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A MEANS OF CONTROL

The Last Scheduled BRAIN FOOD

by Jay Hanson, 01/01/00

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Treason doth never prosper: what's the reason?

For if it prosper, none dare call it treason.

-- John Harington, 1618

Man still bears in his bodily frame the indelible stamp of his lowly origin.

-- Charles Darwin, 1871

Males typically obtain meat in human and nonhuman primate societies and then attempt to use it to manipulate or control females.

-- Craig B. Stanford, 1999

A feeling arose in the Renaissance -- and crystallized by the seventeenth century -- that moralizing and preaching religious doctrine could no longer be trusted to restrain the destructive passions of men.

[2] A new means of control had to be found:

"Peasant rebellions were not exceptional events. They erupted so frequently in the course of these four centuries that they may be said to have been as common in this agrarian society as factory strikes would be in the industrial world. In southwestern France alone, some 450 rebellions occurred between 1590 and 1715. No region of Western Europe was exempted from this pattern of chronic violence. The fear of sedition was always present in the minds of those who ruled. It was a corrective, a salutary fear -- since only the threat of insurrection could act as a check against unlimited exactions." [3]

Bernard Mandeville (1670?-1733) suggested that a society based on the deadliest of the seven deadly sins [4] -- "avarice" -- would create common Machiavellian interests and suppress irrational passions. Mandeville's ideal society was one where the unwitting cooperation of individuals, each working for his or her own interest, would result in the greatest benefit to society at large. Mandeville anticipated laissez-faire economic theory, which promoted self-interest, competition, and little government interference in the workings of the economy.

The utopian agenda of economic liberalism to set up a self-regulating market system was fully realized in the American political model -- one dollar, one vote:

"In 1884, one of the wealthiest men of his time, Henry B. Payne, wanted to become the next United States senator from Ohio. Payne's son Oliver, the treasurer of Standard Oil, did his best to help. Just before the election for Ohio's seat, son Oliver "sat at a desk in a Columbus hotel with a stack of bills in front of him, paying for the votes of the state legislators," who then elected U.S. senators." [5]

The most important function of a market system is its *political* function. [6] The market system serves as a stealth political system to foster rational thought, universal values based on calculation, and world peace based on self-interest. *Great idea!* But despite good intentions, inherently defective economic methodology has led to two world wars with millions killed:

"By the end of the seventies the free trade episode (1846-79) was at an end; the actual use of the gold standard by Germany marked the beginnings of an era of protectionism and colonial expansion... the symptoms of the dissolution of the existing forms of world economy -- colonial rivalry and competition for exotic markets - - became acute. The ability of haute finance to avert the spread of wars was diminishing rapidly... For another seven years peace dragged on but it was only a question of time before the dissolution of nineteenth century economic organization would bring the Hundred Years' Peace to a close." [p. 19]

"The origins of the cataclysm lay in the utopian endeavor of economic liberalism to set up a self-regulating market system." [p. 29] [7]

Today, this same flawed economic methodology is being taught to students all over the world and is leading to a new generation of world wars with billions killed.

SOCIAL PHYSICS

The true nature of the highly artificial economic organization on which peace rested becomes of utmost significance to the historian.
-- Karl Polanyi

Modern economics is shrouded in idiosyncratic self-serving definitions, arcane mathematics, and circular arguments which make it very difficult to understand. But once one gets the scorecard straight, it can be seen that modern economics is nothing more than a social imitation of nineteenth-century physics:

"[With the development of modern physics] it became possible to see orthodox economic theory for what it really was: a bowdlerized imitation of nineteenth-century physics...It was not the methods of science that were appropriated by the early neoclassicals as it was the appearances of science, for the early neoclassicals possessed a singularly inept understanding of the physics they so admired... [Neoclassical economists attempt] to reduce all social institutions such as money, property rights, and the market itself to epiphenomena of individual constrained optimization calculation. All these attempts have failed, despite their supposed dependence upon mathematical rigor, because they always inadvertently assume what they aim to deduce... Conservation principles are the key to the understanding of a mathematical formulation of any phenomenon, and it has been there that the neoclassicals have been woefully negligent." [8]

Economists are trained to believe that "money" is to the economy what "energy" is to the physical world. This leads them to believe that whatever is "economically" possible is "physically" possible too. What economists fail to realize is that the economy is a subsystem of the physical system, and thus constrained by universal physical laws that they have not studied.

Economists do not know that something must be physically possible *before* it can be economically possible. Since they only study money, they have no idea where the physical limits, and thus, economic limits are.

Since economists study the prices of everything, they feel they are qualified to issue opinions about everything. But the reality is quite the opposite. Economists first abstract all commodities to money - - which of course, obliterates all physical differences between the commodities themselves. This

leaves economists *uniquely unqualified* to know the physical relationships between the commodities they purport to study. Because of their total dependence on the measure of "money", today's leading economists do not know the difference between "libraries" and "oil":

"Should we be taking steps to limit the use of these most precious stocks of society's capital so that they will still be available for our grandchildren? ... Economists ask, Would future generations benefit more from larger stocks of natural capital such as oil, gas, and coal or from more produced capital such as additional scientists, better laboratories, and libraries linked together by information superhighways? ... in the long run, oil and gas are not essential." [Nobel Laureate Paul Samuelson and William Nordhaus] [9]

Obviously, the economics taught by Samuelson and Nordhaus has nothing to do with science. [10] If it isn't science, it's ideology. Since economics has a political agenda, it becomes nothing more than *politics in disguise*.

POLITICS IN DISGUISE

I see the White House is like a subway -- you have to put in coins to open the gates.
-- Johnny Chung (1997)

The economist's political agenda is pretty simple: establish a global self-regulating economic system. In order to convert economic students into lifelong politicians, they are programmed via circular argument and "post hoc, ergo propter hoc" (after-the-fact) reasoning to believe the most flagrant violations of reality. Consider five of the most outrageous.

#1. Economists are trained to believe that people are "rational utility maximizers" (calculate decisions according to "Bayes' Theorem"). Although this belief was common one hundred years ago, only economists are still taught it: "Neoclassical economics is based on the premise that models that characterize rational, optimizing behavior also characterize actual human behavior." (R. Thaler, 1987). This premise was shown to be false several years ago. [11] *Thus, the entire modern economic edifice is nothing but junk!*

#2. Economists are trained to believe that "money" has nothing to do with politics and is simply a medium of exchange. But even the casual observer can see that money is social power because it "empowers" people to buy and do the things they want -- including buying and doing other people: politics. Money is, in a word, "coercion", [12] and "economic efficiency" is correctly seen as a *political concept* designed to conserve social power for those who have it -- to make the rich, richer and the poor, poorer.

#3. Economists are trained to believe that people always "benefit" from free market transactions. Nobel Prize-winning economist Milton Friedman explains: "Adam Smith's key insight was that both parties to an exchange can benefit and that, so long as cooperation is strictly voluntary, no exchange will take place unless both parties do benefit." [13]

Since economists do not explicitly define "benefit", one wonders how Friedman could possibly know? In fact, he doesn't. Friedman is brainwashing his students to further his own personal political agenda. Economic professors like Friedman resort to meaningless, circular arguments to turn his students into robotic broadcasting devices.

Economists assume people make "rational" [14] decisions but abstain from testing that assumption. Instead of testing, economists invoke "revealed preferences theory" which states that choices are rational because they are based on preferences that are known through the choices that are made. [15] In other words, meaningless, circular arguments.

#4. Economists are trained to believe there are no "limits to growth". Because they abstract everything to money, even leading economists like William Nordhaus can't imagine an economy that is physically limited by energy. The best Nordhaus can do is to model increasing energy prices:

"The estimate is based on an energy model I constructed several years ago. To estimate the drag on economic growth, I calculated the difference between the economic growth rate with actual energy supplies versus a case in which current (low cost) fuels were available in infinite quantities. In the first case, energy prices would be rising, while in the second case of superabundance, relative energy prices would be constant. This study indicated that the resource-limited case would lower net output in the middle of the next century by about 10 percent." [16]

Although Nordhaus thinks he is modeling "energy", he is actually modeling "energy prices". *There is a big difference!* What would have happened if he had modeled declining energy inputs instead of rising energy prices? We already know the answer to that one:

"In late 1973 the first OPEC oil shock struck, as oil prices quadrupled and the general inflation indexes shot up to 11 percent. More important, gasoline lines appeared. Waiting in line to buy a basic commodity like gasoline is something that no American had ever experienced. Shock and irritation were high, but those lines were like the first small heart attack -- an indication of mortality. Maybe the American economy was growing old and becoming vulnerable. Maybe the American economic dream of an ever rising standard of living was over. Small may be beautiful, but if that phrase meant a lower standard of living, then the average American considered it a nightmare.

"The Nixon-Ford Administration responded with oil and gas price controls. As a vehicle for holding down prices, controls were bound to fail. For one thing, world prices would have to be paid on that part of consumption imported from abroad; for another, controls make it too easy for oil companies to hold oil in the ground or not to look for new supplies of oil until prices rose. When controls did fail, the public's feeling that the federal government and its economists were incapable of managing anything efficiently was further reinforced.

"What was worse, economists could pose no solution to the energy problem. Influential professionals, such as Milton Friedman, predicted that the oil cartel would quickly fall apart. It didn't. Other economists recommended that prices be allowed to climb to world levels, but that wasn't a solution to the problem faced by the average American. Higher prices would force him to change his life style. He might respond to higher prices with smaller cars and colder houses as economists predicted, but he liked doing neither and he could vote. No one considered a forced change in life style a solution.

"Once again, falling back on the principle that higher unemployment would produce lower inflation, monetary authorities tightened the rate of growth of the money supply in an effort to slow the economy, raise unemployment, and push inflation out of the economy. This time the policies produced a credit crunch. For six months in late 1974 and early 1975 the GNP fell at the fastest rate ever recorded. Even the rates of decline in the Great Depression had been less precipitous -- although of course longer and deeper. Anxieties quickly shifted from an unacceptable inflation rate to an unacceptable unemployment rate, and the term 'stagflation' was born.

"Stagflation was both a term and an indictment, since economists had taught that the phenomena -- slow growth, rising unemployment, and rising inflation -- could not all exist at the same time. Yet they did." [17]

#5. Economists are trained to believe that we will never "run out" of a commodity. This is because as prices increase, we will use less-and-less of it, but there will always be some available at some finite price. Practically every economics textbook teaches this. But every economics textbook is wrong because "energy" is fundamentally different from every other commodity. There is no substitute for energy. Energy is the prerequisite for all other commodities, so if we "run out" of energy, we will "run out" of everything else too.

By definition, energy "sources" must produce more energy than they consume, otherwise they are called "sinks". By definition, energy sources have "run out" when they consume more energy than they produce. This universal energy law holds no matter how high the money price of energy goes.

Economists completely overlook this basic energy law and have misled government regulators all over the world.

Here is part of an interview with Nobel Prize-winning economist Milton Friedman (worth quoting at length because of his colossal stupidity):

Ravaoli: But there are many other environmental problems ...

Nobel Laureate Friedman: Of course. Take oil, for example. Everyone says it's a limited resource: physically it may be, but economically we don't know. Economically there is more oil today than there was a hundred years ago. When it was still under the ground and no one knew it was there, it wasn't economically available. When resources are really limited prices go up, but the price of oil has gone down and down. Suppose oil became scarce: the price would go up, and people would start using other energy sources. In a proper price system the market can take care of the problem.

Ravaoli: But we know that it takes millions of years to create an oil well, and we can't reproduce it. Relying on oil means living on our capital and not on the interest, which would be the sensible course. Don't you agree?

Nobel Laureate Friedman: If we were living on the capital, the market price would go up. The price of truly limited resources will rise over time. The price of oil has not been rising, so we're not living on the capital. When that is no longer true, the price system will give a signal and the price of oil will go up. As always happens with a truly limited resource.

Ravaoli: Of course the discovery of new oil wells has given the illusion of unlimited oil ...

Nobel Laureate Friedman: Why an illusion?

Ravaoli: Because we know it's a limited resource.

Nobel Laureate Friedman: Excuse me, it's not limited from an economic point of view. You have to separate the economic from the physical point of view. Many of the mistakes people make come from this. Like the stupid projections of the Club of Rome: they used a purely physical approach, without taking prices into account. There are many different sources of energy, some of which are too expensive to be exploited now. But if oil becomes scarce they will be exploited. But the market, which is fortunately capable of registering and using widely scattered knowledge and information from people all over the world, will take account of those changes. [18]

(In fact, none of the Club of Rome's predictions has failed. Economists like Friedman routinely misrepresent the study in order to further their global political agenda.)

POLITICS IN ACTION

Once the economist's neurons and dendrites are fully programmed (usually for life), economists serve as robotic broadcasting devices explicitly designed to hide the *political* nature of the economy from the public. In other words, the economist serves no function in society except to protect the ruling elites from public scrutiny while they loot the planet.

The United Nations, the World Trade Organization, and the International Monetary Fund have all followed the American lead and attempted set up a *global* self-regulating market system based on these same elaborate economic lies:

"There are no... limits to the carrying capacity of the earth that are likely to bind any time in the foreseeable future. There isn't a risk of an apocalypse due to global warming or anything else. The idea that we should put limits on growth because of some natural limit, is a profound error and one that, were it ever to prove influential, would have staggering social costs."

-- World Bank chief economist, Lawrence H. Summers, Nov., 10, 1991

Endless economic growth is the *sine qua non* of the economist's agenda. If there are, in fact, limits to growth, then the fraud will be exposed and public attention will shift from economic "growth" to economic "redistribution". This is why the ruling elites work so hard to discredit (via their economist robots like Summers) anyone who claims that limits to growth do, in fact, exist. Also see **THE ECONOMIST**, December 1997:

"So, according to the Club of Rome, [petroleum] reserves should have been overdrawn by 50 billion barrels by 1990. In fact, by 1990 unexploited reserves amounted to 900 billion barrels -- not counting the tar shales, of which a single deposit in Alberta contains more than 550 billion barrels.

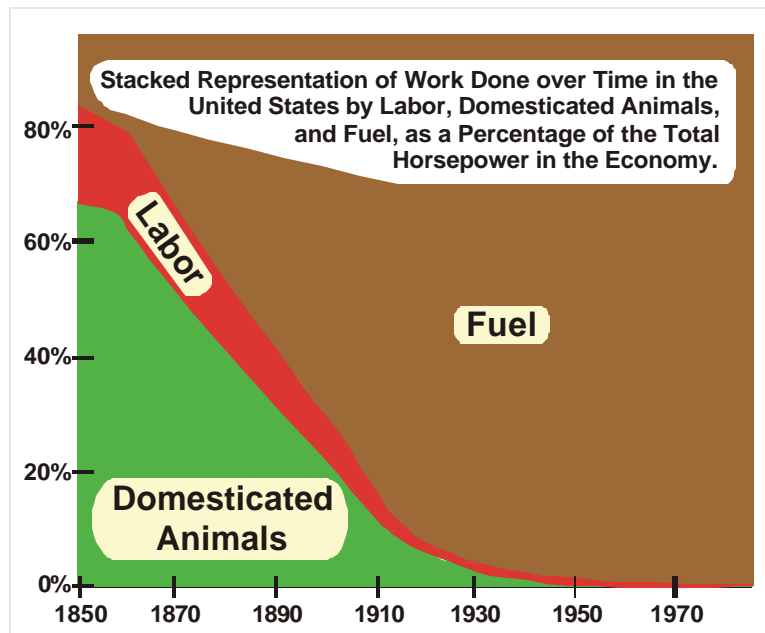
"The Club of Rome made similarly wrong predictions about natural gas, silver, tin, uranium, aluminum, copper, lead and zinc. In every case, it said finite reserves of these minerals were approaching exhaustion and prices would rise steeply. In every case except tin, known reserves have actually grown since the Club's report; in some cases they have quadrupled." [19]

But **THE ECONOMIST** is just plain wrong! The Club of Rome expected reserves to quintuple! Here are the actual scans from the book: <http://dieoff.com/LimitsToGrowth.htm> . Economists routinely misrepresent the Club of Rome's pioneering work. [20]

ENERGY IS THE KEY

Oil has literally made foreign and security policy for decades. Just since the turn of this century, it has provoked the division of the Middle East after World War I; aroused Germany and Japan to extend their tentacles beyond their borders; the Arab Oil Embargo; Iran versus Iraq; the Gulf War. This is all clear.

-- Secretary of Energy, Bill Richardson, December 9, 1999



p. 79, BEYOND OIL, J. Gever, et al., 1991

Although economists treat energy just like any other resource, it's not like any other resource. *Available energy is the precondition for all resources -- including more available energy.*

For many years, geologists and petroleum engineers have published estimates of how much oil can be recovered from any given basin. This is known as "Estimated Ultimately Recoverable" (or EUR) oil. Remarkably, estimates of total worldwide EUR oil have varied little over the past half century! [21]

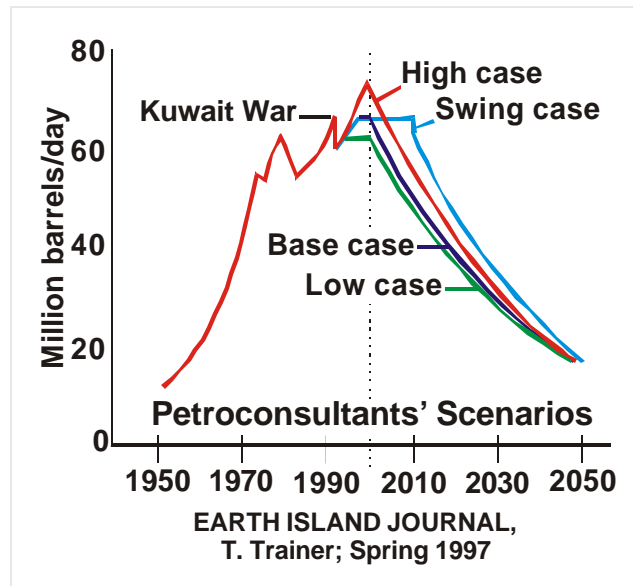
Forty years ago, geologist M. King Hubbert developed a method for projecting future oil production and predicted that oil production in the lower 48 states would peak about 1970. This

prediction has proved to be remarkably accurate. Both total and peak yields have risen slightly compared to Hubbert's original estimate, but the timing of the peak and the general downward trend of production were correct. Hubbert showed that oil production begins to peak and starts to decline when approximately half of the EUR oil has been recovered.

The petroleum industry itself has announced that global oil production will "peak" in less than ten years!

IHS Energy Group (formerly Petroconsultants) is the world's leading provider of data and analysis for oil exploration and production. The company maintains its headquarters at a custom-built communications center in Geneva. It also has offices in London, Houston, Calgary, Sydney, Perth, Singapore and Hong Kong and a global information network. The backbone of the company is a staff of 300, embracing numerous nationalities, cultures and professions, specializing in petroleum geology, geophysics, petroleum engineering, economics, political science, petroleum legislation, cartography, computer science and information technology. [22]

In 1995, Petroconsultants published a report for oil industry insiders (\$32,000 per copy) titled **WORLD OIL SUPPLY 1930-2050** which concluded that world oil production could peak as soon as the year 2000 and decline to half that level by 2025. Large and permanent increases in oil prices were predicted after the year 2000. [23]



ECONOMIST VS GEOLOGIST

According to Philip K. Verleger, Jr.: "No person has had a greater influence on the thinking of experts who have become government regulators of the world's oil and gas industries than Morry Adelman." [24] If Verleger is right, then government regulators all over the world are going to be in big trouble soon because according to economist Adelman:

"Minerals are inexhaustible and will never be depleted. A stream of investment creates additions to proved reserves, a very large in-ground inventory, constantly renewed as it is extracted... How much was in the ground at the start and how much will be left at the end are unknown and irrelevant." [25]

Could Adelman be right? Hardly! Obviously, oil and gas are not "renewed" as they are extracted, otherwise energy companies wouldn't have to keep drilling new holes. But more importantly, Adelman doesn't realize that oil and gas are in such great demand because they are sources of "energy" -- not because they are "minerals". Economists like Adelman are blind to the unique properties of energy because they abstract everything to money and, thus, know nothing about energy.

Adelman: "There are plenty of fossil fuels and no limit to potential electrical capacity. It is all a matter of money." [26] But Adelman is just plain wrong. It's not a matter of "money" -- it's a matter of "energy". It's a bit late, but regulators are starting to get the message because leading petroleum engineers and geologists are actively opposing the economists.

In November 1997, the International Energy Agency (IEA) convened an Oil Conference in Paris. Jean Laherrère and Colin Campbell [27] presented three papers on oil depletion (against Adelman and Lynch from MIT). [28]

As a result of this conference, IEA prepared a paper for the G8 Energy Ministers' Meeting in Moscow March 31, 1998. IEA followed Laherrere and Campbell's view and forecast a peak in conventional oil for 2010 at 78.9 Mb/d and a decrease in 2020 at 72.2 Mb/d. [29]

According to Richard Duncan, this represents a significant reversal of the IEA position: "This is a real stand-down for them because until recently they were in the Julian Simon no-limits camp." [30]

THE UTOPIAN AGENDA HAS FAILED -- AGAIN!

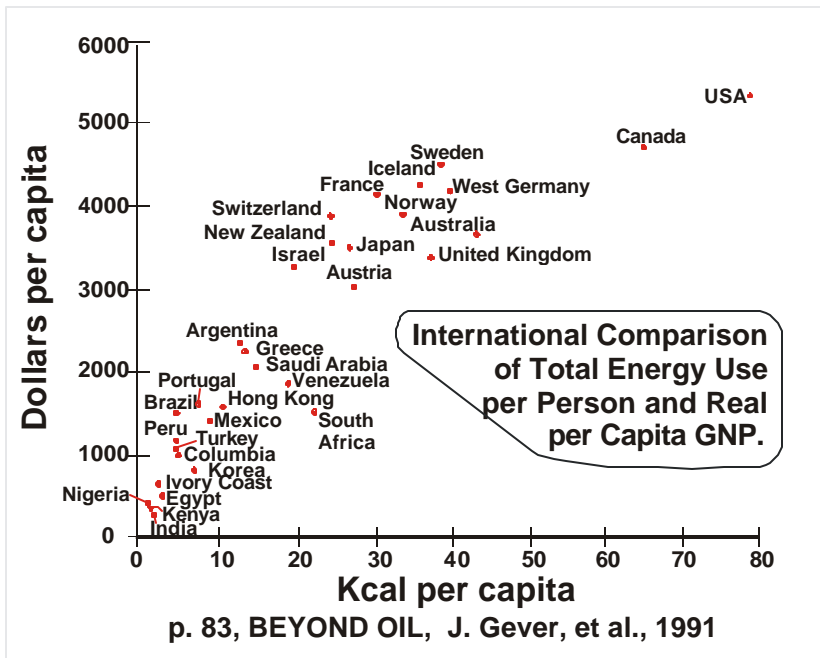
The prerequisite for a global self-regulating market system is peace, which in turn requires ever increasing standards-of-living:

"War analyst Stanislaw Andreski concluded that the trigger for most wars is hunger, or even 'a mere drop from the customary standard of living.' Anthropologists Carol and Melvin Ember spent six years studying war in the late 1980s among 186 preindustrial societies. They focused on precontact times in hopes of collecting the 'cleanest, least distorted' data. Andreski, it seems, was right. War's most common cause, the Embers found, was fear of deprivation. The victors in the wars they studied almost always took territory, food, and/or other critical resources from their enemies. Moreover, unpredictable disasters-droughts, blights, floods, and freezes -- which led to severe hardships, spurred more wars than did chronic shortages.

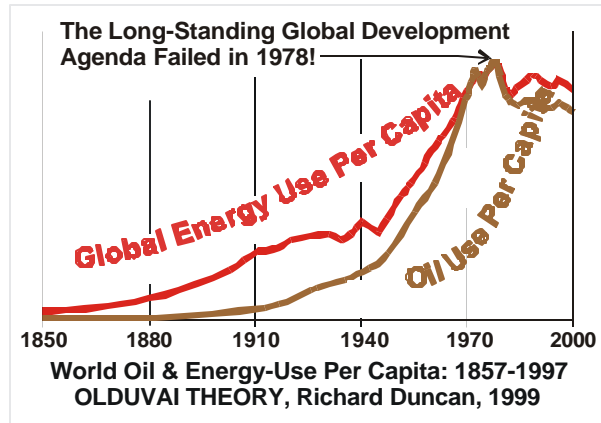
"This also holds true among modern nations. In 1993, political scientists Thomas E Homer-Dixon, Jeffrey H. Boutwell, and George W. Rathjens examined the roots of recent global conflicts and concluded, 'There are significant causal links between scarcities of renewable resources and violence.'

"In short, many wars seem to be a mass, communal robbery of another social group's life-support resources." [31]

Ever increasing standards-of-living require ever increasing per-capita energy use: "If one considers the last one hundred years of the U.S. experience, fuel use and economic output are highly correlated." [32]

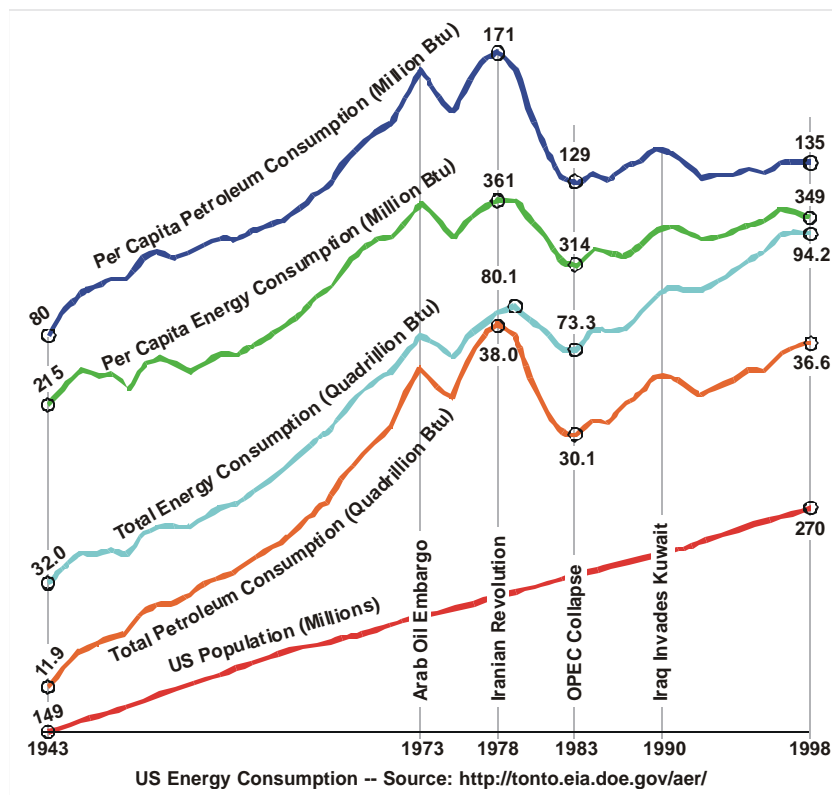


But Richard Duncan discovered that the utopian agenda failed in 1978!



Global energy-use per capita increased during the sub-interval from 1850 to 1909 by a strong 3.88%. Then – despite World War I, the Great Depression, and World War II -- energy-use per capita from 1909 to 1945 still managed to increase by 0.92%. Next came the exuberant post-war years from 1945 to 1973 when energy-use per capita grew by a remarkable 3.51%. Then strong growth ended abruptly in 1973. Thereafter, world energy-use per capita peaked in 1978 and then went into an irregular decline, averaging 0.36 % per year from the peak in 1978 through 1997.

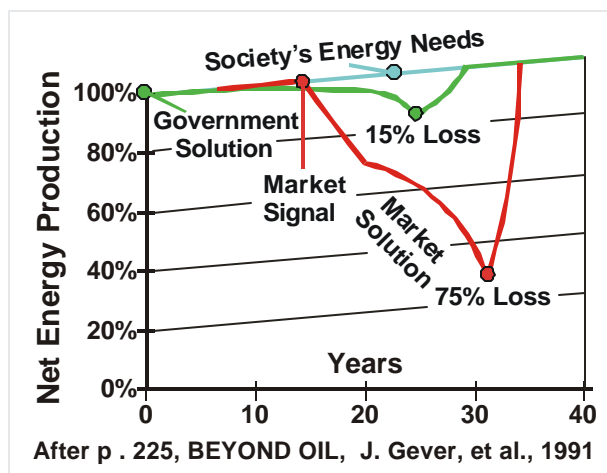
Although global energy use per capita has been declining at an average of 0.36% per year since 1978, energy use in the US has increased an average of 0.7 % per year since 1983:



The near-term "peak" in global oil production will make it physically impossible -- thus economically impossible -- for the so-called "developing" countries to ever "develop":

THE GLOBAL, ENERGY-LIMITED ECONOMY!

An "energy-limited economy" is one where more energy cannot be had at any price. The global economy will become "energy-limited" once global oil production peaks in less than ten years (perhaps much less). J. Gever et al. has calculated that if society waits for the "market signal" before embarking on a crash program of alternative energy development, then the net energy available for non-energy sectors of the economy could drop to about 25% of present values before starting to climb again. *In other words, about a 75% drop in energy available for non-energy GDP!*



In an energy-limited economy, it is physically impossible -- thus, economically impossible -- to provide a constant level of energy for non-energy sectors of the economy during a shift to alternative energy. Keeping the production of goods and services at current levels will require more energy than we can presently generate. To have more energy in the future means that energy must be diverted now from non-energy sectors of the economy into future energy generation.

In an energy-limited economy, economic development projects must "compete" with each other for the limited available energy. The rich and powerful will buy up -- or simply take -- all the energy they need and the poor will be consigned to the grave. [33]

HOW COULD IT BE OTHERWISE?

What becomes of the surplus of human life? It is either, 1st. destroyed by infanticide, as among the Chinese and Lacedaemonians; or 2d. it is stifled or starved, as among other nations whose population is commensurate to its food; or 3d. it is consumed by wars and endemic diseases; or 4th. it overflows, by emigration, to places where a surplus of food is attainable.
-- James Madison, 1791

For want of a nail the shoe is lost, for want of a shoe the horse is lost, for want of a horse the rider is lost.

Worldwide, more than 10 million hectares of agricultural land are abandoned annually because of serious soil degradation. During the last 40 years, about 30 percent of total world arable land was abandoned because it was no longer productive. About half of the current arable land now in cultivation will be unsuitable for food production by the middle of the twenty-first century. [34]

Within the first decade of the 21st century, industrial activity will rise high enough for it to seriously degrade land fertility. This will occur because of contamination by heavy metals and persistent chemicals, climate change, salinization, topsoil loss, falling water tables, and increased levels of ultraviolet radiation from a diminished ozone layer.

Global oil production will peak soon and the spike in oil prices will quickly exacerbate other major problems facing industrial agriculture. Food grains produced with modern, high-yield methods (including packaging and delivery) now contain between four and ten calories of fossil fuel for every calorie of solar energy. It has been estimated that about four percent of the nation's energy budget is

used to grow food, while about 10 to 13 percent is needed to put it on our plates. In other words, a staggering total of 17 percent of America's energy budget is consumed by agriculture! [35]

By 2040, we would need to triple the global food supply in order to meet the basic food needs of the eleven billion people who are expected to be alive. *But* doing so would require a 1,000 percent increase in the total energy expended in food production. [36] *But* the depletion of oil will make it physically impossible -- *thus economically impossible* -- to provide enough net energy to agriculture: "A recent review of the future prospects of all alternatives has been published. The summary conclusion reached is that there is no known complete substitute for petroleum in its many and varied uses." [37] Global food production will drop to a fraction of today's numbers: "If the fertilizers, partial irrigation [in part provided by oil energy], and pesticides were withdrawn, corn yields, for example, would drop from 130 bushels per acre to about 30 bushels." [38] Obviously, death certificates have already been issued for billions of unsuspecting people.

The dependence of industrial agriculture on fossil fuels, the declining fertility of the land, and the positive feedbacks imposed by declining net energy will force the economy to divert much more investment into the agriculture and energy sectors as part of a desperate attempt to maintain agricultural output. Government budgets must also decline in real terms as greater and greater fractions of the economy are diverted into the resource sectors.

As resource quality and land fertility continue to fall, society will be forced to allocate more and more capital to the agriculture and resource sectors, otherwise the scarcity of food, materials, and fuels would restrict production still more -- it's circular, there is no way to avoid the positive feedback. Ultimately, industrial capacity will decline rapidly taking with it the service and agricultural sectors, which depend upon industrial inputs.

Constrained by the laws of thermodynamics, the availability of life-supporting resources will go into a permanent, steep decline.

In less than 20 years, the self-regulating market system will have "run out of gas" and vanished. With the market system gone, the ruling elites will fall back on the good old-fashioned means of control: a police state. In the US alone, 200 million guns in private ownership guarantee that this police state will quickly devolve into rebellion and anarchy.

If the anarchy scenario were to reach its natural conclusion, the global elites would be eliminated by the angry masses. Those who managed to escape would die more miserably than the poor since they are unsuited for day-to-day survival because they lived their lives like queen bees.

But when the above scenario seems inevitable, the elites will simply depopulate most of the planet with a bioweapon. [39] When the time comes, it will be the only logical solution to their problem. It's a first-strike tactic that leaves the built-infrastructure and other species in place and allows the elites to perpetuate their own genes into the foreseeable future: "War is a male reproductive strategy. All that is needed for the strategy to evolve, is that aggressors fight and win more often than they lose". [40]

The global genocide will be rationalized as a second chance for humanity -- a new Garden of Eden -- a new Genesis. The temptation will prove irresistible:

"Strangelove said, 'Offhand, I should say that in addition to the factors of youth, health, sexual fertility, intelligence, and a cross section of necessary skills, it would be absolutely vital that our top government and military men be included, to foster and impart the required principles of leadership and tradition.'

"The arrow had not missed its mark, and around the table there was an outbreak of sober, nodding heads. Attention was concentrated more than ever on Doctor Strangelove.

"Strangelove went on. 'Naturally they would breed prodigiously, eh? There would be much time and little to do. With the proper breeding techniques, and starting with a ratio of, say, ten women to each man, I should estimate the progeny of the original group of two hundred thousand would emerge a hundred years later as well over a hundred million...'"

How could it be otherwise?

WHAT YOU CAN DO!

#1. Move out of the city! Sometime in the next couple of decades, civil authority in large US cities will simply disintegrate. And when authority goes, we know exactly what's going to happen.

Remember the Rodney King rebellion? All that old class hatred and jealousy comes boiling to the surface. It's really going to be ugly -- you don't want to be there!

Go somewhere where the climate is warm, with plenty of rain (just don't come here to the Kona Coast.) I don't think "ethnic cleansing" will be a big problem except in the cities (at least, not to start with).

#2. Prepare yourself to survive without municipal power, water, or sewer services. You won't have to live without hookups initially, but you will be forced to do without them sometime in the next few decades.

Most of the country's groundwater is already contaminated, and once sewage systems and dumps are abandoned, it will ALL become contaminated. Without power to pump or chlorine to disinfect groundwater, you really have no option except to rely on rain catchment for drinking water.

#3. In order to survive, you are going to need a large garden. An oversized garden would allow you to exchange your extra produce to your neighbors for hard goods -- like ammunition.

#4. Remember that you will not be able to rely on complex technology, because once supply lines break down, you won't be able to get spares. So limit yourself to technology that you can fix with a hammer and forge. (If you don't know what a "forge" is, go see an old cowboy movie.)

Beyond these four points, just try to fit in with your community as best you can. Perhaps join a church, lodge, or club -- find someone who is willing to help you in case you are attacked.

Obviously, I don't follow all of my own suggestions, but it's something to think about.

Good luck,
Jay

¹ Seattle police fire teargas as protesters run outside the site of the WTO conference. (Andy Clark/Reuters)

² p. pp. 14-15, **THE PASSIONS AND THE INTERESTS**, Albert O. Hirschman & Amartya Sen; Princeton, 1997; <http://www.amazon.com/exec/obidos/ASIN/0691015988/brainfood.a>

³ p 80, **AFTER THE BLACK DEATH**, George Huppert; Indiana Univ. Pr., 1998; <http://www.amazon.com/exec/obidos/ASIN/0253211808/brainfood.a>

⁴ The Seven Deadly Sins are pride, avarice, lust, anger, gluttony, envy, and sloth. These seven sins are not singled out because they are all grievous sins or because of their severity, but because they are the inevitable source of other sins.

⁵ p. 12, **THE MAXIMUM WAGE**, Sam Pizzigati; Apex, 1992; <http://www.amazon.com/exec/obidos/ASIN/0945257457/brainfood.a>

⁶ See **THE FOULEST OF THEM ALL**, at <http://dieoff.com/page168.htm>

7 THE GREAT TRANSFORMATION, Karl Polanyi; Beacon, 1957;
<http://www.amazon.com/exec/obidos/ASIN/0807056790/brainfood.a>

[pp.5-7] "But if the breakdown of our civilization was timed by the failure of world economy, it was certainly not caused by it. Its origins lay more than a hundred years back in that social and technological upheaval from which the idea of a self-regulating market sprang in Western Europe. The end of this venture has come in our time; it closes a distinct stage in the history of industrial civilization.

"In the final part of the book we shall deal with the mechanism which governed social and national change in our time. Broadly, we believe that the present condition of man is to be defined in terms of the institutional origins of the crisis.

"The nineteenth century produced a phenomenon unheard of in the annals of Western civilization, namely, a hundred years' peace -- 1815-1914. Apart from the Crimean War -- a more or less colonial event -- England, France, Prussia, Austria, Italy, and Russia were engaged in war among each other for altogether only eighteen months. A computation of comparable figures for the two preceding centuries gives an average of sixty to seventy years of major wars in each. But even the fiercest of nineteenth century conflagrations, the Franco-Prussian War of 1870-71, ended after less than a year's duration with the defeated nation being able to pay over an unprecedented sum as an indemnity without any disturbance of the currencies concerned.

"This triumph of a pragmatic pacifism was certainly not the result of an absence of grave causes for conflict. Almost continuous shifts in the internal and external conditions of powerful nations and great empires accompanied this irenic pageant. During the first part of the century civil wars, revolutionary and anti-revolutionary interventions were the order of the day. In Spain a hundred thousand troops under the Duc d'Angoulême stormed Cadiz; in Hungary the Magyar revolution threatened to defeat the Emperor himself in pitched battle and was ultimately suppressed only by a Russian army fighting on Hungarian soil. Armed interventions in the Germanies, in Belgium, Poland, Switzerland, Denmark, and Venice marked the omnipresence of the Holy Alliance. During the second half of the century the dynamics of progress was released; the Ottoman, Egyptian, and the Sheriffian empires broke up or were dismembered; China was forced by invading armies to open her door to the foreigner and in one gigantic haul the continent of Africa was partitioned. Simultaneously, two powers rose to world importance: the United States and Russia. National unity was achieved by Germany and Italy; Belgium, Greece, Roumania, Bulgaria, Serbia, and Hungary assumed, or reassumed, their places as sovereign states on the map of Europe. An almost incessant series of open wars accompanied the march of industrial civilization into the domains of outworn cultures or primitive peoples. Russia's military conquests in Central Asia, England's numberless Indian and African wars, France's exploits in Egypt, Algiers, Tunis, Syria, Madagascar, Indo-China, and Siam raised issues between the Powers which, as a rule, only force can arbitrate. Yet every single one of these conflicts was localized, and numberless other occasions for violent change were either met by joint action or smothered into compromise by the Great Powers. Regardless of how the methods changed, the result was the same. While in the first part of the century constitutionalism was banned and the Holy Alliance suppressed freedom in the name of peace, during the other half -- and again in the name of peace -- constitutions were foisted upon turbulent despots by business-minded bankers. Thus under varying forms and ever-shifting ideologies -- sometimes in the name of progress and liberty, sometimes by the authority of the throne and the altar, sometimes by grace of the stock exchange and the checkbook, sometimes by corruption and bribery, sometimes by moral argument and enlightened appeal, sometimes by the broadside and the bayonet -- one and the same result was attained: peace was preserved.

"This almost miraculous performance was due to the working of the balance of power, which here produced a result which is normally foreign to it. By its nature that balance effects an entirely different result, namely, the survival of the power units involved; in fact, it merely postulates that three or more units capable of exerting power will always behave in such a way as to combine the power of the weaker units against any increase in power of the strongest. In the realm of universal history balance

of power was concerned with states whose independence it served to maintain. But it attained this end only by continuous war between changing partners. The practice of the ancient Greek or the Northern Italian city-states was such an instance; wars between shifting groups of combatants maintained the independence of those states over long stretches of time. The action of the same principle safeguarded for over two hundred years the sovereignty of the states forming Europe at the time of the Treaty of Münster and Westphalia (1648). When, seventy-five years later, in the Treaty of Utrecht, the signatories declared their formal adherence to this principle, they thereby embodied it in a *system*, and thus established mutual guarantees of survival for the strong and the weak alike through the medium of war. The fact that in the nineteenth century the same mechanism resulted in peace rather than war is a problem to challenge the historian.

"The entirely new factor, we submit, was the emergence of an acute peace interest. Traditionally, such an interest was regarded as outside the scope of the state system. Peace with its corollaries of crafts and arts ranked among the mere adornments of life. The Church might pray for peace as for a bountiful harvest, but in the realm of state action it would nevertheless advocate armed intervention; governments subordinated peace to security and sovereignty; that is, to intents that could not be achieved otherwise than by recourse to the ultimate means. Few things were regarded as more detrimental to a community than the existence of an organized peace interest in its midst. As late as the second half of the eighteenth century, J. J. Rousseau arraigned trades people for their lack of patriotism because they were suspected of preferring peace to liberty.

"After 1815 the change is sudden and complete. The backwash of the French Revolution reinforced the rising tide of the Industrial Revolution in establishing peaceful business as a universal interest. Metternich proclaimed that what the people of Europe wanted was not liberty but peace. Gentz called patriots the new barbarians. Church and throne started out on the denationalization of Europe. Their arguments found support both in the ferocity of the recent popular forms of warfare and in the tremendously enhanced value of peace under the nascent economies.

"The bearers of the new 'peace interest' were, as usual, those who chiefly benefited by it, namely, that cartel of dynasts and feudalists whose patrimonial positions were threatened by the revolutionary wave of patriotism that was sweeping the Continent. Thus, for approximately a third of a century the Holy Alliance provided the coercive force and the ideological impetus for an active peace policy; its armies were roaming up and down Europe putting down minorities and repressing majorities. From 1846 to about 1887 -- 'one of the most confused and crowded quarter centuries of European history' -- peace was less safely established, the ebbing strength of reaction meeting the growing strength of industrialism. In the quarter century following the Franco-Prussian War we find the revived peace interest represented by that new powerful entity, the Concert of Europe."

8 pp. 5-6, **AGAINST MECHANISM: Protecting Economics from Science**, by Philip Mirowski; Rowman and Littlefield, 1988; <http://www.amazon.com/exec/obidos/ASIN/0847676951/brainfood.a>

9 p. 328, **ECONOMICS**, Paul Samuelson and William Nordhaus; McGraw-Hill, 1998; <http://www.amazon.com/exec/obidos/ASIN/0070579474/brainfood.a>

10 **SCIENCE, RATIONALITY, AND NEOCLASSICAL ECONOMICS**, L.D. Keita; Delaware, 1992. <http://www.amazon.com/exec/obidos/ASIN/0874134102/brainfood.a>

"The bulk of this text was taken up with examining the claims of neoclassical economic theory to scientific status. Given contemporary views on the nature of scientific theory, I examined neoclassical economic theory in terms of both its historical and contemporary phases. I demonstrated that the cardinal theory of utility that formed the foundation for early neoclassical theory foundered on account of its inability to measure utility in any acceptable scientific way. Its substitute, the ordinal theory of utility, was shown to be equally unacceptable. The scientific pretensions of ordinal utility theory and its correlate, revealed preference theory, were shown compromised by the normative structure of the foundational postulate of rationality. The unscientific nature of ordinal utility theory was further shown to be reinforced by the insulating role played by the *ceteris paribus* proviso.

"This general critique was extended not only to the neoclassical theory of individual agent choice but also to general equilibrium theory and positive neoclassical welfare economic theory. Given the general dissatisfaction with neoclassical theory, a number of alternative theories have been proposed, but the problem with the latter is that, with few exceptions, they are founded on the premise that an objective science of economics is still possible despite its present failings. I pointed out the shortcomings of those theories and argued that on account of the nature of human decision making, no analysis of it could be scientific in the way in which the natural sciences are scientific. Mental states that must be invoked to explain behavior are just not subject to empirical analysis. The attempts by theorists to establish explanatory theories by appeal to heuristic concepts such as rationality were shown to be unsuccessful. The point is that 'rationality' plays a normative role similar to that of 'goodness' in ethical theory.

"The sociologist can indeed record the behavior of individuals in terms of cultural norms of 'goodness,' 'badness,' 'deviancy,' and so on, but he or she must recognize that theories of behavior founded on such concepts are necessarily normative. Similarly, the neoclassical theorist who embraces a particular notion of rationality and grounds his or her theories on such a notion is certainly formulating a normative theory. My analysis showed that the neoclassical theorist of economic behavior is confronted with the dilemma of restricting his or her analysis to a case-by-case taxonomy of individual agent choice, given the inaccessibility to mental states, or grounding his or her explanatory theories on the normative heuristic of rational choice. Neither alternative yields scientific results." [pp. 150-151]

11 e.g., Kahneman, Slovic, Tversky, 1982; H. Simon, 1986, etc.

12 To "coerce" is to compel one to act in a certain way – either by reward or punishment. When I use "politics" or "political", I simply mean, "one coercing another" in the broadest sense.

13 pp. 1-2, **FREE TO CHOOSE**, Milton and Rose Friedman; Harvest, 1980; <http://www.amazon.com/exec/obidos/ASIN/0156334607/brainfood.a>

14 **DECISION MAKING: Alternatives to Rational Choice Models**, by Mary Zey; Sage, 1992; <http://www.amazon.com/exec/obidos/ASIN/0803947518/brainfood.a>

"The social sciences have a long, rich history of writings on rationality. In the tradition of neoclassical economic science, as in the writings of Pareto (1935), an action is rational when it corresponds with the ends or goals sought. Rationality means the adaptation of means to ends. The more congruent the means to the ends, the more efficient the decision and, therefore, the more rational the organization (Weber 1947). Economists abstain from applying the test of rationality to ends." [p.16]

15 p. 31, **RATIONAL CHOICE THEORY AND ORGANIZATIONAL THEORY: A Critique**, by Mary Zey; Sage, 1998; <http://www.amazon.com/exec/obidos/ASIN/0803951361/brainfood.a>

16 p. 31, **LETHAL MODEL 2: The Limits to Growth Revisited**, in **ECONOMIC ACTIVITY #2**; Brookings, 1992; <http://www.amazon.com/exec/obidos/ASIN/9992971517/brainfood.a>

17 pp. 34-36, **DANGEROUS CURRENTS**, by Lester Thurow; Random, 1983; <http://www.amazon.com/exec/obidos/ASIN/0394723686/brainfood.a> <http://dieoff.com/page162.htm>

18 Milton Friedman quoted in p. 33, **ECONOMISTS AND THE ENVIRONMENT**, Carla Ravaioli; Zed, 1995; <http://www.amazon.com/exec/obidos/ASIN/1856492788/brainfood.a>

19 <http://www.economist.com/editorial/freeforall/20-12-97/xm0002.html>

20 See, for example, **LOS SANGRE ES EN TUS MANOS** at <http://dieoff.com/page169.htm>

For recent disinformation about the Club of Rome, see **FOREIGN AFFAIRS**, January/February, 2000; **THE SHOCKS OF A WORLD OF CHEAP OIL**, by Amy Myers Jaffe and Robert A. Manning.

(Amy Myers Jaffe, former Senior Economist for Petroleum Intelligence Weekly, directs the Energy Research Program at the James A. Baker III Institute for Public Policy at Rice University <http://riceinfo.rice.edu/projects/baker/roundtable.html>. ROBERT A. MANNING is Senior Fellow and Director of Asian Studies at the Council on Foreign Relations and author of the forthcoming *The Asian Energy Factor Revisited*)

"Oil Prices have been flirting recently with \$25-\$30 per barrel, levels almost reminiscent of the oil shocks of the 1970s. Rising energy prices have been accompanied by the usual hysteria about dwindling supplies and potentially dangerous transfers of wealth, tempting policymakers to consider ways of dealing with a coming oil crisis. But contrary to much received wisdom, the energy problem looming in the early 21st century is neither skyrocketing prices nor shortages that herald the beginning of the end of the oil age. Instead, the danger is precisely the opposite; long-term trends point to a prolonged oil surplus and low oil prices over the next two decades."

"Both the popular and the elite media -- from Parade asking "Could It Happen Again?" to Scientific American, no less, proclaiming "The End of Cheap Oil" -- are peppered with forecasts of gloom and doom about energy security. But the "sky-is-falling" school of oil forecasting has been systematically wrong for more than a generation. In its dramatic 1972 "Limits to Growth" report, the group of prominent experts known as the Club of Rome wrote that only 550 billion barrels of oil remained and that they would run out by 1990. In fact, the world consumed 600 billion barrels of oil between 1970 and 1990, and there are today more than a trillion barrels of proven reserves (recoverable at current prices under current conditions). This figure is likely to continue rising even as global consumption exceeds the current 73 million barrels a day. Indeed, the International Energy Agency says that there are 2.3 trillion barrels in ultimate recoverable reserves, and if unconventional sources such as tar sands and shale are included, the number may well be greater than 4 trillion barrels.

"The scarcity forecasters -- in some cases, the same people who forecast in the 1970s that oil would cost \$100 per barrel by 2000 -- are not only still wrong, they also have it exactly backward. The world's problem is not scarcity but glut. This is true despite the current Saudi-engineered production cutbacks by the Organization of Petroleum Exporting Countries (OPEC), which boosted oil prices off their \$8-per-barrel lows. Seasoned oil-market watchers know that this fragile deal among oil producers could dissipate quickly, particularly as financial pressures ease over time, tempting OPEC to release some of the 5 million barrels per day currently being held back from the market." [pp. 16-17]

21 OIL AS A FINITE RESOURCE: When Is Global Production Likely to Peak? by James J. MacKenzie; World Resources Institute, 1996; <http://www.wri.org/wri/climate/finitoil/eur-oil.html>

22 See <http://www.petroconsultants.com>

23 THE DEATH OF THE OIL ECONOMY, by Ted Trainer; Earth Island Journal, Spring 1997; <http://dieoff.com/page116.htm>

24 Verleger quoted on the jacket of Adelman's book. For more on Verleger, see <http://www.iie.com/STAFF/verleger.htm>

25 p. xi, **THE ECONOMICS OF PETROLEUM SUPPLY**, by M. A. Adelman; MIT, 1993; <http://www.amazon.com/exec/obidos/ASIN/0262011387/brainfood.a>.

Professor of Economics, Emeritus, Adelman has long been one of the world's foremost energy and resource economists and a leading analyst of international oil and gas markets. He has served as North American Editor of the [Journal of Industrial Economics](#) and on the editorial boards of [The Energy Journal](#), [Energy Economics](#), [Energy Policy](#), and [Resources and Energy](#). Professor Adelman has also served on the [American Petroleum Institute's](#) Coordinating Committee for Statistics and Economics, the Federal Power Commission's Executive Advisory Committee, the [Gas Research Institute's](#) Advisory Council, the [American Economic Association's](#) Advisory Committee to the Bureau of the Census, and the [National Academy of Science's](#) Panel on Natural Gas Statistics. He has received

awards from the [American Institute of Mining, Metallurgical and Petroleum Engineers](#) and the [International Association of Energy Economists \(IAEE\)](#), and he has served as President of the IAEE. *But Adelman doesn't understand energy!*

26 p. 483, Ibid.

27 **THE END OF CHEAP OIL**, by Colin J. Campbell and Jean H. Laherrère, Scientific American, March 1998; <http://dieoff.com/page140.htm>

THE IMMINENT PEAK OF WORLD OIL PRODUCTION, by C.J. Campbell, Presentation to a House of Commons All-Party Committee on July 7th 1999; <http://www.hubbertypeak.com/campbell/commons.htm>

28 **Evolution of "development lag" and "development ratio"**, by Jean Laherrère, presented at the International Energy Agency "Oil reserve conference" in Paris November 11, 1997; <http://dieoff.com/page182.htm>

Distribution and evolution of "recovery factor", by Jean Laherrère, presented at the International Energy Agency "Oil reserves conference" in Paris November 11, 1997; <http://dieoff.com/page183.htm>

29 Jean Laherrère personal correspondence. See **WORLD ENERGY PROSPECTS TO 2020**; <http://www.iea.org/g8/world/oilsup.htm>

30 Richard Duncan personal correspondence. See Duncan's energy paper **THE WORLD PETROLEUM LIFE-CYCLE** at: <http://dieoff.com/page133.htm>

31 p. 190, **THE DARK SIDE OF MAN: Tracing the Origins of Male Violence**, by Michael P. Ghiglieri; Perseus, 1999; <http://www.amazon.com/exec/obidos/ASIN/073820076X/brainfood.a>

32 **SUMMARY OF ENERGY AND THE US ECONOMY: A Biophysical Perspective** by Cutler J. Cleveland, Robert Costanza, Charles A.S. Hall, and Robert Kaufmann; Science 225: 890-897; <http://dieoff.com/page17.htm#ENERGY>

33 The US will make an offer that the major oil producers (e.g., Saudi Arabia and Venezuela) can't refuse. For a fascinating account of how American government operates in the black, read **VICTORY: The Reagan Administration's Secret Strategy That Hastened the Collapse of the Soviet Union**, by Peter Schweizer; Grove/Atlantic, 1996; <http://www.amazon.com/exec/obidos/ISBN=0871136333/brainfood.a>

Schweizer book is endorsed New York Times, the Washington Times, and Forbes. Schweizer was sponsored by the Hoover Institution. "This extensively researched study is fast-moving, exciting, and accurate." -- FORBES magazine about Schweizer's **VICTORY**.

According to Peter Schweizer, the Saudis cooperate with the US in exchange for intelligence on dissidents [p. 31], satellite pictures, AWACS aircraft [p. 51], Stinger missiles [p. 190], advanced fighters, direct military protection, and were even "leaked" information when the Treasury Department planned to devalue the dollar so they could shift investments into nondollar assets. [p. 233]

During the Cold War, the Saudis worked in the black with the CIA to lower global oil prices and thereby deprive the USSR of the much-needed hard currency it needed to operate. Each \$1 drop in oil price cost the USSR about one billion dollars in revenue.

A \$5 drop in the price of a barrel of oil would increase the US GDP by about 1.4 percent. Poindexter: "It was in our interest to drive the price of oil as low as we could." [p. 218] Weinberger: "One of the reasons we were selling all those arms to the Saudis was for lower oil prices." [p. 203] Alan Fiers: The Saudis were also providing financial aid to the mujahedin and the contras. [p. 202]

In the first few weeks of the Saudi push, daily production jumped from less than 2 million barrels to almost 6 million. By late fall of 1985, crude production would climb to almost 9 million barrels a day. [p. 242]

Shortly after Saudi oil production rose, the international price of oil sank like a stone in a pond. In November 1985, crude oil sold at \$30 a barrel; barely five months later it stood at \$12. [p. 243]

In the spring of 1986, the downward plunge in international oil prices was causing serious worries around the world but also among some quarters in the Reagan administration. Vice President George Bush was preparing for a highly visible ten-day tour of the Persian Gulf area. A product of the Texas oil country, Bush saw danger, not hope, in the dramatic and recent decline in oil prices. [p. 259]

Bush was acting on his own against the Reagan administration! While Reagan, Casey and Weinberger were trying to talk oil prices lower, Bush was meeting with Yamani and Fahd trying to talk oil prices higher! [p. 260]

In 1983, the Treasury Department had done a secret study that found the optimum oil price for the US economy was about \$20 a barrel. [p. 141]

34 p. 293, **FOOD, ENERGY, and SOCIETY**; Pimentel, 1996.
<http://www.amazon.com/exec/obidos/ASIN/0870813862/brainfood.a>

35 p. 172, **BEYOND OIL**, Gever et al.; Univ. Pr. Colorado 1991;
<http://www.amazon.com/exec/obidos/ASIN/0870812424/brainfood.a>

36 p. 291, **FOOD, ENERGY, and SOCIETY**; David Pimentel, 1996.
<http://www.amazon.com/exec/obidos/ASIN/0870813862/brainfood.a>

37 **THE POST-PETROLEUM PARADIGM -- AND POPULATION**, by Walter Youngquist; Population and Environment: A Journal of Interdisciplinary Studies Volume 20, Number 4, March 1999; <http://www.dieoff.com/page171.htm>.

38 Ibid. Pimentel, D. (1998a).

39 <http://cryptome.org/bioweap.htm> -- <http://www.emergency.com/1999/alibek99.htm>

40 p. 165, **THE DARK SIDE OF MAN: Tracing the Origins of Male Violence**, by Michael P. Ghiglieri; Perseus, 1999; <http://www.amazon.com/exec/obidos/ASIN/073820076X/brainfood.a>

Here's more: "Chimp social structure would be unique were it not for humans acting similarly. This is no coincidence. By most taxonomic criteria, chimps and humans are sibling species. Overall, chimp society is not only extremely sexist -- with all adult males dominant over females -- but also xenophobic to the extent of killing all alien males, many infants, and some old females who enter their territory. To some readers, my use of the word war may seem too strong to describe what male kin groups do. But systematic, protracted, deliberate, and cooperative brutal killings of every male in a neighboring community, plus genocidal and frequent cannibalistic murder of many of their offspring, followed by usurpation of the males' mates and annexation of part or all of the losers' territory, matches or exceeds the worst that humans do when they wage war.

"Wild chimps reveal the natural contexts of territoriality, war, male cooperation, solidarity and sharing, nepotism, sexism, xenophobia, infanticide, murder, cannibalism, polygyny, and mating competition between kin groups of males -- behaviors that have evolved through sexual selection. Also significant is the fact that none of these apes learned these violent behaviors by watching TV or by being victims of socioeconomic handicaps -- poor schools, broken homes, bad fathers, illegal drugs, easy weapons, or any other sociological condition. Nor were these apes spurred to war by any political, religious, or economic ideology or by the rhetoric of an insane demagogue. They also were not seeking an 'identity' or buckling under peer pressure. Instead, they were obeying instincts, coded in the male psyche, dictating that they must win against other males." [p. 176]

"The central 'truth' of sociologists is that nature, especially that of humankind, is nice and that people are designed to do things that, all in all, favor the survival of their species. Hence people could never be equipped by nature with instincts to kill other people. This idea comes from the Bambi school of biology, a Disneyesque vision of nature as a collection of moralistic and altruistic creatures. It admires nature for its harmony and beauty of form and for its apparent 'balance' or even

cooperativeness. It admires the deer for its beauty and fleetness, and it grudgingly admires the lion for its power and nobility of form. If anything is really wrong with us, it explains, it is a sociocultural problem that we can fix by resocializing people. It is not a biological problem.

"Nature, however, is actually a dynamic state of recurring strife of relentless competition, dedicated predators and parasites, and selfish defense. The deer owes its beauty and fleetness to predators such as mountain lions, which kill the clumsiest and slowest deer first; to competitors for food; and to competition between males to mate. Without predators, deer would not only lack fleetness; they would lack legs altogether. They would be slugs oozing from one plant to another. Yet even if these deer-slugs were the only animals out there, natural selection would favor the evolution of faster and more aggressive deer-slugs and would favor any other trait that made them superior competitors against each other. This would include the killing of one deer-slug by another in situations where it boiled down to kill or die.

"Moreover, the power and noble visage of the lion (or of the family cat or dog, for that matter) rest entirely on natural selection having shaped not only a fleet predator and efficient killing machine but also a very violent competitor against its own kind in situations where the options were narrowed to exclude or kill, or else kill to survive or reproduce." [p. 179]