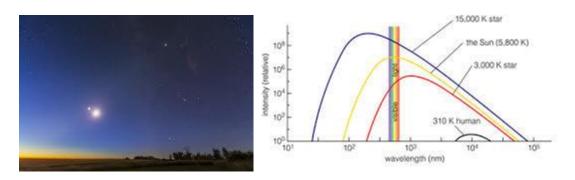
Ecological basis for charity

The words 'economy' and 'ecology' are both derived from the Greek word, "Oikos", pronounced "Eekos," which means-- "home and hearth sustainable within the environment." At some level, in various species and in many human organizational scenarios, both economy and ecology refer to the same concept. To a squirrel, wealth is measured mostly by oak trees, oak acorns and the edible flowers in the undergrowth. To most humans, however, the difference between economy and ecology is substantial-- especially following our widespread practice of exchanging money or its accepted surrogates—such as expensive gifts or rare earth metals or stones-- in the form of jewelry, instead of genuinely needed goods and services.



Perhaps the relation between economics and ecological sciences is comparable to the relation between astronomy and astrophysics. Whereas astronomers start with the identification, naming and classification of stars and constellations, astrophysicists work out "why" and "how" these celestial bodies operate the way they do. If there were no astronomers, we may not know the difference between Venus and Sirius for they move differently and have been classified appropriately.



So economics teaches us that a "pork belly" is a renewable commodity while "petroleum" is a diminishing resource. However, ecology and its associated sciences (such as paleontology)would tell us that pigs are mammals of the "Suidae" family of even-toed ungulates—hoofed animals who can bear their weight on the tips of their toes. Pigs were first domesticated by humans between 9000 and 7000 B.C. in the Aegean peninsula, close to modern day Greece— and have been transported thereafter to various islands and semi-tropical habitats.



A transition from economic thinking to ecological thinking may be difficult for some, but is often imbibed when one is economically challenged and learns from the necessary limitations offered by Nature's local resources. The word "local," here is critical because the ability of a species or individual to find resources depends on how far they are willing to travel to find those resources (e.g. penguin migration). So it is no surprise that all settled and stable ancient civilizations known to humankind were located near abundant sources of fresh water and salt.



Geographic isolation of a group of biological organisms leads to the evolution of features that are different from their progenitor. Our "culture" is a "functional aesthetic" built in part by "geographic isolation." However, the same "cultural identity" may impair our appreciation of the value of another geographically isolated group with whom we now choose to share our talents and resources—either by trade or by immigration. The Statue of Liberty in the New York Harbor is not just some gift of French aristocracy to buttress pride in their revolution that freed the serfs. Instead, Lady Liberty represents the freedom gained by assiduous study of validated wisdom—religious, revolutionary, poetic, or scientific.



The cultural identity of men versus women is not a sexual identity or balance of power—instead it is a need to define oneself in relation to the other. The same goes for inter-generational conflict and cooperation between grand-parents, fathers, mothers, sons and daughters. The plight of children whose words of genuine distress are ignored repeatedly is deplorable and a reason for the parent to repent. We can honor our mother and our father—as the Bible and Torah suggest—only if each parent reciprocates independently. Love is not a gift—it is a Taoist way of transacting.



Not every habitation of humans can be termed as a civilization. It is probably just as likely that an alien from outer space will feel incapable of boarding a bus in New York City as a New Yorker will likely feel incapable of negotiating a fair exchange of goods for services in a Polynesian tribe. Geographically isolated populations have the advantage of growing together but they are faced with seemingly insurmountable challenges when they need to conform to the demands of external visitors. "Fair exchange" is a notion that has often not been subscribed to by invaders and is not necessarily utilized when one is thinking from an "economic" point of view.



It is noteworthy that "fair exchange" is not the same as the "valuation based on competitive analysis" of modern economic thinking. For instance, if there were a patent for cotton clothing, the first person who weaved cotton plant fibers into a fabric would have intellectual property rights to the method for binding cotton fiber into strands, and perhaps for the method to weave the strands into a resilient fabric. Some of the thinking on intellectual property rights is fair, and some of it is monopolistic. IP valuation should reward the innovator for hundreds of sleep-deprived nights with meager entertainment, while simultaneously allowing for fair competition with innovative manufacturers who meet a genuine market need.





A notion that feeds competition in modern human societies is the perception that it is "us" against "them." Ecological studies of plants and animals within an ecological niche (position or function involving access to food resources) have demonstrated that competition for resources is not a primary motivator. Survival with cooperative intent is the motive, unless the cooperating agent withdraws loyalty. The cooperation between ants and aphids is beautiful—as is primate social psychology.



A tiger selects the injured among a herd not because that injured individual is the easier to prey upon, but because the tiger knows this individual is likely to die anyway given the extenuating circumstances of food availability. However, if compared to politicians who reduce benefits for the unemployed, the analogy does not hold. This is because the death of an injured antelope is quick with a canine upon the jugular—whereas the unemployed veteran who returns home after a broken shoulder succumbs slowly and painfully to memories of failed expeditions, missions and military campaigns. Further, evidence suggests that tigers do not kill for entertainment.



If a grocery store represents the resources of nature; the pantry, your kitchen, and your role as chef and host would represent your ecological niche. It was Herbert Spencer (1820-1903) who coined the term—"survival of the fittest," and when Darwin used the term 7 years later to describe natural selection, Darwin intended to suggest that the species that survive are the ones that are best adapted to their ecological niche. Darwin did <u>not</u> intend to suggest that only the strongest or fastest survive.



A disturbing consequence of Herbert Spencer's use of the term "survival of the fittest" and its subsequent use by Darwin, followed by modern society's misinterpretation of it--is that systems and processes that bulldoze their way into mass acceptance without adequate discernment are sometimes encouraged and actively allowed to prosper by way of legislation and "common sense."

A "fallacy" may be defined as an erroneous conclusion (cognitive illusion, mental tunnel, heuristic, error of logic) based on very powerful misinterpreted evidence— not cross-checked by an independent mode of determination of perceptual validity (e.g. a solid pencil appears broken in a glass of water, Ames' Room Illusion). When Krishna's scriptures say "the world is illusion," what they really mean is "beware of your cognitive illusions—the reality is different from your immediate conclusion based on misconstrued apparent perception."



Fallacies of dichotomous logic often fuel political will. Although dichotomies are useful in computer programming and biotic classification— their use in human affairs is often misleading, and sometimes deceitful. With some exceptions, when two entities are presented as if they are mutually exclusive, there is usually a broad middle ground, as depicted in the mathematical concept of intersecting circles in a Venn diagram.



What Eastsiders think Westsiders eat





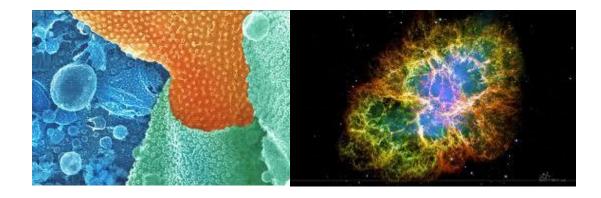
There is no doubt that Nature challenges individuals and species to either "change" or "die," as the remnants of dinosaurs remind us. However, Nature is replete with cooperative and symbiotic strategies of survival based on reciprocal altruism that enable biodiversity despite competition for limited resources. If humans truly believed in "survival of the fittest--" as interpreted by modern theorists influenced by Herbert Spencer-- we would harbor disdain for the medical profession and other healing arts and sciences because medical doctors actually help the "unfit" to survive.



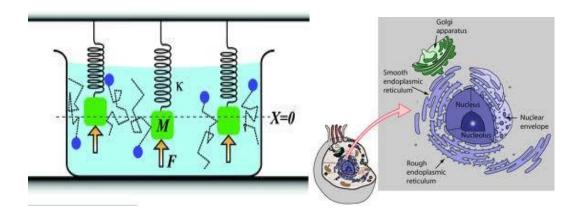
If the fastest and strongest were the only desirable species, would we not enjoy having sharks and piranhas in our fish tanks, aquariums, and shallow waters? Is there not something pleasurable in watching a seemingly helpless delicate goldfish or neon tetra cruise or flit through protected waters? Nature is not the monster she has been portrayed to be in some writings. The Great Barrier Reef off the coast of Australia is an example of Nature's mercy.



Survival of an organism depends on its ability to sustain inter-dependent processes over the foreseeable long term against the challenges of physical entropy (random chaos), and from threats within and external to its niche. If biological cells are modelled on principles of physics, one of their key properties is that the cytoplasm sustains chemical processes in a state of dynamic order that is complex but not randomly chaotic. The Crab Nebula is probably far more chaotic over the span of 10 years than a biological cell that has a sensitive yet selectively permeable cell membrane. This state of dynamic order is <u>not</u> a state of physical equilibrium— in fact far from it.



In a state of physical equilibrium, all local regions of a liquid that are some distance away from surfaces of contact have similar pressure, temperature and molecular density. Laws defining a fluid in equilibrium have simple mathematical formulae to describe them. What makes a biological cell so difficult to model by mathematical physical formulae is its relative inhomogeneity, or structural diversity combined with cooperative functional specialization. The organization of chemicals into intracellular organelles— of cells into tissues—and tissues into organs—makes multicellular organisms a marvel of Nature and God's mercy.



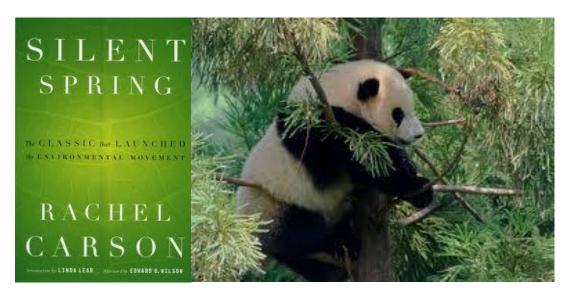
While biological systems attempt to eliminate entropy (magnitude of disorder in a local region of an interactive system) by staying away from a state of equilibrium— available evidence suggests that biotic, business, educational, social, and governance ecosystems may not spontaneously self-organize into their optimal forms. An active agent is necessary to reduce entropy with cooperation from resources made available by proximity. In some cases proximity is not just geographical apposition—rather an attraction based on compassion and mutual respect.



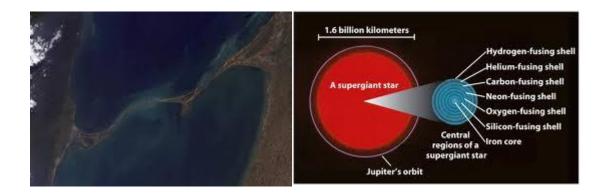
I am not competent to comment on social processes and whether only the "fittest" *social* processes survive in the long term. To imagine that all social and ecological processes are entirely self-regulating may be irresponsible wishful thinking. For example, I can state with confidence that it is <u>not</u> straight-forward to convert a grocery store isle into a royal banquet table for the Queen of England— and the probability that it will happen without an active agent is miniscule.



The good news is that since the 1970's, there has been increased published awareness about the needs of the global community (e.g. Rachel Carson, Silent Spring). This was supported by many innovators in ecological thinking— notably Eugene Odum, James Lovelock, Lynn Margulis, Fritjof Capra, Paul Hawken, Frances Moore Lappe, Carlo Petrini, Vandana Shiva, and so many others— too numerous to name comprehensively. Following the pioneering work of John Muir, environmental conservation organizations such as the World Wildlife Fund, The Sierra Club, National Geographic, and others have done commendable work in educating us about the natural habitat of so many species. We can either choose to discard our print copies of National Geographic following computer access to the worldwide web, and waste electricity on at least one computer monitor— or we can save the print magazine issues from 1977 till 1988 in a glass cabinet for your son or daughter's next sleepover with school friends.



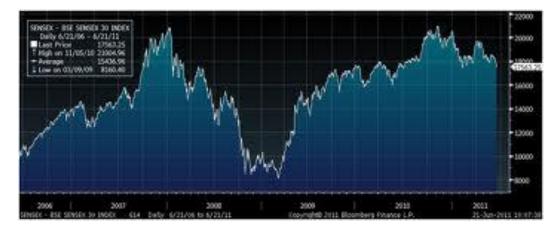
The view of planet Earth from outside the earth's atmosphere as first witnessed by the astronauts aboard the Apollo mission to the moon in 1969 gave birth to a new breed of ecological thinking in the collective unconscious of humanity. With advances in astrophysics we were able to conceive that stellar fusion of hydrogen and helium generated carbon— the basis for our food and fuel—and that hemoglobin-based life forms were based on a heavy metal— iron, as its primary mineral component. We are the substance of supernova dust, evolved in the oceans of planet Earth—washed ashore by lunar tides. Why do we allow our national borders and mythologies of glorious conquest to define us?



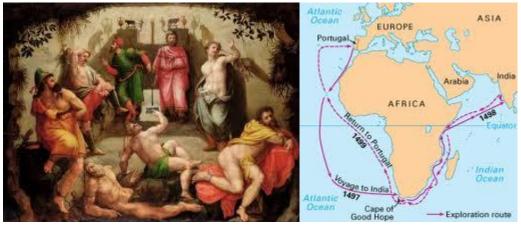
We do not want to wait passively for depletion of resources on planet Earth— as we know has occurred for many island dwellers. We seem to revere warriors and merchants disproportionately. While warriors and merchants have essential roles to play in regions subject to conquest—if they were motivated by fallacious logical thinking and supported by diplomatically inept political leaders— would that be a recipe for doomsday or an opportunity to revisit untested assumptions? To view the Ronald Reagan diplomatic effort in Iceland as a Republican ploy to gain bipartisan popularity would be a tragic misperception of a bold humanitarian move.



With the opening of financial markets across the world on Monday morning, economic indicators adjust currency values in milliseconds. Do these financial valuations indicate honestly the ecologically sound economic value of various geo-political regions in the context of their historical contributions to humanity?



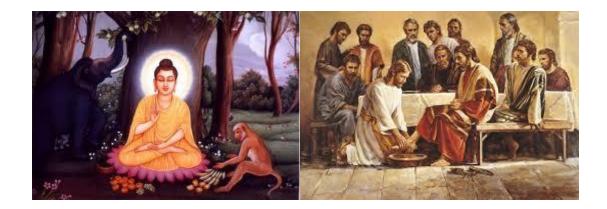
Are the Greek descendants of Pythagoras and Plato as worthless as the descendants of the explorer Vasco da Gama of Portugal? Between Portugal, Italy, Greece and Spain (PIGS), is all of the rest of Europe happy for the domestication of pigs in 7000 B.C.? How come our great economists and political leaders allowed the greatest minds and seafarers of the world to collapse humiliated?



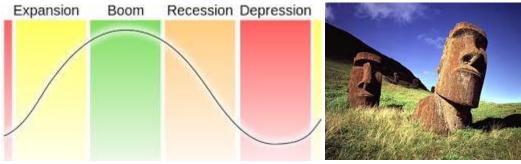
The point of religion is to foster basic courtesies toward one another that enable us to learn and grow in wisdom, compassion, forgiveness, and creativity. The Vedic scriptures claimed by many Hindus as the basis for their religion are essentially poetic discourse with the Spirit of Nature and gratitude for her abundance. In essence, the Rig Veda is similar to Native traditions.



The concepts of loving kindness taught by the Buddha of Bodh Gaya and by the Nazarene Jesus serve essentially the same purpose. The diligence and attention to detail learned by Jewish refugees in their exile from Egypt taught them that even God may not favor the best of us. The charity and mysticism of Muslim wise men encouraged social exchange between economic classes.



It is difficult to predict what will be the fate of human societies as we approach a rate of development accelerated by the various manufacturing booms since the year 1900. While "readiness for war" was the primary impetus for weapon manufacturing prior to the advent of television in the mid 1940's— the "psychology of consumer marketing" has been an equal partner in the "demand" for manufactured products and the fulfilment of that "demand."



Who am I to blame John Maynard Keynes for his theories—however, I have no doubt he is rolling with anxiety in his grave since the tragic killing of John Lennon in December, 1980. Lennon may have been wrong to suggest we live without imagining Heaven—and his emphasis in later years on "bed peace" and "hair peace" was misconstrued. Regarding John Lennon's killer—how do we assess the birth of compassion and repentance in the hearts of our prison inmates who were momentarily overwhelmed by a flight of fancy? How many times did Jesus say we must forgive trespassers? Seven times seventy may be too many for the 21st Century but when there is repentance on over 7 judicial occasions separated by more than a decade of punishment—surely even the Pagan would forgive. There is work to be done on our systems of jurisprudence. Fortunately, poetry, art, music, non-utilitarian science, charity—and esthetic pathways to wisdom— can balance our necessary commodity transactions.



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