EDITORIAL

[Editorial Note: Although neither the *Journal* nor its publisher (The Coastal Education & Research Foundation) endorses the content of editorials, the use of this column is encouraged as a forum for the free exchange of ideas. This commentary by Dr. Le Mehaute represents this author's view of the environmental movement set in the context of the coastal/marine environment. Dr. Le Mehaute's frank comments are not intended to be disrespectful or blasphemous, but rather "food for thought" relevant to a subject that impinges on environmental actions everywhere. His comments are published because they merit consideration by proponents on all sides of the global environmental issue.]

To Beach or Not to Beach: Or the Origin of the Environmentalist Movement

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PREAMBLE

Nobody argues about the importance of managing the environment. Environmentalism as a movement, as well as a public policy, will survive any attack. Ecology as a science, however, has reached an academic status where a little criticism cannot hurt. Therefore, the author feels free to scalpel with sarcasm some of the most questionable aspects of the environmentalist movement.

Is the environment that we have inherited through natural processes so perfect that it cannot be modified gently and carefully for the betterment of humanity? Is man's influence on the environment a part of the natural ecological process, or is it artificial, and fundamentally evil and immoral?

"God is not evil. He is just an underachiever".

Woody Allen

It all started when God got lonely. Then, to have company, he decided to create the Angels. One of them was Satan. Bad news! It was His first mistake. After a while, God got bored with His Angels singing alleluia all day long. "What the hell am I going to do for the rest of my life?" Eternity looks to Him awfully long, particularly at the end. Then he said: "What about creating a little universe for fun? I shall have a garden that I shall call Earth. To make it lively, I shall program it with a self perpetuating extension of my creation. I shall call it Life."

He did it. It did not take Him a long time to figure it out. The Big Bang! Matter, anti-matter, from nothing like 0 = 2 + (-2). Electrons, protons, quasars, black holes. Too creative, too talented He did it too fast, in six days, even though he had all the time in the world. The Earth, Bang! The sun, Bang! The plants, Bang! The animals, Bang! with an innate urge to survive, reproduce, and multiply. Then, at the end of the last day of work, He created a special species to whom He gave a complex assemblage of biochips, called the brain, which enabled this species to think. From the quarks, the neutron, then the amoeba, creating life upwards to intelligence and consciousness.

Six days only! Then He got tired and rested. No surprise that, despite His great talent, it was a mess.

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If God had filed an Environmental Impact Statement, He would never have been given the permit. He (or was it Satan?), put salt into the sea. You cannot even drink it! Polluted at Genesis! He scattered around heavy metals such as mercury. He would have certainly not been allowed to do that since there is more mercury in sea water than is allowed by law. So you cannot even take a pail of sea water and throw it back into the sea without committing an illegal act. He spread around all these toxic substances which poison the clamshells at each red tide. He added 12.6 billion tons of arsenic in the ocean, 3.7 of zinc, 1.8 of chromium. Regarding density waves, they cause more sudden temperature variations than is allowed at thermal outfalls. And there are the hot mineralized volcanic waters, the natural seepage from oil reservoirs, and so on, and so on ... No! His project would have been turned down! How many natural phenomena would be called pollution if they were attributed to mankind?

However the real problem was life. It was not so much the instinct to reproduce. On the contrary, it was even kind of fun. As a matter of fact, it showed that God has a good nature and a sense of humor. The problem was the urge to multiply and for every species to live beyond their income. Life became a cheap commodity, undepletable, so easy to replace that even the most disavantaged creatures and poorest tribes could reproduce in quantity. This increased the pollution so much that some species started to make a real mess.

There were so many buffalos in the Great Plains, excreting sixteen times more than the brainies, that the Missouri River became a real sewer, before the first environmental engineer, named Buffalo Bill, took care of it. By the way, it was also the reason why, at that time, there were so many species of fish in the Gulf of Mexico. Fishes like it, you know. . . . They produce it too. Ocean creatures necessarily live in a soup of their own fecal material. As a matter of fact, they produce more of it in one year than all the brainies since the beginning of time. (There are 3.5 million tons of anchovies in the California waters which produce 5 times as much fecal material as the 10 million people of Southern California, and they are only one of thousands of species living in these waters.) And they do not even treat it like the brainies do before throwing it to sea, adding to the pollution inherited from Genesis.

This innate desire to survive, produce, and multiply extended to the smallest living organisms—

cells, viruses The great plague killed seventy million people.

For life to exist in any form, water, oxygen, energy and nutrients are all needed. God provided the three first necessities in abundance and without problem for all living organisms. But He completely forgot the food, probably distracted for a short while by Satan. So, the poor creatures had only one solution left: to eat each other and, in order to guarantee the survival of their own species, to dominate as many species as possible. The killing of the weakest by the strongest, the survival of the fittest, a law of nature resulting from that moment of distraction. Crime, murder, blood, slaughter It was called the "food chain".

The food chain principle was not intended by God. He may be a fast careless underachiever whose sloppiness has been exploited by Satan. But God is good. It was just an oversight.

As a result, and also as a result of the harshness of the environment, there are only 13,323,987 species left on earth, whereas a thousand times more have appeared, then disappeared for ever. A few more, the Key Largo wood rats, the Schauss Swallowtail butterflies, the California least terns, the belding Savannah sparrows, the California brown pelicans, the clapper rails, the salt marsh bird's beak . . . are now endangered species which soon will have to be added to the billions of species which have disappeared for ever.

In that great shamble, some species such as the cockroaches, the sharks, the brainies were particularly gifted for survival. The brainies not only survived, but started to dominate all the others. And in their urge to survive, multiply, and conquer, each tribe attempted to dominate the others. Competition, ambition, the fight for domination and power, all became laws of nature evolving towards an ecological balance based on the food chain principle. The brainies then became the ultimate predator. In contrast with other species which kill only for food, the brainies started to hunt and fish just for fun. At the end, the brainies had only one enemy, themselves, not only between tribes, social classes or neighbors but even between lovers.

It has to be said in all honesty that, after His six days of hard work and one day of rest, God lost interest in His creation, devoting His free time to something else, God knows what! In any case, for a long time, He did not make any comments when the seals eliminated the abalone, when the beavers built natural dams destroying the

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breeding grounds of many fishes, when the brainies built artificial dams endangering the snail darters, or when they eradicated mosquitos by the trillions.

After a long while, one day (or is it one night? God does not sleep), He just happened to look on His seven-day pastime. Then He suddenly realized what a mess it was. He said to Himself: "My God! I cannot leave it that way. I have to do something about it. But what?" Then He had a divine idea. He was going to have a son who would look like a brainy. He would send him on earth with the mission to try to see what He could do about the food chain. His son tried first to convince the tribe of brainies to which He belonged that killing each other was not the way to go: "You have to be good to each other, help each other, be charitable." Then He tried to make a deal: "Listen, guys, if you follow my instructions, I will recommend you to my Father, and you will have a first class ticket to Heaven. Otherwise, you will go to Hell".

Heaven was supposed to be the place where one is guaranteed a good neighborhood, with ethereal angels singing Gregorian. But no sex, no booze, no gambling.

Hell appeared to be the place where all the action and the fun were. Hell seemed to attract all the bon-vivants, whereas Heaven looked like it was only for the God-fearing, knee-jerking, no fun, guilt-complexed few who were always afraid that, somewhere on earth, someone can be happy. He was not too successful, at least at the beginning. Power, sex, money were the only motivation imbedded in this species by millions of years of an evolutionary process initiated by the Creator but continuously worked on by Satan. Slavery was imposed by the big winners of the food chain upon the weak of their species. And they had a lot of fun in endless orgiastic feasts with half naked beautiful dancing nymphs serving grapes and wine at will. The ultimate of an hedonistic consumer society.

Nevertheless, He succeeded in convincing a bunch of poor fishermen of the good things after life. "You will never get hungry in Heaven." They were twelve disciples who all, except for one listening to Satan, kept spreading His good word and advertising about retiring to God's country club, for selected members only, fully guarded twenty four hours a day by a guy named Peter. Slowly the word spread. They called it "civilization", defined "human rights", invented the "guilt

complexes" and ultimately advocated "environmentalism" almost as a form of religion with an eleventh commandment: "The earth is Lord's and fullness thereof; Thou shall not despoil the earth nor destroy the life thereon"; "Theocentrism: the Cornerstone of Christian Ecology".

It took a long time for the brainies to accept decent moral values. They kept inventing bows and arrows, fortresses and guns, fusion, starwars and hightech to kill each other with more and more efficiency and cost-effectiveness. The rest of the species belonging to the food chain continued, without guilt, to kill each other by the trillions and to reproduce happily even faster.

The brainies, even though still killing each other, were now able to justify their slaughters in the name of a higher cause, a holy war. They killed to convert and occasionally they also got killed for their faith with their guaranteed first class ticket, or plastic key, to Heaven. Their swords, their battleships like their nuclear weapons, were all blessed by the representatives of God on earth. They were fighting for a good idealistic cause, on the right side, on God's side, on both sides. In reality, it was still the food chain principle at work.

Later, they simply disagreed on what was supposed to be the best economical system. This was taken very seriously. God's son preached charity as a virtue. Later a guy of the same tribe named Marx went further: everybody should share equally regardless of what one produces. Needless to say, it did not work at all, as it was too much against nature and the food chain instinct. "Come on. You want me to give to that lazy bum the product of my hard work!" You had to be a saint. So it has to be imposed by force, by tight dictatorial regimes which had absolutely no concern for the environment.

The second system was based on greed, envy, ambition and the urge given at Genesis to be aggressive and dominating. It worked beautifully in a free society of brainies left to their own natural instinct, as it was in full accordance with the food chain principle. Wealth was considered as the reward of virtue. It was the evil part of the creation, the gremlin introduced by Satan at Genesis.

In that free prosperous post industrial environment, the privileges once reserved to an elitist group trickle down to a larger segment of the brainies. Enviable positions at the upper echelon of the food chain were menaced by an invasion of ri Mehaute

lower quality. The most successful, the most affluent wanted to protect their turf.

They invented the "environmental movement". Environmentalism, as it was called, was essentially based on a hypocritical interpretation of God's son-doctrine, the protection of the weak species, based on a pseudo science, ecology, for the benefit of the leisure class. The leisure class wanted a status-quo evolved from two thousand years of Judeo-Christian values which then have more or less slowly permeated most tribes.

"I like having the beach for myself and my friends".

"Keep the shoreline for the few of us who by our long traditional virtues, hard work and hard battles against evil, have been blessed by God with the privileges of keeping His creation in its pristine state. Let us frolic with our friends on the beautiful deserted beaches in front of our homes. Look at our luxury houses, flowers and butterflies. Do you want all this to be invaded by a Sunday crowd of noisy beachgoers, spoiled by beer cans and greasy papers? Don't you want this fragile environment which has been given to us by God protected?"

The elitist brainies then started to advocate the protection of the less talented species which were left after millions of years of evolution, particularly the ones which had previously suffered most from their massacre. The white baby seals, whose fur previously adorned the females of the leisure class, became a cause celebre. With their black eyes and warm teddy bear affectionate look, the baby seals became the favorite subject of a former sex-kitten in search of a redeeming cause to appease her guilt and keep her busy between lovers. For some reason, the rattlesnakes, the cockroaches, the tarantulas could not find any mentor to defend their causes.

"Protecting the environment" became chic. The most successful females of the food chain were particularly influential in that movement. They selected the most beautiful and pristine areas, had their dwelling quarters built there with a view, then immediately became active to prevent the development of their neighborhood in the name of saving the environment. "Save the bay", "Save the canyon", "Save the river", proliferated. The pro and con of artificial beach nourishment became a highly debated issue in every council meeting and public hearing. To beach or not to beach? That is the question!

The "Greens" refined their arguments by adopt-

ing new words of scientific consonance: "Ecosystems, endangered species, cone of influence, carrying capacity, depletable resources, biodegradable ...". They hired lawyers supported by expert ecologists who were able to develop mathematical models, deterministic or stochastic, to prove their points.

Yes! The brainies, with their little minds, were capable of deciphering the secrets of creation with all the chaotic nonlinear interactions between predators and preys and their subsequent instabilities (infinitely small causes have finite effects). They were able to describe these interactions by simplistic equations which God was supposed to have used in His universal theory. These equations were dependent upon the knowledge of functional relationships between causes and effects which were not guaranteed to exist in mathematical forms. Why do you want God to be kind to the god of mathematics? Even if these formulations did exist, they were not necessarily established, as it would require the entire life of a scientist to establish one of these. Furthermore. hypothetical representation of that complex ecological world would require many thousands of these nonlinear relationships, but their Mickey Mouse simplistic mathematical models looked good and convincing to the layman.

Then the environmentalists invented thermal pollution, the ultimate limit to energy development. They promoted "Small is beautiful", "Family planning". Fun without risk was recommended for the least developed tribes in order to prevent the invasion of "illegal aliens" who will destroy their comfort and isolation. ("The last American leaving Miami, please bring the flag".) Self interest but also a good way to get rid of their guilt complexes in the name of a holy cause which in the long run was supposed to benefit everybody.

Stupidity or hypocrisy? Not at all! The brainies always had a talent to rationalize their worst actions in the name of a holy altruistic cause. The underdeveloped were too concerned about surviving to realize that the quality of life was intimately dependent on the protection of the mosquitoes, the alligators and ... keeping them underdeveloped. "Can you imagine the mess if a billion Chinese start to drive Lincoln-Continentals?" The 270,000 deaths from starvation per week were less important than the zero death at Three Mile Island or the swallowtail. It was not exactly what God had in mind when He sent His son to earth and He had mixed feelings about the fuss.

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The swamps became "wetlands", an ecological breeding ground for the lowest level of the food chain. If they disappear, all the species, including the brainies will eventually disappear. Then the huge nuclear weapons investment will have been wasted....

The Greens were very influential. Pipelines were built above the permafrost to let the caribous go by in their yearly tourist vagary towards their summer resort in the Great North. Bridges were built, at great cost, for what is left of the Florida panther, in order that it can keep vagabonding and proliferating in its wet surroudings. It did not come to mind that the simplest way to decrease the list of endangered species was to get rid of what is left of them, so that they will no longer be endangered.

Litigation and mitigation became the buzz words. Sea-oats on sand dunes, sea-grass on sand bar

A good business in a sense for many. Biologists, zoologists, previously unemployed, now were busy writing environmental impact studies, doing baseline research, listing Latin words which may as well be Chinese, adding their scientific jargon so that nobody could argue.

Overall, the green movement, if it did not succeed in sending back the brainies to their cromagnon caves, was at least successful in protecting the privileges of the leisure class, but at a high cost to all classes of their tribes. The tribes where this movement was the most successful suffered an economic recession. Industrial and real estate developments became entangled in endless expensive lawsuits and many projects were stopped.

"You cannot build a nuclear power plant in my backyard".

"OK. OK. I am going to build one on a floating platform offshore".

"Ya! But you will have to protect it from storms by a breakwater, and, because it is nuclear, we cannot afford to take any chance. The design criterion has to be the million year wave".

"What? But wait a minute! That is what an aircraft carrier is about: a floating nuclear power plant, and she rides out a storm eventually".

"Different!"

"Why?"

"Different".

"But that breakwater that you are asking me to build for that million year wave—God alone knows how large—makes the project non economic".

"Too bad. My mission is to protect the environment".

"D.... it! Let the b.... freeze in the dark!"

Economy versus ecology without "ecolibrium". A decrease in the standard of living to increase the quality of life. The elitist few, at the top of the food chain in their comfortable and protected surroundings, were very convincing, articulate, and they have the means . . . to buy politicians and other demagogues.

They were convinced, and subconsciously took for granted, that the natural processes resulting from the food chain principle with all its criminal implications inspired by Satan and overlooked by God at Genesis, were basically sound. They claimed that the earth we have inherited was in ecological balance and not to be changed and that the brainies should have had enough brains to know that they were not free to impose their will to modify this natural balance. Everything that the brainies produce is, by definition, artificial and polluting the environment, against nature, and evil. They are not part of the ecology and above all cannot pretend to improve it artificially. The great Gothic Cathedrals and their surroundings should not have replaced the forests, since as a result of these developments the wolves have disappeared from Europe forever. The brainies were accused of having a significant geophysical impact, the consequences of which were unknown.

Shallow ponds were to be kept as the most fertile source of life and energy, but the deep estuaries and embayments, even though blessed with less abundant benthic biota, were not supposed to be transformed artificially by dredged spoil into a productive shallow pond and breeding ground. Any action taken by the brainies to improve the natural environment, whether to build an irrigation channel or a marina, was condemnable a priori. The marinas of Porto-Fino or Martha's Vineyard were water garages for boats leaching copper from their paint to prevent biofouling, but the toxic organic chemicals manufactured by algae to protect themselves from bacteria were OK!

A retreat from shore was advocated. Waterfront constructions should be left to the fury of hurricanes. "Let the oceans take over great stretches of developed shoreline, including motels and hotels". In contrast, past generations considered that the sea was there to be conquered with dikes, pilings, for the good of society. The Siamese kept living on stilts. The Dutch had always considered that the North Sea belongs to them and is there

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to be conquered (Imagine what these guys would have done if they had been given the Florida Everglades!). The Japanese filled their embayments for airports.

The Greens were very convincing. The first people they succeeded in converting were the flower children, who by fear of the competitive food chain environment prevailing in the industrial society—some called it the rat race giving rats a bad name—revolted against the goodies produced by their assertive and motivated fathers. The challenge to conquer and the work ethics of their ancestors were evil. They still should be struggling in their caves and breaking their backs to hunt for meager food.

They were areas where Satan had worked his will, as God looked away. Contradictions never bother the environmentalists. The mightiest developer on earth, the polyps, whose coral constructions exceed by orders of magnitude all the constructions made by the brainies since the beginning of time and destroy all other lives where they invade, poison the small coral fishes with ciguetoera, were now to be protected. Projects of navigation channels near coral reefs were forbidden. These small creatures may not like to be disturbed.

The leisure class drove gas-guzzlers, travelled first class around the world to admire the natural wonders (not to be accessible to the public at large), went to international conventions on the environment, but were against offshore drilling to fuel their plans.

It became illegal to discharge pure water at sea: the oxygen content of pure water does not fulfill the norm imposed by law.

It became illegal to discharge sewers at sea without expensive and even detrimental secondary treatment, whereas the sea was starved for the basic plant nutrients provided by diluted human sewage in coastal waters. As most fisherman knew, fish were more plentiful around sewage discharges. The homeowner happily imported concentrated sewage sludge from Milwaukee (Milorganite) to fertilize his garden but was disturbed by the idea of discharging diluted sewage sludge miles offshore through a diffuser into moving and mixing waters.

The levels of arsenic and copper in the drinking water were higher than permitted to be discharged at sea. Every home had copper or zinclined water pipes, the brainies drank from tin cans, ate with silver tableware which exposed themselves to tiny concentrations of the so-called toxic metals with no known effect, but counterproductive regulations forced them to spend billions of dollars to prevent trivial additions of metal from reaching the oceans.

The times brought a growing awareness of the discomfort of living upon one's own excrements. They had to be collected, separated into liquid and solid—it was called sewage treatment—then dumped at sea where they could mix again in a diluted form. Sanitary engineers called themselves, more fashionably, environmental engineers. Their job was basically to disperse "it". To them, "it" was bread and butter. A twelfth commandment, "Outa sight and NIMBY", was a copout for the affluent brainies: A Love Canal yielded a hateful brew.

There were also some counteractions. Enhancement of the environment by environmentally sensitive developers started to make headway. Getting rid of an old rusty ship at sea was creating an artificial reef. It was then realized that rubble-mound breakwaters and offshore drilling towers, like sewage and thermal outfalls, actually attracted fishes and enhanced the marine biota. An "ecolibrium" appeared to be possible.

It was also demonstrated that, even without anthropocentric implications, nature is not and cannot be in an ecological balance. Since the beginning of time, species with a high rate of reproduction destroyed the other species on which they depended for their survival. In turn, they became "endangered" and the others strived. The food chain is a completely chaotic dynamic process in continuous evolution.

The road to Utopia was long and difficult. The basic problem remained. No alternative for nutrients appears on the horizon to replace the food chain.

And so it goes. That is the way it all started. But God is good. Remember, all this is Satan's fault. And if one day God realizes that there is no alternative to the food chain, to the struggle and the pain that every species has to endure to survive, He will say "The hell with it!" Since everything has a beginning and an end—except maybe the universe—then, in His infinite goodness, He will let the brainies eradicate themselves suddenly and once and for all. At the same time every living organism on earth seem doomed to disappear. Satan and his gremlins will also be eliminated. The human race was doomed since Adam and Eve.

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Armageddon was due to happen. Even the sun will run out of fuel.

Then one day, or maybe one night, He will start all over again. We were just a temporal failure in the great cosmic laboratory and God is infinitely ingenious and infinitely patient. Eons are only seconds in His mind. Another big Bang! Working through billions of years and billions of celestial systems, a creature will be devised that will share in more divinity that our pathetic breed and our living companions on earth have been able to sustain, getting closer to the pattern held in the divine mind. The food will be there free and plen-

tiful, like water, oxygen, energy, without the need to kill any living organism. The food chain problem will have been solved in His super-duper computer. Life will be sustainable with non-organic chemical matter. The brainies of the time will have the stomach for it. Gourmet food will result from savant chemical reactions obtained in kitchen labs. There will be no gremlins. The ecological balance will no longer be based on the domination of the stronger species. Everybody will be charitable and good to each other. It will be Utopia finally realized. Keep hope! We are a process. We are just God's first draft.