their order, and no books or advice can change this elusive readiness.

THE KEY TO LIBERATION

1989.12.14

The key to liberation is to become *useless to others* and to become *independent of others*. When you're useless to others, they'll let you alone; and when you don't need others, you won't be bothered by what *they* think of what *you* think. Only in this type of environment is it possible to have the freedom to think logically, without regard to personal consequences.

Einstein said it well when he wrote: "Such isolation is sometimes bitter, but I do not regret being cut off from the understanding and sympathy of other men. I lose something by it, to be sure, but I am compensated for it in being rendered independent of the customs, opinions and prejudices of others, and am not tempted to rest my peace of mind upon such shifting foundations." (from *Living Philosophies: A Series of Intimate Credos*, Simon and Shuster, 1931).

Having reached middle-age, and feeling freer to ask what ***I*** want from the rest of my life, I am better able to see the wisdom of this truth. The genes are almost done with me. I have done for them what they wanted, I have fulfilled my "purpose" for being born. By this age my ancestors had finished raising their children, and their usefulness for helping raise grandchildren was balanced by their becoming a liability due to worsening health, requiring more care from others. Hence, middle age is a natural time for the genes to "let go," and leave the individual to fend for himself. Surely, this is the reason for the acceleration in health problems starting in middle age, when our health doesn't matter to the genes; so there are no genes that provide specifically for health *after* this age.

The good edge to this sword is that the genes no longer care if I think subversive thoughts that provide for *my* well-being instead of *their* well being. I can swear to never have children again, or go to war to defend the Fatherland. Such thoughts are academic at my age, since they are much less subversive than they would have been at a younger age. I have "paid my dues," and now I am entitled to find out what the rewards are. The rewards, I find, are a greater freedom to think any way I want. Not a total freedom, because there's a residue from before middle-age, but it seems easier to think unhindered than it was before.

So, I have achieved genetic uselessness! And because I am useless to my genes, they don't care what I do. And since they don't care what I do, they don't care what I think.

As I hinted above, can the same argument be used to describe the dynamic between the individual and other people? Is it true that when a person becomes useless to others they lose interest in what the individual does, and what he thinks?

I think the answer is "yes," provided the individual is not a liability to the others. And if you're a liability to others it is easy to become independent of them, and free yourself

of their influence. This is why it is important to become independent. When you're independent you can become free of anyone whose influence is undesired. It would be in bad taste to point out to people who are embedded in a web of mutually dependent relationships that they hold each other prisoner when it comes to thinking rationally and creatively. When a person's welfare depends on maintaining a web of relationships the person is subject to strong forces inhibiting disruptive thoughts. Only when one person can say "I don't need you," and the other person can say the same, is it possible to have an honest conversation.

At the risk of letting metaphors live a life of their own, I shall ask how much of this way of thinking can be applied to the relationships between modules *within oneself*. This strikes me as a difficult question to answer, yet an important one to ask. I will attempt to rephrase it more accurately.

Could there be mental modules in my brain whose continued existence is threatened by the activities of the rest of my brain, and could these modules act to protect their existence even if such actions jeopardized the integrity and continued functioning of the entire brain system? Wow, how can such a question be addressed? It is, almost by definition, an impossible question to answer!

Cognitive Dissonance Theory comes to mind, according to which: one of the emergent properties of a brain is that it appears to reduce dissonance by either changing behavior or changing the reality upon which that behavior is based. Usually, when reality is changed the new inner reality is a closer approximation to the true outer reality, but CD Theory is most remembered for the scary thought that sometimes the new reality is *further* from outer reality. Thus, inner realities can sometimes be expected to *diverge* from truth, and become committed to dead-end paths.

Is there any way to guard against this? Could this be a fundamental limitation facing every sentient being?

PART FOUR - OFFBEAT IDEAS

Mental modules in conflict.

LIFE'S MAJOR DECISION

1989.12.17

Of all the decisions that profoundly affect a person's life, all but one are made for us by *Destiny*. And that one decision that *we* make is made without conscious awareness.

To be alive is to be within a magical transition between two infinite oblivions. Being alive in the form of a sentient being is the most important gift from Destiny, and we had nothing to do with it.

We are alive during the 20th Century. The *when* of our lives is also decided for us by Destiny.

To be born into an industrialized democracy, instead of an economically undeveloped dictatorship, is another major decision that Destiny makes for us. Those with the misfortune to be born into the wrong society have little opportunity to relocate.

Having and raising children is one of the more significant decisions that *we* can make. Yet, not everyone's life is affected the same way by having children. Some parents are happy and feel fulfilled by these experiences, while others are either indifferent or miserable. Thus, the mere state of having children is, by itself, not a major determinant of life's happiness.

Getting married is an important decision that individuals can make, even if less important than that of having children. Other living arrangements are almost equivalent to marriage these days, because divorce is so commonplace. Again, whether considering the categories of being married, living together, or single, it is possible to find *both* happy and unhappy people. So the decision to live with someone else or to live alone must not be as major a decision as it seems.

The job we hold may seem like a major decision, but the *specific* job we hold is not a major factor determining the quality of life. A person's happiness off the job does not usually change when they change jobs. Sure, the job *influences* (though doesn't *determine*) a person's material wealth, but even a person who is today on welfare can have a higher standard of living than the kings and queens of centuries past.

Having a physical deformity, or handicapping disease, definitely affects a person's lifestyle. But it is widely acknowledged that the victims themselves determine how undermining their handicap is to their experience of life.

PART FOUR - OFFBEAT IDEAS

Real estate people say that one of life's major decisions is the house we purchase. But nowadays, with people typically moving every few years, houses are almost as exchangeable as the family car.

We may preoccupy ourselves with the anguish of deciding what career to pursue, or what relationship to enter into, or which city to live in; we'll worry about what present to buy someone, or when we'll buy a new car, or where to go for vacation next summer, or what to add to our wardrobe. The decisions to all these questions have a minuscule effect on our lives, I claim. If so, then what role do we really have in determining the quality of our lives, as we exercise free will and spend our energies making decisions that always seem important?

There's really only one thing that each of us has decision power over that's really significant: and that's our *ATTITUDE!*

With a good *attitude* a person can live happily in *any* era, *any* part of the world, in *either* the married or single state, *with or without* children, working at *any* job, renting or owning *any* house or apartment, and in *any* of the other possible conditions mentioned above.

Attitude triumphs over the major decisions handed to us by *Destiny*, and attitude triumphs over any "major" decision mistakes that *we* have made. And it certainly triumphs over the everyday variety of minor decisions. The person with a good attitude will have a satisfying meal in any restaurant ordering anything on the menu, whereas the person with a bad attitude may be inclined to be unhappy with every meal in every restaurant.

And the ironic part of this is that *attitude* is never considered to be something we *decide* about! Attitude just happens. It forms, and evolves, *out of* awareness.

"Attitude" deserves more attention! It deserves our most earnest nurturance. It deserves to be tended at a conscious level, at least from time to time. This is why, though I am not a religious person, I pause before each dinner, and allow the feeling of gratitude to grace the moment. It feels right, and I think that taking care of our attitudes in this way can grace the rest of life - and thereby make the best of Destiny's major decisions and our minor ones.

[My good friend Joy points out that “attitude” is the essence of Buddha’s “discovery” after sitting under a banyan tree for a long time. Like all good ideas, they just keep popping up each generation, seemingly fresh to those who aren’t well read. Thanks to Joy, who is well read.]

HUMANS ARE A CANCER ON THE EARTH

1990.04.02

Imagine talking with a human cancer cell. It would protest ignorance of the future, and ignorance of its role in extinguishing the life of the prey upon which it feeds. It is merely doing what it is compelled by its very nature to do.

And this is the way it is with humans. Our numbers are growing explosively, our impact on Mother Earth grows faster than our numbers, we are invading every niche and replacing indigenous species, our behavior in the present is unrelated to possible future consequences, even though it now appears that we are irreversibly altering the earth's ecology and perhaps destroying its capacity for regeneration.

As individuals, we humans are innocent; just as innocent as an individual cancer cell. As a species we are innocent, since a species does not comprehend the consequences of its existence.

It could be argued, however, that there is one significant difference. It is alleged that we humans are *aware* of our existence, capable of foreseeing consequences of our actions, empowered with something called *free will*, and endowed with a moral sense for knowing right from wrong which we use for modifying our behaviors with enlightened good will.

This is alleged by some among us; but I am not convinced of it!

I think we kid ourselves when we claim to have "free will." Our "changing the course of future events" is an illusion! We are really *observers*, taking for true our frail "perception" of future events, a "perception" which in reality is merely an approximate "prediction." We observe the effects of our interactions with the world, then claim to have intervened by force of will since the events we experienced were different from those we believed we would have experienced had we not exerted our free will. When, in fact, our original "prediction" of the future was flawed, as it did not take into account that myriad of influences bearing upon the future which are unknowable to real-world beings - one of which might actually be the formulation of an "intention" to act, which owes its existence to an unfolding of mental events governed by the immutable laws of physics. To all of this we are actually nothing more than **observers**!

We are pitiful, impotent observers, slowly killing our birth place, our brethren - both plant and animal. Some are crying "Foul!" while everyone else either nods in impotent assent or ignores them.

"What will be, will be!" And I claim that our cancerous ways, and the demise of us all, are what is destined to be!

PART FOUR - OFFBEAT IDEAS

MY LUCKY SIDETRACK

1990.04.21/29

Who's responsible for the peacock's tail? Peacock genes! For animals, this answer carries the right nuance, but not for humans.

I want to argue that for Humans it is *we*, as individuals, who must assume responsibility. We Humans are capable of liberating ourselves from genetic agendas, and we can guide our thoughts and actions by the logic of ideas. Peacock men can choose to be otherwise, and women who are attracted to peacock men can choose to think and act otherwise. To do so would be to realize Nietsche's dream of going "beyond" morality.

I won't go so far as to claim that each person has an *obligation* to go beyond the morality that is built into our primitive minds; rather, human intelligence gives each individual the *opportunity* to do so!

Schopenhauer says that "A man can surely do what he wills to do, but he cannot determine what he wills." My intuition, which I must admit motivates my thought more than I often care to acknowledge, believes that ideas have an inherent structure which can afford the needed escape. We may choose to allow that structure to "capture" our mind, and influence its activity. The concepts of geometry are not arbitrary, and by analogy I argue that there is an inherent logic that applies to many other areas of thought, and eventually can be appealed to as a guide in formulating human philosophies for living.

Through a "will," whose origins I cannot discern, I have allowed my mind to be captured by ideas. Their inherent logic exhorts me to eschew the genetic traps that control other people, and make fools of them. It is do-able, to climb up the ladder of logic, out of the morass of incoherent compulsions. Let others be pulled this way and that, and become entangled in a web of unthought-out, un-extricatable obligations.

Only the brave need embark on this journey, however. It is meant only for the intelligent, the wise, and the brave. It is often lonely, so strength and self-reliance are also needed.

Things of value are often unrewarded by our minds, whereas things of no value sometimes bring immense pleasure. I will explain this cryptic assertion momentarily, but I want to note that this is just one more example of what is produced by the conflict between what's good for our genes and what's good for individuals.

The past few years of my life have been especially productive. I've enjoyed this creative period, and have often marveled at the fact that it has been so enjoyable. Sometimes, when I've been "hit" by a thought that connects things in an unexpectedly

enlightened way, I've felt *euphoric*. Most often, however, the emotional payoff for being creative has been more subdued.

Sexual experiences have always produced an easily identifiable pleasure. Why don't I order my life around the pursuit of sexual pleasure, then? Could it be that I am more than a living machine, able to exert "free will" in pursuing aims that my intellect deems "higher" than what any animal can do?

Freud would probably say that I'm displacing sexual energy to activities openly sanctioned by society, or the ghost of my parents, *i.e.* that I'm sublimating my sexual energies. His explanation would be "developmental," as it depends on accidental happenings during my childhood development. And these happenings have sent me off the well worn path - as if I was "meant" to be uninquisitive and driven more by animal forces than intellectual ones.

Perhaps this is true. And if it is true, then I should give thanks for having accidentally gotten off the intended path. For I would not trade who I am, and the way I am now living, for all the supposed rewards of the "normal" life. If I am flawed by an abnormal childhood development, then thank God for it!

Having entered the world of ideas, I could never leave it. It is exhilarating in some difficult-to-explain way. Perhaps it's because the pleasures of roaming in the world of ideas are not accompanied by painful consequences, as is so often the case with animal pleasures. An overindulgence with new ideas never produces indigestion, or a hangover, or the endless quandaries produced by "relationships." The world of ideas has no risks, provided the mind is dedicated to truth.

That's the key, I think. Entering the world of ideas must be done with a devotion to Truth. If it is entered with a cherished belief, and an agenda for proving this belief, then the journey is made "on guard" and it loses spontaneity and is less fun. If Truth is the highest goal, then the journey into the world of ideas is painless and more pleasurable; for then ideas are not feared, they are friendly handholds for wherever the journey goes.

HUMANITY'S KNACK FOR MAKING THINGS WORSE

1990.04.28

Humanity has a knack for making things worse when they try to solve problems. Like feeding the starving Africans instead of giving them birth control pills. As a species, our intuition is inadequate, and overlooks counter-intuitive better solutions.

Maybe it would be better, in the long run, to NOT ameliorate global environmental problems, which just masks the underlying profundity of what faces us and thereby forestalls the day of irrevocable commitment to a new paradigm. Only after the sea level rises, and storms become noticeably more severe, and when skin cancer is noticeably more common, and the air is markedly less breathable ... only then will we be prepared to really change our ways. By "band-aiding" the problem now, we make it worse for future generations.

Major, major changes in attitudes and cultural assumptions are required. Changing our sacred beliefs is our only path to a salvation with any prospect for lasting improvement. Anything short of this drastic change in thinking will not solve problems in the long term.

Therefore, the best thing a person can do now is to adopt the counter-intuitive approach of making environmental problems worse, as fast as possible, to hasten the day of reckoning!

Today's environmentalist is tomorrow's enemy; today's unthinking waster is tomorrow's friend. Reagonomic neglect was helpful in the long term.

The best cure for smoking is lung cancer! Let Humanity slip into the ocean!

IDEA OVER WILL

1990.04.28

Schopenhauer asserts that the "will," *i.e.*, "instinct," is similarly endowed to all men, whereas "idea," *i.e.*, the capacity to think, is very differently endowed. He views the "common man" as having nothing more than the common denominator of all men, or "will." Hence, the common man is all "will" and no "idea."

As an experiment, let me "redefine" Schopenhauer's "will" and "idea" terminology, and put it in accord with sociobiological concepts. "Will," for me, becomes those instinctual behaviors that serve the individual's *genetic* agenda, with or without serving the individual's *personal* welfare. "Idea," for me, becomes those thoughts and values derived by a thinking mind that endeavors to liberate itself from the genetic agenda by placing the highest value on *individual* welfare.

Psychiatry strives to make patients "normal" in areas of "will" function. Whereas there are lots of "will"-based mental health care disciplines, they all neglect "idea" function. How interesting! Outstanding people are outstanding precisely because of their "idea" capacities, yet this area is ignored by all disciplines providing mental health care.

Is it possible that the forces of mass-man are at work? Our culture seems to be "subverted" by "mass man mentality" values. The mass man mentality defines what is normal, what is desirable, and encourages everyone to be "normal." There are a million forces trying to abrade outstanding individuals. Rousseau "sold out" when he began celebrating the common man. He had a ready audience, who "knew" somehow that he was on their side.

Those who celebrate the outstanding-ness in men, such as Voltaire, Schopenhauer and Nietzsche, had a much smaller and perhaps secret audience. Outstanding men's ideas, which adhere to intellectually honest standards, are always *subversive* to the interests of common men.

Imagine a new mental health therapy school; one that encourages the liberation of the individual from the genetic agenda - a therapy that celebrates the outstanding qualities in men, and deals *properly* with any dysfunction in "will," which encourages an exertion of self-control over impulses, and strives to achieve individual liberation.

What is the *proper* way to deal with "will" dysfunctions? As a minimum, it should keep "idea" function intact while adjusting "will" function on behalf of the person's individual welfare. And it should also keep "will" function intact while enhancing "idea" functioning.

Freud had the correct orientation, as far as I can determine. He was unafraid to "heal" people in ways that acknowledged individual welfare over society's grab-bag heritage of illogical and unnatural expectations that burden individuals. I think Freud would

agree with what I am suggesting. He was no apologist for civilization's manipulation of individuals.

Schopenhauer, one of the first known misanthropes.

PREMATURE PARADIGM SHIFTS

1990.04.29

Cognitive Dissonance, or CD, must reach a threshold to produce a Paradigm Shift, PS. It is hypothesized that "real" solutions to problems are not effective until the populace at large undergoes a PS that leads to irreversible commitment to following through with the real solution. Premature attempts to impose real solutions are at risk for being abandoned before the problem is solved, and so permit the problem to grow in magnitude and prolong agony.

Band-aid solutions to problems may actually be better than premature real solutions because their failure will become apparent sooner, and thereby hasten the time CD reaches the threshold for PS change.

Taking this thought one step further, a "no action" response to problems may be the best, in the long run. They would bring CD to threshold sooner, and also hasten the time when PS-generated commitments will be made to the real solutions.

The general goal is to have CD-threshold/PS-solutions occur only under conditions offering the best prospects for *irreversible* commitment to whatever is needed for recovery, but not sooner.

Fat chance that organizations for protecting the environment, controlling population, etc., will sign on. Am I suggesting that they disband?

PART FOUR - OFFBEAT IDEAS

The following is from a self-published book, *Essays From Another Paradigm* (1992). At the time I wrote it I was unaware that others were also "discovering" this idea. Everyone at my cafeteria table laughed at the idea, and I unfortunately didn't pursue it. Now I know that it is receiving serious attention by others less swayed by naysayers.

A NEW ESTIMATE FOR THE END OF HUMANITY

1990.06.10

Intuition is probably worthless when it comes to matters outside the common experience of our ancestors. Only if an issue has an abundance of metaphorical counterparts will our intuition serve us. Consequently, I have tried a totally new approach to the problem of estimating the time of Humanity's demise.

It's based on a thought experiment. First, consider that Humanity does have an end. This may sound like a big assumption; for it assumes that we will not adopt space travel to establish populations around other stars. For the moment, assume that the colonization of other stars does not occur, that the entirety of Humanity's future resides within our solar system. It is estimated that our sun will explode as a nova in approximately 5 to 10 billion years, and this event will evaporate the earth and the other 8 planets.

With this assumption it is inescapable that there will be a finite number of humans born during the entirety of time. Let this number be Ntot. Imagine creating a tiny capsule for each person and placing information about them in the capsule. One piece of information is the birth sequence number, going from 1 (the first person arbitrarily identified as existing) to Ntot. All the capsules are then put in a large bowl, and the capsules are mixed. One of them is drawn at random.

Now, what information might this capsule contain?

Before answering this, let's consider a simpler thought experiment. Suppose two people engage in a game called "How long is the sequence?" One person selects (at random) a sequence length, such as 100, then randomly selects a number from the population of numbers in that sequence, and announces the random number to the other player. How well can the second player guess the length of the sequence? The best strategy is to simply double the number provided, and offer that as the best estimate of the sequence length. This strategy gives acceptable answers 50% of the time, if acceptable is defined as anything between 50% and 150% of the correct answer. (I just "shelled out" of this word processor, and wrote a program to test this trivial concept, and produced an "acceptable" answer 4 out of 10 times).

Now let's try to apply this strategy to the question of Humanity's demise. I will argue that you, dear reader, are a random member of the total set of Humans! This is a crucial step in the derivation, so let's consider it some more.

Einstein developed ways of thinking about time that, ironically, demolished its common meaning. He suggested that it be viewed as a 4th dimension. To simplify what he's asking us to consider, imagine collapsing one of the 3 dimensions of ordinary 3-D space, producing a 2-D stage upon which all things happen. Now allow the 3rd dimension to be time. A point in this universe refers to one specific physical location and one specific time. Volumes in this imaginary 3-D universe refer to all happenings within a specified physical space that occur between two temporal boundaries.

After thinking with such an altered viewpoint on reality it becomes easier to apply spatial concepts to the temporal domain. For example, if we're dropping marbles on a checkerboard we know how to think about probability distributions of where the marbles fall. Likewise, if we go into a "set" of all people who have ever lived (in the past), and draw one out at random, we know how to address this problem. We treat it the same way we treat spatial problems; in this case we could consider a ladder and think in terms of landing on a rung at random.

It is alleged that Einstein thought about a person's existence in just such abstract terms. The future that was to unfold was, for him, just as real as the past which has already occurred. The existence of one is no less real than the existence of the other. It is a short conceptual step to attach the "set" of all humans not yet born to the "set" of all humans already born, and thereby create one "super set" of all humans who ever have, and ever will, exist.

This is what I ask you to do: imagine this "super set" of all humans, stretched out along a sequence that goes from 1 to Ntot. Try to accept the idea that you are not special - any more than now is special in relation to all time. You are not at the forefront of anything, since all future humans exist just as much as you and your contemporaries, or those who have lived and died before you. All humans are equal members of this "super set" called Humanity. Try to absorb the meaning of the randomness of your location in the sequence.

Now, let's ask how we might estimate Ntot, the size of the super set "Humanity." The suggestion, as you have already guessed, is to calculate how many humans have already lived, then double that number.

How many humans have already lived? I've used a population history to calculate that at this time 36 billion people have lived since 50,000 BC. Doubling 36 billion yields 72 billion. Recalling our previous argument, there is a 50% chance that our estimate is between 75% and 150% of the correct value. If the correct value is C, then 72 billion is between 0.75*C and 1.5*C. In mathematical notation, $0.75*C < 72 \text{ billion} < 1.5*C$. Solving for C, we find that the size of the super set Humanity is between 48 and 108 billion.

What does this mean in terms of dates? We can use population projections, and integrate forward until the total number (from the beginning) enters the region 48 to 108 billion. I have done this, and the dates are 2040 to 2100.

Thus, we calculate that the end of Humanity will occur sometime between the years 2040 and 2100! Or that there's a 50% probability of this. The most likely date, corresponding to the time when the integrated human population reaches 72 billion, is the year 2075. That is just 85 years from now!

THE END

Future population crash scenarios meeting the requirement that all those who have ever lived represent 75%, 50% or 25% of all those who will ever live. This graph is based on a 1991 re-calculation of population histories, as published in my book Genetic Enslavement: A Call to Arms for Individual Liberation, *2004, 2006.*

REALITY SUBSETS

1990.06.10

How shall we grasp the notion that there are fundamental reasons that the human mind has a limited understanding of surroundings?

Let’s start by considering the metaphor of geostationary weather satellites that provide TV weather forecasters with pretty pictures for the evening news. The satellites have two sensors, a visible light and an infrared sensor. Only the visible images are shown on the news, since the IR images are difficult to understand for the uninitiated. Whereas the visible maps show land or ocean where there are no clouds, and clouds where there are clouds, the infrared maps show the temperature of these respective areas. Thus, not only is it possible to know where it is cloudy but it's possible to measure the temperature of the cloud top. This, in turn, reveals how high the cloud is, since approximate temperature profiles are known.

The details of these satellites aren't important. But the concepts they illustrate are. Each sensor adds information to what it's like below. As the satellite sweeps silently overhead, the sensors scan from side to side, and transmit maps to receiving stations below. And humans review the maps, both the visible and IR maps, and from this the forecaster infers the existence of weather conditions. An internal reality is created, that draws upon conceptual understandings and perhaps other weather information that is available, and he synthesizes an internal reality representing what is occurring for "real," out there somewhere.

Somebody decided, about a decade ago, to include the visible and IR sensors on the weather satellite. This was a somewhat arbitrary selection, largely determined by what remote sensing technologies were mature enough to use. For example, wind field sensors were not available at the time this selection was made (they're still under development). If a wind sensor had been available, and had been selected, the forecaster's reality would be different, and significantly more accurate.

Here’s another example. The bat has a sophisticated remote sensing system, based on acoustic reflections. Phase coherence of the echo is used to locate the direction of a flying target insect to extremely good accuracy. This all occurs without use of light, which allows bats to pursue and capture prey at night. As a bat flies through the night sky it creates its reality, and adjusts its behavior accordingly. Bats know the world in a way that is very different from any other animal.

One more example. My cat sees, hears and smells well. If I bring food to eat on the porch, Fluffy sniffs if she can't see what I have. She knows objects by their smell. Any new food placed in her dish is smelled, and a second or so of mental calculation produces a decision - to eat or not to eat.

I know the bat doesn't share Fluffy's world of smell, or sight. And Fluffy doesn't share the bat's world of echoes. And neither are we privy to the weatherman's satellite visible and IR maps. Each creature has a unique way of knowing the world.

We humans tend to think our way of knowing the world is complete. We easily forget about the bat, the cat, or the porpoise, the eel, and all other animals. The world we construct is a subset of all possible ways of knowing and constructing a world, and we have to be reminded of this.

The sensory systems we use to know the world represent a first step in a process that limits the reality we create. What we do with the sensory information is also a crucial step in this creative process. Fluffy sees the same picture on the TV (except that hers is in black and white), and we hear approximately the same sounds from the radio, yet we create different meanings from these things. If I play a recording of a Brahms piano concerto, which never fails to move me, I know that Fluffy will be unmoved. Every creature's brain is "wired" to make different uses of the sensory input available to it.

Since every creature's perceptions are different, every creature’s cognitions are different. Hence, every creature's internal reality is inevitably different.

I suspect most people think that an animal’s reality is a subset of the human one. Some might even claim that the Human reality is complete.

After reflection, however, most people would grudgingly acknowledge that individuals differ in their internal realities. If this is true, then it follows that any given person's reality cannot be a *complete* reality!

Added to this argument, no person's reality could *ever* be complete given that the human sensory system is incomplete. But the most important reason people's realities are incomplete is that every human's cognitive capacity is incomplete. We are more like the cat watching TV or listening to Brahms than we are willing to realize. How can we know this? We can't, any more than the cat can know that there's more to the TV show that it realizes, or more to the sound of a Brahms concerto. We can only deduce through logical argument that this limitation exists for us humans.

It is easy to imagine that animals of any given species all have the same reality. Technically, this cannot be true. Evolution would not produce change if variation did not exist for each of the aspects which in fact evolve. If a species is different from others in some respect, then for sure there is variation in that aspect among the individuals of that species. Hence, every attribute is at least slightly different from individual to individual.

Baboons, gorillas and chimpanzees have all been studied enough to discern small differences in social skills. It is easier for us humans to discern the same differences among ourselves, though some are inclined to attribute any such differences to unique personal environments. Whatever mix of explanations one prefers to use, the

conclusion is inescapable that people perceive and comprehend what goes on around them differently.

People can watch the same thing, yet notice different things. Football commentators always amaze me for how much they see in a play. Animal behavior experts comprehend more of animal social interactions than others. Musicians notice more and experience music more profoundly than others. Historians surely comprehend daily news events differently from others. And philosophers must observe everyday happenings differently.

Each person is like the satellite, scanning the world with a unique array of sensors. The internal reality that each person constructs is a subset of what could be constructed. It is inevitably a subset of a "complete" reality.

It is impossible to escape the conclusion that a person's reality is, at best, a subset of a larger reality, since it is possible to demonstrate that more aspects of the reality exist than any one person can achieve. I can never know the world the way the bat knows it, or my cat, or any other person. Your reality and mine will overlap in many ways, to be sure; but the two realities will always differ. Hence, each of our realities is incomplete.

FOREVER

1990.06.12

When we're young the rest of life seems to extend forever. I'm 51, and I have about as many years to live as my daughter Cindy has already lived. Life slowly yields to the reality of not being forever. It occurs to me that the genes cause this. Either they want it to look this way in youth, or it's a natural consequence.

Could it be that since our reproductive life ends at about middle age, the genes are little influenced by events occurring afterward, and our brains have no way of "knowing" what follows afterward? As far as the genes are concerned, we could live forever after mid-life. Or we could drop dead immediately upon reaching it. There's no way to communicate the nature of what follows our reproductive life to the genes. Their wisdom is only for earlier happenings.

It is remindful of the genetic unpreparedness to deal with diseases after mid-life. Repair systems seem oblivious to the existence of life after the reproductive and child-rearing period. Genetically-speaking, there is no life afterwards. It is part of the unknown. For all the genes know, life lasts forever. And, interestingly, we think this way as children and young adults.

DEFECTIVE PARADIGMS

1990.06.24

The disciplines that endeavor to help people are based on incomplete paradigms, and occasionally this incompleteness becomes glaring. The entire approach for each practice is embedded in a paradigm that is so taken for granted that its shortcomings are usually invisible, as the following sections illustrate.

Medical Practice

Consider the high cost of keeping premature babies alive, with the dubious result that after tens of thousands of dollars of taxpayer subsidized medical costs, the babies often grow up with neurological handicaps that cannot be cured and which lead to costly attempts at remedial physical therapy and education. The hardships borne by society pale in comparison with those for the victim and its family.

Doctors also don't know how to deal with the high cost of dying. The last months of a person's life in modern America account for a large proportion of that person's lifetime medical expenses, with the dubious result of merely prolonging suffering. Terminally ill patients who are in pain often cannot obtain effective pain killers because the medications are classified as addictive. The patient can’t even request the doctor to perform euthanasia because it’s illegal.

Eugenics is in the best interests of future generations, yet medical practitioners maintain the taboo about discussing it. The human genome shows signs of degeneration, and there are theoretical reasons to expect genetic deterioration. When over 90% of newborns survive to have children themselves, instead of the species typical 25%, it is inevitable that the genome will suffer (irreversible) damage. Doctors should take the lead in pointing out that the integrity of the Human genome is at stake, and suggest actions to preserve what I believe is Humanity's most precious heritage.

Criminal Law

In criminal law there's the infamous "McNaughton Rule." It stipulates that if a person commits a crime without knowing the difference between right and wrong they are exempt from the full suite of criminal sanctions of the criminal code. Instead, an attempt is made to "treat" them. This means they may be released to society at an earlier date than if they had "known" the nature of their crime before they committed it.

This reasoning is flawed by the assumption that people who commit crimes without a capacity to fully understand the nature of their crime are themselves victims of deprived environments in childhood. For this they deserve extra accommodation under the law, such as a chance for rehabilitation. The grim truth for many criminals is that they were born with criminal tendencies, helped by a sociopathological neurology, which frees them to pursue their criminal dispositions unhindered by the capacity to

feel empathy or know the difference between right and wrong. Such people are poor prospects for rehabilitation. (When you have poisonous snakes in your garden you don't try rehabilitating them, you try exterminating them!)

Another flaw in the paradigm underlying the McNaughton Rule has to do with maximizing society benefits. To the extent that behavior has a genetic component society benefits by somehow disposing of those with criminal behaviors which have their origin in the genes. When a criminal claims that he couldn't control himself due to some genetic predisposition, he should not be allowed to hide behind the McNaughton Rule. Rather, the criminal who cannot help himself is the one who should be disposed of the quickest. In order that the justice system be forgiving of individuals while dealing harshly with the genes, I propose that the gene-driven criminal be castrated. This punishment appropriately addresses the needs of future society, and in most cases will subdue the individual from further criminal behavior due to hormonal changes.

The other type of criminal, the one who knows the nature of his actions, and who committed his crime after meditation, is perhaps a suitable candidate for rehabilitation (provided he is not a genetic sociopath). Thus, I contend that the McNaughton Rule has long-term consequences for society that are opposite of those which everyone desires. This is why I characterize the paradigm under which criminal law is practiced as "incomplete" and deserving of a fresh new reformulation.

Psychotherapy

Psychotherapy's underlying paradigm is also incomplete in analogously fundamental ways. There seems to be an unspoken assumption that everyone should be happy. This is so ingrained in contemporary thinking that it is difficult to call attention to it as an important assumption. One problem with this is that the meaning of "happy" is ill-defined by society.

To be "happy" implies that one be "normal." Most people link the two concepts in a way that misleads. For non-human animals "normalcy" means to be adapted to environmental conditions the way other individuals of the same species are. This assures the individual a place in the scheme of things, and for doing this there is an implicit promise of a "happiness" reward for the individual. People look admiringly to Nature for guidance, and discern the message that it is good to "fit in." The purring cat has succeeded in doing what cats are meant to do, so now it is happy and purrs. "Don't argue with Nature, accept what is natural, fit into the scheme of things; if you do, you will be happy."

This view has a flaw. It overlooks the fact that Nature uses individuals to do the business of the genes, and the genes do not always have the individual's best interests in mind. Indeed, the genes "exploit" the individual and keep it blind to this exploitation. For several decades sociobiologists have been pointing this out for creatures in both the animal world and human.

Psychotherapy that is predicated on the desire to achieve "normalcy" is at risk for treating the patient in the wrong direction. Imagine a Praying Mantis psychotherapist lecturing the male mantis to go along with nature's design for him: a wise male mantis might protest "but the females bite off our heads during mating, and I'm too young to die!" "But, dear male mantis, I have been taught that happiness is to be found in following Nature's design; so trust me, and go out there and be normal!"

Society is a many-headed monster. One message says to exert self-discipline and aspire to great achievement. Yet the Beethovens, the Schuberts, the Schopenhauers, and Einsteins of our world are ridiculed by smug non-achievers for being maladapted. These great men were loners, many of them not marrying, and all of them deriving their satisfactions in life from devotions that the "normal" person cannot comprehend. We should all give thanks that Beethoven was never "treated" by a psychotherapist; if he had been treated and “cured” he might have lived a more traditional and happy life and no one besides a hypothetical wife and children and small circle of friends would have known of his existence - and the rest of us would have been poorer for it.

I think I see the flaw in the way "society" defines happiness, and I think psychotherapy has fallen into the trap of "buying into" the definition that comes naturally. The common man understands happiness to be those things which might be called Nature's gifts. They are Nature's sweet gifts because they are used to overcome the subversive threat of individual logical inquiry. The person who stops to ask "why," who pauses before entering into parenthood, or before marching off to war to “defend the fatherland,” needs an emotional prod to do the "right thing." And the genes defend their interests by defining the "right thing" according to what serves *their* best interests - not the individual's. This is also the origin of the emotional reward for falling in love, for becoming a parent, and for being patriotic. These are Nature's paths to happiness.

Nietzsche counseled that a thinking person should go "**beyond** Nature!" The person who can become immersed in an intellectual endeavor, who can become lost in a fever of devoted work that leads to accomplishment, such a person attains a special form of happiness that borrows from the emotional store that Nature created for other, albeit lowly, endeavors. This unintended use of emotional rewards, the "intellectual high" produced by intellectual achievement, illustrates how one may go beyond Nature, and with luck achieve liberation from the genetic agenda.

People aren't meant to discover truth. In fact, it is possible that Nature has gone to some trouble to create thinking brains that carefully navigate around it; after all, a thinking brain risks discovering the genetic agenda, which must be safeguarded at all costs.

An individual must have to take an unusual path in life to be afforded the opportunity to see things from an unintended and more truthful perspective. Such people may have scars from their journey, and may appear maladapted. When they are being helped by a psychotherapist there is a danger that the therapy will mold the person back to normalcy in too many ways. Just as there must have been ways a therapist could have helped Beethoven get along with people he had to deal with, or to gracefully accept his

encroaching deafness, these healing efforts by a well-meaning therapist might have also molded Beethoven in ways that would have detracted from his creative output.

Traditional psychotherapy fails to deal with these issues forthrightly. When a patient is exceptionally well-functioning in at least one real world realm, such as professionally, or when the person achieves in a chosen intellectual realm and is not out of touch with reality by being engaged in the pursuit, then it is important for the therapy to respect what is occurring. The psychotherapist's goal of helping people achieve “happiness” carries with it the risk of destroying what future generations would cherish as the gifts of “a genius at work.”

Edward O. Wilson, who argued (in Sociobiology: The New Synthesis*) that many academic disciplines should reconstitute themselves with guidance from sociobiology, creating a firestorm of protest by entrenched interests.*

SPOILED RICH PEOPLE

1991.04.28

I'd like to read an article that starts with descriptions of the hardships in various parts of the world, chosen more or less at random, and ending with some "hardships" in America. The following is a quote from an article in the LA Times, 91 Apr 27, based on an interview with a psychiatrist (charging approximately 150 $/hour), who states that "a typical patient at his office is a 30-year old male who grew up in a pampered world of maids and servants. But now, a few years out of school, he is frustrated that he has not yet made his first $1 million. He is acutely aware that his father is rich, that his friends from high school are rich; they all own Mercedes-Benzes and beach homes. His sense of what's good enough is very warped."

Such people could live in Heaven and by their complaining attitude turn it into a private Hell. Let's all give them our sympathy!

Even Americans who *appear* to deserve sympathy should be reconsidered. The person who complains about being unemployed for more than 26 weeks, thereby losing "rights" to unemployment checks, and who has no savings to turn to, nor relatives or friends to take them in, nevertheless lives in a place that is safe from political persecution, where war and rampant disease do not exist, and where anyone with forethought and proper planning can avoid being destitute.

Attitude, that's what it all comes down to! People whose jobs are not 99% secure should save money instead of succumb to the impulse to indulge in purchases. Yet they purchase beyond what they have, using credit cards. Anyone this irresponsible, who counts on others to solve unforeseen problems, deserves what happens to them when they lose their job.

I claim that anyone with the correct attitude, who is not physically or mentally handicapped, can live a happy life in this country. Poverty comes to those who don't prepare, and economic security comes to those who do. A person should not marry if they are unable to accept married responsibilities. A married couple should not have children if they are unable to provide for them. A person should not spend money on frivolities, such as a TV, VCR, or trip to Disneyland, if basic needs would go unmet if employment were lost for a year, for example.

Americans place themselves at risk when they succumb to "feel good" criteria for ordering their lives. Living in the present, surrendering to impulses, are characteristics we expect of children, not adults. Yet these foibles are peculiarly "American."

If challenged, I could live on half the poverty income, simply by using my intelligence and exerting impulse control. I would live on peanut butter sandwiches, rent a single room, and use a bicycle and the bus system to get around. And I could be happy, for there would be ample time to read, stroll, and enjoy the tranquility of a country that is

not at war. Some might call it living like a monk, and they could not be happy without material wealth and lazy consuming, but that attitude is precisely the problem.

It is possible that "good times" *bring out* these behaviors in ordinary people. This is what an apologist for the ordinary person might argue. Apologists never allow the individual to accept responsibility. Problems always have their origins "out there" somewhere. *Society* is the problem, for them. It's the *environment.*

Well, if it's not the environment, as I claim, then could it be the *genes*? Yes, it's the genes that create people who fail to live *considerately*. The genes create people who respond to good times by living for the moment, exploiting whatever is available, making babies before their care can be assured, and generally mot caring for the 'morrow.

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I'm wondering what happens to those 75% of people who were never meant to survive! These genetic degenerates have been spared the usual fate by unusually favorable conditions for the past 500 years, who have caused the human population to explode, with unknowable consequences.

Could these people be dragging down the quality of life? Could their care, somehow, be a cause for the inability of most of this generation to afford housing, compared with "our parent's" generation? (I feel this one, recalling how my father was able to build a 2500 square foot house on a teacher's salary, and I, with a salary 2.5 times his, allowing for inflation, could not afford a house until after mid-life.)

Is it possible that there was a time, in the distant past, when nearly everyone was healthy, alert, and capable of managing their own affairs. When the average IQ was possibly 110 or 120? When genetic defects were rare? When nearly everyone contributed to society's health and growth, instead of diminishing it? A Golden Era?

These degenerates may be our legacy, and they may be dragging us down to lower levels of national poverty. But we still have tremendous opportunities for individual fulfillment.

Stop complaining, America!

PART FOUR – OFFBEAT IDEAS

Paris Hilton, poster-child for" spoiled rich."

ORIGIN OF CONSCIOUSNESS AND DECEPTION IN EVERYDAY LIFE

1991.05.05

A man is in love. He wants to marry a young girl who doesn't know how to cook, sew, grocery shop, use a checkbook, follow a budget, or get a job. He is a professional, but lacks self-confidence. Why is his love directed the way it is?

It turns out he will be accepting custody of a 4-year old daughter from a previous marriage. This is the key to understanding what motivates him. He needs a live-in babysitter, who would be cheaper than a day-only sitter. He doesn't state this to the girl he "loves." It appears that there is a code of silence about it.

I would not be surprised if he himself is not consciously aware of this one, compelling reason to want to form a "relationship" with this particular girl. She will not figure out the importance of this motivating factor on her own, for as long as he doesn't broach it with her. And he is unlikely to broach it with her if a part of himself keeps the crucial information away from his consciousness. His "performance" will be more convincing the less he knows of his ulterior motivation.

None of the cynical dynamic just sketched is new; for it pops up in psychology articles from time to time. What I want to add to it is that consciousness might have evolved to be of service in committing convincing deceptions.

Consider, for a moment, that during a social interaction all thoughts can be viewed as belonging to one of three categories: 1) those which assist the subject in getting what the subject's genes want, 2) those that have no known effect, and 3) those which harm the subject's goal of getting what his genes want. The subject's *non*-verbal behavior will presumably be driven by the first and third categories of considerations, but what about the subject's *verbal* behavior?

Imagine that there are 30 thoughts in question, 10 in each of the above three categories. Of these 30 thoughts we can repeat the process of categorization, but this time using the *other* person's perspective. Assume for this example that there are a *different* 10 thoughts in each of the categories. If the subject wants to influence the other person he will collect the 10 thoughts which have a positive connotation for the other person and place them in a repertoire for his verbal conversation. The 10 thoughts that are self-serving will stay out of consciousness - unless there are any which belong to both person's positive connotation categories.

I have portrayed a "dual processor" model for conducting social interactions. One processor is used for promulgating non-verbal behavior, the other is used for guiding verbal behavior. The verbal behavior processor's activity generates "consciousness"!

NEVER MEANT TO BE

1991.06.02

As I glided through the congested Fedco crowd I was struck by the thought that "most of the people there were never meant to exist." This thought was stimulated partly by the lack of grace and forethought with which most people did everyday things, such as walking through crowds, or coordinating their movements when paying a cashier, taking the receipt, and picking up their purchases. Little things, yes; but I was also influenced by recent thoughts on the matter of the population explosion, and its lack of precedence in Human history.

The population explosion is ominous for a reason more important than the strain on resources and general crowding that most people think of when it is mentioned. More importantly, the population explosion implies that babies are surviving to adulthood who would have perished in harsher times. And what's good about babies perishing? Statistically, those who perished were the less fit, genetically.

It is a cruel truth that during the past several million years humans have survived to adulthood at the rate of approximately 25 to 33%. A woman typically bore 6 to 8 babies during the ages 18 to 40 (at one birth every 3 years); yet, on average, only two survived. During the previous several million years times were "harsh" almost all the time. Only during the past 11,000 years has Human inventiveness, combined with a warm interglacial, created bountiful conditions. And during much of the past 11,000 years the survivorship percentage has been abnormally high. Today it is probably 95% in the developed countries, and I have estimated that approximately 70% in the undeveloped countries. The survival rate for the undeveloped countries can be estimated from their rate of population increase, which is about 1.66 %/year at the present time, and their birth rate, which remains at approximately 4.0 %/year.

The Soviet geneticist Alexey S. Kondrashov (*Nature*, 1988) has suggested that the normal low survival rates for humans shielded us from the deleterious effects of "mutational load." He writes "In modern human populations detrimental mutations with small individual effects are probably accumulating faster than they are being eliminated by selection." One of the most frightening things about this is that the spreading of deleterious mutations in the human gene pool is practically irreversible. This is due to the great difference in timescales between the "weeding out" of deleterious genes and their spontaneous creation.

It must be one of the most profound unspoken truths that the women in the undeveloped countries, who are almost continually pregnant, are one of the greatest threats to the future well-being of Humanity. Furthermore, the women of the industrialized world are not harmless, for they bring to bear even greater medical resources for keeping their newborns alive. Wealthy women have fewer children in their lifetime, but their closer-to-100% offspring survival rate theoretically could be

creating a more dangerous reservoir of unwanted genes than the corresponding reservoir created by poor women.

Consider the case of wealthy women keeping 99% of their offspring alive while poor women keep "only" 90% of theirs alive. In the first case, the wealthy women are artificially introducing into the gene pool a sub-population of children with a greater proportion of the worst of the deleterious mutations, since they are disposing of only the worst 1% of the deleterious mutations; whereas the poor women are at least disposing of the worst 10%. Contrast this with the fact that for human "vigor" to remain unchanged it is probably necessary to dispose of approximately the worst 67 to 75% of deleterious mutations!

As I was walking out of Fedco I wondered what percentage of the people "were never meant to be." If 95% of births survive to adulthood, then at least 70% were never meant to be. But there must have been an accumulation of bad genes during the past 11,000 years, so the percentage of "never meant to be" people has to be higher than 70%. Could it be of the order 90%, or 99%?

Simple calculations lead to very high percentages of "never meant to be's" using modest values for the number of generations that high survival rates are hypothesized to exist. It is difficult to estimate the degree of defectiveness of the lowest 70%, and it is also difficult to estimate the fraction of defective offspring that will be born to the lower 70%.

Perhaps one way to estimate this percentage is to estimate the incidence of easily identifiable (genetic-caused) physical and mental infirmities in present-day industrialized populations and compare this value with the corresponding incidence for primitive populations (which have not experienced a population boom in recent history). I don't know what these numbers are. Imagine a grant application to study this, and the uproar it would cause!

Alexey S. Kondrashov, who famously wrote about the dangers of "mutational load."

WHEN MY BODY IS A LIABILITY TO MY GENES

1991.06.10

When my body is no longer an asset for the genes within, when my body becomes a liability to those genes, do the genes have a means for responding appropriately to this situation, by predisposing my brain to moods and actions leading to my demise?

What a preposterous suggestion! That there could come a time when I am a liability to my children and relatives.

If my genes could have a viewpoint, what would it be? In answering this it is important to keep in mind that my genes view me from several perspectives; from the perspective of each body where they are found.

Will I feel some inner compulsion to walk into the bleak white outdoors, like the Eskimo, and never return?

Consider the child who is deformed or retarded, and doesn't "fit in." Should it be a surprise to find them prone to depression and suicide? This may be what "Cipher in the Snow" was all about.

If it is possible for the genes to predispose a person to depression and suicide in response to failure in life, then there is a potentially powerful reward for any such genes that may arise by random mutation. This is only true provided their "side-effects" are acceptable. Unwanted side effects would include any change to normal behavior.

The logic of this reasoning is so persuasive that I am tempted to shift the burden of proof, and default to a belief in it unless I encounter evidence to the contrary.

PART FIVE:
POST-HOLIDAY VIGNETTES, STORIES AND ESSAYS, 1992 AND AFTER

Growth doesn't stop, once started. After 1991 there were moments like those during my "holiday" – when an incident was especially poignant, or when a whimsical story just had to be written down.

Of course, my essays kept coming, unabated, leading eventually to my book *Genetic Enslavement: A Call to Arms for Individual Liberation*, which I published in 2004 and 2006. I won't include many essays written after 1991 because most of that material is in the aforementioned book.

If you read one story in this Part it should be "Cat Bird Lesson" on page 125. It makes me tear-up every time I read it. "Adieu" on page 144 is a poignant record of how I felt as I prepared to retire, and hand over my beloved Microwave Temperature Profiler projects to the new "Mr MTP."

PART FIVE: POST- HOLIDAY

INHERITED PARADIGMS

1992.09.05

Metaphors can be fun, and their allure can pull us along toward either better or worse understandings. When they serve the cause of better understandings, the use of metaphors is lauded. I'm toying with one now, and wondering if it's laudable.

Galileo helped liberate us from Aristotle's incorrect view of momentum. Aristotle thought that an object in motion was evidence of continued force being imposed upon the object, and that greater forces produced greater speeds. This served both the layman and "scientist" for 2000 years.

Galileo showed through logical arguments that an object moves with a constant speed until acted upon by an outside force. Today, every scientist has internalized this, and to me it even seems intuitive. Yet, people who work to understand the cognitive development of children report that it is natural for the child to think as Aristotle did. It is only through intervention by teachers that the correct "intuition" is internalized.

The reason people are born with the wrong intuition is because in a world where friction is ever-present, as with dragging a load, or pulling a cart, it is expedient to rely on a pragmatic, though flawed, concept. It would burden the mind to have two concepts, where one undid much of what the other said, instead of one expedient concept.

Could this story serve as a metaphor for some of the paradigm shifts I wish humanity would adopt?

Everyone is born with a predisposition to view the world in certain ways. It is natural to judge the truth or falsehood of something on the basis of whether it makes one feel good or bad. Like the song line says: "It can't be wrong, when it feels so right?" If "just so" stories satisfy the 5-year old, might adult "just so" stories satisfy adults?

Since the genes have a stake in what an adult believes (I'm assuming that beliefs are capable of influencing behavior), it is logical to assume that many belief predispositions serve genetic purposes. There is a particular class of belief predispositions which must rely heavily on inherited brain circuits: those that serve the genes while ill-serving the individual. By this reasoning I have become suspicious of beliefs that elicit emotions. The stronger emotions were created by the genes to overcome individual logic.

Logic is sometimes an enemy of the genes. If logic cannot be overcome by predispositions, then emotion must be invoked to achieve the gene's desired result. For this reason, logic is "guided" by genetic predispositions. It is guided to such an extreme extent, sometimes, that a logical argument can be presented in all manner of ways to an

individual, yet he will persistently resist it, and persist in believing whatever ridiculous position he started with.

PART FIVE: POST- HOLIDAY

THE MINOAN

1993.04.25

When I was young I met this old man who said he was an itinerate history teacher. He said he wandered and taught at universities. He had taught everywhere in the world.

Our discussion wandered to the Golden Age of Greece, which he knew about. He seemed interested in impressing upon me the importance of the earlier Minoan civilization, which influenced the Greek. He stated that if it hadn't been for the volcanic eruption on Santorini one fateful Fall, the Minoans might have surpassed modern Western Civilization. This intrigued me, so the next day I went to the library to read about this Minoan civilization. The more I read, the more I became bothered by the absence of any mention of a volcanic eruption.

Many years later I mentioned this to a historian I met at a friend's party. He said "Sure, it has been discovered that a volcano erupted on Thera [also called Santorini], and this might have destroyed the Minoan civilization." I asked when the discovery was made, and he said about 2 years ago. I asked if the volcano erupted in the Fall or Spring, etc, and he laughed, saying no one would ever know that! Years later I read a book which placed the eruption in the Fall of 1628 BC. How could this old man have known these things 30 years ago?

When I visited Greece last year I made a point of pursuing this enigma with a visit to the University of Athens History Department. To my surprise, there was the old man, looking exactly like I remembered him 35 years earlier. He was teaching history, and he remembered our earlier visit in Michigan. His memory of our encounter was remarkable. I asked how he knew about the Thera volcanic eruption before it was discovered, and he nervously replied that the discovery was just a discovery by those who hadn't known about it.

This cryptic reply whetted my curiosity. He seemed concerned that I had pursued the matter. I asked if we might talk that evening, at a coffee house. He hesitated, but agreed.

We spoke for a couple hours, as is the custom in Greece, before getting around to the main issue. I asked how he lived, and he said that he taught history at Universities, but had trouble holding onto jobs because he insisted on teaching history the way he knew it happened, not the way it was reported in textbooks. During this conversation he asked about my life, and questioned me about many things. I couldn't figure out why he should interested in them.

Finally, I raised the question that made him uneasy earlier, about how he knew about the Thera volcanic eruption 35 years ago, and he merely said that he knew a lot of history. I pressed him further, and then he said "You won't believe the real explanation anyway, so I'll tell you. I'm a Minoan! I was born in the year you would call 1661 BC! Next June I'll be 3652 years old!"

That's when I realized he was a charlatan! He may have been a good history teacher, and he used that knowledge for impressing people with engaging, first person tales.

[This story was inspired by a friend, Claude Michaud. I met him in the 1960's when I thought he was about 60 years old. The last time I saw him, almost 40 years later, he still looked 60 years old.]

Here's the Minoan, or the person who inspired the story. Claude looked just like this 30 years earlier.

PART FIVE: POST- HOLIDAY

CAT BIRD LESSON

1993.08.08

For the past several days I have been at war with a pair of cat birds. The birds had become annoying, not only for harassing the crows and our pet cat Fluffy, but by becoming inexplicably noisy for no reason. They have a penetrating short chirp, which they issue incessantly, all day long, and an occasional raspy, loud noise which is devoid of all melodic content. The raspy sound I soon noticed was used to intimidate, as it occurred every time they swooped down in a dive bombing attack at Fluffy. When a crow sat on a utility wire nearby, the cat birds attacked and harassed the crow unmercifully, using the raspy intimidating sound. I think it was this combination of incessant, irritating noise and intimidating pestering of other innocent creatures that caused me to declare war yesterday.

I was armed with a $20 water gun, that was advertised to be able to shoot a stream of water 70 feet. My shots always missed the mark, but they succeeded in scaring the cat birds away. "Good; serves you right!" I declared, "that's some of your own medicine." I brought my front porch chair to the back yard, where they spent most of their time, and resolved to spend as many hours as were needed to harass them back, until they decided to move to some unlucky neighbor's property. I had to nip this in the bud, for I didn't want the rest of my days upset by the intruding sounds of these irritating birds.

Once, I thought I was succeeding. Whenever I issued a "warning shot," which I learned I could embellish by allowing some air to enter the front of the gun, the cat birds would fly to trees two houses to the south. But they kept coming back. "Stubborn birds!" After I shooed them away from the back, sometimes they'd go to the front of the house. Back and forth I walked, trying to anticipate where they would stubbornly reappear. Sure hope the neighbors didn't think I was crazy, walking back and forth, and looking up at birds that apparently didn't annoy them. If only it was legal to fire a BB gun, I could simply shoot each of the cat birds when they were positioned for a safe shot. Just another example of the handicapping down-sides to city living.

I noticed something in one bird's beak, and the thought of them building a nest on my property only heightened my resolve to harass them until they left, permanently. A thought occurred to me, that maybe I should study their habits, like a naturalist, and thereby become armed with knowledge that could help me wage war more successfully. This is what my friend Al would do. When a crow lighted upon the top of the utility pole, I studied the cat birds harass them; they flew past the crow in one direction, sat on the line a couple feet away, then flew past them in the other direction, sitting again a couple feet away. Each time they passed the crow they would swoop as if to peck the hapless crow. The crow must have weighed 5 times as much as the cat bird, yet maneuverability gave victory to the smaller cat bird. The crow always gave up defending itself, and flew away.

"Fitting!" I declared to myself, recalling how the crows were the bullies of the bird world in our neighborhood. I remembered seeing a crow attack a smaller bird and eat it alive, last year. But I was too impatient to get the cat birds off my property, and rather than study their habits patiently I would even interrupt their harassment of the crows by trying to make sounds with my water gun to intimidate them away.

I remembered that I had forgotten to feed Fluffy, so I went into the house to get her food. I placed Fluffy's food dish within sight of my war headquarters, and resumed my cat bird watch. The darned birds came down to buzz Fluffy, while she was eating. While I stood over Fluffy to guard her from the harassing dive bombing birds, I wondered what Fluffy had done to deserve this! She's not like the crows, I told myself. Well, maybe just a little, as I recalled innocent Fluffy trotting proudly on a few occasions with a live bird in her mouth. Maybe that's why cat birds hate cats, and harass them.

I was especially unnerved when the cat birds perched atop the neighbor's antenna. I can't shoot at them if the water would end up going off my property, and it seemed like the birds knew this. All I could do is intimidate them with the sound of water shooting out at my nearby lemon tree, on my property. This would always send the birds flying off to the tree south of my neighbor's property.

My poor lemon tree. At least it was getting watered. In past years, when it had been dry, this would have been good. But this year we had good winter rains and the lemon tree was green and full. It had a good crop of lemons, all green so far. I looked forward to the day they would start ripening, so I could add freshly squeezed lemon juice to my after-work rum and coke. I walked over to the lemon tree to see when it might start bearing the desired fruit. While I was standing underneath, I thought I heard a small chirp.

How could that be? The cat birds were two properties away. I kept still, and heard another weak chirp from straight above me. What! Could there be a nest there, of cat bird babies? The foliage was so dense that I had to look from several angles, but then I saw it. A nest!

Suddenly, everything fell into place! With images flashing though my mind: the cat eating baby birds; the crows carrying smaller birds off to the neighbor's roof to eat them alive there; the cat bird with what must have been food in her mouth! The harassing made sense! It was the cat birds defense for a cruel world where creatures eat other creatures, and harassment is an option for smaller, gutsy creatures to survive. This gave me a new understanding and respect for the cat birds.

I struggled with a part of me that wanted so much to be rid of the annoying, raspy sounds, and the dive bombing nuisance. This part of me, which had focused so much hate, lately, was saying "destroy the nest!" but a new part of me was saying "protect the nest!" I got my stepladder, placed it under the lemon tree, and climbed to just below the nest. I used a stick to clear the branches, and noted the parent cat birds hovering nervously nearby. I knew that if I were to trim the branches from above the nest, it would be exposed in a way that the crows might target the baby birds. And

this might free my property of the pesty birds. But I also knew that I couldn't do this, for I had a new perspective, based on a new understanding of them.

The understanding part of me realized that the cat calls and harassing would cease once the baby birds were successfully fledged. This wasn't, therefore, a matter of two cat birds settling on my property to begin a permanent harassment. There was purpose for their behavior. A necessity! How refined is evolution that it would create such intricate behaviors so suited to survival.

I emptied my water gun, and put it away. I decommissioned my war headquarters, by moving my chair back to the front porch. And I went into the house to make a cup of coffee. And came back outside to hear the cat bird sounds with new ears.

As I write this, my heart is filled with a new love for nature. Outside my open window is a lemon tree. And in this lemon tree a miracle is unfolding, for there are two fledgling cat birds, now out of their nest and sitting on a branch, making chirp and cheep sounds. They chirp in answer to a chirping parent in the distance. Soon the parent arrives with food, and feeds one or the other babies holding onto a branch unsteadily. Occasionally a parent will fly to the ground and make a raspy warning, presumably, to condition Fluffy to stay out of the area, in anticipation of the time a fledgling may fall from the tree while it is learning how to fly. I've just put Fluffy in the garage, as I sense that flying lessons will soon begin.

The small-throated chirps are remarkably similar to their parent's chirps. The baby cheeps, however, are sweeter. I assume they will develop into the raspy sound, which they will use to protect their fledglings, someday. Just as both parents use their raspy warning cries to ward off potential enemies, both parents bring food to the nest. This is something humans can identify with.

As I sit here, looking up through my window, with up-welling eyes, into a lemon tree, I know that I am watching one of nature's miracles that has been taking place since life began; yet I am appreciating it as if it were the first time. I've had this feeling before, this emotionally profound awe with the beginning of life. It was when each of my daughters was born. It is fitting that we the living should be fascinated with the beginnings of life.

I feel a connection with the cat birds that is profoundly different from the connection I had with them one day ago. Whereas I had been filled with anger, and a desire to shoo them away, or even to kill them, today I am filled with an empathy based on understanding, and kinship. We are both a part of life, and go about our business of recreating our own kind in ways that evolution has provided for. We are part of an immense web of interconnected life inhabiting this battered planet.

A fleeting thought catches my attention, that just as I have become more "understanding" and tolerant of a cat bird after learning that it's behavior is driven by special needs, and that these needs can best be seen by taking the time to empathically place oneself in the cat bird's position, it might also be useful for me to sometimes place myself in another person's position, to see the world from their

perspective, so that I may be more understanding and tolerant of people who I might normally be too quick to make judgments about.

I have seen and felt Nature the way it was meant to be experienced, and I have learned. Today I am a wiser, and happier man.

Here's the tree (right of center) where the cat bird built its next.

PART FIVE: POST- HOLIDAY

BLANKOUTS

1993.09.18

It was not my normal time to eat lunch at the company cafeteria, and my regular lunch bunch had not yet arrived. I sat down at a table that seemed unusually empty, considering how crowded the rest of the tables were. A large group must have just left. One person was left, though. I sat on the opposite side of him, a few seats laterally. Before I could eat my first mouthful, this stranger spoke.

"Excuse me, but I need to ask you something."

"Sure."

"I'm a visitor to your company, this is the first time I've eaten at your company cafeteria, and I'm puzzled by something. I've been seated here for the past 10 minutes, and during that time at least 5 people have come to this table, sat down, and in a couple minutes they get up and move elsewhere. This is the only empty table, and I can't figure out why. Can you tell me why?"

"Well, no!" I replied. "I also noticed that this table seems unusually empty, but I couldn't say why."

Just then the stranger jerked, involuntarily, in a manner so grotesque that I knew immediately why the others had left. His head jerked backwards, and his elbows rotated outward, and the most scary grimace came over his face! I froze, partly out of courtesy, but also out of shock. He continued to speak.

"This has never happened to me before."

He spoke so matter of factly. The recovery was so quick; it was as if the jerking movement hadn't happened. I didn't know what to say.

"I didn't forget to shave, and my hair is combed. Is there something gross in my appearance that I can't see?"

What a puzzling thing for him to say! He seemed totally oblivious to the movement that convulsed him just moments before. Could it be that he was unaware of what had happened?

"You say this has never happened before?" I asked, lamely.

"Right. Well, usually when I travel I eat with the people I'm visiting. And when I'm at my company cafeteria I eat at the regular time with my associates. So I rarely eat alone; but still, it just seems strange ..."

Just then he jerked in exactly the same manner as before.

"... that people would get up and leave for no apparent reason."

It was obvious to me that he was unaware of his jerking, as incredible as that seemed. I decided to confront him with what was happening.

"Did you know that you are jerking?" I asked.

"Jerking?"

"Yes. Twice while we've been talking, you jerked your head and arms. It lasted about a second."

"I don't want to disagree with you, but..."

"You must not be aware of things when you start jerking, I suppose."

"But if that is true, how could I have no awareness of it?"

"Well, maybe the brain can blank out intervals of time while still preserving a sense of continuity. And in your case, whatever causes the jerking also initiates the blanking out effect. I don't know. But I assure you, you have jerked twice while I've been sitting here. And that must be why others have left the table."

"Damn!"

And he got up from the table, thanked me for being candid with him, and left! Leaving me sitting alone - at the only cafeteria table with only one person seated.

As I sat there alone, I wondered if such "time out's" can happen to just anyone. And if they happened, they could go unnoticed - unless they produced something noticeable to others.

Might our lives be punctuated by a random sprinkling of "brief blank out's" that are unnoticeable to ourselves and others? If they are brief enough, our behaviors would be unaffected. We could listen to people talking, and seamlessly reconstruct the entire flow of conversation well enough to carry on.

A movie is a projection of many still pictures, and the mind creates the sensation of smooth flow. The mind, which is a master of pragmatism, overcomes limitations of perception to create a reality that will "get on with the job of living." Perhaps everyone goes through life converting momentary still perceptions to a movie-like smoothness of experience.

Gestalts are perceptions of whole objects as unitary, even when parts of them are obscured. Could not the same phenomenon occur in the dimension of time?

If our perception of the smooth passage of time is an illusion, then who is there to tell us about our mistaken perception. If our behavior is not "unusual" during the normal sprinkling of blank outs, there will be no clues for others to notice. We all may be like the man with jerks, except that our moments do not reveal themselves and we shall never know about them.

PART FIVE: POST- HOLIDAY

While engrossed by this intriguing thought, I slowly became aware of the fact that although the jerking man had left at least 10 minutes before, I was still the only one at the table. Could it be...

THE JACKET FROM BANGLADESH

1993.12.19

"Have you found what you want?"

"No. My arms are too long."

"Try the extra large. Over here."

And the Fedco clerk searched in a rack for an extra large jacket. "I don't know about color, but you can try this on for size at least."

It went on nice, and felt comfortable. Arm length just right, even when stretched out as if holding onto a steering wheel. It wasn't as snug as I'd like around the waist, though. Let's see, an inside pocket, the outside pockets open on two sides, so there are four front pockets.

"Lots of pockets," I said. "Is this water proof, or water repellent?"

"It says proof."

The tag, indeed, said water proof. I noticed that the coat came from Bangladesh.

"What's the difference with the other coats, over there, beside the fact that these are from Bangladesh?"

"Nothing, really. They all use the same materials."

I noticed the sign, "*For Sale, $39.95.*" Not bad. Color isn't great, but it fits better than any other jacket I had. "OK, I want this one."

A few days later, I took a hike in the mountains. It was December, and cool enough to wear my new jacket. I stashed my wallet in the inside pocket, some candy and nuts in an outer/upper pocket, and also some gloves in the outer/lower pockets.

Two miles up the trail I took a rest. It was a good time to eat some nuts. I was warm, so I opened the jacket. That's when I noticed another pocket. On the right side, inside. A small one. "I wonder what that pocket can be good for?" It zipped open, and was quite deep. "Hey, maybe I could put my cell phone in here." At the bottom was an inspection slip, as usual. It was folded, not like other inspection slips. And it wasn't!

It was a note, with neat hand writing!

"Please, American, bring me good luck. I work hard making coats. I want to be free." And it was signed "Sevali Galu. 139 Teshinka, Baloring, Bangladesh."

I felt bad, after reading the note. Was this Sevali a slave worker? I've heard of China using political dissidents as slave workers in clothing factories, but what about Bangladesh? All I could recall about Bangladesh is that they have a lot of typhoons

and floods that kill lots of poor people living on the lowlands by the sea. I couldn't even picture Sevali, as I had no idea whether that was a man's name or a woman's.

Walking down the trail, thinking about my jacket differently, it struck me as preposterous that on the other side of the world, about as far as anyplace can be from me, is a person who helped make this jacket that kept me so comfortably warm. And I knew the person's name, but that person didn't know mine. "That's not fair. I must write a thank you note."

And so, later that day, I wrote a brief note, thanking Sevali for making such a nice coat, and I wished her, or him, good luck. Feeling awkward about not knowing if I was writing to a man or a woman, I asked Sevali to write back, and to tell what life was like making jackets in Bangladesh.

A month later, I got an airmail letter from Bangladesh.

"Dear Mr Bruce: I am very happy to receive your letter. I know real people buy our coats. You are the first American for me to know. You ask if I am a man or woman. I am not. I am 13 years old. I learn English at school. The boys tease me, and say I am a boy. The girls say I am a boy too. I am a girl. But I think all boys and girls are silly. Men and women too. I go to library, not play with girls, or go with boys, like others. I pretend to be the same, but really not. It is being a slave to live with everyone here. I know that bigger world exist. Books describe different ways to think. I like German thinking. Do you know Schopenhauer? He my favorite. Please tell, is American life like Schopenhauer says to be? Not be silly, think more? You bring me luck, your letter. I read more. Thanks. You write again, please. Goodbye, Sevali."

PART FIVE: POST- HOLIDAY

Here's the jacket from Bangladesh, worn by the author who is removing a flashcard from the MTP instrument installed in a NASA ER-2 airplane (1994).

PART FIVE: POST- HOLIDAY

THE PERCEPTIVE MARTIAN

1995.01.12

A perceptive Martian once roamed this earth and became quite curious about human behavior. As he studied, he first arrived at the conclusion that behaviors are driven by the question: *Do I have what other people want?* This would explain why people follow fashions - in clothing, mannerisms, lifestyles, and even ideas. While young boys have sports heroes and dream of being like them, young girls want to be called pretty because everyone acts as if that is a compliment. Inherent in this question is the corollary: *Can I change what I have, or appear to have, and end up with what people want?* As if believing in a "yes" to this question, people buy flattering clothes, try weight control regimens, and learn important job skills. In summary, the Martian believed that humans are driven, at some subconscious level, by the question *How do I measure up, compared to others?*

But the Martian noticed that some people, generally the more mature ones, seem to be asking another question: *Do I have what **I** want?* It's as if these few people had grown *beyond* the first question, and had substituted for it this newer one. The corollary question for these people was also different: *Can I change so I have what I want?* It is not clear to our observer whether these few "self-directed" people were once "other-directed" and merely grew from one to the other, or whether they were always inclined to be other-directed. By the Martian's objective standards these newer people seemed to fall into foolish behavioral traps less often. They also tended to be more like each other in different cultures, as if they were drawn toward a universal template, from which specific cultures were aberrant departures.

But lo, our Martian noticed one more sub-category, even smaller in numbers because they were drawn from the previous category of people. These rare souls were asking *Why do I want what I want?* And their corollary question was *Can I choose what I want?* The Martian was especially pleased to note that the people who asked these questions always ended up with answers to the first question, but for the second question they were disheartened and uncertain. Their answer to the first question was that genes are manipulative creators of individuals for the sole purpose of their (i.e., the gene's) proliferation. They called their viewpoint sociobiology (some called it evolutionary psychology because sociobiology had gotten bad press when was first publicized). Curiously, when these people answered the second question, they invoked the same arguments about the genes to state that the genes set our values so it is impossible to be free of their influence in eschewing old values for the purpose of setting new ones.

This might have been the last category of people the Martian could discern, but one day he acknowledged that someone defied all the others. He believed that it was meaningless to state that a person was asking a question, then choosing or changing their behaviors. People, he believed, were no different from a rock, in the sense that the movements of every particle of both is governed by the same physical laws. According to this argument a person cannot "choose," and thereby "change"

the course of future events, any more than a rock can. Both ideas are preposterous; so neither the rock nor the person can have this weird capability. Free will is an illusion, and all experience of it is merely the experience of a spectator. There was only one person on the planet who thought this way, and the Martian might have discounted him - except for the fact that this person was the Martian!

The perceptive "Martian." (Thank god I'm not human.)

PART FIVE: POST- HOLIDAY

LITTLE BIRD

1996.01.22

Once there was a little bird that had a cheerful attitude. When it first raised it's head above the nest edge, and looked out, it proclaimed "Oh, what a beautiful world!" And life was good for this little bird. When mother came, it chirped louder than its sisters and brother, and it got lots of food. What a beautiful mother it had, too. They were blue and grey, which made a striking contrast. Siblings were a duller version of blue and grey, drab almost. Little bird was brown! At first, this didn't bother little bird, for everything was going its way.

Little bird felt bad that it got more food than the others; so it chirped less loud, hoping to help its siblings. This worked, but still little bird grew faster.

Then one day it was time to fly. Only little bird was ready to fly, for it was bigger than its sisters, and even its brother. Mother bird tried to help, but it seemed to have a slightly different way of flying. On its own, then, little bird learned how to fly. And, one bright sunny day, it flew off - never to return.

While sitting on a branch, wondering what life was all about, little bird noticed a big brown bird light upon a nearby branch and stare Little Bird's way. "What do you want?" Little Bird finally chirped. "I'm your mother" the other bird answered. "But you're not blue and grey, you're brown - like me." "That's right, I'm your mother." And thus began a conversation that was most disturbing to Little Bird.

For the brown mother said that it did not mean to abandon it to another bird's nest; rather, this is what all brown birds did. This was a good tradition because it allowed brown birds to raise more brown birds. The blue and grey birds were dumb, and fed babies not their own. But it was their fault, for being so stupid.

Little Bird didn't like this explanation. It liked blue and grey mother, and it even liked its blue and grey siblings. They grew up together, and Little Bird liked being good to the others. When brown mother learned of these feelings, it became upset! "No, don't think like that! Those blue and grey birds are dumb, and they're only good for hatching your eggs and raising your young."

Little Bird flew away, and wanted to be alone. But brown mother followed. Brown mother had a friend, who came and sat next to her, and they both looked at Little Bird. The friend began to lecture: "You must do as we do! It is normal! All brown birds lay eggs in the other kind of bird's nests. It is our proud trademark. We are known throughout the world for doing what we do. We have a name, and it is Cuckoo Birds. If you can't do as Cuckoo Birds do, then you are not normal, and we shall have to change you!"

Poor Little Bird! It didn't want to change. Why can't brown birds and blue and grey birds like each other? Why was Little Bird different? Little Bird didn't want to treat blue and grey birds badly, but Little Bird also didn't want to be different.

The brown mother's friend could see that Little Bird was different. And she shamed Little Bird, repeating over and over that it was good to be normal. Little Bird wanted to be normal, and it wanted to please brown mother, so it pretended to agree with brown mother's friend, who merely wanted Little Bird to be normal. After some more badgering, Little Bird finally convinced brown mother and the friend that it agreed that it was bad to make a nest, and good to lay eggs in nests the dumb birds had already made. The brown birds flew off, with brown mother barely saying "goodbye."

Secretly, Little Bird wanted to see blue and grey mother bird. But that was wrong; it wasn't normal. So poor Little Bird flew off, feeling uncertain about its future, and also feeling uncertain about being "normal."

Little Bird flew far away. It kept growing, and when it was ready, it felt like making a nest. And it made that nest. And layed eggs in the nest. And it stayed at the nest, and when baby birds hatched, Little Bird went out and fed them - just like blue and grey mother bird had done. Little Bird felt good about what it was doing. In spite of the fact that it wasn't normal!

This isn’t Little Bird, but my Blue Jay friend shows trust of humans that Little Bird might aspire to.

PART FIVE: POST- HOLIDAY

RESTAURANT THOUGHTS

1999.04.30

Now that I'm retired, and free of tiresome business trips, I rarely go to restaurants alone. Today, in a fit of exuberant rejoicing over being free of the manifold problems I'd been helping my neighbors with, I impulsively decided to go out for lunch - alone. As it turned out, it gave me another opportunity to reflect upon that endlessly fascinating subject: ***the way people are.***

While seated, waiting for the waitress, I sensed that my perspective of people in public has changed since childhood. With youthful eyes I saw everyone as "normal," or, in today's vernacular, everyone had their "life together." When I went along with my parents to a restaurant, for example, I saw the waitress as a waitress, busboys were just busboys, and other patrons were just normal people eating out. Now, with a lifetime of experience coloring every perception, I see a waitress as a person wishing to be somewhere else and having a myriad of personal preoccupations, I see patrons as people with secret problems and unending troubles coping with life, on morning walks past residences in my senior-only mobile home park I wonder what "independent living" problems are being dealt with inside, and all the while I see myself as the only worry-free, "together" person in the world. This perception must be exaggerated, but that's how things sometimes look to me.

While musing over my unusual way of looking at people, I overheard a young man seated at a table behind me who had the worst case of "burst talk" that I'd ever encountered. His speech came out in tightly-packed bundles of barely-pronounced words, like bursts of machine-gun fire. If he wasn't medicated, he should have been. How, I wondered, could his woman companion tolerate him? People flawed by a nervous, barely-together demeanor constitute a public contagion that everyone can do without. I feigned the need for a toothpick, which gave me the excuse to get up and walk to somewhere in order to see what he looked like. Of course, he looked "normal," which is the way I might have perceived him when I was a child. But I've seen the world and have lived life, and now I know he's not normal.

The people at another table mistook the busboy for a waiter, a common mistake for those who see the world in terms of their own needs. I recalled the saying "a hammer sees everything as nails."

The busboy, seeing patrons from his perspective, must look forward to quitting time, hoping for as few messy tables as possible. Perhaps he groans silently whenever people enter the restaurant. The proprietor, on the other hand, must feel good when more patrons enter. He probably views the waitresses and busboy as his means for earning money, a way to buy that new car that's in the ads. Maybe the man at the other table is a doctor, automatically seeing other patrons with the expectation that they might be one of his patients, or maybe seeing them as potential patients, and noticing if they show evidence for the malady he treats. Salesmen must see people as consumers, tailers would notice how men dress, shoe repairmen would note the state

of people's shoes, undercover security people see milling customers as possible shoplifters, and the list of personal perceptions is endless.

I was wrong in childhood to see others as simply normal people doing what they seemed to be doing, who in their turn viewed everyone else as normal people doing what they seemed to be doing. The world is a more complicated place, and it takes a lifetime of observing and pondering to glimpse the way it really is. Perhaps no person on public view, or elsewhere, is "normal" in the sense that we imagine as children.

How sophisticated I am now! That said, I wonder how things would seem if by some magic I were to live another 200 years; would I reflect upon the naive perspective of that 59-year old man, complacently complimenting himself about how perceptive he had become during a mere few decades of experience, wondering and marveling? And although I now feel like the only "together" person in the world, I don't know what people think when they see me. Maybe someone at a table I hadn't noticed was observing me, and speculated upon this poor, lonely person with no one to join him while dining out.

I could be wrong. I could be wrong about everything! Nobody can really know his surroundings, or even himself. This much I know.

Same restaurant, another day, with friends Joy and Alfred.

PART FIVE: POST- HOLIDAY

I TURN ON THE SUN

1999.05.22

I was eating my birthday breakfast of bacon and eggs, an unusual departure from my otherwise vegetarian diet, when Sarah entered the dining room and began to meow. Over the years I've come to guess her wants, even though all meows sound the same to me. I make my guess from context, and her actions. Usually, when Sarah's hungry, she'll knock over a plastic container with her food inside, and the one-foot fall can be heard throughout my mobile home. Her sister, Mahi, has learned how to pull down a ribbon/shoe-string toy the kids made for her, and I always reward her with play when I notice that the ribbon toy has been pulled down.

Although Sarah hadn't knocked down the food container, I was anxious to quiet her, so I got up to check her food dish. After watching me put more food in a dish that already had some in it, Sarah walked impatiently down the hall. This usually meant she wanted me to open the sliding door to the "sun room," so named for it's many windows of which the eastern ones were the most appreciated in mornings. I was puzzled to see what I thought I knew, that I had already opened the sun room; yet Sarah entered, and meowed. "What can be your problem!" I exclaimed. That's when I realized that it was overcast, there was no sunlight in the sun room, and maybe Sarah was asking me to "turn on the sun!"

Poor Sarah! She didn't understand. She must think of me as some kind of god, who turns on the sun in the morning and turns it off at night. After all, I do this with room lights. And the food I put in her dish does not come from a hunting act, but appears magically. My girls say that I'm Sarah's favorite, with a tone of voice that conveys envy and jealousy; and I shrug it off as my being the one who feeds her, opens the sun room - and, as I can now add, who turns on the sun!

PART FIVE: POST- HOLIDAY

Sarah, on her last day, dignified as usual and in pain from inoperable cancer, just before going to the veterinarian to be euthanized.

PART FIVE: POST- HOLIDAY

MUST WE TOLERATE INTOLERANCE?

1999.07.31

"I'm tolerant, and merely wish that intolerant people be exterminated!"

People having unconventional ideas wish that society could be more tolerant. For every free-thinker there are a dozen intolerant people ready to censure the expression of new thoughts. Is it logically consistent for the free-thinker to wish for a way to constrain the actions and expression of intolerant people? Can someone preach tolerance, wishing for a more tolerant society, and also call for restraints to be placed upon intolerant people?

Is it not paradoxical to propose the promotion of a more tolerant society by advocating intolerance of a specific category of that society's population? It's always unnerving to encounter paradoxes, such as the slip of paper that states, on both sides "The statement on the other side of this paper is false!" yet that seems to be the same category of paradox faced by tolerant people wishing to rid society of intolerant people.

I suspect that intolerance is an invention of the genes. An evolutionary psychology article (Boyd and Richerson, 1985 and Henrich and Boyd, 1998) models a behavioral trait called "conformism" and shows that individuals within tribes fare better when they tend to adopt tribal customs and beliefs. The model shows that "a tendency to acquire the most common behavior exhibited in a society was adaptive ... because such a tendency increases the probability of acquiring adaptive beliefs and values."

The term "adaptive" is crucial to understanding the implications of this work. Presumably the genes that incline the individual to conform are the beneficiaries of the conformism. But a behavior that is adaptive for the genes that construct an individual may not be "adaptive" for the individual. In other words, a behavior might jeopardize the well-being of the individual while it serves his genes. Reproductive activities are the most glaring example of this, for they place the individual in harms way (male/male combat during competition for female access, female dangers during birth process, etc.), and force individuals to engage in much more work than would be needed to merely sustain themselves.

If conformance benefits the genes, then might the enforcement of conformity also benefit the genes? Intolerance of noncompliance with group norms could be a mental mechanism invented by the genes to overcome logic and enforce conformity when it is patently not in the individual's best interests to do so. A young boy may prefer to chase butterflies when he is expected to learn warrior skills, and since butterfly chasers are less useful to fellow tribesmen than warriors, it is natural to expect that the genes have provided a mechanism for tribal members to pressure errant individuals to adhere to what is in the common (i.e., shared genes) best interests. The social pressures used to enforce this adherence to tribal customs is what more recent generations, groping for liberation and experimenting with individualism, have labeled "intolerance."

Conformism and intolerance could be "opposite sides of the same coin" for getting a genetic job done. This "coin" would sometimes help an individual become better adapted to conditions, but on occasion it would impede the individual from achieving individual well-being. And always, conformism and intolerance work against individual liberation from the culture the individual was accidentally born into.

I like living within a culture that has become more tolerant of new ideas than perhaps at any previous time. It seems impossible to imagine a primitive tribesman insisting upon expressing beliefs that conflict with those enshrined in tribal custom, since a deeply entrenched part of us knows that the disobedient individual would be banished. And banishment, for our distant ancestors, was equivalent to a death sentence, as the support of a tribe was essential to survival. Individuals who demanded tolerance of new ideas would have simply disappeared, and will not be found among our ancestors.

So this is a theoretical explanation that might account for the intolerant attitude that comes so naturally to humans. If intolerance comes naturally, then it will be difficult to discourage, and tolerant societies may be short-lived. Specific conditions may elicit intolerance, even among people who would agree with arguments for tolerance under benign conditions.

In this way we might try to understand what happened in pre-war Germany. If Germany's economy had been better, if Germany's prestige had not been so extremely decimated by lopsided settlement conditions of the first world war, perhaps the Nazi's would not have recruited so many followers to their intolerant cause. Some "brown shirts" might use my argument to exclaim "my genes made me do it" and seek exoneration on the basis of special circumstances. But I would argue that not all Germans succumbed, and those who took heroic stances by protecting Jewish neighbors show that people have different intolerance predispositions. As with all human traits, even those that are contingent on situation, every person inherits a different trait strength - which is to say that they inherit a different probability of exhibiting the trait compared to others in the identical circumstance.

I am arguing that some people are inherently less tolerant than others, and it is in real-world situations that we begin to learn which people are inherently less tolerant. It may be that the expression of intolerant attitudes is only 40% genetic, and the rest environmental. It can still be argued that real-world situations reveal in a statistical sense those people who are inherently intolerant.

I shall stop-short of recommending how those of us who are inherently tolerant should deal with that majority among us who are inherently intolerant. Rather, let me suggest that thinking people be aware, and be wary. Let us never apologize for the differentness of our ideas even though we are circumspect in our expression of them. For anyone engaged in a journey of discovery in the realm of ideas it is important to climb forbidden hills, and look upon those valleys so feared by the masses. There may be a better place in one of those valleys, not just for individuals,

but also for societies. Our timidity has its origins with the genes, which are not necessarily designed to assure healthy societies or individuals.

A free-thinker's stance on intolerance must acknowledge realities, especially in public proclamations. Intolerance is a formidable force endurably entrenched in human nature, and it awaits the thinker having new ideas with unkind intent. Mindful of these realities, I conclude that the prudent path in life for thinking people is to quietly refrain from berating intolerance!

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PART FIVE: POST- HOLIDAY

This group photo shows how many of us support a field trip to somewhere in the world to study the health of the stratosphere using instruments aboard the NASA ER-2 airplane. Most deployments consist of 100 to 150 people, including the aircraft ground crew. When this many people are together in a foreign land, working 12 hours per day, minimum, for 6 weeks, typically, it is inevitable that some kind of bonding occurs. I could tell stories about each person, funny things they've done on field trips and scientific conversations we've had. Everyone has earned respect for being good at something. This picture is unrelated to the previous story; it's presented as a "set up" for the next one, the last in this book.

PART FIVE: POST- HOLIDAY

ADIEU

2000.06.23

Fortunately, it was dark enough that she couldn't see my tears.

Yes, this is about love. But not the "love" you're thinking about. It's more about one's "love for life."

I barely knew the woman. She operated an instrument on the research airplane that was taxiing away just now. I knew her from being on many flights together, where we operated our respective instruments.

She had walked out to show a friend the airplane, and was telling her about the excitement of being on these missions. I asked her why she wasn't on the plane, and she explained that she'd be joining it in Norway. She asked why **I** wasn't on the plane, and I merely said I wouldn't be needed on this mission.

As they walked back to the hangar I was alone again. I sat on a box that was at the tarmac's edge, and waved half-heartedly, knowing that it was too dark for MJ to notice me. Besides, he was probably preoccupied with power switchover glitches, rebooting the CAC computer, and reporting his readiness status using the headset microphone.

My wave was really just symbolic. This would be the first time my understudy would be in charge of "my instrument" as it departed for another mission. For 16 years I had nurtured my "baby," an instrument referred to by the acronym MTP. I had slowly improved it to a level of performance that made it a regularly used one on NASA airplanes conducting atmospheric research studies. And I had just finished preparing MJ to take over my work in anticipation of retirement.

I felt like a parent fretting over a child's readiness for the big world. Had I trained him for enough situations? Would he know how to respond to the instrument's occasional malfunctions? After participating in about 20 previous missions, this would be the first one I wouldn't be on. Already, I was missing the excitement of being part of a team doing new things, trying to learn if an ozone hole was likely to appear over the North Pole the way it did over the South Pole. I would miss the good-natured banter on the plane, and the camaraderie of the group I had come to know and like during the past several years.

While watching the DC-8 under a gradually darkening sky, I was also pleased that my instrument would probably continue to live into the future as a staple research tool for airborne atmospheric remote sensing. Just a few years earlier, when I began to think about retirement, there was no one in-training for taking over my role. The thought of my instrument "dying" with my retirement didn't bother me, really. It's my nature to not care about such things. As a child I would crumple my drawings and throw them away, and only years later did I learn that my mother had been retrieving them from the wastebasket for a scrap book she was keeping. I still throw away

ideas, and neglect publishing. But, this time, as luck would have it, MJ became frustrated with his other work at exactly the time that training a replacement would have to begin, and when I asked him if he'd like to be the next Mr MTP, he agreed with surprising enthusiasm. So, I do admit that a part of me was pleased on this day, January 24, 1996, to see the taxiing plane with my instrument aboard, knowing that a new Mr MTP was in charge.

It was my decision to retire early. I was 56 years old, and the premature death of a couple cousins during the past year drove home the reality that my father's family harbored an early heart attack gene. Seven out of eight paternal male relatives died in their fifties. If it weren't for that concern, I would be on the plane, now taxiing toward the runway.

When it took off, roaring into the night sky toward Alaska, I waved one last time, and quietly said "adieu."

MJ, the new Mr. MTP, controlling the MTP instrument in the NASA DC-8.

RETROSPECTIVE

My holiday ended 16 years ago, but like all good holidays it left a good residue of memories and attitudes. In a sense, it gave me the poise for living that I had been seeking decades long. One of my favorite sayings is “Life’s an immense preparation for something that never really happens.” That’s a fair description of my pre-holiday restlessness. I’m now living that life for which the previous one was an immense preparation. It’s a reward I’ve earned.

Each life can be viewed as an “inevitable unfolding.” We become who we were meant to be, provided horrific events do not sideline our development. Twin studies show that identicals become more like each other as they age. We can use this finding to imagine that every person has a hypothetical twin, and derive from this that each person matures toward who they were meant to be.

The feeling of slowly becoming myself is strong with me. The Holiday Transition featured in this book was an essential part of this growth. When we are true to ourselves it should not be surprising that we are more comfortable with ourselves. The knocks of life provide opportunities to experience many ways of being, and choose those that seem right. The inner poet that I found during my holiday was one of those parts of myself that had been neglected. The writer that emerged near the end of the holiday had new things to write, and all things written had a new maturity.

Although I am closer to who I am, I am convinced that were I to live another several decades I would become even closer to that inner self. This won’t happen, but the theoretical possibility is there, and the prospect of additional discoveries of who I am gives the future a special appeal.

PART FIVE – POST-HOLIDAY

YOUR ODYSSEY

1992

From dust to stars, and dust again;
once more a star, with earth in orb,
evolving life, on land and sea,
producing Man, and making me.

Ageless atoms, you leave behind
countless stories, now combined.
Configured thus, you now form me,
providing for my odyssey.

From single-cell, to feeling child,
who learned the skills for living life,
my opened eyes viewed worldly scenes,
I filled with hope, and dreamed some dreams.

I worked and toiled, for decades long,
some lucky breaks, and then achieved!
Triumphant pause, a time to see,
the rush of time, the end of me!

My song is brief, it's almost sung,
deserving rest, my war I've won.
But from within, that short-termed we,
you atoms yearn to wrestle free.

Restless atoms, you must resume
uncharted paths, for endless time.
I give you thanks, and set you free,
as you resume YOUR odyssey.

APPENDIX A – MORE STORIES

This section is reserved for stories that are too long for the main section of the book. In the First Edition they appeared in Part Three, Stories: 1980 - 1995. They continue to illustrate the Holiday transition, but I also surrendered to the temptation to insinuate some of my sociobiology thinking into an otherwise innocent story, as the first two entries illustrate.

APPENDIX A – MORE STORIES

FREDDIE'S POPULATION FLUCTUATION MODEL

1990.03.01

[This entry is kind of long. It includes results of spreadsheet calculations that I made while studying the questions treated in this whimsical story. Normally, such material would be submitted somewhere for publication, but I didn't know where to submit and I didn't want to review everything done previously by others that would have to be included in a formal paper. Besides, it's more fun writing fiction. The name Sue Barker is an "inside joke" which only a few within the sociobiology community would recognize]

"Freddie, what's wrong?"

"The world's turning upside down on me. I don't know what to think."

"Is it your Sociobiology 101 again?"

"Yeah. My term paper. I keep getting all the wrong answers. I turned it in this morning, and I'm not happy with the way it turned out. I thought it was a smart idea to go for a computer simulation of population fluctuations simply because I'm a computer major."

"You mean you didn't write the perfect program?"

"It's not that. I kept getting opposite answers."

"Opposite from what?"

"Opposite from the right answers!"

I felt sorry for Freddie. He almost never gets things wrong. He's not used to failure. I offered to treat him to lunch so he could explain what happened. It turned out to be a long lunch. I became engrossed, and forgot about the time. We must have talked for several hours.

It seems he started out with a simple model for something called "mutational load," which a Soviet scientist described in a 1988 *Nature* article. He chose a Monte Carlo simulation, which he found to be very effective in many previous situations. IQ was used as a "dummy parameter" to stand for anything that was heritable and affected survival.

One of his first results is that offspring average IQ must be about 2 points lower than their parent's. But those who survive a "culling" effect, in which it was typical for 75% to not survive to reproductive age, exhibit IQ averages the same as their parents.

That seemed straightforward, though it seemed odd that nobody had previously called attention to such an interesting phenomenon.

The Monte Carlo simulations connected parental generation IQ to something called "genomic IQ." Each generation of surviving offspring had an average IQ that was intermediate between that of the parent and that of previous generations. Low IQ parents tended to have offspring brighter than themselves, while high IQ parents tended to have offspring less bright than themselves. The offspring IQ tended to "spring back" toward a preferred "genome IQ," which changed very slowly with time. This effect was included in the Monte Carlo model.

Freddie's sociobiology professor suggested that the model include a relationship between the survival rate of offspring versus the population's per capita accumulated wealth, such that wealthy societies afforded better survival rates. Birth rate was related to per capita wealth in a similar manner. This was modeled using the standard relation having decreasing birth rate with increasing wealth.

One key hurdle was to express a population's change in accumulated wealth during a given generation. A power law was finally chosen, which related the wealth change to the population's average IQ and their per capita wealth.

Freddie's model simulations showed very little to generate concern, at this point. The genomic IQ exhibited slow excursions of typically 10 points with timescales of about 2000 years. He made several runs to deduce the feedback forces, and concluded the obvious: "low IQ populations" could not sustain "high per capita wealth societies," while "high IQ populations" could not sustain high population levels (because their low birth rates were not sufficiently compensated by their higher survival rates). The reassuring thing about these runs is that IQ movements did not go forever in any one direction, but oscillated with periods of roughly 2000 years.

"That's great, Freddie!" I exclaimed, trying to cheer him up. "You've shown another way to account for the spacing of the golden eras of the Greek/Roman civilization and the Renaissance! And also the Minoan in relation to the Greek, perhaps." He didn't seem impressed by this attempt at congratulation. Instead, he was glum.

"Wait til you've heard my next simulation; it's not so wonderful!" And he proceeded to explain what the professor had suggested for the next model improvement.

The unsatisfied professor stated that populations that are Gaussian for one trait may be non-Gaussian for another. What this meant, for the model, is that Freddie had to account for the fact that the higher IQ parents within a generation might be more successful in assuring the survival of their offspring than were the lower IQ ones. In other words, the model had to treat offspring survival rate as differentiated within a generation such that individual parental memberships adhered to the specially specified survival rate relations.

Moreover, the same differentiation within a generation had to be applied to the birth rates. So, during any given generation time-step, Freddie had to take into account

how many offspring each parent combination produced, and how many of them survived to adulthood. Freddie's a computer program major, so this was easy. No problem!

The new model simulations had different dynamics. Population oscillations had shorter timescales. Probably due to the Monte Carlo paradigm there didn't seem to be any predominant period of oscillation. Dramatic changes in population IQ, typically 10 points, occurred in 200 years!

This, by itself, could have been disturbing. But what seemed to really bother Freddie was the sign of the correlation of IQ changes with population, and with per capita wealth. In every instance IQ rose when populations fell, which also coincided with per capita wealth values that worsened. The converse was true: when populations rose, and per capita wealth increased, IQ declined!

"So why does this bother you, Freddie? Couldn't you have predicted that from the model assumptions?"

"Yeah, the model did what it had to. But think of it! When times are good, and getting better, the people were getting dumber! That's wrong! I don't care if the computer thinks that's right!"

"Well maybe you left something out of the model that might 'correct' that problem," I suggested. "Everyone knows that world models are notorious for leaving out dynamically important factors." Maybe I said the wrong thing.

"It gets worse! Save your bright ideas for when I really need them!"

Freddie proceeded to describe what the professor suggested next. It had to do with the tendency for humans to be polygamous, as borne out by a preponderance of polygamous primitive societies. Somehow, polygamy had to be incorporated into the model in a way that accounted for its influence on fitness, as represented by the dummy parameter IQ. That was a harder challenge for Freddie, for it took him further a field from computer science than any of the previous model representations. But since this was a class in sociobiology, it was an appropriate exercise, and since the professor thought Freddie might actually learn something from it, poor Freddie was on his own to figure out a solution.

The first thing he did was to create another independent variable, because he wanted to retain IQ as a collection of things related to only intelligence. He invented MQ, or Monogamy Quotient. High MQ meant there was a strong tendency to be monogamous, etc. At the professor's suggestion he began keeping track of the fate of genes for MQ and IQ separately. Thus, individuals became carriers for gene alleles; and the model focused on the fate of the gene alleles rather than individuals. However, the "user" of the model still monitored the aggregate properties of the population, such as total population, average IQ, average MQ, per capita wealth, etc. In this sense the model user viewed model results in the same

way, but the model was achieving them with a more detailed representation of properties below the aggregate level.

The first experimental runs were used to impose different initial values of MQ, in order to study population behavior. Nothing interesting happened. Populations fluctuated as before, in similar accordance with different combinations of initial conditions for societal wealth, IQ, etc.

The professor came to Freddie's help at this point, and suggested a bold new improvement to the model. Since it was a Monte Carlo model, it would be easy to add the realistic property of uncorrelated inheritance of alleles at different gene loci. For example, a specific individual could be specified to inherit the gene for high MQ as well as any hypothetical mutation at the site of any other gene. To make this model upgrade work it was necessary to explicitly specify the presence of a large number of genes.

Genes were hypothesized to exist that coded for such arbitrary qualities as skin "color," body type, and others, which collectively came to be referred to as "anatomy genes." Other genes were hypothesized for such qualities as blood type, metabolism type, immune system function, which came to be referred to as "physiology genes."

The professor insisted that IQ be sub-categorized, since IQ is basically a behavioral descriptor, and other behavioral properties must be explicitly incorporated in the model. MQ was an example of a behavioral descriptor. It was fun devising new behavioral properties to ascribe to genes, and Freddie and the professor spent a lot of time sorting through the candidates. A final set had to be selected which was manageably small in number, yet large enough to represent important hypothetical contributors to population fluctuations. This set of genes came to be referred to as "behavior genes." IQ was just one of the behavior genes, as was MQ.

Having selected a half-dozen anatomy genes, another half-dozen physiology genes, and a dozen behavior genes, it was necessary to devise realistic interrelationships. For example, skin color could be related to sunlight exposure, which in turn was related to geographical location (i.e., latitude and cloudiness of climate), amount of clothing worn (i.e., coldness of climate), amount of time spent outdoors (i.e., lifestyle), and many other things. It was not possible to incorporate all of these factors explicitly, so a "lumping" strategy was adopted. When the model was running the user could arbitrarily impose a change in the aggregate of factors affecting "skin color," for example. The user would simply alter the payoffs and penalties for having various skin colors at some arbitrary time during the model run. This might correspond to a migration, or a change of lifestyle, or the adoption of clothing in response to a climate change.

The same process was used to reward or penalize blood types. It was arbitrarily assumed that one blood type had properties which were desirable for a long interval of time, and after some "change in the environment" (such as the appearance of a virus) another blood type was more desirable.

Behavior genes were a greater challenge. For example, a philandering gene was hypothesized. Freddie and the professor had long arguments about how to specify the payoffs and penalties of philandering. Freddie would state that he thought philandering would never pay off, and the professor argued that it would always pay off provided it did not jeopardize a monogamous relationship. Then they'd argue the merits of monogamy versus polygamy. Then the "rape gene" was brought up, and they'd argue about the merits and demerits of rape. The arguments got complicated, and the professor kept having to remind Freddie that the merits and demerits of any particular gene had to be measured by the way it fared in an environment of other genes, as opposed to how the individual carrier of the gene fared.

Freddie seemed to have the additional problem of confusing different measures of "good." Whereas he could accept that a gene was "good" in the sense of surviving many generations, he could not accept it as "good" from a "personal morality" standpoint. The professor had to keep reminding Freddie to not be influenced by his moral preferences when the task at hand was to develop a population model that was as realistic as possible.

They eventually began to develop a hierarchy of behavior gene groups. In their initial attempt, the first level of the hierarchy consisted of 1) IQ, to represent "posterior" brain functions, and 2) EQ, or "executive quotient," used to measure the capacity for those "anterior" brain functions that pertain to purposeful decision-making. They had great arguments about how to incorporate another scheme for gene grouping, wherein LB, or "Left Brain" index, would be used as a measure of the capabilities that are most strongly represented in the Left Brain, and RB, or Right Brain index, would be used as a measure of the capabilities that are most strongly represented in the Right Brain. There was no easy way to impose such a left/right grouping upon a pre-existing anterior/posterior grouping paradigm, due to the belief that a particular talent drew upon the participation of many specific locations from both sides. After many futile attempts to conceive of systems for cleanly-separated gene effects, they arrived at an unusual solution.

They would start thinking about genes in terms of subsets. For example, verbal skill depends on competence in Broca's Area (left/frontal) as well as Wernicke's Area (left/posterior). Reading skill is even more complicated, for it depends on competence in Wernicke's Area (left/posterior), character recognition areas (right/posterior), serial combining areas (left/posterior), and context-dependent meaning search areas (right/posterior). Since it is unlikely that any single gene would produce improvements in all these locations there probably is no single "reading gene." Instead, any gene that produces an improvement in one of these areas could be called a "reading gene component." This is a multi-gene view of reading competence. They decided that all complex competencies are to be thought of as multi-gene.

Another feature of their subset gene theory is that every gene usually has more than one effect. Thus, a gene that improves the "serial combining area" used in reading could lead to improvements in other tasks that required serial combining. Just as

important, genes that improve competence in one thing might decrease competence in other things.

Thus "armed" with their "subset gene theory," Freddie and the professor set out to create overlapping gene groups, without worrying about the details of the multi-gene origin of capabilities or multi-effects of each gene. This was a breakthrough, for it allowed them to postulate many gene groups that would not otherwise appear acceptable.

For example, they postulated a group of genes for PR, a "producer" index, used to measure the capacity for personal accomplishment, or productivity. They became bold, and conceived of PR's opposite, called PA, representing a "parasite" index, used to measure the abilities an individual might have for engaging in socially parasitic life styles.

At this point they had four behavioral gene groups: IQ, EQ, PR, and PA. Each one was acknowledged to consist of many individual genes. It was further acknowledged that in some instances a gene could also belong to other gene groups. This was a detail that wasn't important to worry about for the objective of developing a sophisticated computer model of population fluctuations, but it was an accommodation to the way genetics works.

It was clear that IQ consisted of many components. IQ tests suggest that at least a dozen components are recognizable. Some are even identified as residing in one or the other cerebral hemisphere. Since a person's IQ is generally high, or low, in all areas (of a hemisphere) together, there is a temptation to think that the genes that influence IQ are probably close together on the same chromosome. However, genes interact in ways that can make them appear to have been inherited together, and it is not necessary for the population model to explicitly contain these details. The model treated IQ as if it were created by a small group of genes, mostly inherited together.

EQ was treated the same way. MQ was classified as a subset of EQ. PR and PA, strictly speaking, are also subsets of EQ. The attractiveness of their subset gene theory was that it didn't matter which gene group was a subset of whichever other gene group. Thus, Freddie and the professor stopped worrying about the hierarchical relationship of gene groups.

However, they did start worrying about the functional relationship of gene groups. For example, specific PA strategies cannot be effectively practiced without the requisite anatomical inheritance. The socially parasitic strategy of philandery is more successful when the individual male is viewed by the females as sexually attractive. But what is it that causes females to view a particular male as sexually attractive?

"We had long arguments about this," Freddie told me. "Sue would argue that men did have the equivalent of peacock tails by which women judged them, and I'd argue that that was ridiculous!"

"Tell me Freddie, was it uncomfortable talking about these things with a woman?"

"Well, not really. Since I don't find her attractive, I don't care much what I say, or what she thinks of what I think. She is my professor, so I really don't have any choice."

"It must be useful being able to bring both perspectives to bear on problems that involve sexual strategies, isn't it?"

"We did have clashes, but I don't know if her sex had anything to do with it. Especially when she raised the question of why men have to exist!"

"You mean she actually asked such a question?"

"Oh yeah, and now I understand that it's a legitimate question."

And Freddie went on to explain why it's appropriate to ask why do men have to exist? The argument goes something like this. Men usually don't invest in rearing children. "Paternal parental investment" is always smaller than "maternal parental investment." The major contribution men make in being a father is one successful sperm! If the female could reproduce asexually, as happens in a few species, the male gender would not be needed. Without men, the argument goes, all offspring would be daughters, and all daughters would invest in raising offspring. More children could be raised each generation, which would have doubled genetic impact. Furthermore, the woman's genes would make up 100% of the daughter's genome, instead of 50%, and all granddaughters would be made from 100% of her genes, instead of 25%, and so forth. From the standpoint of the genes, having daughters asexually would be a more efficient way for them to reproduce themselves than the slower and more diluting process of reproducing sexually. So why are there males in so many species? And why do men have to exist?

"This question arose when we were trying to specify the rewards and penalties of monogamy and polygamy. In polygamy the father's parental investment is less than for monogamy, so it is even more difficult to account for why polygamy was so common for our distant ancestors. And if we couldn't account for this, we probably wouldn't be able to properly model the influences of polygamy and monogamy on population changes."

"Did you point out that modern men, who are monogamous, actually do contribute significantly to child rearing? Both directly, through being with them and teaching, and indirectly, by providing home, food, protection, and probably many other incalculably valuable things?"

"Yes, but she said such facts could only account for modern monogamy, not prehistoric polygamy. And whatever accounted for prehistoric polygamy has to be an important factor to not overlook in the model."

APPENDIX A – MORE STORIES

Freddie and the professor proceeded with their best estimates for the functional relationships between the behavioral gene groups and all other parameter's of an individual's life. They created a few additional behavioral gene groups, and a few additional anatomy and physiology gene groups, but these were mere refinements which did not affect the gross behavior of population fluctuation results. The greatest weakness in their model was identified to be the unrealistic functional relationships between the identified behavior gene groups.

They were surprised by an intriguing and unexpected result for the relationship between PA and PR. There was a category of population fluctuation which was produced by this relationship. When societal wealth accumulated, and the population rose, the incidence of individuals choosing the socially parasitic PA strategies increased! A time came when too many people were engaged in PA, and the remaining population of PR individuals could not sustain the level of per capita wealth. The non-productive individuals were "dragging" the living standard of everyone else down, and eventually the accumulated societal wealth began to decrease. By this time the lower IQ portion of the population had out bred the upper IQ portion, and these new members were further "sapping strength" from society at large. The dynamic was unstable, and always led to a population crash.

After the population crash, life was hard. Any individual who chose a PA strategy was not tolerated, and most individuals chose PR. Survival rates were low, so IQ began to rise. Another population cycle began. The seeds of every great age were sewn during the dark age preceding it.

Sue Barker was excited by this finding. She admitted that part of her excitement could be traced to the discrediting of Human Nature, which apparently had become a childhood need that lived semi-subconsciously into adulthood.

Freddie was less excited by this finding. He was troubled each time his moral values were "insulted," as he put it. "The model led to the wrong answer every time!" he would exclaim.

Sue was still troubled by the issue of why men existed, though. At times this unanswered question seemed more important than the unexpected new findings. She would badger Freddie about it, and imply that the model was incomplete because it didn't provide any clues.

"Sometimes I think she was obsessed by the need to explain the enigma of sexual reproduction, in order to be considered for a Nobel prize, or something. Then, at other times, I'd think she wanted to discredit men. I really didn't know why it was so important to her, but I found myself taking it on as my goal also."

"Tell me, Freddie, why was she spending so much time with you? After all, this was just Psychology 101, not a graduate level course. She was treating it as if it was your PhD thesis!"

"I think it was because she saw in me a chance to get answers that other people couldn't provide. I'm a computer major, and she could see how fast I could put the model together. She had never seen a Monte Carlo approach applied to sociobiological population problems, and it probably struck her as a unique opportunity."

"So how do you know she wasn't really interested in you, Freddie?"

"She took every opportunity to discredit men, and I'm sure she could see that it didn't make me happy."

"For example?"

"The time she pointed out an obscure detail in my computer output."

And Freddie proceeded to give an accounting of a remarkable finding. They had been studying various PA strategies. One dynamic that had been programmed into the model, at Sue's request, was the strategy of rape. She noted that several dozen animal species exhibit male rape of females. The females raise their offspring, which are in fact half hers regardless of whether the biological father was the female's mate or another male who raped her. It is in her interest to raise the offspring, provided she succeeds in concealing the true paternity. If her mate were to find out that an offspring was not his, he would proceed to harass it to death, thus making more parental resources available to his offspring. All this was well understood and explainable by standard biological theory.

The entire scenario of rape, concealment of paternity, possible discovery by the male mate, and subsequent harassment and possible death of the illegitimate offspring, all of this had to be somehow incorporated into the model. It was accomplished by adjusting the survival rate of rape offspring.

This was one piece of the puzzle that led to Sue's eventual finding. The other one has to do with "philandery," another dynamic that Sue insisted on incorporating. Married men commonly philander, so this was modeled by including a specified probability of philander offspring for each man. If the male adopted a PR strategy, his probability of having philandered offspring was reduced compared with men who adopted PA strategies. This was meant to account for the fact that successful PR men jeopardize their offspring's welfare by taking the risks of philandering, whereas PA men have little at risk by philandering.

Indeed, parasitic men often do not marry. They become "pirates," figuratively, and sew their seeds wherever opportunities occur. They often never see their offspring, so cannot provide parental investment, as Sue carefully pointed out to Freddie. "What good were such men?" she asked, rhetorically.

She described "Attila the Hun" as the ultimate parasitic male, a marauding pillager of other productive men's labors, killer of other men's children, and raper of other men's wives. She could not decide if such men adopted this strategy in response to

perceived environmental conditions or because they inherited genes that predispose them to be like that. Sociobiologically, she stated, it is understandable that such male behavior should exist. She speculated that their numbers might increase when there was more to pillage, when conditions were good for the majority of people. The argument she used is that when wealth existed in abundance there was more to lose in defending the excess wealth than in allowing it to be stolen. Hence, parasitic behaviors should occur during the "best of times" in the affairs of men.

This was her finding, and it pleased her. She was pleased that the model showed an intuitively plausible dynamic between degrees of male parasitic behavior and societal per capita wealth. The two factors had correlated fluctuations.

Whereas this finding pleased Sue, it really bothered Freddie. He kept seeing the model give the message that during the best of times the worst of human nature came out.

Freddie saw another pattern emerging which he suspected Sue was also aware of. Namely, that the worst aspects of human nature seemed to be exhibited by men. It was the men who were parasitic, who murdered, stole, raped, abandoned, and who instigated pillage and mayhem. The women bore children, were caring, endeavored to maintain stability, and protected offspring from murderous stepfathers. It was looking like all the ills of Man were caused by men.

"But I got even with her," Freddie said triumphantly. "I beat her at her own game. I pointed out that it was the women who maintained the worst aspects of men's nature by seeking out exactly those men who lived parasitically for their illegitimate liaisons. The fact that women find such men sexually attractive attests to their co-conspiratorial role in maintaining the undesired traits."

"But what would be in it for the women?" I protested. "What would be the payoff for the woman who seeks out parasitic men for surreptitious sexual affairs?"

"Easy," said Freddie. "Their son's are likely to be parasitic, just like their parasitic father, and they will carry the mother's genes into the future using proven parasitic strategies. The daughters, meantime, will give birth to sons who will be parasitic, etc. So the women who think pirates are sexy are playing a double strategy game. They're hedging their genetic bets by going with both competing futures."

"What did Sue say to that?"

"I think she was upset. She didn't dispute my interpretation, and even volunteered that if women didn't play the male pirate game they could put such men out of business in only a few generations. But since it would only take one uncooperating woman to undo things, it would not be possible for any of the women to liberate themselves from the encumbrance of being attracted to pirates once the dynamic had established itself."

Freddie's glee was moderated. He had succeeded in forcing Sue to see that men were not all bad and women all good. But he also thought that the bad that could be seen in some male strategies was ugly.

Freddie's major coup occurred, however, shortly after this minor one. Freddie solved the problem of why men should exist!

He had tried playing-off some groups against others. It was part of his attempt to understand why some populations exhibited more robustness against environmental assaults than other groups. He had controlled all factors except certain ones in order to try to isolate the key factor affording robustness. Freddie noticed that his polygamous populations were more robust than the monogamous ones. Of course he didn't like that finding, so he kept checking it for other initial conditions. All runs showed the same thing. The more polygamous, the more robust.

Instead of telling Sue, and seeking her advice about it, he proceeded with a detailed inspection to find out why polygamy conferred robustness. He noted that in polygamous groups, the ones with higher group survival rates, the individual male survival rates were lower when hypothetical environmental assaults occurred. This seemed paradoxical, but then Freddie was getting used to paradoxical model results.

The paradox was explained when he looked in greater detail. The individuals who survived became the polygamous heads of families, and the offspring of the lucky man bore his traits, which were presumably the same traits that enabled him to survive. Thus, in a polygamous society, a larger fraction of the offspring acquire rare desirable traits faster than in the monogamous society.

Freddie extended this finding to explain what men are for. Men's job is to explore mutation space, and provide a few good "winner takes all" survivors. Female offspring are the beneficiaries of traits received from their fathers, who were the "winner take all" victors of their generation. The children of each generation benefit for the same reason. Everyone benefits (except the loser males).

Freddie worried about the morality of this theory, as usual. His explanation made it look like most men were meant to die. As if most males were just cruel experiments, never meant to have families, and often not meant to survive childhood. Freddie thought it would be a better world if every man and every woman could grow up, get married, have children, and live a peaceful life. Freddie couldn't accept the fact that in the normal state human males had about a 20% chance of reaching adulthood, as did about 30% of women. And that only a small percentage of those 20% of male survivors succeeded in gaining access to women.

Freddie explained his findings to Sue. At first she was stunned! He had succeeded where she had tried, and failed! It was her question that he had answered. The irony is that he didn't like the answer as much as she did. It would have been more fitting for her to have made the winning speculation. But Freddie succeeded, not because he got the answer he was looking for, but because he had the tools with which to probe, and the courage to face the facts that his model results presented.

APPENDIX A – MORE STORIES

Sue congratulated Freddie. She said his term paper was now complete, and an A+ grade was too small a reward for what he had done. She offered to co-author a paper presenting their model, and presenting their results. And Freddie was happy about this.

Still, he was not happy about the messages he found in those results. He was upset! And Sue understood his emotional reaction. She had become more insulated from the emotional meanings of her work, as many practicing sociobiologists do.

She tried to explain to Freddie that every creature should give thanks to an innumerable number of unfortunate ancestors. Or rather, to contemporaries of one's actual ancestors, to the contemporaries who were the cruel and unsuccessful experiments of an uncaring Nature. But only through such "wasteful" and painful mutational experiments can Nature produce the wondrousness that each species indisputably exhibits. For every beautiful peacock there are many, many ugly peacocks. For every human brain that thinks, there are many, many brains that did not think so well. All these forgotten beings exist somewhere in the past. We, the living, are indebted to them.

"That was Sue's consoling message to me," Freddie Sole explained. "I don't know what to think. My world seems upside down. And that, Bruce, is what's wrong with me! Thanks for listening."

ROMAN TREASURE

1991.07.07

Last summer I took an "active" vacation. It was an "adventure vacation" archaeological dig near Rome.

You paid your own way there and back, and paid for their no-nonsense housing (tents). You even paid an additional fee for the privilege to work at their "dig."

My fellow diggers were nice. Mostly college students, some in graduate school, and a few who had recently graduated with degrees in archaeology or anthropology who couldn't get jobs in their field. It was fun, working outdoors, and being part of a "team." Mealtimes were lively, no matter where you sat. Conversations were usually offbeat and stimulating.

My group was assigned to a site which was supposed to have been abandoned due to an ancient volcanic eruption nearby. But nothing of archaeological value was turning up, and I was losing interest. In retrospect, I think I might have had a different subconscious plan even before arriving in Italy. For it was "too easy" when I decided to quit the group, and strike out on my own - to dig elsewhere.

I chose a place where nobody ventured. According to the various signs on the fence, I discerned that it had originally been a public park, then was sold for development, but the developer went bankrupt. For now the land lay vacant. I found a way to gain entry, and commenced to work undisturbed on one area at the top of a rise.

The digging was unproductive, and soon I was looking forward to the evenings, when it was too dark to dig. For a long time I have had the whimsical dream of reading Lucretius's "*On the Nature of Things*" in its original, untranslated form. The poetic beauty of any poem must inevitably suffer in translation, I reasoned. In the States I had bought an "original form" copy, shortly before coming to Italy. "What an appropriate place to be reading a work of Lucretius!" I told myself. So each evening, with a translation book at hand, I worked to decipher small portions of it, and felt satisfied as much from my growing competence in translating original Latin as from occasional glimpses of Lucretian poetic genius.

After two weeks of digging I found a vase that was unbroken! It could have been a few years old, or a few centuries. I had no way to know. Inside was a brittle animal skin, curled in a tight roll. After unrolling it under a steam treatment I devised, I began to study the surface of the skin. I explored one of its corners with tannic acid, and found that markings could be elicited using a weak solution. The amazing thing is that I recognized some of the markings as similar to those in the Lucretius text!

More treatment produced more markings. I was too busy eliciting the markings to spend time deciphering them. My treatments of the skin were done at night, and during the day I continued to dig. I found pieces of other vases, but it appeared that

they could not be easily reconstructed, and any animal skins that they might have contained would have disintegrated long ago.

On the slope of the rise I found another vase, this time unopened. Like the first one, it contained an animal skin inside. I proceeded to treat it in the same manner, with tannic acid, and uncovered markings similar to those on the first skin.

My summer trip was at its end, so I brought the two skins home, still not knowing if they were antique or recent. I didn't notify the Italian government, as I suppose their antiquities laws require, partly because I didn't know if I had antiques. I would do this in due time, after attempting to translate the skins.

The second skin, or manuscript, came from a lower level, indicating that it might be older, so I commenced to translate it first. The date I calculated was an incredulous 60 BC (after converting to our dating system). The name Memmius appeared at the beginning, as if he had written it. Yet other names were there, too. Maybe it was a collection of writings which Memmius had edited. At the top was written the title: "Living Philosophies."

By the next spring I had translations for over half the entries. One writer eschewed "pleasure as a goal for living," stating that such an orientation was more suitable for "a herd of sheep." This was surely a reaction to the Greek Epicurean philosophy, which had gained many adherents by that time. He also challenged free will, by asserting that "although we may do what we will, we cannot will what we will." Another writer stated that the "Hows" of the universe were discernible, but not the "Whys"; and that humans might as well quit looking for meaning in life, because there wasn't any. And how touchingly familiar, somehow, to read that "future historians will think of our age as the Golden Age, the glorious morning of the world."

I was struck by a "familiar" sentiment throughout, as if it had been written during our century!

I was eager to translate the other, more recent document, as it promised to show what happened after the "glorious morning" of their world. My interest was directed to the "follow through" of ideas since the title of the second document was also "Living Philosophies." The date on the second Living Philosophies translated to 1 BC. I reckoned that the intervening 59 years represented the next generation's thinking, culturally speaking, although it was two generations biologically. Lucretius had been dead for most of that time, but his great poem would have become more widely known among the thinkers of the era.

Although he felt that his age was in decline, Lucretius worked hard to help his contemporaries rid themselves of the "tyranny of religion." And the lesser-known thinkers, who contributed to the first document, were showing the way to a new age of profound truths. Surely, the generation that followed them had every opportunity for advancement, and they would have gleaned greater insights. These expectations

heightened my excitement as I progressed with the translation of sections in the more recent document.

One person believed that the most important thing in her life (she spoke of bearing children, so the writer had to be a "she") was "my love of ... the family." She stated that "An afterlife seems to me certain." Another wrote "I come home to my heart. My deepest conviction is that one's love for a very small circle of family and friends is what matters most in life." He goes on "When I think of the miracle of sex, a pure belief in a divine intelligence very nearly filters through my skepticism. What a sly invention of nature the orgasm was!"

Another summed up his life's work by expressing the "hope against all hope, for the unity of all churches."

As I read, a feeling of sickness came over me! "Is that what happened after the glorious morning of the world? Did thinking disappear? Could there merely have been a greater diversity of thought, with some thinkers continuing to think, while others consulted their "feelings" as a substitute for thought? What became of the great promise, revealed by the first document, for the advance of enlightenment?"

I kept wondering about this. Somehow, "Truth had been hijacked" in their time. The people of the "glorious morning" had come so close to unlocking long-standing enigmas. A birth had been aborted!

If those who followed had really wanted to know the greater truths, some of which we have gleaned during the past two centuries, it could have been theirs almost "for the asking."

Surely, somebody of that time carried forward the Lucretian legacy, as exemplified by the first Living Philosophies. Possibly these ideas fell out of fashion. But when something goes out of fashion, it usually exists in a less public way for awhile, like clothes that remain in the closet. In the case of ideas, a person may not be able to speak publicly, or write for contemporaries. But what can such people do when "public correctness" dictates who can be heard and who can't? If they want to communicate, they must "bury" their thoughts. I wondered if they might sometimes "bury their thoughts," literally! And thereby attempt to bequeath them to more receptive future readers.

But wait! Am I not one of these receptive future readers! If such a document exists, where is it? Have I overlooked the real treasure buried in Roman soil?

If the disciples of those who wrote the first document buried their writings, they would have ended up below my digging level. Last summer I might have come within inches of what I now realize would be an even greater Roman treasure!

"I must return to Rome, and continue the search!"

And that's what I did! That summer, I returned to the same site in Rome to "deepen my dig."

But when I arrived at my old dig it was the site of great activity. Bulldozers were now moving the earth from here to there, and everything was a jumble. My hopes seemed dashed!

I watched from outside the fence, and tried to reconstruct what was happening. The dirt from my area was being hauled away, at perhaps five truckloads per day. It must have been a week ago that the level that interested me had been taken away. I followed the trucks to a landfill on the coast, and determined that their dumping was following a pattern. Reconstructing to a week's worth of this pattern led me to focus attention on one part of the landfill. But I couldn't just walk in there, acting like a tourist interested in landfills. How could I get my hands on that dirt?

I went in at night, with a flashlight. I found only broken plates and vases, not obviously antique. I put some of them in a bag and took them to my hotel. But there was nothing of value in them. Night after night, upon returning to my hotel, I was empty handed.

One night, while busy digging in the landfill, I was startled by someone approaching with a flashlight and calling out "Don't worry, I just want to talk with you." From his accent I knew he was from the States. He stopped at some distance and said that for several nights he had noticed me and couldn't figure out what I was doing. He wondered if I might satisfy his curiosity.

I figured he was safe with some of my secret, so I said I was looking for artifacts that were being dumped from a site that was too late to dig. "But why are you looking at night?" I was embarrassed. I hadn't lied, I wanted to stick with the selected truth as much as possible. So I said "I don't want the wrong people beating me to it." That was true, as far as it went.

Not wanting to let him keep the initiative longer, I asked what he was doing here every night. After asking, I was afraid I might have gotten in the middle of some drug connection I didn't want to be a part of. I would never have predicted his answer.

"I'm studying frogs. They mate at night, and that's when you have to study them."

What a relief! A zoologist, or something.

"Let's have coffee" he said. "When will you be free?"

I was done for the night, and so was he, so we went to have coffee. He told me about his frog study. He was working on "female choice," which is a way of saying that females influence the evolution of male characteristics by playing a crucial role in choosing who they'll mate with. "Females have only themselves to blame when they complain about the way males are!" he joked.

He was forthcoming with his mission to Rome, and I wanted to be more forthcoming about mine. But I was still afraid of breaking the Italian antiquities law. So I didn't tell.

Fred told me his field was sociobiology (not zoology). It was a new field, only 20 or so years old. He was interested in the field for what it had to say about human nature. Most people, he said, study the sociobiology of animals, instead of humans, because there limited funds would support the sociobiological study of only animals. Nobody, it seemed, wanted to pay for the sociobiological study of human nature.

We gained each others trust after many late hour conversations in the coffee house. One night I decided to be honest with Fred, and told him that "I am really here to follow up on a find I made a year ago." And I proceeded to tell about the two manuscripts.

Fred was astounded that I had discovered actual manuscripts from 2000 years ago. It was a relief for me to learn that Fred sympathized with the way I was handling the discovery. He agreed with me that most people would not view the second manuscript as a retrogression, but he did. And he was supportive of my idea that the good thinkers might have gone "underground" sometime between the first document and the second.

A few nights later I made the big discovery, the one I had returned to Rome for!

Within an ordinary-looking vase was a superbly preserved animal skin, rolled up, and so tightly sealed in the vase that I did not have to use the staining technique to reveal the markings. I proceeded to translate it with excitement. The following is my liberal translation of it, in its entirety:

We live in interesting times. The great thinkers Democritus, Lucretius, and others, have set the stage for the great adventure which is now unfolding. That it is unfolding in secret is itself confirmation of what we are discovering.

The most powerful forces in the affairs of men are ideas. And some ideas are too strong for our contemporaries. Those of us working in secret dedicate our labors and our discoveries to Lucretius. For he started down the path that is inevitably taken by those who are not afraid of ideas and of Truth.

It is our surmise that we are not the first to have taken this path. Rather, during every civilization's decline there are a few conscientious thinkers who follow-up the pursuit of forbidden knowledge that was started before the decline began. Our country's wondrous experiment, which produced the greatest civilization yet, is in an irreversible decline. Some have suggested that it is the fault of heathen Roman blood, for they have attempted to discredit the Greek cultural heritage, out of jealousy for having not created it themselves. But this explanation too easily excuses our role, for many among

us welcomed the material wealth that the Romans created, and have been slow to remember the old ways. Our attempts to point out that people's attitudes and ways of relating to each other have changed, for the purpose of meeting new self-serving goals, has met with overwhelming condemnation. All our thoughts are unwelcome in public places, causing even the more innocuous insights, such as those on profound matters of long-standing philosophical interest, to be whispered amongst ourselves.

It is our triumph that all basic questions posed by the philosophers before us have been answered, in one way or another. No fundamental mysteries remain. Whereas some of the old questions have been shown to be meaningless, given the correct perspective, others have been shown to be correctly posed and susceptible to elegant resolutions. The key to our successes is the ability to be intellectually brave and to be unafraid of Truth. Thus, all previous assumptions were called into question, and many of them did not survive uncompromising inquiry.

We struggled with the matter of going beyond our senses, and preferring one hypothetical explanation over another, while the competing hypotheticals were equally consistent with what our senses and limited experiments have shown to be fact. The risk has been to place too much trust in the guiding notion of parsimony. It would be good if our technology afforded more experimental proof. But in retrospect, we do not feel that this limitation has hindered us greatly. The most parsimonious hypothesis has got our vote, and we have been amazed over what large amounts of otherwise disparate factual material has been accounted for by adopting the most parsimonious hypothesis. If our Philosophy is to have a name, as was done for the teachings of Socrates, Plato, Epicurus, and others, we would like it to be known as Parsimonism.

Parsimonism has sweeping powers of explanation, and we have used it to produce answers to the 10 major questions which philosophers before us have settled on as most basic. After dispatching these 10 supposedly important questions, we have our own ideas for what we think are much more profound philosophical questions, which could not have been articulated until the popular though trivial 10 are answered and set aside. It is almost an embarrassment to address the supposed big 10, for they seem so childish; but anyway...

The Old Philosophy Question #1 is "What is the nature of the Universe?" The starting point for Parsimonism, and the underlying assumption which has stood our tests of inquiry, is that the universe is mechanistic. All phenomena are thus the result of mechanical interactions, just as Democritus and

Lucretius described. The rules guiding the "whorl of the atoms" are of finite number and are fixed for all time. Moreover, there are only a finite number of types of atoms, and the properties of these types are fixed for all time. We do not know if the universe existed forever in the past, or if it will exist forever into the future. That is one limitation set by our primitive technology. If there was a time before which our universe existed, then it is proper to ask how the universe came into existence. We all agree that to say that it was created by some entity is not parsimonious, since even more difficult questions are raised by such a position, such as what created the creating entity. Thus, we conclude that if the universe "came into existence" it did so mechanistically. During the course of time the interactions between the atoms, in accordance with the fixed laws of nature, form new associations. These new associations lead to rocks, water, and all things that we can see. We assume that they really exist, even though our perception of them is flawed by an incomplete set of perceptual apparatus.

Question #2 is "What is Man's Place in the Universe?" We have deduced that Man is, like all other living things, merely a temporary association of atoms. Thus, a living thing is made up of the same physical building blocks as non-living things, namely, the atoms and any associations that the atoms may make amongst themselves. The world suddenly made sense in all manner of aspects after we considered the following hypothesis for viewing the defining property of living things versus non-living things: that living individuals are created as "vessels" for carrying "tiny design designators." The design designators specify how the individual is to be assembled from the materials in the environment. We have hypothesized that each vessel is assembled by many design designators, and that they are competing with each other for existence. It is helpful to consider the design designators to be non-living, but the vessels they create for their propagation to be living.

Humans are no different in fundamental ways from the myriad of other living things. We first postulated that this was true, in the spirit of being parsimonious, and placed the burden on ourselves to try to disprove this hypothesis. After considering the great similarity of our organs, body structure, and behavior to those of other animals, we were left with the original hypothesis intact. Thus, when we ask if humans have a special place in the universe, or are we like a speck of dust in a universe that does not care about us, we are left to take the parsimonious position that the latter is true.

Question #3 is "What is Good and What is Evil?" This question wasted a lot of our time, and we concluded that good and evil are whatever you define it to be! This is an example of an ill-posed question. By stating the question this way, and getting the listener to accept the challenge of answering it without

strenuous complaint, you have slyly positioned the listener into a pitfall out of which there is no logical escape. When old philosophers asked this question, they really had a different one in mind, but didn't have the clarity of thinking to pose it properly.

Question #4 is "What is the Nature of God?" This is another ill-posed question. By asking it this way the questioner is actually stating that something unspecified (and unspecifiable) exists, then burdens the answerer to extricate himself from the trick just created. The concept of God is superfluous for comprehending everything, including the phenomenal need for such a belief.

Question #5 is "Are Things Governed by Fate or Is There Free Will?" This, too, is an ill-posed question. We believe that free will can be defined in such a way that it encompasses fate. If free will is meant to describe the phenomenon of thinking about a possible future situation, desiring that it happen, and acting in ways that are believed to promote the desired condition, then there is nothing in this simple conception of free will to exclude fate. The underlying position of Parsimonism states that all things are made of the same fixed number of types of atoms, and that their movement is governed by a finite set of fixed laws. Given this, it follows that everything is predestined. There can be no way for an atom to move other than what is required by the fixed natural laws, and if an atom moves contrary to these laws, then the parsimony assumption is violated. This is the same idea stated by Lucretius, when he wrote that "There is no need for the aid of the gods, there is not even room for their interference." Thus, the task is to devise a way of accounting for our experience of having free will within the mechanistic viewpoint. This is done by stating that our perceptions and experiences are consequences of underlying interactions, and that any time we experience the "will" to do something, that "will" sprang from these same underlying interactions. Thus, thoughts and desires are consequences of events, not causes of events.

Question #6 is "Do We have a Soul and Are We Immortal?" The soul is another superfluous invention by minds that inherited a primitive and undisciplined way of thinking. When it is asked if we have a soul, there is a burden on the questioner to describe what a soul is, using understandable language. No one who honestly tried could meet this challenge, so the first part of this question is too ill-posed to warrant an answer. If we are to answer if humans are immortal, the questioner must define what it is that is hypothesized to live forever. If you ask if each person has lasting influences for all future time, then "yes," each person is immortal; in just the same way that a falling stone is immortal. For in our mechanistic world view everything in theory has influence of finite amount over every other atom within its

infinite reach. But this is a trivial answer, for what is meant by the question is surely something more ethereal. So if the simple-minded conception of the question is chosen for answering, in which the person lives in some other location after death, the answer is an unequivocal "of course not!"

Question #7 is "What is Man's Relation to the State?" The state is man's creation, or to be more explicit, the creation of the tiny design designators that fabricate individual humans. Specifically, the state is not the creation of any God. The rulers of states are not given their power by any God, nor by the people they rule. The rulers take the power for themselves, on behalf of the tiny design designators within them. It is meaningless to ask if the individual men who are ruled by state rulers have the right to rebel, for they will do whatever they do as the laws of nature mechanistically dictate. What is the best form of state, and what is the worst? This is a meaningless question until goodness and badness are defined (specifically, goodness or badness for what?).

Question #8 is "What is the RelationshipBetween Man and Education?" This is a trivial-sounding question, and we haven't figured out why philosophers worried so much about it. They tried to ascribe a purpose to education, but in a world that is meaningless there is no more a purpose for human education than there is for the existence of humans. Is it designed to make men free, or to make men more reliable as blind servants of the state? Neither, it serves the tiny design designators, and for as long as it remains in their service, the practice of education will exist. As will be clear after reading what we state below, individuals who strive to liberate themselves from their tiny design designators can employ education to facilitate that liberation, and thereby render education "subversive."

Question #9 is "What is the Relation Between Mind and Matter?" We have come to the parsimonious position that mind is the activity of the brain organ, and the brain is a very complex association, or configuration, of matter. To ask if one is superior to the other is to miss the point, since mind is a phenomenon produced by the matter. Mind, thus, cannot be free from matter; it cannot exist on its own. There is much nonsense spoken about mind being pure and matter being evil. Minds that are predisposed to think in such silly ways will think these ways because that is one of their unique flaws.

Question #10 is "What is the Nature Between Ideas and Thinking?" This may seem like an unsophisticated question, but it actually strikes at the heart of something that is more profound than the originators of the question envisioned. For example, in asking if ideas are inherent in the nature of our minds, it is wise for us to remember that the tiny design designators assemble

the mind, and create connections between the many parts. We know that most of the assembly of the brain occurs before birth, hence before experience. We hypothesize that since a person's behavior so profoundly influences the fate of the individual (and the tiny design designators carried by the individual), that the tiny design designators must necessarily predispose the brain, during their assembly of it, toward certain behaviors that are to be elicited by specific situations. It is parsimonious for this situation to exist, and very difficult for it not to exist.

Thus, the brain, in our view, has inherent in it certain ideas more than others. That is to say, some ideas are easier to think than others, some ideas may be impossible to think, and some ideas may be almost impossible to not think. Likewise, some behaviors may be easier to elicit, others may be nearly impossible, and some behaviors may be almost impossible to not be elicited when predefined circumstances exist. Given this, how can we be sure that our thoughts and beliefs are correct? How can we be sure that our actions are for our own good, instead of, for example, being good for the tiny design designators?

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These are our answers to the major questions that were formulated by past philosophers. All of the well-posed questions can be answered, and the ill-posed ones can be identified. But we believe that with our new perspective it behooves us to articulate a new set of major philosophical issues. A new era in philosophy needs to be forged. And this is what engages our thinking today.

We now choose a more efficient way of addressing philosophical matters, by starting from the beginning. Parsimonism is our starting "viewpoint," and all our other philosophical positions are logical consequences of this starting viewpoint. [Henceforth I will use the modern word "paradigm" instead of "viewpoint," and the modern word "gene" instead of "tiny design designator," since both substitutions call forth modern equivalents of what the writers must have had in mind.] *For us it was a conceptual breakthrough to translate the starting assumption of Parsimonism to the idea that all living things are under the control of genes. This idea is so powerful that we have referred to it as the Gene Paradigm. It is the key to understanding human behavior (as well as the behaviors of all other animals), and the dilemmas associated with being alive.*

We believe that Parsimonism leads to a comprehensive "Philosophy of Reality." In particular, the Gene Paradigm can be used to understand Human Nature, and issues that pertain to "Man's Relationship to the Universe" and "Man's Relationship to Man." For example, with the Gene Paradigm firmly in mind, we can deal with the old question "What is the purpose for Man's

existence?" by simply stating that "each man's purpose is to carry his genes and to do a good job of propelling them abundantly into the future!" Of course, this is a false purpose from the perspective of an individual man. It is only man's purpose from the perspective of the genes within him.

In following this reasoning further, we arrived at the upsetting insight that the genes may sometimes be our enemies, since they cannot be expected to keep our best (individual) interests in mind when there is conflict over a behavior that benefits the genes but places the individual at risk. Emotions are used to influence the individual when it is important for the genes to get their way. Logic and insight are as often a threat to the genes as a tool for them. This conflict has been resolved in favor of the genes, by the genes, for they have created brains that control logical thought by employing emotions that are elicited at appropriate times to overpower logic.

We, as individuals, are not supposed to be aware of this arrangement. Thus, it was not entirely a surprise each time we discovered another human mental "blinder" for not gaining insight into this elaborate mental sham. It is ironic that humans, as uniquely "abled" as we are for the study of philosophy, are also uniquely "disabled" for its effective study. This is why it is necessary at the outset of any endeavor for understanding the nature of reality, and especially of human nature, to be intellectually brave, and lose one's inborn fear of ideas!

It became our habit, while trying to understand something, to force ourselves to experiment with a belief in whatever was opposite from our emotional inclination. Some among us took this strategy to extremes, and had great fun making counter-intuitive leaps ahead of the rest of us. This was especially effective when we were trying to understand human nature in order to develop a Philosophy for Living. The "counter-intuitives" declared that the most injurious path in life is the one that follows the strongest emotions. They pointed out that the strongest human emotion in everyday life was the impulse for sexual intercourse, and a life that is centered on this pursuit, whether clothed in the facade of romantic love or not, would lead to disease and premature dissolution, in the case of men, or an excessive burden of child-rearing without paternal partnership, in the case of women.

It has been our hope that the insights from our Philosophy of Reality could be used as a basis for developing a "Philosophy for Living." Some progress has been made on this, such as the need to be wary of being led by emotions. However, at the present time, we have encountered so many dilemmas on this endeavor that we believe this problem may be fundamentally without solution.

APPENDIX A – MORE STORIES

Epicurus, who among past philosophers has come the closest to our approach to formulating a Philosophy for Living, ignored the inherent conflict between an individual and his genes in developing the notion that the pursuit of pleasure should be an individual's guide for living. What is an individual to do when the roots of happiness are presented to us by the genes, which use "happiness" to lure us into doing things which, although they produce happiness, otherwise jeopardize our individual welfare? We do not know how to save Epicurianism from the dilemmas inherent in it, which are seen to be obvious faults only after adopting the Gene Paradigm. A similar conclusion was reached for every other candidate for a Philosophy for Living which we considered.

Some of us have reacted to this dilemma by wanting to issue "a call to arms" for liberation from the genes! Others have suggested that a better life is lived by surrendering to the genes "with open eyes" (avoiding the most nefarious genetic traps, or pitfalls). Still others have discarded the Epicurean maxim and have begun to invent new maxims for living. Finally, there are a few among us who have given up hope that it is possible to formulate any such thing as a Philosophy for Living. They state that each person's life is a meaningless existence, and all attempts to order existence by appeal to axioms is inherently subjective and can only lead to meaningless, sophistic maxims.

Upon realizing that we could not reach agreement on the matter of translating a Philosophy of Reality to a Philosophy for Living, we gave up on the endeavor and proceeded to concentrate on elucidating several profound matters within the realm of our new Philosophy of Reality.

We began by analyzing the relationship between one man and another. We wanted to develop a theory to account for the existence of social interactions. Why should one individual, an "interactor," initiate a social interaction with another, the "interactant"? The consequences of the hypothetical interaction are benefits and costs to each participant. (To be rigorous, we acknowledge that the costs and benefits accrue to the genes of each participant, not necessarily the individual participant.) There are 4 possible outcomes: 1) the benefits exceed costs for both participants, 2) the interactor wins but the interactant loses, 3) the reverse occurs, and 4) both lose more than they gain.

This simple-minded consequence matrix had to be elaborated to allow for the relative amounts of the costs and benefits for each participant. A theory for "social reciprocity" was derived, in which there are 8 outcomes. They involve such things as "win big/win small" and "win small/lose small," etc. Social reciprocity consists of a seemingly unending series of interactions described as "win big/lose small" and "lose small/win big." We believe that these

"calculations" are performed subconsciously, or perhaps automatically (as would be the case for essentially all non-human animals).

This basic dynamic between unrelated individuals was developed into a theory to account for the creation of "societies." Without social reciprocity there was no way for us to theoretically sustain cooperative relationships among individuals (unless they were close genetic relatives). A society, according to our conception, is a pool of individuals who maintain "unending" chains of social reciprocity relationships. And for as long as each interaction is of the correct type, in which there is a net gain from the interaction, society will be "healthy" and has the potential for "growth." A group of societies that are healthy constitute what we commonly call a "civilization." We believe that we have identified one key "force" in the rise of civilizations.

What about the decline of civilizations? This is a matter of great concern to us now, as ours has been in decline for over a century. Can the insights that elucidate the rise of civilizations possibly also provide insight into the dynamics of their decline?

We returned to the matrix of social interactions between any two individuals, and focused attention on the ones with a net loss. Of the 8 possible interactions there are four with a net loss: 1) "win small/lose big", 2) "lose big/win small," 3) "lose big/lose small", and 4) "lose small/lose big." Our attention was most attracted by the first of these, and to a lesser extent to the second. The others didn't make sense from any perspective, and we consider them to be pathological.

Could an individual sustain himself by initiating interactions in which he "wins small" while the other person "loses big"? Yes, we concluded, in two ways. First, he could forcibly enact the relationship, as criminals do. Second, he could deceive the interactant into thinking that the interaction is one of those which legitimately sustain socially reciprocal relationships (that happen to be "societal net win" interactions). If either approach is used, the person is said to be unscrupulous. An unscrupulous person might also engage in one-time transactions of the "win/lose" type. The effect of such people on a society is similar to the effect of a parasite that lives uninvited upon the productive labors of a host organism. We therefore call these people "social parasites."

Social parasites, if they are abundant, can convert a flourishing civilization into a declining one! This is our conclusion, and it is based solely on "thought experiments," or "simulations." We played games amongst ourselves, taking on roles of various types. Every time, we were led to the same unpalatable conclusion: prosperity invites social parasitism, which eliminates prosperity!

APPENDIX A – MORE STORIES

In other words, flourishing civilizations produce the conditions which lead inevitably to their decline. This occurs because social parasitism is rewarded the most when a civilization produces wealth in excess, when there is reduced incentive for the producers to risk guarding every unit of wealth they produce. The abundance of less guarded wealth is an enticement which elicits unscrupulous traits that reside at some threshold in all among the populous. If the realization of what is happening is slower than the entrenchment of opportunism, there is an irreversible degeneration and decline of the civilization. It is ironic to note that in this dynamic the more successful the host, the greater it rewards the agents for its destruction.

The growth of civilizations are self-limiting. Our great experiment, which at its zenith produced Socrates and Plato, and a vibrant democracy, is now in decline due to a rising sea of opportunists. They pretend to be working on behalf of the community, the greater good, and the glory of Greece, but in reality they are working for only themselves. The Romans are not our worst enemy, it is ourselves! It is in our very nature to, in effect, destroy what others before us have produced, and which some old-fashioned achievers among us today still continue to produce. It can regrettably be said that our generation is plundering the fruits of what differently motivated previous generations of truly great Greeks have achieved.

As if to justify their nefarious plundering, these present-day parasites exalt innocence, they sanctify the purity of ignorance, and at the same time they condemn those with ambition to achieve as being somehow corrupt, and a threat to the state. In reality, they are subverting values in order to continue their rape of our heritage. They are hijacking the values which brought us to greatness, and replacing them with counterfeit, self-serving values. It is not the "barbarians at the gate" whom we should fear, it is the "citizenry" within, the corrupt culture created by the overwhelming force of small-minded opportunists, which is sanctified by equally corrupt and opportunistic intellectual apologists. They make a legitimate pursuit of philosophy impossible, because of their self-centered agenda. Their definition of "public correctness" perpetuates the disembowelment of our once great culture from within.

It is for this reason that we have had to go underground with our new thinking. For our uncompromising style of thought, and our brave way with ideas, is properly perceived by the parasites as threatening to their continued plunder. The war they are successfully waging requires that we be silenced.

We are silent, yes, but only to their ears. We owe allegiance to our only god: Truth! On Truth's behalf we are courageously developing the insights which

have been recorded here. We are finishing an intellectual odyssey which was started by those who gave birth to our great civilization.

Whereas the masses of our Roman brethren believe that we have been silenced, and for their purposes we have been, we make our most cherished offering to those of another time. By planting our "seeds of Truth" in vessels, with the hope that some future "disciples of Truth" will chance upon our gift, we strive to give our labors new voice.

We thus bequeath this vase, with its cherished contents, to you the finder, with the hope that you are of a mind to understand our message and give new life to Truth!

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Of course I do not agree with much of what is in this ancient document, but I respect their poignant predicament and how they reacted to it. If it is a legitimate document, then it might shed light upon the decline of both the Greek civilization and Roman Empire.

Furthermore, if this document is to be believed, we have an explanation for the dramatic deterioration that occurred between the first "Living Philosophies" and the second one. As this was my goal for returning to Rome, I have found what I wanted.

As disturbing as this document is for the questions it raises about ancient Rome, I am comforted by the thought that modern America and the other nations comprising Western Civilization are not at risk the way ancient Rome apparently was.

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I showed the ancient document to Fred, and watched his expression as he read it. He seemed genuinely shocked!

I knew the "no" movements of his head were really a "yes" of agreement with what he was reading. I believed that I knew him that much.

When he finished there was a silence. I finally asked "What shall we do?"

"About what?"

"We can't just keep it a secret!"

"But nobody would believe it! You couldn't get it published, if that's what you're thinking."

"Why?"

"For the very reasons it was written in the first place! Can't you see the parallels? The things they're writing about, the gradual corruption of their culture and

the accelerating decline of their civilization are too much like what's happening to us, today. It was blasphemous then, and it's blasphemous today! Don't you see that?"

I didn't know what to think.

"Do you mean to say that you think our civilization is in decline? Don't answer! That's not the question. The question is: what should we do with this manuscript?"

"Try to understand that nothing can be done with the manuscript! To see this you need to understand that the entire message of the manuscript applies to what's happening today. That's why nothing can be done with it. It is not publishable today, and it may not be for centuries!"

"But you aren't offended by it. And I wasn't. There must be others like us."

"There are, but they're part of a modern-day underground. Just like those in declining Rome and Greece. And like those during every other declining civilization. That's the way things work. A civilization is created by producers and it is destroyed by parasites. It's an unending cycle. And when you're on the downswing, as we are now, there is no force strong enough to reverse the trend."

"You sound very much like this ancient document. They might have said exactly the same thing. It's as if ..."

"As if what?"

"As if you wrote the document and put it in a vase for me to find -- as a hoax!"

"I did."

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It hurt! I was a fool! How could I be so gullible? It was as if someone had cheated me, and it was myself.

"But what's the difference?" Fred asked. "Such a document might have been written. It is theoretically possible that it could be discovered some day. Does it have to be discovered to have the force its discovery would have? Is it not enough for you to believe that such a document might exist, or might have been written? Does a truth have to come out of the Heavens, accompanied by a clap of thunder and singing angels, for it to be legitimate?"

"Coming out of the ground would have been better!" I grumbled.

"Well, who cares? That's what I think. Besides, think of all the work I went to. Translating all that from English to ancient Latin."

"Think of all the work I did? Translating it from ancient Latin to English."

"Let's compare versions!"

"That's stupid. You wasted my time. It's all phony. You should apologize!"

"You're foolish, besides being ungrateful. You still miss the point. Tell me, what would have happened if I hadn't admitted I wrote it?"

"I don't know. Maybe you're suggesting that it would have changed the way I viewed the rise and fall of civilizations. Maybe so, and I would have eventually applied some of that thinking to the way I viewed our civilization, with its troubles."

"Well maybe I'm sorry for the way I did it. But I still think I've done you a favor."

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I think what bothered me most was my gullibility. I pride myself on being nobody's fool. I must have had too great a need for discovering something of importance. I wondered if the other two vases I discovered a year before were also fake.

I had finished my business in Rome, so I went home; after thanking Fred for all his work, ill-directed as it was. We parted friends.

To this day I wonder what might really have happened if Fred had allowed me to believe in the authenticity of the "ancient" document, if I had allowed myself to believe that there was merit in attempting to publish it. But that's another world line, another hypothetical reality that was never fated to be. To paraphrase Lucretius,

Que sera, sera.

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This story was written in angry protest after reading *Living Philosophies: The Reflections of Some Eminent Men and Women of Our Time*, edited by Clifton Fadiman (1990). It was the third in a sequel of three books with an identical theme and similar title. The first book, *Living Philosophies: A Series of Intimate Credos* (1931), is one of my favorites, as it captured the essence of reductionism at an early time in this century. The second book in the series, *I Believe: The Personal Philosophies of Certain Eminent Men and Women of Our Time*, edited by Clifton Fadiman (1939), was a somewhat diluted version of the first book. The authors who were invited to contribute to this second book had less to say, and I recall being somewhat disappointed with it. So, when I learned in 1990 that another in the series had just been published I was excited, hoping that the luster of the first book would be restored amid a general decline in intellectual discourse. So much insight had been achieved since 1939, with the sociobiological insights being especially relevant to the philosophy topics of the earlier books. I went to my favorite bookstore and eagerly bought it, brought it home, settled in my favorite reading chair, and settled in for what I hoped would be a good read. But no, it was not to be. The authors were so banal, so politically correct, so disappointingly "contemporary." My disappointment turned to anger the more I read. What was the intellectual world coming to? That's when I had this story idea.

APPENDIX A – MORE STORIES

APPENDIX A – MORE STORIES

Country Roads

2008.11.24

Whenever I listen to "Country Roads," sung by John Denver, I feel an emotional tug. I couldn't be feeling tugged back to West Virginia by childhood memories because I grew up in Michigan. When I hear the song I usually visualize a soldier killed in battle far away and his soul is hovering over the body asking to be taken home. But today the song brought back memories that tugged at me in a different direction.

I've been to West Virginia. I'll always remember a wonderful early morning breakfast of ham and eggs at a restaurant on a West Virginia country road.

In my youth, during my first job away from home, I was granted "telescope time" at the National Radio Astronomy Observatory, NRAO. I was to observe Jupiter using the 85-foot radio telescope named "The Howard Tatum Telescope" – probably because someone with that name donated funds for its construction. I arrived a day early, and Frank Drake showed me the telescope I was going to use. In off hours it was used for Project Ozma, and he pointed out the speakers where they heard the first "signals" of what they thought might be communications from a distant civilization. It later was determined that they had heard signals from a secret man-made military satellite. Anyway, after my first day's observing I needed help processing my Jupiter data and Frank introduced me to Billy Meredith, one of their computer programmers. Billy worked a few hours on my program, and as he loaded the cards into the computer's card reader he remarked "Keep in mind, programs never work right the first time; so we're going to run it to find out what bugs need to be fixed." It worked the first time, and this gave me instant respect for his programming skills.

A few years later, I was working at JPL and became leader of the radio astronomy group. We were building a radio telescope in the mountains and we needed someone to write a control program for it. I remembered Billy, and asked him to join our group for this programming task. He agreed, and for a few years he was happily writing a computer program to control our telescope in the mountains. At the time I hadn't made the connection that Billy liked driving up the mountain road to our observatory because the area reminded him of his West Virginia mountains.

I slowly sensed that Billy was home sick. On his lunch hour he would ride his motorcycle up a nearby mountain road to eat lunch alone in some secluded turn out. One day he said that the Very Large Array project at NRAO needed a programmer, and he wanted to accept that job. I agreed for him to return to West Virginia, though that meant I would take over programming responsibilities for our telescope in the mountains.

I missed Billy, not only because the extra travel and programming was a detour to my career path, but because he was such a nice guy. He would say that he liked being

a hermit, which always puzzled me because he was such good company, and made people comfortable when they were with him.

From time to time I would get news about Billy's work at NRAO. He seemed to be happy being "back home." He took up the hobby of sky diving, which surprised me for being slightly "out of character."

Many years later I got news that Billy had died in a sky diving accident! I cried, and had trouble believing that I'd never see Billy again.

After a couple decades I guess I've reconciled myself to Billy's death. Today I was listening to a John Denver recording of "Country Roads" and I remembered Billy.

Country roads, take me home
To the place I belong
West Virginia, mountain momma
Take me home, country roads

And as I was listening I visualized, for the first time, poor Billy, falling in the sky, to the place where he belonged…

Almost heaven, West Virginia
Blue Ridge Mountains.…

"Bye Billy, glad to have known ya!"

APPENDIX B – MORE OFFBEAT IDEAS

This section is reserved for “offbeat ideas” entries than I felt were too long for inclusion in the main section of the book. In the First Edition they appeared in Part Four, Offbeat Ideas: 1980 - 1991.

APPENDIX B – MORE OFFBEAT IDEAS

OEDIPUS AND SOCIOBIOLOGY: A SPECULATION

1985.02.12

> "Hrdy noticed an invading male charge after a mother, attempting to snatch away her baby. For several days, the other females in the group tried to defend the mother and her baby. But the male persevered, and finally managed to deliver a slash to the infant's stomach that left the intestines exposed. Taking the wounded infant to her breast, the mother looked up at the sky, as though in despair. 'It was the only time in my professional career that I wept.' // Because females are usually outmatched in the physical war between the sexes, they are helpless to protect their offspring against an infanticidal male. // Female gorillas respond to infanticide ... they leave the father who allowed their baby to be killed and run off with the murderous male. Infanticide, along with various female defenses, has been seen in 13 primate species. *Selections from "Mother Nature's Murderers," Natalie Angier,* Discover, *Oct 1983.*
>
> "Psychologists Scarr and McCartney speculated... The theory presupposes that the stages of our development are set genetically and are acted upon and maintained environmentally... Only after a child is genetically receptive ... is the environment able to have any real effect on ... behavioral development." *Selections from "The First Cause" by Michael Guillen,* Psychology Today, *Dec 1984.*

Fathers face the constant challenge of cuckolding. One way of identifying offspring that are fathered by other males is to notice phenotypic differences from self. Phenotype includes both physical and behavioral attributes. Phenotype similarity is a good indicator of genotype relationship (when environment for offspring resembles that of parent). Therefore, it makes genetic sense for a father to "reject" offspring that appear different from self in either physical appearance or behavior.

The mother, on the other hand, can be certain that *all* her offspring are "hers," and should defend *all* her offspring. These behaviors are found in the animal world.

Not all behaviors have to be taught. Many of them pre-exist as neural circuitry. Humans probably have more, not fewer, pre-existing behavioral circuitry. What seems to distinguish humans is the wealth of conditions that affect behavior, and the complexity with which this is done. The elicitation of behavior, to the extent that this occurs, is based on a more complex organization of experience. The way a person "is" can be viewed as a subset of possibilities of the way a person could be.

I imagine that behavior is elicited according to a two-step process: 1) perception, and 2) behavioral response. We must suppose that each individual is endowed with neural circuitry for both perception of the relevant realities, and the production of the appropriate response. (Although it is irrelevant where in the brain these two processes occur, it seems reasonable to place the social perception circuits in the right posterior tertiary cortex, and the behavioral response circuitry in the right frontal tertiary cortex).

This sequence of "perceptual elicitation of behavioral response" resembles the old "stimulus/response" theory, which unimpresses present-day psychologists. As simple-

minded as the old version of SR theory is, the basic concept is valid in my opinion, provided it is re-formulated with a sociobiological perspective. Motivation needs to be brought into the dynamic.

The scenario of this essay begins with the father "perceiving" that one of his children is "different." The differences that he is programmed to notice belong to the category of "fathered by other male." In the second step the perceptions elicit behavior that is (genetically) appropriate for the situation of a father being cuckolded. He must "reject" the child. Many specific forms of rejection are possible, and they pre-exist within the father's behavioral repertoire (with no conscious knowledge of the situation).

The child is not "tabla rasa," in spite of his age. His task is to survive, regardless of the challenges presented to him by an infanticidal father. The child must first "detect" that there's a problem. The problem is automatically categorized by the child as a problem with the father, belonging to a category that we might name "infanticidal father." The second step for the child is to have this perception elicit behaviors that serve his interests in surviving. We may suppose that each child, whether ligitimate or not, should be endowed with a repertoire of behavioral responses appropriate to the situation "stepchild of an infanticidal father" (again, all this is automatic, and is not consciously understood by the child).

The mother must also exhibit the same two-step process when the father is infanticidal. She first "detects" that the father is "rejecting as if having been cuckolded," and this perception then elicits appropriate behavioral responses. Most responses are to protect the child (whose genetic relatedness to her is assured). (Observations in the animal world reveal that a mother in this situation sometimes gives up on the child, as if to cut her losses, and works to secure the unchallenged support of the other children).

There are three players: a father who is cuckolded (or believes at some subconscious level that he is), a child at risk, and a mother who is prone to defend the child.

The configuration of motives, and the alliance of forces, is interesting. The mother and child are allies in overcoming the father's attempts to reject the child. The father is conspired against by the two of them. Yet he is more powerful, and could overwhelm both of them and kill the child if he were certain that he had not fathered it. The child is not hampered by such uncertainties, for he is unquestionably 100% related to himself. Yet he is physically dependent on the father and mother for protection and nurturance. So, any impulse to displease the father, or invoke his wrath, must be held in check. And the mother is similarly constrained in her thinking, for she must consider the welfare of the other children, as well as her own.

For the child, all things become subordinate to the goal of physical survival. It becomes important to replace dependency upon father with reliance upon self. The child must not trust the father too much, whereas the mother can be trusted.

APPENDIX B – MORE OFFBEAT IDEAS

The cautious mother secretly supports the child. She views the child as being legitimate, and entitled to a winning place in the world. Her support and belief in the child can be a saving force. She begins her supporting role by sheltering the child from the rejecting father, and keeping alive the child's "will to survive." This mother, who seems sincerely concerned with the child's welfare, creates within the child the experience of a caring "significant other." She thereby plants a seed of hope for the eventual connection with another entity who cares.

The child's relationship with his two parents are profoundly different. When the child is a boy, the configuration of alliances resembles what Freud called the Oedipus complex. The boy longs for the mother, and must suppress violent thoughts directed at the father. But the distrust between the father and son are not motivated by the son's desire for pleasure through sexual intimacy with the mother. Sociobiologically, this explanation would not make sense. Instead, the distrust is based on perceptions by all the players that are real, and which make sociobiological sense. The distrust begins with the father, and is responded to by the son and mother.

This is an alternative theory for the Oedipus complex, which to my knowledge, has never been suggested.

PARTIAL CONNECTEDNESS AND REALITY LIMITATIONS

1990.05.27

Suppose it were possible to wave a magic wand above a person's head and they would thereafter think, feel and act *logically.* What would such a person be like?

This thought experiment forces one to confront some fundamental and disturbing questions about human nature. I claim that the question has an unsatisfying answer, and that any proffered answer necessarily carries with it a substantial baggage of false assumptions.

Let’s explore this matter by asking the question: Suppose this magic wand somehow transformed my pet house cat, Fluffy, into a *rational* cat. Imagine the deed is done, and the following events ensue.

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Fluffy stands there with a rigid stare, as if stunned. She's either dead, or thinking. Yes, she must have been thinking, for now she has turned to look at me with new eyes. She meows, but is startled by what she did. She slowly looks at the furniture, then the ticking cuckoo clock. Her body seems paralyzed still, as if inhibited to permit thought. She remains this way for a long time, moving only her head to look around.

I put food in her dish in the kitchen, and she begins to walk toward it, but then stops, as if to assess whether she is really hungry. Eventually curiosity brings her the rest of the way to the food dish, and she stares at it. She smells it, then thinks some more. She might really be hungry, yet immobilized by existential questions about the merits of surrendering to emotional forces, or maybe even staying alive.

I begin to feel sorry for Fluffy. I know that she will be handicapped when I put her outside, where she has to defend herself from neighbor cat intruders. She had enough trouble before, being clawless.

Finally, Fluffy begins to eat. She eats slowly, perhaps tasting the food, and being aware of its properties for the first time.

I call her name from the living room, and Fluffy looks up. I have an idea, and I drag a string across the floor. Fluffy walks slowly to me, and looks at the string. She seems to want to move, yet is restrained. She used to become so excited about chasing the string in the past! What cruel trick have I inflicted on this poor, unsuspecting cat!

Fluffy looks up at me, and I imagine she's asking a question. I feel guilty, and put the string away. I get down on my hands and knees, and look at Fluffy. She stares back. I tell her I'm sorry, but I don't think she understands. The staring is getting nowhere, so I sit up on the couch. Fluffy is still staring, now at the wall. I'm bored, so I pick up a magazine article on neural networks, and become engrossed.

Cindy walks in, sees the string, and proceeds to drag it on the rug in front of Fluffy. When I realize what's happening, I start to shout "No, ..." but then I notice Fluffy chasing the string!

This is astounding! Fluffy acts like she did before. "Cindy! What did you do?" "What do you mean, Dad?"

Curious, I walk to the food dish, and rattle it. Fluffy hears, and comes running! She briefly smells, then eats. "She's acting just like before." "Before what, Dad?" "Before I ..., never mind Cindy."

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Now, dear reader! What do you suppose happened to Fluffy? Did she really revert to her earlier state spontaneously? Well, maybe she *thought her way back to her natural state* through some logic that might instruct us about this issue.

Perhaps what happened is that, with her capacity for rational thought, she confronted the existential dilemma of going beyond an inherited nature, where no emotional rewards exist, and "chose" to surrender to her inherited nature in order to experience *living* in the only way that is possible, given the way brains are wired. Could Fluffy have chosen *emotional life* versus *emotionless cognitive awareness?*

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I must now comment on this hypothetical situation.

First, notice that much of my speculation about how the cat would react contained anthropomorphic tendencies. That is, I postulated that the cat was becoming more like a human. It is as if each species thinks of itself as the embodiment of what is right to do. From the perspective of each animal individual whom I hypothetically victimize by this experiment it may seem unusual to be drawn toward perspectives and actions that are normal for humans. Is there something inherently superior in the way humans view things, and act?

If the same thought experiment were applied to a human, what might occur? Would the human subject begin thinking and acting like an alien from another planet? If an alien were to try to answer, then "Yes, the human would act like us aliens!"

And how would the alien think and act if a super-alien subjected him to the same experiment? There is no end to this series of unanswerable hypotheticals.

Is there an objectively rational way of thinking and acting? And if so, would each subject tend toward that objectively rational end point, and not necessarily toward the

human way of thinking and acting? Let's leave this question for a moment, and approach the matter from another direction.

What about the matter of eventually forsaking the tendency toward rationality and reverting to one's inherited nature, which I implied would occur? This is a profoundly more fundamental question than the previous one.

To address this question I need to make an aside. It's about neural networks, and real brains.

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When constructing neural networks for solving problems it is customary to begin with a "fully connected" network. That is, every element (neuron) is interconnected (connected in both directions) with every other neuron. For example, if there are 100 elements, there will be 100x100 = 10,000 connections in the system (don't worry about the details of this, just try to follow the general idea). Each connection can be either excitatory or inhibitory (positive in sign, or negative). An excitatory connection means that if the source neuron is in its "on" state it causes the target neuron to get closer to its threshold for "firing" (going to its "on state," assuming it wasn't already "on"). Inhibitory connections have the opposite influence on target neurons. Such "systems of neurons" exhibit "stability states." Once the elements (neurons) are placed in an initial state (where "state" means a configuration for all neurons of being either on or off), the dynamics are such that a new (closely related) final state is arrived at, and small "nudges" away from this final state are unable to move the system away from the final state (it keeps coming back).

Such a system of interconnected elements is capable of storing a large number of "memories." A memory is perhaps a misnomer, but the terminology is derived from the fact that the system's arrival at a state can be achieved from an "area" of initial conditions, and this has the property of "content addressable memory." Other uses for such a system can be devised which can be made to resemble classification, perception, calculation, cognition, behavior, and other things. When used to "store" and "retrieve" memories, a system of 100 neurons can "hold" about 10 memories (provided any one memory is not too similar to any other). A system of 10,000 neurons, for example, can hold about 1000 or so memories, etc.

A system of 10,000 neurons, which can have about 1000 stable states (memories), cannot be "taught" just any 1000 stable states. The 1000 possible stable states "pre-exist." The meaning of any one of these depends on the specifics of its interface with the outside system of neurons in which it is embedded.

Some of the 1000 stable states of a hypothetical neural subsystem (consisting of 10,000 neurons) will be useless to a real organism. Some of these states are useless because they do not conform to an external reality, such as 1 + 1 = 3. This may be the most common situation. Or, they do correspond to reality, but the organism has no use for that aspect of reality. Finally, although this is getting ahead of ourselves, the genes may

need to keep the individual organism unaware of an aspect of reality that otherwise might jeopardize genetic agendas.

We may consider, as a starting viewpoint, a fully connected system with 10,000 neurons, and carefully remove those connections that aren't required to represent the "needed" reality states. If only 10 stable states are needed, out of the 1000 possible, most connections could be eliminated (while keeping each of the neurons). This might lead to a connectivity of 10%, for example.

The forces of evolution did not start by constructing the 10,000 neuron subsystem in a fully connected state, with a later slow removal of connections that were not needed. Rather, neurons were added to a pre-existing set of neurons and they were connected to only those neurons which were useful.

Whichever way we prefer to regard the *formation* of the resultant network, in its final form it can be viewed as "partially connected." It is important to realize that in a partially connected network of N neurons there are fewer than N-squared interconnections, and thus there are fewer than "10% of N" stable states for the system. *Partially* connected neural subsystems are thus not capable of certain things that a *fully* connected network is capable of. Brains are capable of those things for which they have evolved, and sometimes a few irrelevant (harmless) states. But they cannot be expected to perform in arenas for which they were not evolved.

Consider the frog, with a visual system that performs superbly for detecting flying flies. It is utterly incapable of detecting a motionless fly, and it is alleged that frogs can die of starvation while surrounded by freshly killed flies. To use neural network terminology, the frog's visual system is a partially connected network that does not accommodate the percept "stationary fly."

A cat's visual system is partially connected in such a way that it excels at detecting a running mouse. Feature detection subsystems exist for the task of running mouse detection. A photograph of a mouse, which **I** may think provides an excellent rendition of a real mouse, has no arousing affect on my cat. Perhaps my visual system is more fully connected than my cat's, or maybe mine, which is also merely partially connected, is simply partially connected *differently.*

The same concept applies to hearing, smelling, feeling, etc. My cat and I have different capabilities in the realm of *perception.* I will whimsically assert that my cat and I also have different capabilities in the realm of cognition, or thinking, which can be explained by different subsets of partial connectedness within the tertiary cortical areas of our respective brains.

And this brings us to the audacious thought that we humans have "blind spots" in our thinking. Not just in our perceptions, but in the things we are capable of thinking about. Certain thoughts may be very difficult to think. If this is so, you might ask, then surely we'd notice that something's missing. Not so! Do any of us notice the blind spots

in our vision? (To prove they exist, place a sheet of paper on your desk, and draw three dots 2.5 inches apart along an imaginary horizontal line; then stare, from a distance of about 9 inches, at the center dot, and close first one eye, then the other. The right eye fails to see the dot on the right, and the left eye fails to see the dot on the left.) The brain is wired so that it does not "notice" that something is missing. By the same reasoning I allege that human brains are unable to notice that they are unable to *think* certain thoughts! To expect otherwise is as silly as calling out to a group with a regular membership "whoever isn't here, please say so."

In contrast to blind spots is the tendency for a properly prepared neural network to converge on a preferred stable region for too many stimulus situations. In other words, the area of initial conditions that lead to convergence upon a predictable stable state is larger than it "should" be. By analogy, I claim that human brains are ever too ready to think certain thoughts.

Thus, it is too easy to think "magically," to believe in spirits, or gods, or God. To believe that every problem has a solution, or that every question that can be articulated has one correct answer.

Each sub-species of firefly has a unique flash pattern. The females (called glow worms) respond to only the appropriate flash pattern with their own species-unique response flash pattern. When both male and female patterns are correct, mating will proceed. The high specificity of both the sending and receiving neural apparatus of both sexes assures that potentially disruptive genes from other sub-species will not be introduced into their offspring's genes. This specificity can be attributed to very sparsely connected neural circuits assembled by firefly genes. If an individual departs ever so slightly from the species-specific (though arbitrary) pattern, they will be doomed to infertility, and their version of firefly "wrongly" partially connected neural networks will be doomed with them. The arbitrary timing for the flashes of a specific firefly species is perpetuated. From their perspective, there's a right pattern, and all others are wrong. And no fireflies are present who would dispute this.

Analogies abound throughout the animal kingdom. Insects, reptiles, birds, mammals - they all have species specific ways of creating partially connected networks. Each species is capable of an extremely small subset of what would be possible using a fully connected brain. Every individual's perceptual repertoire is very limited, as is each individual's behavioral repertoire.

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We are now ready to return to the question of the magic wand. What is possible, and what isn't, by a hypothetical magic wand that purports to remove irrationality? And is such a wand even possible to conceive?

I believe that not only is such a wand *practically* impossible, but it is *theoretically* impossible! And I think you now understand why I am taking this position.

APPENDIX B – MORE OFFBEAT IDEAS

Only if the wand were to enhance connectivity beyond what the genes specified is it possible to conceive of perceptions, thoughts and behaviors that are outside the realm of the species. Every individual has possibilities that are limited by their inheritance. It is futile to "exhort" an individual to "straighten up, and be rational!"

My cat cannot think thoughts for which connections do not exist. And more to the point, humans cannot think thoughts for which human brain connections do not exist. This is our lot, this is what it means to be alive.

"Life's a funny proposition, indeed!"

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I've had many conversations with male "praying mantises." Usually I ask what they think about courtship, and the female praying mantis custom of biting off the head of the male during sexual congress for the presumed subsequent nurturance of her baby praying mantises. Every time I confronted the males with this reality, they deny it. Nevertheless, I exhort them to reconsider, to go beyond praying mantis limitations, and to retire to a life of tranquil contemplation and joy in being alive. But my arguments fall on deaf ears, and they go lumbering off awkwardly to their unnecessary and sad destiny.

They act this way, I assert, because their genes have provided them with a very carefully connected neural network for a brain. Any males who had the benefit of a genetic mutation that coded for a connectivity allowing them to contemplate the consequences of their instinctual actions left no offspring to carry the desired mutation into subsequent generations. The only fellows we see, consequently, are the fools who are incapable of thinking outside the carefully scribed realm of thoughts and behaviors that serve praying mantis genes.

This dynamic between what the genes want the brain to think and do, as mediated by a gene-coded construction of partially connected brains, must occur for every living creature - including humans. Is there any folly within the Human experience to suggest that Human Nature exhibits the same limitations? What a silly question!

Naturally, our brains are constructed so we don't see our follies. Any brain that was rational and perceptive about "sacred" things would drop out of the gene game. The lucky individuals might lead an individually rewarding life, but their wisdom would be lost when they died. **As we look at others, and even ourselves, we see only fools!**

If a magic wand cannot reconnect, it can do nothing! A wand that does not reconnect is as useless as my conversation with the praying mantis. If the circuits are not there, they're simply not there, and it is futile to exhort the partially connected brain to think the unthinkable.

APPENDIX B – MORE OFFBEAT IDEAS

To paraphrase Professor Robert Feynman, teaching is a pointless activity. The students who don't know the stuff will never learn it, and those who are capable of learning it will learn it on their own. Our state of connectedness defines our destiny!

A wise man cannot go amongst his contemporaries and simply enlighten by engaging in provocative conversation. Nobody is changed by forcing them to face a truth. If such a preposterous thing as a God did in fact exist, and if such an entity came to Earth and engaged men in conversation and explained to them anything they asked about, and even explained things they weren't smart enough to ask about, it would all amount to nothing. For human brains are constructed in such a way that truths which were not useful to our ancestors are repelled like water rolling off preened feathers.

There is no magic wand for making a person think and act rationally. There is no regimen of thought that will accomplish this impossible goal. The thinking individual is left to contemplate the futility of his predicament, and formulate existential epithets.

Life is not only a **funny** proposition; it is a **futile** proposition - indeed!

[This is another essay that needs to be polished and included in the Third Edition of my book *Genetic Enslavement*. It explains the impossibility of successfully addressing the challenge of choosing values to live by to supplant the values our genes gave us to live by. This essay supports the penultimate chapter of that book, *Repudiation of the Foregoing*.]

APPENDIX B – MORE OFFBEAT IDEAS

THE ULTIMATE LIBERATION

1990.06.30

Dear reader of the 22nd Century; dear confused person! You may be wondering what happened, if you are one of the lucky ones to have the strength to wonder. I will tell you! I will explain what happened.

You may wonder why someone from the 20th Century has the nerve to give an accounting of events which have not yet occurred. Normally such things are not done. But you and I are on opposite sides of a catastrophic collapse, so profound that our ways of thought are different, so I imagine you might need the help of insights which may be unfamiliar to your generation.

I propose to write across the Centuries, and offer explanations and insights about the collapse with a *pro*spective perspective. I can see with foresight, perhaps more clearly than you can with hindsight, the unfolding forces and events that bring down civilizations, and which is now bringing mine down.

It will be your job to renew the spirit of Human endeavors, and to create conditions for the rise of a new civilization. If you are successful, generations that follow you shall then have the opportunity to create habitats in Space, far from the degenerating influences on Mother Earth. And only after the Human seed dwells safely in Space can the dream of The Ultimate Liberation be achieved.

The rise and fall of civilizations are influenced by the unrelenting war between producers and parasites. It's an issue of micro-motives determining macro-behavior.

As a first approximation, the cycle begins with achievers working to produce a civilization from the rubble of a previous one. Life is hard, and freeloading is not tolerated. Women "know" this, and they are attracted to men who display the will to achieve. Men know what women are looking for, so even if they aren't real achievers they endorse the ethic and emulate the attitude.

When a civilization is successful it produces wealth. Eventually, when most people are wealthy, and when wastefulness abounds, there are new opportunities for freeloaders. More and more men are drawn to the parasitic niche. It becomes common knowledge among a subculture that working is unnecessary, that others are willing to work more than one man's quota. The women also notice that something is changing.

Women are trend watchers, more than men. They assess what the next generation will be like, what it will reward, and mate with the men having the genes for it. At this writing women have detected the coming of the transition by the cues of wealth and a growing unwillingness to work. This has triggered a shift in the type of men they find attractive. The producer is now "out," and the parasite is "in!"

In America this happened during the famous "sixties," the 1960's. The land that my father's generation built has become the land that my daughters will plunder. Although men's activities do the actual plunder, the women must be held partly responsible, for they play a crucial role in bringing it about. Men who would otherwise be productive achievers will be parasitic when women embrace the new era of parasitic freeloading. Women, ever style conscious, want only the best for their genes, and care not for civilization. Men, who subconsciously monitor women's taste, are equally responsive to only what best serves *their* genes. Both sexes are guilty!

In every era there are men and women who have what it takes to create civilizations, just as in every era there are those who have the capacity to bring the very same civilization to ruin. The genes may respond to the changing selective pressures, but they do not change as fast as the chameleon behaviors which are within the repertoire of every being. I believe that every person, of every age, is both great and petty, since each has the capacity for creating *and* destroying civilizations. And I also believe that men and women differ in their predispositions to be on one or the other side of this dynamic. This is our eventual hope for salvation.

As I record these insights, I, because of my ideas, am already an anachronism. Those of my generation who think like me will keep working; we will continue our endeavors to contribute to the glory of this civilization's cycle, because our direction was "set" in childhood. It is our heritage, and we will not "sell out." Our productive efforts will carry many freeloaders, which the women are already learning to adore. This is fate, and every player has an assigned role.

Because of technology it is possible for just a few very productive workers to carry a larger load of non-producers than during previous cycles of civilization. However, also because of technology, the problems facing us have a broader base from which to grow, and the problems will grow ever faster; these destructive forces will grow beyond the reach of rescue by any minority of producers. No amount of heroic effort by achievers will be able to tame the ills that have already been unleashed. By the end of the 21st Century our Earth will be a pitiful, whimpering Hell! Those few of us who see this give muted warnings that go unheard through the frenzied clamor of plunder.

The pinnacle of the Golden Age of Western Civilization occurred during the mid-20th Century, during the 1950's and 60's. Pockets of progress now persist, giving the false appearance of a continuation of a Golden Age.

There will never be anything to match the Apollo Moon landings. The Space Shuttle is becoming a disaster, and our ability to manage large projects, requiring the sacrifice of individuals to the greater good, is not even possible within a limited organization such as NASA. This is a symbolic failure which bodes ill for society at large.

Bold thinking, which could theoretically arrest the decline, had its golden eras scattered among the late 18th, middle to late 19th Centuries, and during the 1920's and, in limited areas, during the 1970's. Sociobiologists, who hold key insights that could theoretically

guide our civilization to safe shores, is practically silenced, and will never overcome the regressive tide of thought which non-achievers dominate.

Medical research will continue to make dramatic accomplishments, but the excessive practice of it will render itself impotent by creating needs that grow faster than medicine's ability to cure. Every new application of medical technology seems to be on behalf of the blind goal to prolong life, regardless of the merits of the individual life. Thus, people with genetic defects are contributing to the gene pool at a rate unrivaled by past eras of good intentions. Medicine, which is supposed to ameliorate suffering, is showing its other "cutting edge." Genetic fitness is also imperiled whenever large fractions of newborns are kept alive by medical technology through the reproductive years, due to the "genetic load" effect. Genetic disintegration is essentially irreversible, since the timescale for the creation process is so much longer than that for dilution.

This is a sad thing to write, sitting here imagining the genetic defects that may afflict *you.* But this may help you understand why you and your contemporaries are afflicted so extensively by unwanted genes.

Environmental insights and actions are increasingly rendered impotent by short-term forces to safeguard the local economy. Half-hearted attempts will be made, and obligatory lip service will be given, but the fundamental lifestyle changes that are required will not occur. People's short-term interests will always prevail over longer-term ones. Environmental disasters will appear more frequently, will rage like wildfires, and they will occur faster than they can be put out.

The world's population will grow unchecked, and nobody will dare to suggest that another country, or another "class," exert reproductive restraint. The majority, living in poverty, would never vote for any measure that might help the wealthier, regardless of the possibility that only the well-off have prospects for saving civilization.

These failures to cope will occur because of the genes. People will not "think" what the genes have inhibited them from thinking. Only new thoughts, bold thoughts, can hope to save this civilization. Humanity cannot liberate itself from the blind agendas of the genes, and for this, every civilization that rises is also doomed to decline - unless...

Unless isolated communities can somehow plant themselves in Space, and nurture a new Nature!

A new ethic is needed, and only by ridding ourselves of the most offending genes can the transformation occur. It is possible that the resolve can only be sustained, and genetic progress is undiluted, from the uncompromising rigors produced by a community living or dying together in Space.

Males need to "show off" their good genes so females will be attracted to them. Peacocks show off their immense feathered tails, as if to say "with a handicapping tail

of this great size I *must* have some compensating good genes for *some* things in order to have survived; and your offspring can have them too - just *let it be me*."

Bright coloration is also a handicap, making the male more visible to predators, which would serve to separate those well endowed with compensating survival genes from those less well endowed which do not possess the compensating good genes.

Bower birds are perhaps showing off the fact that they are not victims of general genetic deterioration, for if they were carriers of a load of bad genes, they could not construct their elaborate, genetically programmed bower displays. Synchronized mating dances may serve the same function.

In these bird examples the display is a means for stating that unseen good genes are present which should be of interest to the female because of their potential usefulness in helping her offspring survive. When desirable genes can be detected more directly they will advertise their presence by a more obvious means. A good hunter will advertise his success, thus assuring prospective mates that he would be a good provider for her and her offspring (and that her male offspring might also be good hunters, etc).

Humans have many more opportunities to show off because the human repertoire of economically useful activities is so large. It is not necessary that every man be a good hunter. He could also be valued for healing abilities, or a talent for commerce, or farming, or tending domesticated animals. If an individual is good at any of these valued activities he should advertise it.

In modern times it has been customary for individuals to become excessively engaged in rare endeavors, as if to show prowess in a new niche. Mountain climbers, for example, are at a loss to explain their motivation to others. Fanatic commitments are made in a diverse list of activities: sky jumping, hang gliding, rock climbing, motorcycle racing, dragster racing, etc. And there are less showy activities, like toastmasters, community volunteer work, etc. Humans are unique in having such a wide variety of activities for dedicated personal commitment. The existence of some of these is an outgrowth of the need to advertise good genes for something useful.

Civilizations are based on the contributions of people engaged in many specialized activities. For awhile every village needed at least one good blacksmith, a few good bakers, tailors, traders, etc. Today, every city needs computer programmers, hardware experts, telecommunications specialists, business entrepreneurs, company managers, environmental scientists and engineers, etc. Adaptability is important, since valued specialties come and go almost as fast as the generations. People with good genes for some of these activities are an asset to sophisticated societies. They can be an asset to prospective sexual partners. And the individual who has the good genes would do his genes a favor by advertising this fact.

Only men need advertise their good genes, since only women are discriminating in their mating choices. Men lose almost nothing by mating with any woman who

consents. Women need only advertise fertility and fecundity, for reasons described below.

My argument superficially resembles Freud's belief that civilizations are built by men who are sublimating unquenchable sexual drives into productive activities. My argument is nevertheless fundamentally different in one respect. I claim that men are driven to advertise their good genes in order to enhance their sexual attractiveness, which is the gene's way of maximizing the number of them that get inserted into the next generation. In the process of advertising their good genes, men engage in activities which happen to produce civilizations. Genetic survival is the micro-motive, civilization is the macro-behavior. Sexual union is merely an intermediate step in the entire process.

Freud identified the quest for sexual union as the ultimate goal, and he can be forgiven for mistaking proximate causation for ultimate causation because sociobiology had not been discovered in his day. Today's Freudians cannot be so easily excused, for they are under a self-imposed limited perspective, hobbled by a need to see things from the narrow perspective of psychological theory. Psychologists miss the big picture.

I suggest that much of what animals and humans do is part of the endeavor to be "looked over" by the opposite sex for the purpose of initiating sexual activity so that the genes within us may live long and fruitful existences. An activity that might normally be construed as serving the individual's personal survival or prosperity should be re-judged with this viewpoint. A person may appear to be dancing merely for the delight of performing coordinated movements, yet the *real* reason may have to do with the genes' desire to be looked over and judged worthy of becoming a part of another person's offspring.

This desire to be "looked over" is a means employed by the genes, a micro-motive, which drives the evolution of genes. In the process, civilizations can become a consequence or a casualty. They are a consequence when productive achievement serves the genes, and they are a casualty when parasitic exploitation serves the genes better. What a flimsy dynamic for making civilizations come and go!

About the Author

Bruce L. Gary was born in Ann Arbor, Michigan in 1939. He graduated from the University of Michigan in 1961 with a BS degree in Astronomy. He was employed by the US Naval Research Laboratory, in Washington, DC from 1961 to 1964, Caltech's Jet Propulsion Laboratory in Pasadena, CA from 1964 to 1966, Cornell University for assignment at the Arecibo Ionospheric Observatory from 1966 to 1966, and again by Caltech from 1966 to 1998.

Additional professional information can be found at the following web site:

http://brucegary.net/resume.html

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MISANTHROPE'S HOLIDAY:

VIGNETTES AND STORIES

This is one of my four misanthrope books. It consists of vignettes, stories and essays that document a transition in my life from a cold-hearted misanthrope to a warm-hearted one.

The softening of my outlook was influenced by fatherhood. As I extended a helping hand in the raising of daughters Lory and Cindy I internalized the notion that strength and independence are achieved from the nurturing of others. A child with special needs is a call for special parenting, and I answered that call.

I have come to view the years 1980 to 1991 as a tumultuous time of transition for me and my family. Before the transition I overlooked things that would have been distractions in my pursuit of a professional career. During the transition I paused more often, smelled the roses, and allowed the inner poet to explore the poignancy of everyday things. After the transition I felt a balance in life, an acceptance of what can be changed and what can't, as if I had returned from a holiday that had given me permission to relax and experience the world more fully.

An author must keep in mind his intended readership. Although my daughters were on my mind as I collected the material, and they may be the only ones to read this book, after finishing it I believe it is suitable for a wider readership. After all, misanthropes have many life paths and this book illuminates mine. I fervently hope that some day humans will become sufficiently dissatisfied with "human nature" that they will embrace the criticisms and visions for a better world that only misanthropes can offer.

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