

# Culture Change



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Civil Liberty, Peak Oil,  
and the End of Empire

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# Our Fate

Every culture has a story, an explanation of where the world came from, an ethical framework of appropriate behavior, an understanding of what it all means. Every culture believes its own cosmology, and believes it to be the only real story. Every culture believes the stories of other cultures to be wrong. Ultimately, the story each culture possesses is neither right nor wrong, but rather a lens through which the world is viewed. That lens may shine light on certain realms, while obscuring others from view.

We in the western industrial world have a story, and we are no less convinced of the rightness of our story than any culture that came before us. Our story is about progress. The past, so our story goes, was dark, the present is better, and with the right technological advances, the future may be even brighter. Every culture has a resistance to accepting those things that contradict its story. We have a hard time comprehending, or accepting, things that contradict our story of progress.

While we are daily witness to the powers of progress manifest in the extraordinary mechanical technologies we have developed in the industrial age, we remain woefully unaware of the most basic causes of social change in our society. Which leads us to some profound questions.

We know the majestic trees of the great forests clean our air and water, and yet every day the destruction of the Earth's forests to build roads and cities continues. We can see the terrible tragedies that have befallen our forebearers, the great civilizations that left only deserts where fertile forests and fields once were. We can calculate the amount of topsoil on a field, and in the world. And still that soil continues to erode. The number of species alive on the planet declines every day. Precious genetic material is being lost, never to be recovered. How could it be that we know so much, and still we are powerless to stop the decline of the global environment?

Global oil production will peak sometime soon, with enormous consequences for modern industrial society, and yet we are making no significant preparations. We are facing a looming "energy crisis," and yet we have access to more energy, more resources, by several orders of magnitude, than any of our forebearers. How could we have so much energy at our disposal and still be facing a crisis?

Global warming is another threat to our future that we,

particularly in the U.S., have not begun to address. And yet we know the answers. We have the conservation technologies, many of them quite ancient. We can see how other people can and have lived using much less energy. We know about the problems, we see the solutions, and yet somehow we are collectively paralyzed to act.

For decades global living standards were increasing. Now, because of debt, HIV/ AIDS and other diseases, environmental degradation and political unrest, life expectancy and living standards have fallen in much of Africa, and in Russia.<sup>1</sup> There exists in the world more than enough food, medicine, and materials to feed, clothe, and house all of humanity. And still the resources are misappropriated. We know how to be kind to each other, how to take care of kinfolk, family and friends when they are in need. Is that not the lesson that our species learned millions of years ago, living in social bands? And still millions of the human family are somehow outside of our family, removed from any such compassion.

In the U.S., the movement to limit womens' access to contraception and sexual liberty seems to move forward with an unstoppable momentum. The incremental dismantling of the welfare state continues in favor of an ever-expanding prison population. Once fringe fundamentalists movements now assert power in the political forum, with disturbing parallels and quiet cooperation between those who would impose Islamic law abroad and those who would impose a self-defined Christian law at home. We have seen democracy succeed and spread, unevenly, but inexorably, to include more and more people. How could it be, after democracy has triumphed over so many challenges, that it would be giving way now to fundamentalists and extremists, each calling the other devils, even as they each use the same means and methods to restrict freedom, to undermine democracy?

How could it be that we know so much, and yet we are facing profound social and ecological crises, seemingly impaired to act? This book is based on the following contentions:

---- While we possess an extraordinary mechanical technology, there are certain aspects of modern society that serve to inhibit the development of social awareness. Our lack of social awareness does not result from the difficulty of understanding social problems, it results from the active

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1 *World Population Prospects: The 2004 Revision*, Department of Economic and Social Affairs, Population Division, 2 United Nations Plaza, Room DC2-1950, New York, NY 10017 USA, available at <http://esa.un.org/unpp/>

repression of such awareness.

---- The political resistance movements that developed in the twentieth century were adapted to conditions of economic growth. Specifically, when an economy is growing, petitioning through political and legal means to assure increasing access to rights and wealth for traditionally disenfranchised groups met with a measure of success, and that success was the foundation for further movement building. Those movements cannot, as they are currently structured, guide us through the coming age.

---- Many of the problems that we see as having purely political roots are strongly influenced by economic and ecological factors. Social issues that may seem far apart, such as ecological stress and women's rights for instance, do in fact have common roots. In the modern context, much of the political unraveling that we are witnessing can be understood in terms of the limitations of growth of modern industrialism.

---- The growth of fundamentalism and militarism, the decline of civil liberty and the environment, all of these problems are going to get worse if we do not find a new means to address them.

---- There are real solutions to these problems, but it is going to involve a quantum leap, both in thought and in action, beyond our current methods of political engagement. The solutions themselves are not even terribly difficult, they are simply well outside of our current range of vision and will.

Our story of progress hides from us the deep, dark forces of structural change, the economic and ecological foundation of our society. We have been convinced that ecological matters are secondary, dependent on the political decisions that we make, or that are made for us by those in power. The precise opposite is true. To understand that, we have to look at a bit of history.





# Civil Liberty

## The Rise and Fall of Liberal Democracy

In October 2001, the U.S. congress passed the Patriot Act with no real debate, the majority of congress-members never having read the bill. Since that time, hundreds of people have been detained without charge or trial. Warrantless searches have been conducted on hundreds, perhaps thousands, of people. Millions of American's phone calls have been monitored. Activist groups have been surveilled and infiltrated, including such terribly dangerous organizations as Quaker peace groups, organizations advocating vegetarianism, and student groups.<sup>1</sup> Even library records are now subject to seizure without warrant or notice.

From the global perspective, the situation is even more sinister. Suspects have been detained in the U.S. or kidnapped abroad by American government operatives, flown to secret prisons where they have been tortured.<sup>2</sup> The U.S. is in a "war" with an ephemeral enemy who can never be defeated or even identified. This war that can never be won is then a justification for assassination, kidnapping, and murder around the world.

The decline of civil liberty is frightening as it progresses. And while it is the noblest cause to try to defend our hard-won freedoms, the deeper roots of the changes our society is undergoing are left out of the politicized discussion of the issues. As industrialism matures, reaching

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1 Lisa Myers, Douglas Pasternak, Rich Gardella and the NBC Investigative Unit, *Is the Pentagon Spying on Americans? Secret Database Obtained by NBC News Tracks 'Suspicious' Domestic Groups*, Updated: 3:18 p.m. AKT Dec 14, 2005, Matthew Rothschild, *Rumsfeld Spies on Quakers and Grannies*, The Progressive, December 16, 2005, Kevin Zeese, *National Security Agency Mounted Massive Spy Op on Baltimore Peace Group*, TheRawStory, <http://rawstory.com/>, January 10, 2006

2 Dana Priest, *Jet Is an Open Secret in Terror War*, Washington Post, Monday, December 27, 2004; Page A01, Daniel Dombey. *US employs 'Gangster' Methods, Says Report*, The Financial Times, January 24 2006, Don Van Natta Jr., *US Recruits a Rough Ally to Be a Jailer*, The New York Times, Sunday 01 May 2005

the limits of its ability to expand, the retraction of civil liberty is gaining strength from an unseen dark hand of history. It is time to shed light on that history, as the future of our own freedoms will rest on our ability to understand the deep historical roots of freedom and slavery, and our will to act on that insight.

Personal freedom is rightly understood to be an outgrowth of political democracy. The historical circumstances that foster the birth, growth, and death of democracy are clear, if one is willing to look at them. The entire heritage of academic and political understanding directs us away from any such clear insight. As such, we are baffled by the current ailments of our own democracy. That need not be the case.

Greece is known as the birthplace of modern political democracy. The lands of ancient Greece were settled by a number of groups who conquered and were conquered in turn by succeeding waves of settlers.<sup>1</sup> Much of the lands of Greece are hilly, with some sizable fertile valleys. The hills were once covered in great forests of oak, beech, pine, and cedars. Population pressure, the need for agricultural land, pasture, and the extensive use of wood for building and fuel deforested the hills. As populations grew, the land was degraded. The ecological costs of Greek population growth at home were substantial. Plato spoke of "the formerly rich land [that] is like the skeleton of a sick man, with all the fat and soft earth having wasted away and only the bare framework remaining."<sup>2</sup>

Starting in 700 B.C., the ancient Greeks began a widespread campaign of colonization. The Greek Poleis were city-states, the building blocks of the incipient Greek state, and the locales from which the waves of colonizers originated. Greek colonies spread far and wide. Expanding for the next several centuries, Greek colonies numbered over six hundred, extending to North Africa, Spain, France, and around the Mediterranean Sea.<sup>3</sup> The colonizers destroyed, displaced, or enslaved foreign peoples. Colonialism also stimulated trade in a manner unlike any prior civilization. That trade served, among other things, to bring food to the increasingly denuded mother country.

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1 Kitto, H.D.F., *The Greeks*, Penguin Books, New York, 1984, Fine, John, *The Ancient Greeks, A Critical History*, Cambridge MA., Belknap Press of Harvard University Press, 1983, Frost, Frank J. *Greek Society*, D.C. Heath and Company, Lexington, MA. 1971

2 Hillel, Daniel, *Out of the Earth, Civilization and the Life of the Soil*, University of California Press, Berkeley, 1991, p.104

3 Frost, *ibid*, p.25

The colonialism of the Greeks was historically unprecedented, and something unprecedented happened. Most archaic civilizations arose in river valleys. Specifically, the Yellow River Valley in China, the Indus River Valley in India, and of course the Tigris and Euphrates in what is now Iraq. Productivity can be greatly expanded in fertile river valley lands through irrigation as populations grow. There was little reason or benefit for the early river valley civilizations to go abroad to feed their growing populations. And, as a fellow by the name of Wittfogel pointed out in referring to river valley civilizations as “hydraulic” societies, the king of such a state can wield great power by controlling the irrigation works.<sup>1</sup>

Greek agriculture was rainfall fed, and thus dispersed. For a few thousand years prior to Greek colonialism, human civilization had been headed in a consistent direction, toward increasing social stratification and declining civil liberty. But then, in ancient Greece, the new traders bringing home resources from abroad found that they had a new power. Here's a new definition of democracy for you: Democracy is when economically empowered people express that power through the political process. As the ancient Greek mercantilists brought home more and more wealth, they struggled against, and prevailed in large measure, over the landed gentry. None of the other ancient civilizations had faced a circumstance quite like that.

Historians love to focus on the mental aspects of social change, if for no other reason than it makes the historians themselves look more important. The reality is that the economic and ecological circumstances of any society have a dominating influence on its course, especially over time.

It doesn't work for any society to have piecemeal freedoms, or piecemeal restrictions. The ancient Greeks represented the first large scale human society where trade was economically critical. The expansion of civil liberty was vital for the expansion of commerce, but it also created an opening for intellectual expansion as the Greek philosophers wrote their names indelibly into the Western history books. The democratic expansion of that time was a limited one. Greek society still practiced slavery. Women were still largely barred from political participation, although at the peak of Greek democracy, there was some loosening of traditional restrictions.

In time, Greek colonialism became less profitable as conquered

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<sup>1</sup> Wittfogel, Karl A., *Agriculture, A Key to Understanding Chinese Society Past and Present*, Canberra, Australian National University Press, 1970

groups fought back. As the prosperity of Greek colonialism began to fail, Greek democracy began to fail. As to whether the particular decisions of specific leaders of the time could have made a difference, to the Greeks or the peoples under their rule, it's hard to say. But as the commerce from the Greek colonies began to wane, the power of the mercantilists began to decline as well. The once invincible Greek army suffered more and more defeats, and the old voices of centralized power were raised. Democracy passed, and dictatorship asserted control over the crumbling Greek state.

A similar pattern played out with the Roman Empire, though of somewhat different flavor.<sup>1</sup> The Romans were one among many tribes on the Italian peninsula who vied for power and control over increasingly large territories. Underlying this struggle was steady population growth, the need for increasing land and food to feed growing populations. Their land was, like the Greeks, largely hilly and composed of thin soil. So too, their agriculture was primarily rain-fed. The Romans, for whatever reason, triumphed in time over the other tribes, and consolidated what was to become the most powerful empire the world had ever known. Underlying this expansion was a steady pressure of population growth and ecological stress that was noted by the Romans themselves. Lucretius lamented of the "forests that are receding higher up the mountains, yielding ground to agriculture."<sup>2</sup>

The Romans established a colonial empire right on the historical heels of the Greeks. Rome was ruled over by the Caesars, and by the Senate, the latter being a body whose membership was passed through a hereditary class and was highly conservative, favoring the interests of the landed gentry. As Roman colonialism grew more successful, at a great price to the conquered peoples in foreign lands, the Roman mercantile class found itself wealthier, increasingly empowered to challenge the traditional power of the landed elite.

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1 By far the most readable Roman history I have found is Africa, Thomas W., *The Immense Majesty, A History of Rome and the Roman Empire*, Thomas Y. Crowell Company Inc., 1974. An insightful book of the agricultural history of Rome can be found at Lewit, Tamara, *Agricultural Production in the Roman Economy, A.D. 200-400*, Oxford, Tempus Reparatum, 1991, Also used for this text: Brown, Peter, *Power and Persuasion in Late Antiquity, Towards a Christian Empire*, University of Wisconsin Press, 1992, Hadas, Moses, *A History of Rome*, Anchor Books, 1956, Salmon, Edward, *A History of the Roman World from 30 B.C. to A.D. 138*, London, Methuen, 1968

2 Hillel, *ibid*, p.106

At the peak of the democratic period, Roman citizens did not have to pay taxes, so profitable were the spoils of Empire. The peak of Roman democracy occurred early on in the Empire. At that time, the Plebeian Assembly, a democratically elected body of Roman citizens, acquired the power to veto acts of the Senate. It was in this time that each and every Roman citizen gained the right to have their case heard before a Roman court. This is a critical hallmark of democracy. Without appeal to the courts, a citizen, then as now, could be preyed upon by more powerful members of society with no recourse.

Roman democracy in the end was even less complete than Greek democracy, in large part because the Roman Empire was ultimately larger, poorer, and more embattled. The Roman state never dropped the practice of slavery, even at the peak of the democratic period. Roman colonialism also had an ecological price. In the colonized lands, the Romans pursued intensive agriculture, often establishing large slave estates that had no means or motivation to preserve the land. In the 3rd Century A.D., St. Cyprian wrote that "the world has grown old and has not retained its former vigor. It bears witness to its own decline... The husbandman is failing in his field.... Springs which once flowed profusely now provide only a trickle."<sup>1</sup>

Roman exploitation engendered militant resistance across the empire. One of the more successful of such resistance groups were the early Christians. The Christian movement was one among many revolutionary organizations fighting the Romans. As these movements put more pressure on the mother state, the coffers were drained to pay for the military upkeep of the Empire. As those profits drained away, so the power of the mercantile society, limited as it was even from the beginning, dissipated as well. The Caesars arose triumphant, consolidated new dictatorial powers to fight the terrorists of the day, claimed themselves to be divine beings, Gods born of virgin mothers. Sound familiar?

The latter Roman empire was an age in which scientists and philosophers were scorned. Court astrologers were hired to advise the Caesars.<sup>2</sup> An elaborate system of spying and repression was employed against not only foreign but also domestic populations. Spies were established on each urban block to keep track of the neighborhoods, to report any disloyal persons. If such knowledge would bring us any

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1 Hillel, *ibid*, p.106

2 Africa, Thomas W., *Science and the State in Greece and Rome*, John Wiley and Sons, Inc., 1968

comfort in our time, it is in knowing that even such intimate repression ultimately failed. That failure took a long time, however.

The Byzantine Empire followed upon the heels of the Romans. The Dark Ages descended upon Europe, and the peasants were by and large left to themselves for lack of a state apparatus to issue orders. As to whether that was a time of peaceful country living throughout most of Europe, or a dark age of struggle and backwardness, depends on which piece of the story you are looking at.

By the 1300s, populations had grown across Europe. The Black Plague arrived, and because the people were impoverished, crowded, and hungry, the disease carried off a third or so of the population.<sup>1</sup> Notwithstanding the Inquisition, a few wars and a other distractions, European civilization stabilized after the Black Death and populations started growing again. They were again approaching the levels they had reached before the plague when someone had a grand idea: Colonialism.

The price of European colonialism on indigenous populations around the world was profound, deadly, and irreversible. And what we call democracy grew out of it. Back in the home country, the resources started flowing in. Food came in from the American colonies, from India and the far east. Millions of people around the world died to feed the populations of Europe.<sup>2</sup> Exactly how many we will never know. But the mother countries once again found themselves with a mercantile class that, over time, vied for power with the old, landed gentry. The mercantile society, in order to be economically viable, needed to give freedom to traders, to producers, shippers, and buyers. It was a slow, incremental set of changes that favored the unsteady expansion of civil liberty. European agriculture was, by and large, rain-fed and thus dispersed. The lack of a powerful landed gentry in control of large scale irrigation works, as existed in other early civilizations, facilitated the dispersion of power and thus the growth of democracy.

### Modern Civil Liberty

In the United States, the expansion of civil liberty has also

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1 A most extraordinary book about cultural evolution, with a section concerning European history and the Black Death is Harris, Marvin, *Cannibals and Kings, The Origins of Cultures*, Vintage Books, New York, 1978.

2 Some of the costs of colonialism can be seen in Davis, Mike, *Late Victorian Holocausts, El Nino Famines and the Making of the Third World*, Verso, London, NY, 2001

followed the expansion of the colonial/ mercantile economy. And what an expansion it has been. The economic and ecological roots of modern social movements are hidden from us, but it very important that we understand them. The modern civil rights movement is illustrative in this regard.

Since World War II there has been, for the most part, an expansion of civil liberties. The names and sacrifices of the leaders of the civil rights movement in the U.S. are well known. It is less well known that structural changes were underway in our society that supported the growth of such a movement at that particular point in history. The mechanization of labor pushed many Black Americans out of the rural south and into the cities in the post World War II era. There they met segregated housing, and new forms of discrimination. Jim Crow still stood as the law of the land throughout the South.

The peak of black political representation had actually been a long time before that, in the immediate post Civil War era. Since that time, wave after wave of violence, discrimination, and disenfranchisement at the voting booth had dramatically decreased black political representation.

In spite of economic dislocations, and in spite of discrimination, Black Americans were improving their economic lot after WWII. Black income was growing 11% *faster* than White Americans the 1950s.<sup>1</sup> That provided some muscle behind the will of freedom, a pivotal factor that made the difference between prior generations who may have wanted more freedom and those of the post-war era who won it.

The post-war era saw an expansion of liberty for minorities, women, and youth. In the next chapter we will look at the rights and roles of women in American history. We will only make the point here that the feminist movement followed on the heels of a substantial increase in the number of working women and in their collective rate of pay in the post World War II era.

The great expansion of civil liberty has begun to unravel. The roots of that unraveling lie in the late 1960s and early 1970s. At that time, two forces converged to change the direction of American society, those forces being the price of labor, and the price of commodities. (This latter category is simply economic-speak for oil. The cost of any commodity in the modern economy is ultimately driven by the cost of extraction, transportation, and processing of said commodity.) The

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1 Perelman, Micheal, *The Pathology of the US Economy, The Intractable Contradictions of US Policy*, Palgrave, NY, NY, 2002 p.35



corporate profit rate, the amount of money that companies make from selling their goods and services, began to fall in the late 1960s. By the mid 1970s, after the first OPEC oil shock and with continued steady wage growth, the corporate profit rate flat-lined.<sup>1</sup> The big boys didn't like that. Even though wages climbed, relative purchasing power of the working class did not.

The free-wheeling days when corporate profits, private wages, consumption, and the total number of people experiencing these windfalls could all increase together had come to an end. Why? The mainstream economists say wages went up too fast. Oil prices certainly went up. In the end, that kind of economy had to come to an end at some point. If one tried to extrapolate the early 1970s rate of growth of resource extraction and productive capacity, the resources required would have been astronomical. Whether the limitation was oil, or some other finite resource, that kind of growth simply could not go on forever.

It is easy to assume that the oil price shocks of 1973 and 1979 were due simply to OPEC and political disruptions in Iran. The reality is that the global oil production system was stretched to the breaking point, and the actual reduction in OPEC supply was minuscule.<sup>2</sup> The market system adjusts smoothly in conditions of plenty, but extreme price spikes can result when critical supplies tighten. Because of the very narrow margin between demand and oil production capacity, oil prices spiked dramatically in the 1970s in response to minor reductions in supply. These price hikes cooled the global economy, reduced oil consumption for a time, and provided time for the oil infrastructure to expand.

By the late 1970s, industrial capitalism was facing a choice. The first option would have been to commence a major economic restructuring, a redistribution of wealth, a decentralization of productive capacity and political power. That way, the growth of prosperity could have been more widespread without generating unmanageable pressure (read inflation) in the industrial economy. The second option would have been to limit growth of incomes for poorer people all over the world,

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1 Armstrong, Phillip, Andrew Glyn, John Harrison, *Capitalism Since World War II, The Making and Breakup of the Great Boom*, Fontana, London, 1984, p.246-256

2 Simmons, Mathew R., *Twilight in the Desert, The Coming Saudi Oil Shock and the World Economy*, John Wiley and Sons, Inc., Hoboken, 2005, p.54-55, Kunstler, James Howard, *The Long Emergency, Surviving the Converging Catastrophes of the Twenty First Century*, Atlantic Monthly Press, NY, 2005, p.46

including in the U.S. This would serve to cool the economy (limit inflation), drive wages down, and restore corporate profit rate. That would require the end of New Deal Liberalism, a more draconian government, the elimination of at least some of the social welfare network (so people will be compelled to work for whatever wage they can find), and escalating political and legal pressure to keep the masses in line.<sup>1</sup>

The American economy had hit a wall. In retrospect, we either had to develop a more socialistic economy that could do more with less, or we had to polarize. Imagine if the planet were actually considerably larger. If there were a lot more of resources of every kind, then that contraction would not have happened at that time.

We tend to see the polarization that began in the Reagan era in purely political terms, failing to recognize the economic components. We know that the War on Drugs was reinvigorated in earnest, that the prison population began a climb that continues until the present. Wages for the working class have gone prostrate. One of many obstacles in understanding these things is that the left and the right both tend to believe their own propaganda. The right claims wages have grown, the left claims that wages have stagnated and fallen through much of the last quarter century. Both things are true, actually. The wages of the working class and poor in our economy have stagnated, and in some periods fallen. But the *size* of the middle class has increased, as have their wages on average; a picture that is sufficiently complex to allow for all manner of conclusions for the creative statistician.<sup>2</sup>

The oil price shocks of the 1970s helped usher in the conservatism of the modern age. It is not a coincidence that the stagnation of wages, even declining in some areas, has paralleled a stagnation or loss of civil liberty for minority and poor groups.

Social movements that would concentrate wealth and power in the hands of the ruling class or disperse such endowments to the masses are perpetually waiting in the wings for such opportunities as may avail themselves by structural changes in society. The economic viability of our society is ultimately an ecological question. As social movements

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1 Nossiter, Bernard D. *Fat Years and Lean, The American Economy Since Roosevelt*, Harper and Row, New York, N.Y., 1990 for the relationship between unemployment and inflation in post WWII. Also Parenti, Christain, *Lockdown America, Police and Prisons in the Age of Crises*, Verso, NY, London, 1999

2 Stonecash, Jeffrey, *Class and Party in American Politics*, Westview Press, 2000, p.18

take advantage of different changes in circumstance, they are in effect manifesting ecological changes in a political forum, but that is far removed from the consciousness of either side of the movement. To apply that to the case in point, the supply of oil and other resources is ultimately an ecological question. The great growth of industrial economy in the 1950s and 1960s created an opportunity for movements that sought to expand liberty and political representation for traditionally disenfranchised groups. The limit of our ability to expand oil supplies rapidly enough to keep up with industrial growth, working as it did in tandem with the politics of the time, created a constraint that served to limit the expansion of civil liberty and bring to power conservative forces.

These issues are intimately intertwined with our society's attitudes toward poor people. In a previous book, I examined that issue more closely.<sup>1</sup> The wealthy and powerful rarely lack for civil liberty. Thus freedom in any society is most usefully defined by the treatment received by poor and marginalized groups. In this regard, it is an enormous mistake to believe that we can address poverty or civil liberty by purely political means. While the activists who seek to defend the interest of marginalized groups deserve our utmost support, the longer term perspective demands a broader-than-political approach. Specifically, poverty in the modern industrial economy is purposefully managed. Poverty helps keep wages down, which not only improves corporate profit, but also serves to limit inflation by limiting aggregate demand. The less people get paid, the less inflationary pressure there is in the economy at large. This is the big secret that isn't a secret, a grand piece of the mind-game of the modern world where we pretend our culture is rational and sensible even as we mythologize the most fundamental institutions of our society. We can talk endlessly about poverty and the moral fiber of society. All the while the economists have a name for structural poverty. It's called the NAIRU, or NonAccelerating Inflationary Rate of Unemployment. That is the level of unemployment that the economists deem necessary to keep inflation, and thus the whole economy, in balance.<sup>2</sup>

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1 Zeigler, Alexis, *Conscious Cultural Evolution, Understanding Our Past, Choosing Our Future*, Ecodem Press, Charlottesville, 1998, also at [conev.org](http://conev.org)

2 See Nossiter, Bernard D. *Fat Years and Lean, The American Economy Since Roosevelt*, Harper and Row, New York, N.Y., 1990 and Epstein, Gene, *The Fed's Belief in the NAIRU Could Keep Economic Growth in a Straightjacket*, *Barron's*, 76:44, Mar 4, 1996

Even if we want to keep inflation at low levels (which is desirable for numerous reasons), structural poverty is by no means the only manner to effectively achieve such goals. The sum total of all things purchased by Americans is referred to as aggregate demand. Excessive aggregate demand spurs inflation, and it can be limited by reducing the money in the pockets of citizens. The big question comes down to; whose pockets? Aggregate demand can be more effectively limited by reducing the incomes of rich people instead the wages of poor people. (There is considerable economic evidence to suggest that a flatter wage structure is economically much stronger. The Asian miracle economies all had a flatter wage structure throughout their periods of inferno growth.)<sup>1</sup> Rich people are simply more politically powerful than poor people, so the poor end up carrying the burden of a forced reduction of aggregate demand. Our society then generates mythology about the personal triumphs of the rich and the personal responsibility of the poor, thus alleviating any discomfort attendant to our methods of economic management.

In the 1970s, we hit an ecological constraint, a limit on the ability of the energy supply to keep up with demand. This created a period of great price instability in the cost of oil, which in turn undermined the economic growth that was supporting the movement to expand civil liberty. The conservative movement of the 1980s increased structural poverty, thereby limiting inflation, and improving corporate profits. The economy started growing again, but from a lowered starting point owing to the contraction of the early 1980s.

It is not a matter of simple cause and effect where economic growth causes the expansion of civil liberty and contraction causes a decline of civil liberty. But when economic growth empowers certain groups, then we may reasonably expect those groups will demand more political voice. In periods of economic contraction, organizations that seek to unify people behind traditional symbols of power are more likely to be successful. This the same pattern as was played out in ancient Greece and Rome.

It is terribly important that we understand these things, because our future is going to involve a large economic contraction as measured in traditional terms. If we remain caught in the ruts of history, if we try to address these issues through purely political means, then the ecological limits that cause economic contraction will ultimately leave us, like the

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<sup>1</sup> George, Susan, *How The Other Half Dies: The Real Reasons For World Hunger*, Rowman and Littlefield Publishers, 1977, p.41-43

ancient Romans and Greeks, bidding farewell to our beloved democracy once and for all.

The seemingly unstoppable loss of women's reproductive choices also has its roots in the economic transitions we have been experiencing in the last few decades and is thus a case in point for the kind of transitions we have and will face. The South Dakota legislature banned abortion outright in February 2006. For many Americans, it was an act that defies explanation. What the heck were they up to?

# Women's Rights

## What the Heck is Going on in South Dakota?

The conservatives' campaign to restrict women's access to abortion, and ultimately to birth control, has become a juggernaut in American politics. No one seems to know how, or why, but this unstoppable force seems to be moving through the legislatures, in the street, slowly eroding women's access to reproductive choices. No end of ink has been spilled about the chicanery of organizers, politicians and pundits. But is that really the explanation for what is going on here? Are the conservatives really just better organizers than the feminists? As one of my younger friends would say when he's thinking really hard; ummm - no.

When the South Dakota state legislature banned abortion in February 2006, it was obvious enough they were trying to force the issue before the Supreme Court, freshly stocked with conservative judges as it is.<sup>1</sup> The overturning of the South Dakota law by referendum in November 2006 only begs the question. Why is this debate happening in South Dakota? For so many Americans who would be hard pressed to locate the state on a map, it makes no sense at all. For many Americans, it seems ludicrous in our sophisticated age that we would be sliding back into the dark ages of gender relations.

The story grows even more sinister when you realize that the "Christian" right has been engaged in a relentless campaign to restrict not only abortion, but access to contraception as well.<sup>2</sup> You heard that right. Through local efforts and government pressure, a broad-based anti-contraception campaign has been launched in America. The Centers for Disease Control have been stopped from giving contraceptive advice.<sup>3</sup> Numerous states have passed laws allowing pharmacists to not dispense contraceptions if they choose not to. Particularly in the South, a sustained

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1 *S.D. Abortion Bill Takes Aim at 'Roe,' Senate Ban Does Not Except Rape, Incest*, Evelyn Nieves, The Washington Post, Thursday, February 23, 2006; Page A01

2 Page, Christina, *How the Pro-Choice Movement Saved America*, Basic Books, NY, 2006

3 Page, 2006, *ibid*, p.71

campaign against the "condom pushers" has been launched, using pseudo-science to "educate" young people about the "unreliability" of condoms. The results are that many youth are convinced that condoms are ineffective, therefore they don't use them. Increases in sexually transmitted diseases, including HIV, are occurring as a result, particularly in some southern states. The teen pregnancy rate is also high in these areas.<sup>1</sup> These efforts have also been taken overseas whereby conservative groups based in the U.S. are attempting to undermine access to contraception for women in poorer nations all over the world, sometimes in quiet cooperation with Muslim fundamentalists.

The anti-contraception campaign may seem particularly absurd given that decreasing access to contraceptives will very predictably increase the demand for abortion. It is only our lack of understanding of how the evolution of our culture fits into the broader picture of human cultural evolution that makes all of these events so inscrutable. We can build computers and spaceships, but we are woefully, purposefully, ignorant of where our culture and our beliefs came from, where they are headed, and why. If you understand the larger picture of human cultural evolution, then South Dakota makes perfect sense.

#### A Brief History of Patriarchy

Anthropologists trying to understand why women in some societies have great respect and power while women in other societies are abused and powerless have pointed out that the most telling correlation is simply women's role in the economy of any given society. For the vast majority of human history, we lived in small groups of hunter-gatherers. (I use the term gatherers to refer to such groups.) Among modern gatherers, women are often responsible for collecting more than half of a community's food supply.<sup>2</sup> In such groups they are

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1 Page, 2006, *ibid*, p.79

2 Many of the groups referred to here still exist, even though their traditional subsistence patterns have been greatly altered by contact with industrial society. Using the past tense to refer to such groups would imply they no longer exist, which is not accurate. Using the present tense would imply they still live as they did when they were studied by anthropologists, studies many of which are decades old at this point. I have tried to reflect the current circumstance such as I understand it in the use of verb tenses, but that task is ultimately doomed to some inaccuracy as a result of the ongoing changes such cultures have been and continue to undergo.

respected. They are active participants in group decision making. Such is true among such groups as the Kung, in southern Africa, or the Mbuti (Pygmies) in the Ituri rainforest in central Africa. These groups are traditionally egalitarian. They have elaborate healing rituals, and women may become highly respected healers.<sup>1</sup> Among the Mbuti, the women traditionally participated with the whole group in net hunting.<sup>2</sup> Among the Kung, women may hunt some. These groups are also quite relaxed about sexuality. Women are not considered dirty or unclean, nor is there any concern about virginity or sexual purity.

In terms of gender relations in gathering societies, the exception proves the rule. Among the traditional Inuit (Eskimos), subsistence was entirely dependent on men's hunting. There women had less social power, although their rights are not nearly so denigrated as in some agricultural groups.

The picture gets more complicated among small horticultural and agricultural cultures. Among those groups where women are a significant part of horticultural production, and if the group is not engaged in active warfare with nearby groups, women have social and political power. The Semai of Malay fit this pattern. They are a peaceful, egalitarian culture that practices small scale "slash and burn" horticulture. They burn sections of the forest and use the clearings to plant gardens and orchards. Women have relatively equal power to men among the Semai.<sup>3</sup> The Yanomami of the Amazon are a culture similar in village size but very different in gender relations. They also live in small villages that practice slash and burn horticulture. The primary difference between these groups is warfare. The Yanomami periodically engage in harsh combat, and more often in rituals of bullying and intimidation, with other villages that live nearby. Among the Yanomami, women are beaten by men. There is no taboo against rape if a woman is not adequately protected by her male relatives.<sup>4</sup>

The height of women's power occurs in cultures where the men

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1 O'Kelly, Charlotte G., Carney, Larry S., *Women and Men in Society: Cross-Cultural Perspectives on Gender Stratification*, Wadsworth Publishing Co., CA., 1986, p.23, Katz, Richard, *Boiling Energy, Community Healing Among the Kalahari Kung*, Cambridge, Harvard University Press, 1982

2 Turnbull, Colin M., *The Forest People*, New York, Simon and Schuster, 1962

3 Dentan, Robert Knox, *The Semai: A Nonviolent People of Malaya*, New York, Holt, Rinehart, and Winston, Inc. 1968.

4 Lizot, Jacques, *Tales of the Yanomami, Daily Life in the Venezuelan Forest*, Cambridge University Press, Paris, 1985



travel great distances to conduct trade or warfare. Among the Nayar in India, both the family name and property carried through the line of matrilineal descent. Traditionally, women could marry whomever they wanted, or have multiple husbands if they chose. Children belonged to the female-headed family line. Among preindustrial groups where men travel to fight long distance wars, women also gain a measure of power. Such was true among the Iroquois of North America where women appointed, and could remove, male leaders.<sup>1</sup>

As human societies grew larger and moved toward more intensive forms of plow and irrigation agriculture, they developed far more extensive and powerful social hierarchies. In general, women's liberties declined as villages became tribes, tribes became states, and states became empires. These changes were not by any means uniform or linear. Some feminist scholars have pointed to considerable evidence that some farming societies early in their evolution held women in higher regard. European neolithic villages left behind sculptures of female deities, and no evidence of harsh social hierarchies. Similar things can be said of the very early stages of "civilization" in other parts of the world.<sup>2</sup>

The correlation between women's economic roles and civil liberty is unmistakable, as is the correlation with warfare and decreased liberty. But what actually causes the decline of women's liberty as their economic roles decline? And why does warfare cause women to be disempowered? And last but not least, why does every discussion of women's roles invariably involve looking at sex? Why are women so much more sexualized than men? And why has male supremacy become nearly universal in modern times?

The answer to all these questions lies in understanding how human societies motivate people to undertake arduous or undesirable tasks in response to ecological stress and threats of violence from other groups. Starting with gatherers, we can see that many of them are monogamous. Their sexual attitudes are remarkably relaxed compared to what we are accustomed to in modern times. Among the Kung or Mbuti, good hunters will occasionally have more than one wife. The anthropological term for multiple wives is polygyny. Multiple spouses is referred to as polygamy, multiple husbands is called polyandry. Of the hundreds of cultures studied by modern anthropology, 95% practice

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1 O'Kelly, *ibid.*

2 Eisler, Riane, *The Chalice and the Blade, Our History, Our Future*, HarperCollins, 1988

polygyny.<sup>1</sup> You can count on your fingers the number practicing polyandry.

Why would good hunters have more than one wife? It would appear to be the very beginnings of a sexual reward system. Ecosystems are pyramidal, meaning it is a lot more likely that one will deplete large, huntable animals at the top of the pyramid than the roots and berries at the bottom of the pyramid. Thus as gathering societies feel a lack of animal foods, they reward good hunters with increased social respect and increased sexual access. The process of sexual reward is apparent in hundreds of ethnographic works from around the world. The Sharanahua of South America, for instance, have rituals where the women flirt with the hunters to encourage them to go off and hunt, the implication being that everyone will have a merry time when they come home.<sup>2</sup> And presumably they do. Similar symbolism exists all over the world. In our case, getting rich is symbolized to increase sexual access.

In horticultural societies, leadership becomes more visible, although it is still based on charisma rather than wealth, family name, or inheritance. These village leaders are always male, and they almost always have multiple wives. Even though the village headman's house and clothes are indistinguishable from other villagers, he still has social respect and sexual access to more wives in many cultures. His job is, in many groups, to get up early in the morning, and shout to people to get up and work and prepare for the next feast. They are responsible for encouraging people to intensify their productive effort. The leader comes to be seen as a "great provider" who will provide for the wellbeing of the village.<sup>3</sup> They are also often the center of a local redistribution network. Among some Native American groups, and other similarly sized cultures around the world, there is often a "chief's granary" where each family is supposed to put some grain at harvest time to be redistributed as needed.<sup>4</sup> Among the Trobriand Islanders in the South Pacific, each family unit hung sweet potatoes on racks on the chief's house, whereby they were redistributed as needed.<sup>5</sup>

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1 Murdock, George P. et al, *Outline of Cultural Materials*, New Haven, Conn. : Human Relations Area Files, Inc., 2000

2 Siskind, Janet, *To Hunt in the Morning*, New York, Oxford University Press, 1973,

3 Harris, Marvin, *Cannibals and Kings, The Origins of Cultures*, Vintage Books, New York, 1978

4 Harris, *ibid*, 1993

5 Malinowski, Bronislow, *Argonauts of the Western Pacific: An Account of*

The transition to horticulture, and then to more intensive forms of agriculture, was pushed forward by increasing population growth and ecological stress. Gatherers generally had enough, and their food sources were reliable by virtue of being diverse. Subsistence farmers have to work harder, and their food supply is less reliable. They have to overproduce to compensate for potential crop failures. The village leaders in horticultural societies encourage increased production. They don't get paid more money, they don't have a nicer house. Among the smaller groups, the only distinction of their leadership at all is social respect and multiple wives. Although one can imagine many other potential means to motivate people, the sexual reward system is used by almost every human culture. The vast majority of human cultures practice polygyny. Even in many nominally monogamous cultures, men are expected to be more promiscuous than women. (That in itself is a contradiction. If men are being promiscuous, then the women they are having sex with are equally so. But cultural symbolism often ignores the obvious.)

In gender-equal societies, there is no great concern about sexual purity. But as women become symbolized as rewards for men's efforts at increased production and warfare, then one sees increasing concern about sexual purity. In highly male supremacist societies, women's sexuality may be highly controlled. Among Muslim groups that practice Purdah, a woman is at no point in her life supposed to be in the company of a male non-relative without a male relative present for fear that there could be some sexual activity that would make her unclean. The punishment for infraction is death. As women become sexual commodities -- rewards for male intensification and warfare -- then control over such human commodities becomes a pointed concern for male leaders. Less severe forms of control over women's sexuality are seen in many male-supremacist groups. Bodily mutilation for supposedly erotic purposes may be undertaken. The painfully bound feet of women in China in past centuries were said to be highly erotic to men. Women may also be seen as dirty or unclean, particularly during menstruation. Gender-equal societies possess no such beliefs or practices.

Male leadership and polygyny in peaceful horticultural societies is not necessarily onerous for women. They still retain a great deal of respect and autonomy. That changes under conditions of warfare, more severe ecological stress, and heightened social hierarchy. For those

groups that practice inter-village warfare, male supremacy is greatly exacerbated. The power of the male warriors, particularly the headman of the village, is greatly increased. Women's status is dramatically reduced. Polygyny becomes more pronounced as the village headman/ great provider/ great warrior collects as many wives as he can. Wars are fought to capture young women for wives. Cultural practices of mutilating women's bodies in various ways may be adopted in connection with warfare. Among the Dani in New Guinea, when a man died, the finger of a female relative was amputated.<sup>1</sup> Public rape may be adopted by village leaders as a means of social control to keep women in line.<sup>2</sup>

In such cultures, men are taught to be fierce, boy children are cheered when they fight with each other. Women are taught to be more passive, to not fight back. Preindustrial warfare is gruesome, hand to hand combat. Each group must try to intimidate its neighbors or face potential attack. Teaching men to be aggressive maximizes the power of a group relative to the groups around it, even if there is a price at home. The choices faced by such peoples may be hard for us to understand. Allen Johnson, in speaking of the Yanomami, gives an excellent description of the trade-offs faced by people living in small villages at war.

“Men that in family-level societies would be taught restraint or expelled from the group, among the Yanomami gain extra wives and a following of men. But, being [fierce], they are truly fearless and expose themselves and those around them to danger: despite efforts to restrain them, they lose control and maim or kill other men, bringing the wrath of their victims’ families down on themselves and their close relatives and inflicting on everyone the costly consequences of a state of war. There is seemingly no alternative, since less combative groups are bullied and exploited by stronger groups who covet their women or want to displace them from their lands.”<sup>3</sup>

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1 Heider, Karl, *The Grand Valley Dani, Peaceful Warriors*, Holt, Rinehart, and Winston, New York, 1979

2 Gilbert, Herdt, *The Sambia: Ritual and Gender in New Guinea*, Holt, Rinehart, and Winston, New York, 1987

3 Johnson, Allen W. and Earle, Timothy, *The Evolution of Human Societies: From Foraging Group to Agrarian State*, Stanford University Press, Stanford CA, 1987. p.129

The purpose of leadership in small human cultures is to intensify and focus the effort of the group to increase production or to engage in warfare. The period referred to by feminist scholars in early agricultural societies when women were more respected probably represents a time of decreased ecological stress for these cultures. Agriculture can support many more people in a given area than gathering. The early stages of agriculture were thus a time of relative plenty. As ecological stress increased, headmen became more powerful tribal leaders, and tribal leaders became kings. Hierarchy became institutionalized, and power became arbitrary. The sexual reward system has been and remains the primary means by which societies of every size motivate people to undertake arduous or dangerous tasks. The sexual reward system has become a built-in part of human culture, a stress-response mechanism. The reason male supremacy is so pervasive in the modern world is that we live at a very particular point in human history. For tens of thousands of years, gatherers lived in what were probably gender equal societies. In the last few thousand years, the plague of ecological stress has spread to every corner of the world, as has the response; social hierarchy and sexual reward.

Why are men always the focus of sexual reward? Ever since the dawn of our species, it is likely that men hunted and women gathered. Hunting with bows and spears often involves extended treks for days at a time chasing wounded animals. Women, because of bearing children, were more suited for gathering. There was nothing oppressive about this original division of labor. From the beginning men were hunting, and engaging in the "politics" of going out to face or fight others. Political decision making is the source of great power in our time. That is a recent development. For the vast majority of our history, there was no special privilege or prestige attached to hunting or being the political face of the band. But this early division of labor did put men in those roles. As the world became increasingly crowded, the nature of those roles changed dramatically. What started as a benign division of tasks became the root of male supremacy in a crowded, ecologically stressed, and militarized world.

### Male Supremacy in America

Now we need to take a jump to American history. Sexual reward and male supremacy have shaped our lives, and our history, as much as they have shaped the lives of preindustrial villagers.

Most people's awareness of the evolution of women's rights goes back a few decades at best. We know about the recent conservative drift of American politics dating back to 1980. We know about the tumultuous 1960s, the feminist movement that grew out of that era, and *Roe v. Wade* in 1973 that made abortion legal. Before the 1960s, memory fades off into a deep dark patriarchal past. If we look deeper into that darkness, we find male supremacy is not as consistent or persistent as some might imagine.

Without knowing, the average American would presume that in colonial times, men ruled with an unchallenged hand. The truth is that in Puritan America, women in many areas had the right to vote, and the right to own and inherit property.<sup>1</sup> In spite of the reputation of the Puritans, the sexual mores of the time were less restrictive than what came later. Premarital sex was considered normal. It was not unusual for women to go to the altar pregnant; there was no shame involved.<sup>2</sup> In this period, the country was predominantly agricultural. Women and men shared in the farm work, as well as in child care. The birth rate was high.

The late 1700s and early 1800s saw rapid industrialization, particularly after the revolution. As the industrial mode of production grew, men became the wage earners and women were left at home. The early 1800s saw a steady deterioration of women's political and legal power. Women lost their right to vote. Women's dresses became increasingly elaborate, expanding outward to the grand hoop skirts of the middle of the century. Women were made into icons of sexual beauty in this period, put on a pedestal of feminine beauty and motherly attributes.<sup>3</sup> By the later part of this period, doctors were advising women that they were infertile in the middle of the menstrual cycle, the precise opposite of the truth. Clitorectomies to "cure" masturbation and other invasive gynecological surgeries were increasingly widespread.<sup>4</sup> The belief that

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1 Women lost the right to vote in New Jersey in the early 1800s. Johnston, Carolyn, *Sexual Power: Feminism and the Family in America*, Tuscaloosa, University of Alabama Press, 1992, p.14

2 O'Kelly, Charlotte G., and Carney, Larry S., *Women and Men in Society: Cross-Cultural Perspectives on Gender Stratification*, Belmont CA., Wadsworth Publishing Co., 1986, p.126, Gordon, Michael (ed), *The American Family in Social-Historical Perspective*, New York, St. Martin's Press, 1978, p.363-372, Haller, John S, and Haller, Robin M., *The Physician and Sexuality in Victorian America*, Urbana, University of Illinois Press, 1974, p.94

3 Banner, Lois W., *American Beauty*, New York, Alfred A. Knopf, 1983

4 Okelly, *ibid*, p. 130, Gordon, *ibid*, p. 388,410

women "steal" mens' virility and strength by "stealing" their vital fluids became established in some medical and popular circles.<sup>1</sup> These beliefs and practices parallel similar beliefs found in other highly male-supremacist societies.

The techniques of abortion had been developing throughout the period. Although some methods were hazardous, abortion up until the point of "quickenning" - when the fetus starts to move - was legally and morally acceptable, and widely practiced.<sup>2</sup> Even the Catholic Church was pro-abortion at that time.<sup>3</sup>

By the late 1800s, that all changed. Doctors of this era competed with herbalists and homeopaths on equal footing. With the advent of antibiotics, doctors began to gain prestige and power. But they needed a moral cause to boost their political profile. The American Medical Association used abortion as a moral issue to build their social movement.<sup>4</sup> With women firmly removed from the workforce, and under the persistent onslaught of the AMA, abortion and contraception advertising were outlawed by the Comstock Act in 1873.<sup>5</sup>

As the turn of the twentieth century approached, things were changing in many ways. Women were moving into the labor force in ever greater numbers, as well as into higher education. There was an enormous progressive movement of Unionists, Greenbackers, Populists, Socialists, and others. Women's dress started to become more practical as hoop skirts shrank into narrower dresses.<sup>6</sup> Women's organizations worked hard through this period and finally achieved the right to vote in 1917. In retrospect that might seem overdue, but the U.S. was actually one of the earliest industrial nations to give women the vote.

The progressive movement splintered over World War I, but the booming Twenties saw further relaxing of sexual restriction, and women's employment continued to expand. The "flappers" of that era were women who enjoyed their newly found freedom to smoke, drink,

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1 Harris, Marvin, *Culture, People and Nature: An Introduction to General Anthropology*, New York, HarperCollins, 1993, p.361-363, Gordon, *ibid*, 374-393

2 Mohr, James C., *Abortion in America: The Origin and Evolution of National Policy, 1800-1900*, New York, Oxford University Press, 1978

3 Page, 2006, *ibid*, p.58

4 Mohr, *ibid*

5 Mohr, *ibid*, p.196

6 Steele, Valerie, *Fashion and Eroticism: Ideals of Feminine Beauty from the Victorian Era to the Jazz Age*, New York, Oxford University Press, 1985, p.52

and enjoy an active social life. Movies were new, and alive with social experimentation. Sexuality was becoming more explicit, and even some measure of homosexual expression found its way onto the stage.<sup>1</sup>

This prolonged expansion of women's legal rights and social roles came to an abrupt end with the onset of the Great Depression. With the onset of economic depression, official government policy gave preference to male "breadwinners" over female employees.<sup>2</sup> Hollywood, sensing the new conservative mood, adopted a voluntary "code of conduct" that saw a restriction of sexuality.<sup>3</sup> Open sexual expression in the theater gave way to *Snow White* and other popular entertainment that was largely devoid of political or sexual content.

World War II saw a great expansion of employment, of women and everyone else. Even though women's employment expanded, their social roles did not. Rosie the riveter got paid, but did not expand her other rights or protections. The income disparity between men and women was substantial. Women were symbolized as Hollywood sexual icons pinned up in the army barracks.<sup>4</sup>

By the mid 1950s, women's employment exceeded the peak achieved in WWII.<sup>5</sup> Following close on the heels of this expansion of women's employment, a powerful feminist movement rose in the 1960s and 1970s. The modern feminist movement sought and won greater support for equal pay, greater protection from domestic violence, and a legal recognition of the right to an abortion. Sexual norms relaxed as sexuality was more openly expressed in cinema and popular entertainment. The expansion of women's rights in this period was of unprecedented scale in American history.<sup>6</sup>

In summary, women had more rights and status in the Colonial period than many people assume. They lost many of those rights as men became the sole wage-earners in the 1800s. Toward the end of the 1800s,

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1 Sterling, Walter (copyright), *The Love Goddesses: A History of Sex in the Cinema*, (film) Paramount Pictures, 1984

2 Margolis, Maxine, *Mothers and Such*, Berkeley, University of California Press, 1984

3 Banner, *ibid* p.282

4 Banner, *ibid*, p. 283, Baty, S. Paige, *American Monroe: The Making of a Body Politic*, Berkeley, University of California Press, 1995

5 Ryan, Mary P., *Womanhood in America: From Colonial Times to the Present*, New York, New Viewpoints, 1975, p.319

6 Banner, Lois W., *Women in Modern America: A Brief History*, Harcourt, Brace, Jovanovich, New York, 1974.



women moved back into the labor force, and began gaining ground in terms of their legal rights and social power. In the Great Depression women were pushed out of the labor force and again lost political power. In World War II, women were in the labor force in great numbers, but did not gain any ground. That had to wait until women again achieved a historically unprecedented representation in the labor force in the 1950s and 1960s, thus giving rise to the modern feminist movement.

Having laid out a very deterministic history here, some clarification is in order. Every activist worth their salt knows that social changes do not flow automatically from structural changes in our society. Change comes as a result of people standing up in a social movement to demand their rights. Does the activist perspective contradict the argument that women's rights change as a result of their changing role in the economy? Not at all. If we state that rights are determined solely as a result of political pressure, then we are saying that the women who lost their rights in the early 1800s were too lazy or foolish to organize a movement to prevent such losses. We are saying that women in the 1930s were inadequate organizers to prevent the loss of their rights and liberties. Surely we don't believe that. It is far more plausible to suggest that all people prefer to be free, and that deeper structural changes in our society influence who wins and who loses political battles.

To understand how our civil liberties expand and contract, we have to understand how economic and ecological changes intersect with our social movements. In our society, economic changes set the stage of politics. Economic and ecological changes create opportunities that social movements can take advantage of, windows in time where things can change if enough people are sufficiently organized to make them change. That does not mean that progressive change, or regressive change, will come automatically once conditions allow. But it does mean that the opportunities for change are very different at different times.

Seeing how structural economic changes can influence social attitudes toward women shows us a few things. In general, economic pressures have a great deal of influence over whether or not progressive, or regressive, social movements succeed. As with the village level societies we looked at earlier, significant social stressors tend to decrease women's power as society turns to the age-old institutions of male leadership. In our case, we see that represented in World War II where, even though women were employed in greater numbers, they were still held back from gaining political power. It is also important to know, especially given the current vilification of the President by progressive

forces, that the role of women in the U.S. has *not* historically corresponded with various shifts right and left in political power. In the 1920s, conservatives held the upper hand politically even as women's roles were expanding. The 1930s and World War II saw the rise of New Deal Liberalism even as women were driven back into traditional roles. Women's roles are closely linked with their economic position, *not* with presidential politics. The correlations are clear, but it has all gotten a little more complicated since the Reagan era.

### But Why South Dakota?

The feminist movement of the 1960s followed on the heels of a significant expansion of women's employment, and hence income. That is unmistakable. Since that time, America has gone two directions at once.

Since Ronald Reagan was elected in 1980, the middle class has gotten larger.<sup>1</sup> There has been a real estate boom, an e-boom that busted but left its mark, and a general increase in prosperity among wealthier and urban Americans. The two coasts have prospered.

Meanwhile, the wages of the poor and working class (lower middle class) have stagnated, even fallen at times.<sup>2</sup> All manner of social services have been cut, including many programs that support single mothers with children. Federal cuts to social programs have left many states and localities struggling to pay for schools. Local governments have struggled with choosing between increasing property taxes or cutting back local services. The number of family farms has continued to decline while the number of corporate farms has increased. Sprawl and big-box commercialism has economically benefited specific locales while sucking the lifeblood out of surrounding areas. (The county where a Wal-mart is located gets richer, all the counties surrounding it get poorer. The net result is more jobs destroyed than created.)<sup>3</sup> The economies of many of the central and midwestern states have not kept pace with coastal states.

Some commentators in the 1980s created the phrase "the feminization of poverty" to describe the combined impacts on women of

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1 Stonecash, Jeffrey, *Class and Party in American Politics*, Westview Press, 2000

2 Stonecash, *ibid.*

3 Norman, Al, *The Case Against Wal-Mart*, Raphel Marketing, Atlantic City NJ, 2004

gender-based wage disparities, the increase in the number of female-headed households, and social spending cuts. The term would more accurately be "the feminization of rural poverty." According to a USDA study prepared to analyze the economic changes affecting women in rural America, "*The relative decline in traditional married-couple families has increased the share of females at risk of poverty. The increasing feminization of poverty, a shift toward more mother-child families among the poor, is a reflection of the growing instability of the traditional American family... High poverty rates among nonmetro women signal a reason for public policy concern.*"<sup>1</sup>

Urban middle class women have, statistically speaking, gotten wealthier. (There are certainly poor women in urban America, but both in terms of statistical averages, and in terms of voting power, they are lumped together with a large block of middle class women whose incomes have grown.) Urban women have narrowed their wage parity with men. Congress in the 1990s passed several pieces of legislation to protect women from domestic violence. Now, generally speaking, the police can seek evidence and prosecute a male abuser whether or not the abused woman presses charges. This is consistent with how we would expect a human society to respond to an increasing role of women in the economy.

Rural women, especially working and lower middle class women, have gotten poorer. We see, particularly in rural areas, a social and political movement to return to "family values" and restrict women's access to abortion and contraception. This is consistent with how we would expect a human society to respond to a decreasing role of women in the economy. (Reducing access to contraception may seem particularly bizarre until you see it in context of the rather consistent patterns in male-supremacist societies to control women's sexuality. If sexuality is going to be a reward for specific behavior and social allegiances, then it has to be controlled.)

And that is the solution to the riddle. Given that America is polarizing, we are talking about two different societies. An urban, middle and upper class one where women are gaining ground, and a rural and lower class one where women are losing ground.

Now here's the zinger. Out of 50 states, can you guess where South Dakota ranks in terms of women's median annual earnings?

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<sup>1</sup> Rogers, Carolyn C., *Changes in the Social and Economic Status of Women by Metro-Nonmetro Residence*, Agriculture Information Bulletin No. (AIB732) 24 pp, February 1997

<i>States, New England and West Coast, that Support Abortion Rights</i>	<i>Rank, out of 50, Median Annual Earnings for Full-Time Working Women, 2002<sup>1</sup></i>	<i>States, Central and South that do not Support Abortion Rights</i>	<i>Rank, out of 50, Median Annual Earnings for Full-Time Working Women</i>
Washington D.C.	1st	<b>South Dakota</b>	<b>50th</b>
Maryland	2nd	Arkansas	48th
New Jersey	3rd (tied)	Louisiana	47th
Connecticut	3rd (tied)	Mississippi	42nd (tied)
Massachusetts	3rd (tied)	Idaho	42nd (tied)
Alaska	6th	North Dakota	42nd (tied)
Washington	9th (tied)	Oklahoma	37th (tied)
California	7th	Alabama	37th (tied)
Colorado	9th (tied)	South Carolina	37th (tied)
Rhode Island	12th (tied)	Tennessee	35th
Delaware	12th (tied)	Utah	33rd (tied)
New York	15th	Kentucky	33rd (tied)
New Hampshire	12th	Texas	28th (tied)
Vermont	23rd (tied)	Wisconsin	28th (tied)
Oregon	23rd (tied)	Indiana	28th (tied)
Maine	35th	Florida	26th

Fiftieth out of fifty. The politics of the other states display the larger trends. If *Roe v. Wade* is overturned, approximately sixteen states are prepared to defend or expand women's access to reproductive choices. Approximately twenty-two are prepared to ban or restrict access

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1 Caiazza, Amy, Ph.D., April Shaw, and Misha Werschku, *Women's Economic Status in the States, Wide Disparities by Race, Ethnicity, and Region*, Institute for Women's Policy Research, 1707 L Street, NW, Suite 750, Washington, DC 20036, *web* www.iwpr.org

to abortion and contraception.<sup>2</sup> The former states have large urban populations, and are largely in New England and the West Coast. The latter states are largely rural and central rust-belt states.

The list of states that support and oppose abortion display the growing disparity between the two Americas. The preceding table indicates states that support or oppose abortion followed by that state's ranking (out of 50 states) of women's median income. Support and non-support in this case are defined as those states that likely would, or would not, ban abortion if *Roe v. Wade* were overturned.

This preceding chart doesn't tell the real story, because even here rural and urban, rich and poor women and families are lumped together. That tends to flatten, or make statistically less visible, the feminization of poverty that is occurring in the United States. Even so, the general pattern is clear.

Another matter to consider is the personal motivations some women may have for participating in social movements, even ones that appear to restrict their own freedoms. Some years ago, Connie Paige published a book called *The Right to Lifers* in which she calmly compared the women who make up the right-to-life movement with pro-choice women. Pro-choice women are more likely to be urban, professional, educated, and to have an independent income. The need to control their reproductive process is, among other things, an economic imperative. If and when they have children, they are more likely to wait until they have finished college and/ or established a career.

Right-to-life women are likely to be in "traditional" families, to have less education, to be more economically dependent on a husband. For them, sex should be governed by moral and religious norms. They have a desire, and an economic need, that there be a mutually binding sexual contract with their husbands. If you are going to be dependent on someone, then you would at least want them to be true to their end of the bargain. And that is part of the reason that some women would support a general restriction of sexual norms, particularly under circumstances where their economic opportunities are limited. I would not suggest that every woman in rural or urban America fits these general descriptions. Nor would I suggest that all, or even a majority, of rural women support the conservative agenda on reproductive rights. These different populations face different trajectories. What urban women see as an infringement on their rights at least some rural women see as a defending

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<sup>2</sup> Page, Susan, *Roe v. Wade, The divided states of America*, USA Today, 4/17/2006

of their rights.

### The Sacredness of Life and Empire

The fixation in our society with the absolute sanctity of life expresses itself as a desire to save the lives of embryos, to forbid assisted suicide, or to prolong the lives of the elderly at all costs. (The reality is that doctors and nursing home workers let old people die every day instead of engaging in invasive interventions that would only postpone the inevitable, but we do not recognize this reality culturally.) Such behavior is most peculiar when one puts it in the larger context. We use capital punishment. We have a much higher level of poverty in our society than do most industrialized cultures. Any sophisticated medical analysis can show that poverty itself shortens ones' lifespan. The U.S., in spite of having the largest, most powerful economy on the face of the Earth, ranks 36th among the world's nations in infant mortality.<sup>1</sup> And the matter of American foreign policy is another tale for the Grim Reapers Hall of Fame.

Why the obsession with life on the one hand, and the complete disregard on the other? Sadly, the question answers itself. The Romans re-wrote Christianity as a pacifist religion as their Empire matured; a pacifist religion with a benign fatherly god who was then easily associated with the benign fatherly power of imperial government. One of the espoused tenets of that religion is the sanctity of life. We do as the Romans did, elevating the status of life as a smokescreen, a means of hiding the life-and-death consequences, at home and abroad, of our social order.

Male supremacist societies seek to control women's sexuality so it can be directed as a reward for male intensification behavior. We are also symbolically preserve life at all costs as a means of obscuring the deadly expense of our lifestyle. By pretending that we believe life is sacred, we deny any responsibility for the lives we take. If a homeless woman dies of exposure on the street, then she must be responsible, because we as a society consider life sacred. The multitudinous war casualties, far more numerous among our opponents than among our soldiery, are all accidents, because we consider life sacred. We deny

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1 *World Population Data Sheet*, Population Reference Bureau, 1875 Connecticut Avenue, NW, Suite 520, Washington, DC 20009-5728 USA, at prb.org, see also [http://www.geographyiq.com/ranking/ranking\\_Infant\\_Mortality\\_Rate\\_aall.htm](http://www.geographyiq.com/ranking/ranking_Infant_Mortality_Rate_aall.htm)

social responsibility for the poverty and social decay that escalates violent crime, because here, in our society, life is sacred. Life is sacred, and when it is destroyed, that can only be an accident, an aberration. We as a society are not responsible.

### From Material To Mental

We can see in recent events how structural economic changes create opportunities for social movements, and that ultimately becomes the manifest face of economy and ecology in our belief system. The feminization of rural poverty did not simply cause a bunch of parental notification and abortion-restricting laws to fall out of the sky, but it has created the opportunity for conservative social movements to advance their agenda. The prosperity of urban women likewise did not spontaneously result in improved protection from domestic violence. Specific advocacy groups went to bat for that legislation, funded by donations from their supporters, with all manner of political pressure coming from advocates who wanted that legislation.

As we approach particular ecological limits of our world, economic trends (increasing or decreasing commodity prices, for instance) are set in motion. These trends in turn create opportunities for social movements to influence public belief. An ecological pressure "causes" a change in how we think, but we remain absolutely oblivious to the root cause. The economic stagnation of rural America, and the feminization of rural poverty together present both an opportunity for conservative movements who thrive on adversity and a limitation of women's career opportunities that makes them more dependent on male breadwinners. The economic stagnation of rural America is one of the results of the limits of oil production and industrial growth.

We tend to think of ourselves and modern industrial society as being somehow separate from the rest of humanity, as if there were no patterns of cultural change in the human species, as if somehow our technology has allowed us to supersede the cultural patterns of history. This great illusion is propelled by the academics, politicians and preachers who tell us every day how important their ideas and policies are while ignoring the dark, gritty, unflattering structural economic influences over modern life. The culture of activism itself seeks to organize a constituency to influence current policy. Who is looking at the big picture? No one. The resurgence of fundamentalism in America, the movement to restrict women's sexuality, to control it and use it as a

reward for appropriate behavior is the very same pattern that has played itself out thousands of times in human cultures around the world.

We tend to put our minds above matter, to think that policy and politics determines economics and the fate of the environment. The opposite is far more true, and far less flattering. Fundamentalist movements thrive on adversity. The escalating environmental crises of our time will, with near certainty, reinforce the growth of sexual reward and the restriction of women's rights if we continue to try to address the issue through purely political means. The alternative is to see this issue linked as it is with our broader ecological fate. We are losing because we suffer a terrible tunnel vision. We understand issues only in narrow political terms. The restriction of sexuality in South Dakota is not unique or surprising, not an inscrutable game of modern political manipulation. It fits perfectly well within a larger dark story of how human cultures the world over evolve and respond to stress.

We cannot deal with the most immediate manifestations of male supremacy in an age of ecological decline by simply addressing politics and policy. We have to develop a broader understanding of how our culture, and human cultures all over the world, change and evolve. Then we have to employ that understanding to the conscious purpose of directing our society towards more benign structural change. When will the oil run out? Sooner, or maybe later. No one knows exactly. But the point is that male supremacy is as alive as ever, and the limitations of the modern industrial economy are going to provoke the same stress-responses that human cultures have employed the world over for thousands of years unless and until we get smarter. We need to take conscious control over the future direction of our society, particularly the economic and ecological levels. That is where the power lies.

Biofuels have gotten a lot of publicity lately. Could biofuel be the solution to the peak and decline of oil production? If the limits of energy supply are constraining industrial growth and fostering a fundamentalist degeneration, could biofuel be a solution to our political decline?





# Peak Oil, Biofuel, and Genocide Neoliberalism's End Game?

This chapter is based on the following contentions:

- 1) Oil production cannot last forever. It will at some point peak, and decline.
- 2) Substitutes for oil are going to be more expensive and inadequate to sustain the industrial growth to which we have grown accustomed.
- 3) The flattening of the industrial growth curve will have enormous social and political impacts.
- 4) If we could find a new source of cheap energy, it would do more harm than good.
- 5) Biofuel is not a substitute for fossil fuel, but rather could be the trigger for a global-scale genocide.
- 6) The solutions to our energy problems are, from a mechanical perspective, relatively simple. Real solutions require a change of culture.

The first three contentions are fairly obvious. It is the latter three that are more difficult, and most important to understand, hence the need for reading and writing books. Numerous books about the peaking of oil production have been written.<sup>1</sup> It is our purpose here only to provide a very brief review of that particular issue to set the stage for a broader look at energy, culture change, and genocide.

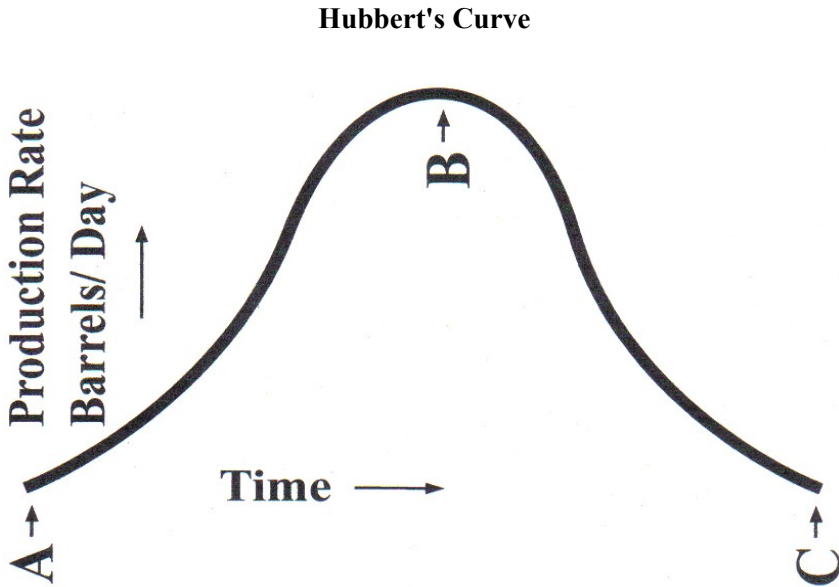
In the 1940s, a man by the name of M. King Hubbert worked as a geologist. He had worked for a number of oil companies, and was well-known and highly respected in his field. In 1956 he published a theory about the upcoming peak of oil production in the United States. Hubbert predicted that oil production in the U.S. would peak around 1970. Discoveries peaked around 1930, and production continued to climb. In spite of his position in the field, Hubbert was ridiculed for his prediction. He continued to be the target of derision as oil production climbed

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<sup>1</sup> The authors I have found most informative include: Simmons, Mathew R., *Twilight in the Desert, The Coming Saudi Oil Shock and the World Economy*, John Wiley and Sons, Inc., Hoboken, 2005, Campbell, Colin J, *Oil Crises*, Multi-Science Publishing Company Ltd, Essex UK, 2005, Heinberg, Richard, *The Party's Over, Oil, War, and the Fate of Industrial Societies*, New Society Publishers, Gabriola Island BC, 2005, Deffeyes, Kenneth S. *Beyond Oil, The View from Hubbert's Peak*, Hill and Wang, NY, 2005. Other authors include James Howard Kunstler, Jeremy K. Leggett, Michael T. Klare, Julian Darley.

throughout the 1960s. The peak arrived just as Hubbert predicted in the early 1970s. Hubbert continued to be the target of scorn about his prediction even after the peak, up until several years later, when finally it could no longer be denied that oil production in the U.S. had peaked.<sup>1</sup>

Hubbert's curve is no more than a simple bell curve. Point A occurs when an oil field is found. As the field is explored and developed, production begins to climb rapidly. The curve presented here is simplified. The real production curve of any field, or set of fields, tends to be a jagged line that goes up and down as production rises and falls on a short-term basis. Point B occurs when about half of the oil has been removed from an oil field. It is the time when production capacity stops growing. Point C is the point of absolute depletion.



As a field passes point B, production tends to level off, and then begins an inexorable decline. The decline is slow at first, but accelerates over time. Oil company representatives like talk about horizontal drilling, gas injection, and other new technologies that accelerate the extraction of oil. It is important to know that, based on actual data from oil fields in which these technologies have been applied, the positions of

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<sup>1</sup> Deffeyes, *ibid*, see also <http://www.hubbertypeak.com/hubbertype/>

point C remains the same. Advanced extraction technologies tend to widen the plateau at point B, but the slope between point B and point C is then steeper.

Applying the Hubbert methodology to the global oil system leads to the conclusion that oil production should have peaked already, or will peak soon. Global oil discoveries peaked in the 1960s. There was a major slowdown of oil production in the 1970s and 1980s relating to the OPEC boycott and other problems of that time. There are some people who think that global oil production would have peaked in the 1990s were it not for these prior disruptions. There are others who think that global oil production has peaked or is about to peak in the next few years. And there are some who think that the peak is at least a couple of decades away.<sup>1</sup>

There is no disputing that the production of light sweet crude -- the oil at the top of the reservoirs that is easy to refine -- has peaked.<sup>2</sup> A lot of the disagreement centers around deeper, thicker oil and tar-like substances. How much is there, how much can reasonably be extracted? No one knows for sure.

If we are running out of oil, shouldn't someone have noticed? Shouldn't someone in government or industry be keeping tabs on these issues? The Energy Information Administration (EIA) is an agency of the U.S. Department of Energy. The EIA is charged with predicting future supplies. The DOE did not predict the peak in the continental U.S. Even more recently, electric power companies converted considerable peak generating capacity to natural gas, but now the natural gas supply is falling short of demand in North America. They did not see that shortfall coming. Energy is so deeply a part of the modern economy that it is hard for people to conceive of a shortfall, even people highly educated in the field. Oil companies have never in the past predicted production peaks or prepared for them. If the peak of global oil production is approaching, there is no reason to assume that we would notice or respond in advance. We never have.

The tragedy is that many of the discussions about Peak Oil in the mainstream media point to various dire predictions from the past that haven't come true yet, therefore discounting predictions about oil in the future and encouraging people to not respond. An independent report

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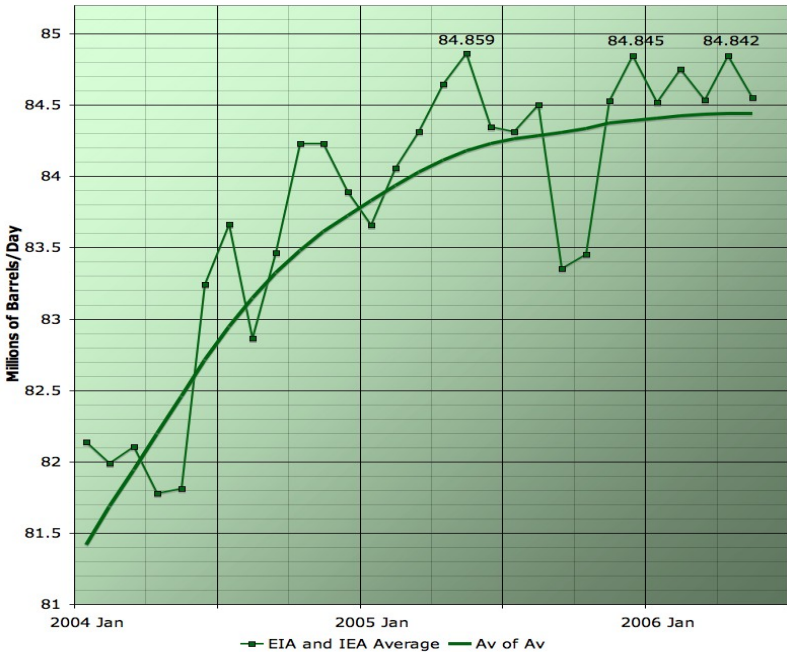
1 Campbell, *ibid*, see also <http://www.peakoil.net/>, <http://www.peakoil.org/>, <http://www.theoilcrash.com/> <http://www.lifeaftertheoilcrash.net/>, <http://www.peakoil.com/>, <http://www.postcarbon.org/>

2 <http://www.energybulletin.net/8102.html>

commissioned by the U.S. Department of Energy, conducted by Robert Hirsch of the Science Applications International Corporation, concluded that:

*“The world has never faced a problem like this. Without massive mitigation more than a decade before the fact, the problem will be pervasive and will not be temporary. Previous energy transitions (wood to coal and coal to oil) were gradual and evolutionary; oil peaking will be abrupt and revolutionary.”<sup>1</sup> “Initiating a mitigation crash program 20 years before peaking appears to offer the possibility of avoiding a world liquid fuels shortfall for the forecast period.”<sup>2</sup> “Late initiation of mitigation may result in severe consequences.”<sup>3</sup>*

**Global Oil Production**



This graph represents global oil production over the last several

1 *Peaking of World Oil Production: Impacts, Mitigation, & Risk Management*, Robert L. Hirsch, SAIC, Project Leader, Roger Bezdek, MISI, Robert Wendling, MISI, February 2005, project initiated by the U.S. Department of Energy, p.64

2 Hirsch, *ibid*, p.59

3 Hirsch, *ibid*, p.60

years, based on data from the International Energy Agency and the Energy Information Administration, tabulated by Stuart Staniford.<sup>1</sup> A couple of caveats or are in order. There is no systematic process of reporting global oil production. The data behind this graph are estimates. Furthermore, as we pointed out earlier, and is clear in this graph, oil production climbs and falls on a short-term basis. Therefore, no one can claim with any certainty to know the date of the actual peak of production until years after the event. Current data does indicate that we may be at or near peak.

Oil production will peak. That is an absolute inevitability. And any preparation for that peak would take years, if not decades. Oil is integral to our modern economy. Even if one believes the most optimistic scenarios about how much oil is left, if we want to make a graceful transition, we should start now.

All of this is little more than common sense. We have known for decades that oil is a finite resource, and that we are very dependent on it. Why have we not responded? One big reason is the myth of progress which tells us that new innovations, like biofuels, can replace fossil fuel. Could that be so?

### Biofuel

Biofuels include ethanol, biodiesel, woodchips burned for electrical power, and other sources of fuel that originate in the fields, farms, and forests of the world. Are biofuels the solution to the depletion of fossil fuel? They are not. They are the endgame of neoliberalism, the program of bringing global trade to every corner of the modern world. Biofuel as it merges with the global trade system may well be the means and method of global genocide.

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<sup>1</sup> Graph from theoil drum.com, reprinted with permission. Description of the graph; "IEA and EIA data averaged together (with centered moving average). NB data is only from Jan 2004 to May 2006. Believed to be all liquids. Source: IEA Oil Market Reports, and EIA International Petroleum Monthly Table 1.4. The IEA line is taken from Table 3 of the tables section at the back of the OMR in the last issue for which the number for that month is given." A short biography of Stuart Staniford; PhD Physics, MS CS. 10 years as an innovator in computer security (especially worms). Patents, research papers with 100+ citations, major media coverage. Ran a company for 5 years. Now working as a consulting scientist and researching peak oil." His website is at <http://invictaconsult.com/>

The myth of progress is deeply rooted. The reality of industrial development is that we have always used the most accessible fuels first, and then moved on to less accessible fuels. From the earliest days of human life on earth, biofuel was the only energy used other than human muscle power. Earlier civilizations discovered fossil fuel, but stuck with the use of firewood as it was more accessible and cleaner burning than coal or oil. In Roman times, oil was discovered, interchangeable parts were invented, but there was no need for such items in the economy of the time. We may think of the steam engine that powered the early industrial revolution as a grand invention in its time. The reality is that the steam turbine was invented in A.D. 62, more than 1,500 years before its use in Europe. The Romans didn't use steam power because it did not fit the economy of their age.<sup>1</sup>

As Europe was beginning to industrialize, firewood, wind and water power were relied on as the sole sources of energy. Steam-powered machines were invented and reinvented, but never actually used. They were not needed because biofuels, wind and water power were more easily accessible. The limit of the biofuel economy in Europe was reached in the mid 1600s. By then, deforestation was widespread, and all of the easily accessible wind and water power sites were being used. That is when the use of coal began in earnest.<sup>2</sup>

At first people dug shallow coal, or picked up coal along the beach. As this coal was exhausted, they started digging deeper and deeper mines. As the mines grew deeper and began to flood with water, more sophisticated water pumps were developed to pump out the mines. At first horses (another source of bio-power) were used to power the pumps, but in time the mines grew so deep that that rag-and-chain horse powered pumps became inadequate. There, more than a thousand years after the first known invention of the steam turbine, steam power finally found its practical application, running water pumps to pump out the mines.<sup>3</sup>

There are two points to be derived from these historical insights. The first is that what we normally call progress is often a response to depletion. Industrialism exceeded the depletion limits of biofuels a long time ago. The second point is that the trajectory of using resources that

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1 Africa, Thomas W., *Science and the State in Greece and Rome*, John Wiley and Sons, Inc., 1968

2 Wilkinson, Richard G., *Poverty and Progress, An Ecological Model of Economic Development*, Methuen and Co. Ltd. London, 1973

3 Wilkinson, 1973, *ibid.*

are easily accessible first, and then turning to less accessible resources has pervaded throughout industrial development. Digging deep coal is a lot more expensive than cutting firewood. Would it make any sense to mine deep, low grade ore before mining shallow, high grade ore? Does it make any sense to mine at all if you can find what you need at the surface?

One might think that the United States, having conquered a continent, would not have been subject to the same limitations of Europe in terms of resource constraints. But the same patterns of resource use and conversion still apply. In the U.S., biofuels were heavily applied to burgeoning industry after the revolutionary war. The eastern U.S. was heavily deforested in this period. As settlers moved west, other states suffered similarly. By the mid 1800s coal had become the dominant fuel because the biofuel economy had been overextended and depleted.<sup>1</sup>

In the one hundred and fifty years since the biofuel economy reached its limit in the U.S., not only has population increased several fold, but also energy use per capita has grown much faster than population itself.<sup>2</sup> Biofuel, being on the surface, easily accessible, and easily processed, represents a high-grade "ore" relative to fossil fuel. The fact that we have considerable forests today in the U.S. is the result of the fact that we are *not* using them for biofuel.

## Food and Fuel

Are biofuels renewable in the modern context? Any resource is renewable only if it is extracted at a rate no greater than it is replenished. Overcutting a forest or overfishing a fishery renders a renewable resource non-renewable. Given that biofuels potentially involve taking human food and feeding to automobiles, the renewability issue is paramount.

If we are going to feed human food to cars, we need to know how much surplus food production capacity we have. We get our food from a number of sources. Do you know when the world fish catch peaked? In the early 1980s.<sup>3</sup> What about grain production? Per capita

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1 Wilkinson, 1973, *ibid*

2 <http://dieoff.org/page224.htm>

<http://www.globalchange.umich.edu/globalchange2/current/lectures/energy1/energy1.html>

3 Brown, Lester, *State of the World 1993*, Norton, NY, 1993, p.12



production peaked in 1980s.<sup>1</sup> Irrigated farmland produces a lion's share of human food. How is the supply of irrigated land holding up? Because of salinization, erosion, and other management issues, the global supply of irrigated farm land per capita has shrunk precipitously in the last several decades.<sup>2</sup> Protecting the soil has been a long-term issue for humans. Over the past 1000 years, humans have permanently degraded more farmland than the sum total of that currently being farmed.<sup>3</sup> The final humbling fact is that, even though the U.S. has the most productive agricultural system in the world, we are now a nation that teeters on the brink of agricultural debtorship. Our current agricultural balance of trade is nearly flat, and if current trends continue, the U.S. will be a net importer of food within the next couple of years.<sup>4</sup>

If the amount of irrigated farmland per person has actually shrunk, how is it that we continue to feed growing populations? The phrase the “oilification of food” was first coined a few decades ago, but it is more relevant than ever. The amount of energy we invest in each calorie of food produced has climbed steadily, and continues to climb. We have been replacing soil with oil. We now invest about ten calories of fossil fuel for each calorie of food we get in return.<sup>5</sup> That is long before anyone considers putting those food calories into a gas tank.

The impacts of broad-scale biofuel conversion are beginning to appear. Cars are now consuming most of the annual global increase in grain production that up until now has been feeding our growing population. As with oil depletion, markets and prices do not respond in an orderly fashion to reductions in supply. Brazil has become a major producer of ethanol from sugar cane. According to Lester Brown, “*With just 10 percent of the world’s sugar harvest going into ethanol, the price of sugar has doubled.*”<sup>6</sup> In 2006, global grain stocks reached their lowest

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1 Brown, 1993, *ibid.*, p.13

2 Gardner, Gary, *Shrinking Fields, Cropland Loss in a World of Eight Billion*, WorldWatch Paper 131, WorldWatch Institute, 1996, p. 20

3 Meadows, Donella, Jorgen Rogers, Dennis Meadows, *The Limits to Growth, the 30 Year Update*, Chelsea Green, White River Junction, VT, 2004, p.61

4 Grist Magazine, February 10, 2006, also see US Department of Agriculture Research Service, <http://www.ers.usda.gov/Data/FATUS/monthlysummary.htm>

5 Pimentel, David, *Food, Energy, And Society*, University Press of Colorado, Boulder, 1996, also Dale Allen Pfeiffer, *Eating Fossil Fuels*, From The Wilderness Publications, Oct 2, 2003

6 Brown, Lester R., *Supermarkets and Service Stations Now Competing for Grain*, Earth Policy Institute, July 13, 2006

point in 34 years.<sup>1</sup>

We are using energy at a rate that cannot reasonably be obtained from biological sources. The U.S. is particularly profligate. According to David Pimentel, the U.S. population consumes 40% more fossil energy than all the solar energy captured by harvested U.S. crops, forest products, and other vegetation each year.<sup>2</sup> Any use of biofuels has to be added to our current demands on the Earth's biota that we already claim to produce food and fuel. For food, building materials, and firewood, we already harvest about 25% of the entire photosynthetic product of planet earth. If one looks at only the land area, we already harvest about 40% of the entire photosynthetic product of the land mass of the planet earth.<sup>3</sup> The energy used by modern industrial society, if harvested from biological sources, would represent an *additional* 25% of the Earth's entire photosynthetic product.<sup>4</sup> Or, another way to say that, to match our current consumption of energy from biofuel sources would require all of the food, paper, and building material currently harvested from the world's forests and fields. To produce biofuel on a scale to support even a fraction of current industrial output without reducing food production would require harvesting the planet's biological output at a rate that may not even be possible. If it could be done, it would come at extraordinary cost to every other living thing on the Earth.

There are grossly conflicting claims regarding how much fossil fuel is required to produce a gallon of ethanol or biodiesel. Some biodiesel advocates say that one gallon of fossil fuel used on the farm produces several gallons of biodiesel. If that were true, biodiesel would already be dirt cheap and a dominant fuel. Oil company conspiracies aside, neither Archer Daniels Midland nor the American farmer would let that one slip by. Ethanol and biodiesel critics claim that these fuels represents a net energy loss from farm to gas tank, and that these fuels are simply a complicated farm subsidy.<sup>5</sup> Even the optimists suggests that

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1 Brown, 2006, *ibid*.

2 Pimentel, David, *Food, Energy, And Society*, University Press of Colorado, Boulder, 1996, also at Pimentel, David and Marcia Pimentel, *Land, Energy and Water, The Constraints Governing Ideal U.S. Population Size*, NPG forum series published at NPG.org

3 Vitousek, P.M., et al, *Human Appropriation of the Products of Photosynthesis*, *Bioscience*, 36, 1986

4 Jeffrey S. Dukes, *Burning Buried Sunshine: Human Consumption Of Ancient Solar Energy*, *Climatic Change*, 2003, 61: 31-44.

5 Pimentel, David, *Biomass Utilization, Limits of*, *Encyclopedia of Physical*

ethanol is only 25% efficient at best, meaning that you have to burn 4 gallons of fossil fuel to get 5 gallons of ethanol.<sup>1</sup>

The amount of human food needed to fuel a car is staggering. Concerning ethanol, even if we disregard the energy used to distill ethanol, about 4.2 hectares (10.4 acres) of corn must be used to fuel one car for one year.<sup>2</sup> The global supply of grainland per person was .23 hectare (notice the decimal) in 1950. Now it's .12, and is projected to be .09 hectare per person in 2020.<sup>3</sup> Lester Brown says it a different way. According to him, the grain needed to fuel one SUV for a year would feed 26 people.<sup>4</sup>

If biodiesel and ethanol are ecologically expensive, then won't the market correct the problem by keeping biofuels financially expensive? Maybe, but biofuels also make people feel better about driving. This guilt relief adds to their market value, which increases their market power even further relative to third world stomachs. This has to be put in the context of the support biofuel is receiving from diverse and powerful interests. In the fall of 2004, the U.S. Congress passed a tax relief bill to promote the use of biodiesel.<sup>5</sup> President Bush has spoken on numerous occasions in favor of biofuels, has visited biodiesel plants to show his support, and has announced a "Biofuels Initiative" to encourage the development and use of biofuel.<sup>6</sup> The European Union is pursuing a

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<http://www.news.cornell.edu/releases/Aug01/corn-basedethanol.hrs.html>, see also [energyjustice.net](http://energyjustice.net) and [www.energyjustice.net/ethanol/pimentel2001.pdf](http://www.energyjustice.net/ethanol/pimentel2001.pdf)

1 Hebert, H. Josef, *Study: Ethanol Won't Solve Energy Problems*, Associated Press, 7/10/2006.

2 Pimentel, David, *Energy and Dollar Costs of Ethanol Production With Corn*, M. King Hubbert Center, Petroleum Engineering Department, Colorado School of Mines, Golden CO 80401-1887 at [hubbert.mines.edu/news/Pimentel\\_98-2.pdf](http://hubbert.mines.edu/news/Pimentel_98-2.pdf)

3 Gardner, Gary, *Shrinking Fields, Cropland Loss in a World of Eight Billion*, Worldwatch Paper 131, Worldwatch Institute, Washington D.C., 1996, and Brown, Lester, World Watch Institute, *The State of the World 1997, A Worldwatch Report on Progress Toward a Sustainable Society*, W.W. Norton, New York, 1997

4 Brown, Lester R., *Supermarkets and Service Stations Now Competing for Grain*, Earth Policy Institute, July 13, 2006

5 The bill was H.R. 4520, the American Jobs Creation Act of 2004, see <http://www.biodiesel.org/news/taxincentive/>

6 The Department of Energy published a press release about the Biofuels Initiative at <http://www.energy.gov/news/3246.htm>. President Bush visited a

similar strategy. National celebrities are promoting its use in the corporate media.<sup>1</sup>

The environmental cost of biofuel is not a far-off, theoretical matter. It is here and now. The new frontier of biodiesel can be found in the palm oil plantations of Malaysia. Thousands of acres of tropical forest land and all of the rare species that inhabit them are now being sacrificed to grow palm oil to feed the cars of the U.S. and Europe. The wild orangutan will likely soon be extinct because of biodiesel.<sup>2</sup> One might do well to keep in mind that while tropical rainforests are very rich environments hosting a diverse numbers of rare species, many other environments fit that description as well. The American grasslands were once one of the most diverse and rich environments in the world. While we have grown accustomed to corn growing where multitudinous birds and buffalo once roamed, any natural environment that is sacrificed for a biofuel monocrop production will result in species extinctions. And there will be many such extinctions.

### Common Sense

Apart from all the publicity about biofuel, a new energy source would do more harm than good in the long run. How could that be? Our understanding of our society is very issue-oriented, not systematic. If you understand modern society as a system, then simply adding more energy does not improve the sustainability or long term viability of our society at all. This was demonstrated several decades ago by computer modeling developed by the Club of Rome.<sup>3</sup> They created a model that attempted, to the the extent possible, to quantify the basic parameters of the modern industrial economy. Their model included resource availability, the ability of renewable resources to regenerate, the ability of the land and sea to absorb pollution. The overall shape of the model was shocking to many, though it should not have been. If you put yeast in a petri dish, and

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biofuel plant in Virginia May 17, 2005. Press release at  
<http://www.renewableenergyaccess.com/rea/news/story?id=29931>

1 Willie Nelson has been promoting Biodiesel, see  
<http://www.msnbc.msn.com/id/6826994/> see also  
<http://wired.com/news/technology/0,1282,66288,00.html>

2 Monbiot, George, *Worse Than Fossil Fuel*, Guardian 6th December 2005 at  
<http://www.monbiot.com/archives/2005/12/06/worse-than-fossil-fuel/>

3 Meadows, Donella H, *The Limits to Growth, A Report for the Club of Rome's Project on the Predicament of Mankind*, New York, Universe Books, 1974

provide a food medium, the population of the yeast will grow geometrically, then collapse as food is exhausted and pollution builds up. The Club of Rome model for the planet Earth showed that, if human populations and resource consumption continues to grow geometrically, then ultimately we will overstretch and collapse.

The more subtle and interesting parts of the model come into play when you start to adjust the variables. What if the modelers grossly underestimated the availability of energy? They tried doubling all resources in the model. The growth curve was extended by less than two decades, then it collapsed. Let us be clear here: collapse in this case means a dramatic decline in both human population and living standards. That is a gruesome prospect.

How could it be a doubling of the energy supply still leads to collapse? Because our world, and our global economy, are complex systems. There are many limits. Adding energy to industrial production does not increase the ability of the land and water to absorb pollution. Adding energy cannot infinitely expand our food supply. There are many limits, and removing any single limit (such as energy) means that the growth of the system is ultimately brought to a halt by other limits.

The Club of Rome models have been vociferously attacked. The primary mode of attack has been gross misrepresentation of the original model. The original Club of Rome writers were very clear that their model indicated general trends. The general growth curve was shown to reach its peak sometime in the mid 21st century. Numerous critics claimed that the Club of Rome predicted that specific resources would run out at specific dates, those dates being ones that we have already passed, therefore discounting the entire model. The Club of Rome never made any such predictions. (See the *Limits to Growth, the 30 Year Update* for a discussion of this issue.)<sup>1</sup> The bizarre and frustrating aspect of that debate is that modern liberal publications, including *Harper's* and the *WorldWatch Journal*, continue to print the misrepresentations about the Club of Rome report to this day, thus replicating the reactionary misinformation about the original models, thus encouraging complacency.<sup>2</sup>

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1 Meadows, Donella, Jorgen Rogers, Dennis Meadows, *The Limits to Growth, the 30 Year Update*, Chelsea Green, White River Junction, VT, 2004

2 Cavaney, *Red Global Oil Production About To Peak? A Recurring Myth*, American Petroleum Institute, *Worldwatch Magazine*, December 15, 2005, Urstadt, Bryant, *Imagine There's No Oil, Scenes from a Liberal Apocalypse*, *Harper's Magazine*, August 2006

Let's just bag all the environmental science for a moment and ask a common-sense question. What if the most optimistic predictions about energy supplies are true? What if gas prices fall back to a dollar a gallon? Then what happens? We will go back to buying larger and larger SUVs. We will use that new energy to fuel automobiles, bulldozers, housing construction, and the manufacture of consumables. All of that consumption will simply tip the balance between humans and ecosystems and natural resources that support us further out of scale. Decades from now, there would be less topsoil, fewer forests, and more people. That's not rocket science, it is no more than common sense. If finding new energy sources would only drive consumption further, why are we looking for new energy sources? We have a cultural problem, not an energy problem.

The biodiesel Hummer is now a reality. We currently have access to more energy than any of our forebearers. The problem is not energy supplies, but poor choices about how we use them. Adding new energy supplies, without addressing the root of that poor decision making, will only expand the scale and impact of those bad decisions.

We all use energy, and it has to come from somewhere. Finding a sustainable source of "alternative energy" has been a prime motivation behind the biofuels movement. Surely, so the logic goes, there must be some set of alternative energies that could supply our needs. The problem is that you can't get the right answers by asking the wrong questions. Trying to address the problem from the supply side is asking the wrong question.

### Supply Versus Demand

Current levels of consumption serve to keep the industrial machines running. We overproduce and over-consume at great expense to future generations. In the immediate sense, that overconsumption is driven by a desire for status -- the need to be respected by our fellow humans. Thus our houses continue to grow larger even as the number of people living in them declines. Our cars get larger even as the environmental costs of them become more apparent every day. We tend to think of the desire to "keep up with the Joneses," the need for status, as an innate human trait. The technological fixes are more appealing than telling other people how to live, or challenging current political power. But a real understanding of technology and our current ecological situation displays the weaknesses of purely technological approaches.

This is not the time and the place to engage in a detailed analysis of each alternative fuel, but let us look for a moment at solar energy. No one can say when the first proto-human decided to construct the first primitive shelter with the doorway facing the sun to warm the shelter, but certainly by the time of the archaic civilizations, a pattern was well established in some areas of building shelters with a solar orientation. Socrates described principles of passive solar design.<sup>1</sup> Thus the passive solar hovel is at least a few thousand years old.

In modern times, solar energy has seen numerous improvements. For solar hot water there are batch collectors, flat plates, and now a variety of vacuum tube designs. Solar electric panels (photovoltaics) have seen a modest but steady improvement of both efficiency and cost. The liberal solar solution, like the biofuel solution, simply superimposes this technology right on top of our existing lifestyle. It doesn't work very well, neither from a fiscal nor an environmental perspective.

The average home uses so much electricity that powering it with photovoltaic panels is extremely expensive, costing tens of thousands of dollars.<sup>2</sup> Not only is that financially unfeasible, that money also represents a huge environmental price in the energy embedded in the manufacturer of those solar panels. The life-cycle payback (ratio of the cost of the system for the life of the system to energy generated) of such an approach is very high. If we look at the global application of the American solar electric home, it becomes quite clear that it is not feasible, nor is it by any measure sustainable.

The same analysis holds for solar hot water. The available supply of sunshine varies considerably in different locales. In some areas, simple, cheap batch collectors are a good financial investment even with current energy pricing. In most areas, one needs flat plate or other modern designs to have an effective system. On average, solar hot water systems are expensive. Solar hot water is more economically viable than solar electric, but the cost per person is still high, especially if you extrapolate the model to a global scale.

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1 Butti, Ken and John Perlin, *Golden Thread: Twentyfive Hundred Years of Solar Architecture and Technology*, Cheshire Books, 1980

2 Per-capita electricity use in the U.S. is about 12,331 kwh. Solar panels sell for 4-5\$ per KW. The amount of energy such panels generate is highly geographically variable, but a 3X-5X multiplier (a 1KW panel will generate 3-5KWH as a daily average) can generally be applied. To support of household of 2.5 people, needing 30,827 kwh, would cost over \$38,000 for the panels alone, not counting other hardware or installation costs.

Alternative energy sources such as solar can, when applied to a single family home, offer a percentage reduction on energy use after the application of considerable capital and material investment. A percentage reduction may sound good, but the reality is that we are currently using at least one order of magnitude (10 times) more energy than is, by any measure, sustainable.<sup>1</sup> Painting over our consumptive lifestyle with alternative technologies does not offer an order of magnitude reduction of resource usage. Applied in such a manner, alternative technologies are not financially or ecologically feasible to apply on a global scale, and they take no account for their own life-cycle costs.

The issue is whether you work on the problem from the demand side or the supply side. If you take any modern energy system and try to address it from the supply side, you will invariably fail. Biofuels are being sold on the notion that because they come from a biological source, that automatically makes them renewable and benign. Nothing could be further from the truth. There is, for instance, a movement to use biofuel to generate the nation's electricity. What does that mean? That means massive tree chipping operations have started descending on our national forest, thus converting lush green forests into moonscape and chips.<sup>2</sup> The chips are then burned instead of coal to generate steam that turns the electric turbines, thus keeping the lights, computers, air conditioners and tumble driers of America in operation. Careful what you wish for. If you try to meet America's energy demands from the supply side, you are simply going to throw unsustainable weight onto already overstressed biological systems.

The primary purpose of the entire alternative energy movement in its current form is palliative, not ecological. The problem is the lifestyle, not the technology. The technologies are mostly ancient, and yet the American lifestyle pays no attention to even the simplest ancient technologies such as solar orientation.

Ultimately, we live on a planet that is finite. As much as we choose not to recognize the limitations of the finite planet on which we

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1 What constitutes a "sustainable" level of energy use is a highly debatable point. One interesting resource is Pimentel, D. et al, "*Will Limits of the Earth's Resources Control Human Numbers?*," (Environment, Development and Sustainability 1: 19-39, 1999, which can be found at <http://dieoff.org/page174.htm>

2 Haq, Zia, *Biomass for Electricity Generation*, 30 Jul 2002, published by Energy Information Administration, at <http://www.eia.doe.gov/oiaf/analysispaper/biomass>



live, we also ignore the extent of the inequalities that already plague our species. These two sets of issues are likely to work hand in hand to produce a biofuel genocide in the future.

### The Neoliberal Endgame

We tend to think of Third World starvation as the result of natural disasters, poor local governance, and a history of underdevelopment. While there is not one single cause for modern inequality, we in the West tend to remain blissfully ignorant of the extent to which we benefit from the systems that perpetuate global poverty, or even national poverty.

There are a number of layers. The first is the direct suppression of productive capacity in the global South. It profits industrialized countries to suppress industrial development in the poorer nations while maximizing the output of raw commodities (mineral ore, bulk agricultural goods, timber) that are shipped north. In past decades and centuries, this took the form of the direct suppression of productive capacity. England would not, for instance, let the American colonies produce any textiles, only raw cotton. In modern times, the conflict has been over productive capacity and “intellectual property rights”, the latter referring to a variety of patents and technologies, including the patenting of genetic material. Although industry has moved into some less-developed countries to take advantage of cheap labor, they have also violently resisted any direct competition with their manufactured items.

The commercial interests of the industrialized world have also used the global financial system to encourage dependency of less developed nations. By encouraging these unindustrialized nations to take loans, the global North ensures that they will remain dependent in the future for further infusions of cash.<sup>1</sup> This loan pushing reached a peak in the 1970s. By the late 1980s, the indebted nations were being forced, under pressure from the International Monetary Fund, to cut back on social services, and the standard of living and life expectancies in some of those nations actually began falling. Even those countries that maintain a positive balance of trade, selling more than they are buying, are forced to take on a certain amount of debt simply to be able to move goods. To move a ship full of merchandise requires taking on short term debt to pay for those goods. This financial leverage is then used for the profit of the industrialized North.

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<sup>1</sup> Perkins, John, *Confessions of an Economic Hitman*, Berrett-Koehler, 2004

Even the money that is loaned to less industrialized countries finds its way back to Northern banks. Sometimes corrupt officials in less developed countries simply embezzle the money and then reinvest it in Northern banks. Often Northern loans are contingent on Northern companies being hired to undertake development work. Then the debt repayments themselves, squeezed out of poorer nations, come back to Northern banks. Even if the debt has been paid off several times over in interest, still, Third World peoples are expected to pay.<sup>1</sup> The loans that were started in earlier decades continue to maintain a financial dependency for less-developed nations.

These are facts that are, at least in some circles, well known. But it doesn't stop there. While less developed nations are cut off from global trade because of their supposed fiscal irresponsibility, the U.S. public debt is now at 7% of GDP. How do we do that? Because oil money from the Middle East, money from China, Japan, and elsewhere pours into the U.S. to finance public debt through the purchase of treasury bonds.<sup>2</sup> And last but not least, there is a consistent flow of educated people who, after being educated at considerable expense in other nations, choose to migrate to the North where they are given preferential immigration status. The net result of all of these factors is that not only do raw materials flow from the less industrialized nations to the industrialized nations, the net flow of money is from South to North as well.<sup>3</sup>

What does all of this have to do with biofuel? Biofuel is ultimately a commodity produced from the land and sea. As much as we might think global hunger is the result of natural disaster, it is rather the result of inequality. The U.S. thinks of itself as the breadbasket of the world. As we mentioned, the reality is that the U.S. is not a net supplier of food to the world in any large measure.<sup>4</sup> While poverty is endemic in

1 George, Susan, *A Fate Worse Than Debt*, Grove Weidenfeld, NY, 1990

2 Gross, Daniel *Wanna Buy a T-Bill, Sucker?*, *The foreign fools who are buying American bonds*. Slate Online magazine, June 15, 2004, <http://www.slate.com/id/2102433/>

3 *Odious lending, Debt Relief as if Morals Mattered*, The New Economics Foundation, 3 Jonathan Street, London, SE11 5NH, <http://www.neweconomics.org/gen/>, also George, Susan, *A Fate Worse Than Debt*, Grove Weidenfeld, NY, 1990, p.63, see also Third World Network, <http://www.twinside.org.sg/pos.htm>, See also Jubilee 2000 debt campaign; the Ethical Trading Initiative; the UK Social Investment Forum

4 Grist Magazine, February 10, 2006, also see US Department of Agriculture Research Service, <http://www.ers.usda.gov/Data/FATUS/monthlysummary.htm>

Latin America, domestic meat consumption went down for many years while exports to the U.S. increased.<sup>1</sup> Across Africa, much of the best land is taken up by transnational corporations and other entities exporting luxury crops to Europe while local people starve.<sup>2</sup> In our modern world, people starve because of poverty, not natural disaster, and poverty is inextricably linked to the extreme accumulation of wealth in the global North.

Is it not bizarre that you hear every day how a development project in Africa, Latin America or Asia cannot proceed for lack of “money.” But every day, millions of dollars worth of “money” is created by Western banks in the form of commercial loans.<sup>3</sup> The “money” is created the instant it is loaned. Presuming that an aid worker in central Africa is going to spend a lot, if not all, of their money buying food, goods and services where they live, how could it be that the only “money” that is suitable for that purpose has to be created in a Western bank? If you look at the history of social movements in the West, you know that revolutions have been fought over who controls the supply of money. The fact that the West now asserts control over the payment of workers in muddy villages in every nation of the world is bizarre and tragic, and an extension of the historical trends of powerful interests controlling the money supply.

Our mythology of progress is racing headlong toward a collision with the reality that we live on a finite planet. Given that our human world is very polarized along lines of wealth and power, those who hold such wealth are likely to take every measure to hold on to their power, and make every justification for doing so. Large-scale biofuel production is possible, if we set aside a large portion of the land currently used for food.

### The Velvetized Genocide

As the constraints on other alternative fuels becomes more apparent, there will be a growing pressure to finance the consumptive

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1 *Forest Destruction for Export*, World Rainforest Movement, WRM Bulletin, Issue Number 85 - August 2004

<http://www.wrm.org.uy/bulletin/85/LA.html#Brazil>

2 George, Susan, *How The Other Half Dies: The Real Reasons For World Hunger*, Rowman and Littlefield Publishers, 1977

3 Galbraith, John Kenneth, *Money: Whence it Came, Where it Went*, Houghton and Mifflin, Boston, 1975

economy with biofuel produced on a very large scale at the expense of global food production. The wealthier nations will, in the coming decades, through a policy of neglect and quiet interference, destroy populations in Africa and elsewhere in order to take their land for the sake of biofuel production. On our long list of technological illusions, biofuel is the only means of supporting the consumptive economy that could, from the standpoint of physics, actually work.

If you think that such a dire scenario is inappropriately alarmist, consider what has happened already. Anyone familiar with epidemiology can tell you that epidemic disease is inextricably linked to hunger. The Black Death of Europe, in which a third of the continental population died in the 1300s, was the result of widespread malnutrition that weakened the population.<sup>1</sup> The plague existed before then, and still does, but it was the weakening of populations through hunger and crowding that left them susceptible to a widespread pandemic. Europe recovered in time, and populations grew. Our forebearers were once again approaching the tipping point to disaster a couple of hundred years later. How did they save themselves? Colonialism. They conquered lands across the New World and Asia, at great expense to the native peoples, and established colonies that shipped food back to the homeland.<sup>2</sup> That forestalled another plague in Europe, but at the expense of tens of millions of human lives around the world.

In more modern times, we are all familiar with the genocide undertaken by Hitler. But how many Americans are aware that the number of people who have died in sub-Saharan Africa from HIV/AIDS exceeds the number who died in Hitler's camps?<sup>3</sup> The population growth of some African nations has been brought to a halt by HIV/AIDS. Why are we so aware of one holocaust and so ignorant of another? If and when transnational agribusiness moves into sub-Saharan Africa to produce biofuel on land vacated by epidemics, will we in the West not applaud them for bringing economic development and free trade to the poor?

The modern commercial economy absolves all guilt. Everyone is supposed to produce, buy, and sell on the global market. And if there is a

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1 Harris, Marvin, *Cannibals and Kings, The Origins of Cultures*, Vintage Books, New York, 1991. p.259

2 Wilkinson, Richard G., *Poverty and Progress, An Ecological Model of Economic Development*, Methuen and Co. Ltd. London, 1973, p.114

3 2006 Report on the Global AIDS Epidemic, Joint United Nations Programme on HIV/AIDS, UNAIDS/WHO, also <http://www.avert.org/subadults.htm>

holocaust in that marketplace, there is no specific political leader or party to blame. And that is how genocide will grow, quietly, while the West is greatly saddened by natural disasters. The global agribusiness corporations will move onto the land where the skeletons lay quietly, and the Western media will applaud the corporate biofuel producers who are at last bringing economic development and free trade to impoverished nations. It is a bitter irony that this global genocide has its roots among those who consider themselves the most enlightened and progressive.

### Simple Impossible Answers

The biofuel genocide was seeded by a gross misunderstanding of the history of our industrial society, and by the desire to do something when we don't know what to do. We first have to correctly diagnose the problem. Modern society is not only ecologically unsustainable, it is politically polarized. In our time various groups have struggled, and won, civil rights for their own race, gender, or ethnic group. While these movements are laudable, they leave the basic structures of society unchanged. In as much as the energy issue reaches to the heart of industrialism, we cannot address it without a different kind of movement.

For all of human history, up until very recently, human beings enjoyed a rich and deep social life in bands and villages. Many of the modern non-industrialized peoples have a mathematical understanding that often does not exceed counting to three. It becomes apparent when examining such peoples that one of, if not the primary, driving forces behind the evolutionary creation of human intelligence was not mechanical technology, but rather the need to maneuver within the intricate social fabric of the band, village, and extended kinship system. In very recent times we have abandoned that social fabric in favor of the single family home. The social band has been replaced by the television, and pets. Anthropological commentary aside, the ecological price of constructing single family houses, heating and cooling them, and transporting their occupants, regardless of the fuel or technology used, is astronomical.

If we Westerners could live, sharing resources as our predecessors did, as most of humanity still does, that in itself, regardless of the technology used, could affect an order of magnitude of reduction of resource use. If ten people live in a house, if those people walk or bike to their gardens and their jobs, they would have already created nearly an order of magnitude reduction of resource use. The really interesting part

is when you look at the application of alternative technologies combined with lifestyle changes. Again, looking at solar, a residential solar hot water system, or a residential solar electric system, is expensive to install. But if that system is expanded only slightly to accommodate a few more people, the total cost per person, financial or ecological, plummets. The payback time, and life-cycle costs, shrink dramatically. This may sound like a minor point. It is not. If civilization falls completely apart, then we will have to deal with that. In the meantime, people want and need access to hot water, some electrical machines, some access to transportation. The point is that achieving these goals in a truly sustainable manner is easy, once one assumes a change in lifestyle, impossible if one superimposes them over our current lifestyle.

Is changing lifestyles impossibly difficult? It seems so because of the peculiarities of our current state of cultural evolution. We live in centralized states, and yet the social instincts of our species evolved in bands. We are taught the granite illusion that the mass society is our band. Especially as a result of the breakdown of any intimate human community in our time, we conform to the social lifestyle pressures of the mainstream society. The solution to changing the Western lifestyle is the simple impossible act of creating social networks that build social support outside of the mainstream in the context of a truly sustainable society. American individualism causes many modern ecologists to seek efficiency improvements to the single family homes, but that model is not really ecologically viable.

Looking at the real answers -- understanding them as more cultural than technological -- belies the use of biofuel as a "transitional" fuel. What are we transitioning to? Why would that "transition" be easier in the future than now? How is aiding and abetting the consumer society with yet another palliative, yet another support for the myth of progress, going to aid in a future "transition" to a sustainable society? The answers are clear enough. The transition will largely be back to past technologies, and that transition grows more difficult by the day. Now is the time.

The growth will have to stop eventually. We only get to choose when. We will have to change our lifestyle. We only get to choose whether we do that in a time of relative plenty, or wait until it is much more difficult.

The technological side of the problem is actually relatively easy, in the most part because it was solved a long time ago. The alternative technologies -- wind, solar, biofuel produced and consumed on a local and very limited scale -- have worked just fine for centuries. But if any

“alternative” technology is superimposed on our current social structure, the results will be equally disastrous regardless of the fuel.

The laws of physics hang over modern society like Damocles' sword. We scurry around under that sword, trying to convince ourselves that we can be saved from the global environmental impacts of our actions with reformism and palliatives. Biofuels, and biodiesel in particular, are the popular new kids on the block. The current biofuels movement will only exacerbate our difficulties. The real answers are both terribly difficult and idiotically simple. The real answers involve understanding how and why our culture, and its technology, change.<sup>1</sup> We need to make ourselves conscious of how our culture evolves, and thus in turn make our culture conscious. The real answers involve weaning ourselves from the milk of the corporate mother culture, and striking out in a cooperative movement that is truly sustainable.

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<sup>1</sup> Zeigler, Alexis, *Conscious Cultural Evolution, Understanding Our Past, Choosing Our Future*, Ecodem Press, Charlottesville, 1996, also at [www.conev.org](http://www.conev.org)

# Ecological Decline

## 101 Painless and Ineffective Ways to Save the Whole Damn World Versus Real Solutions

"Offset your CO<sub>2</sub> emissions from electricity use, from heating/cooling your home, from air travel, or driving your car. You don't have to switch power companies, modify your home or car, or change anything to participate." (The 'do something' link from Al Gore's website about climate change)<sup>1</sup>

"I am writing this book from a middle-of-the-road perspective, with experience of both environmental problems and of business realities." (Jared Diamond, from his popular book, *Collapse*)<sup>2</sup>

"[T]he growth of capital depends not at all on a low propensity to consume but is, on the contrary, held back by it ... [M]easures for the redistribution of incomes in a way likely to raise the propensity to consume may prove positively favourable to the growth of capital." John Maynard Keynes<sup>3</sup>

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1 [http://www.nativeenergy.com/WB\\_ClimateCrisis.html?ClimateCrisis#](http://www.nativeenergy.com/WB_ClimateCrisis.html?ClimateCrisis#), linked from [climatecrises.net](http://climatecrises.net)

2 Diamond, Jared, *Collapse, How Societies Choose to Fail or Succeed*, Viking, NY NY, 2005, p. 17

3 Keynes, John Maynard, *The General Theory of Employment, Interest, and Money*, 1960, (first published in 1935), Harcourt, Brace and Company, New York p.373. Keynes was arguing against the "classical" economists, who favored saving money as an economic and moral imperative, what we would now call "tight money" policies. Keynes favored redistribution of wealth and increased government spending, even if it had to be deficit-financed, as an economic stimulus. With the threat of socialist and other popular movements arising in the 1930s, social science decided to follow Keynes and advocate the redistribution of wealth. Keynes suggested redistribution would serve the same functions as socialism without so much disruption to the existing economic system (Keynes, 1960, p.378)



“The people of the United States are in a sense becoming a nation on a tiger. They must learn to consume more and more or ... their magnificent economic machine may turn and devour them. They must be induced to step up their individual consumption higher and higher, whether or not they have any pressing need for the goods or not. Their ever-expanding economy demands it.” Vance Packard's *The Waste Makers*, circa 1960<sup>1</sup>

The slowing of industrial growth in America is bolstering efforts by conservative forces to advance their agenda. The peaking of oil production, and the lack of a comparable alternative fuel are likely to further reinforce regressive trends in American politics, including the further restriction women's rights and sexual freedoms. The ecological limits of our Earth are setting limits for industrial growth, and that in turn has enormous political and cultural impacts on us. We need a stark, realistic understanding of our ecological circumstance and the likely political results so we can realistically assess our responses.

The 1970s oil price shocks, coming as they did in a time of progressive political churning in American politics, helped accelerate the environmental movement. The 1973 oil price shock occurred at a time when the margin between the demand for oil and supply had tightened. Even though the actual amount of oil withheld by OPEC was minimal, the price fluctuations in the marketplace were large because the market was so tight in the first place. Again, in 1979, demand was very close to supply. The revolution in Iran reduced oil supplies by a relatively small amount, but even that minor limitation in supply triggered a major price spike.<sup>2</sup> Markets respond to changes in supply and demand smoothly until the point at which the market gets too tight, then hoarding and a fear of severe shortages can exacerbate a minor shortfall, producing very erratic price spikes.

As a result of the 1970s oil price spikes and out of concern for the durability of energy supplies in general, an energy conservation movement was launched. People bought smaller cars. The public was

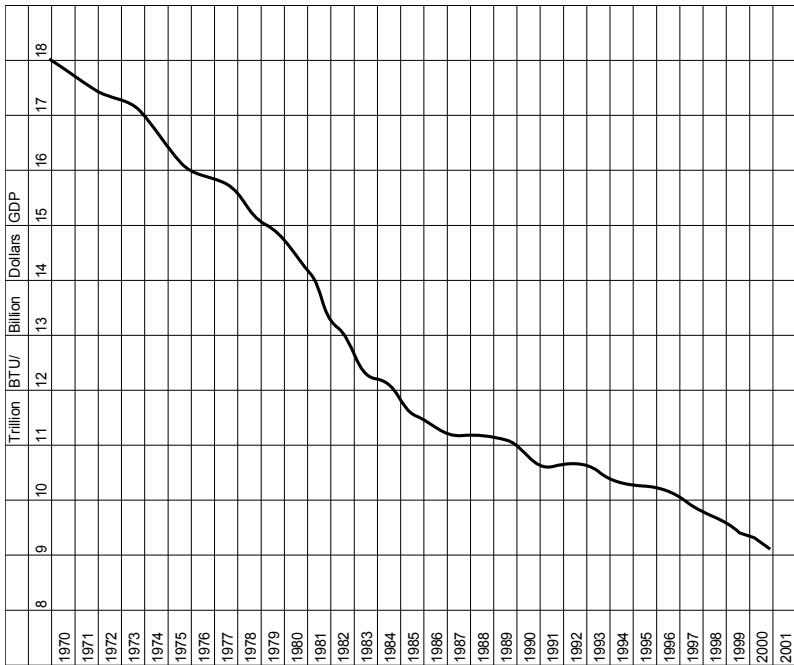
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1 Packard, Vance, *The Waste Makers*, Pocket Books Inc., New York, 1965

2 Simmons, Mathew R., *Twilight in the Desert, The Coming Saudi Oil Shock and the World Economy*, John Wiley and Sons, Inc., Hoboken, 2005, p.54-55, Kunstler, James Howard, *The Long Emergency, Surviving the Converging Catastrophes of the Twenty First Century*, Atlantic Monthly Press, NY, 2005, p.46

encouraged to insulate their homes, to caulk the cracks and to buy more efficient appliances. Jimmy Carter put solar hot water panels on the White House. There was a blossoming of alternative energy ideas and projects, some of them effective and successful, some of them neither. Carter invested money in research and development that led to the development of the compact fluorescent light bulb, a mainstay of modern conservation efforts. There were also efforts at improving industrial efficiency through more efficient motors, streamlining production processes, improved insulation etc.

**The Good News, Falling Energy Use Per Unit of GDP<sup>1</sup>**



All the ideas and work put into energy conservation had a noticeable impact on America's energy consumption. If you look at the energy consumption of the U.S., corresponding as it does in a very direct fashion with CO<sub>2</sub> output, you see the unmistakable dips in the 1970s. The

<sup>1</sup> Data extrapolated from *Historical Statistics of the United States, Earliest Times to Present, Millennial Edition*, Cambridge University Press, NY NY, 2006, vols 1&3

oil price shocks cooled the global economy, including that of the U.S., and resulted in substantial reductions in energy use and pollution. It is particularly noteworthy that the energy used/ pollution generated per unit of Gross Domestic Product, which had been stable or climbing slightly until the 1970s, turned around and began a steady decline. The U.S. has, since that time, produced more goods and services with less energy per unit of output.<sup>1</sup> Even after Reagan came into office and removed Carter's solar panels, even after oil production again got ahead of consumption and prices fell in the 1980s, the amount of energy used and pollution generated per dollar of GDP has fallen steadily since that time.

Improving efficiency is the good news. The bad news, however, trumps all of our environmental efforts. The bad news is that overall energy use and pollution generation for the U.S. and the world dipped a bit in response to the 1970s price spikes. Ever since then, it has grown steadily. We are producing more with less, but consuming so much more than before that at the end of the day we are using more energy and generating more pollution than our parents generation, or their parents, or any humans who have ever lived on the Earth.<sup>2</sup>

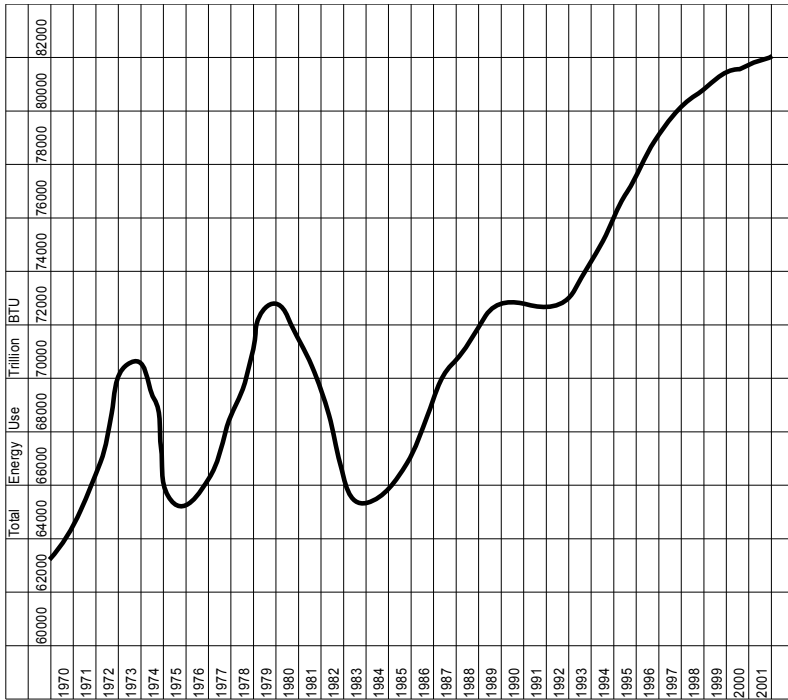
A big part of the reason our economy appears to be more energy efficient even as it is more destructive is because a lot of our GDP is now made up of services that are not directly tied to resource extraction. If you spend 100 dollars on hard goods made of metal and plastic, then heavy industry has to produce those goods. If you spend 100 dollars getting your hair fluffed and cut, then the effect on GDP is more or less the same, whereas less energy is used. An economy of hair dressers and massage therapists is more energy efficient than an economy of iron smelters. One should not be misled into believing that our society is somehow "post-industrial." Under the candy-colored plastic that lines the interiors of our cars, the same greasy engines are at work. The same industrial economy is at the base of our modern society, there are simply more services layered on top of it.

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1 Calvert Group (Editor), Hazel Henderson (Editor), Jon Lickerman (Editor), Patrice Flynn (Editor), *Calvert-Henderson Quality of Life Indicators*, Bethesda MD, 2000

2 Calvert Group, *ibid.*

**The Bad News, Climbing Total U.S. Energy Use<sup>3</sup>**



We thus arrive at the most terrifying and destructive aspect of the modern economy, and that is throughput. The more resources we gather from the environment, the more we process, consume, and ultimately degrade those resources and the ecological systems of the Earth, the wealthier we become. Never before has an economy quite like ours existed. A tree standing in the forest, or a lump of coal resting underground are economically meaningless. The tree generates clean air and water, feeds and shelters wildlife, is part of an intricate and interconnected web of life, and may even be personally appreciated by humans as pleasing to look at. But we have enough air and water that, in the short term at least, we can largely ignore the ecosystem contributions made by the tree. Perhaps the land above the lump of coal is likewise appreciated and useful in a larger sense. But when the tree is cut down,

<sup>3</sup> Data extrapolated from *Historical Statistics of the United States, Earliest Times to Present, Millennial Edition*, Cambridge University Press, NY NY, 2006, vols 1&3

when the coal is dug up, when these "resources" are processed, bought, sold, and expended, then they serve as immediate economic stimulus, making somebody wealthier, and pumping money into the economy. (Technically, money is created by commercial banks in the form of commercial loans. But if you own a forest or coal mine, then your chances of getting a commercial loan are greatly improved, and when you do, that money is then put into the economy.)<sup>1</sup> Ultimately, it doesn't really matter whether the tree and the coal produce something useful, or whether they are simply sold, bought, and destroyed. As long as commodities and money change hands, the economic stimulus is the same.

Throughput is the volume of resources that must be passed through (extracted, processed, and sold) in the industrial economy to maintain employment, profit, and growth. Throughput results in; 1) economic stimulus, 2) political power, and 3) military dominion. Let us look at each of these results in turn.

The economic stimulus of throughput is clear. The impact grows further for the western industrial powers as a result of our being the owner of the global currency (the dollar, the currency on which all oil markets operate). Even as western industrial nations spend into debt, money from the oil producing nations and China is being reinvested in huge sums in the U.S. through the purchase of treasury bonds and other means.<sup>2</sup> That foreign money is then the basis of commercial loans that pump money into the American economy, allowing us to consume goods from all over the world. In short, both in terms of material resources and money, a large part of global throughput goes through the American economy, which gives us great power and influence over the global economy.

The second component of throughput is political power. Every successful politician tries to channel public funds and private investment toward their constituents. Even though conservation programs can generate more jobs more efficiently than extractive industries, the question becomes who is getting paid. That is a large part of the reason why conservative politicians favor defense spending over conservation investment, because the former more effectively channels public money

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1 Galbraith, John Kenneth, *Money: Whence it Came, Where it Went*, Houghton and Mifflin, Boston, 1975

2 Gross, Daniel, *Wanna Buy a T-Bill, Sucker? The Foreign Fools Who Are Buying American Bonds*, Slate Magazine, June 15, 2004, <http://www.slate.com/id/2102433/>

into the pockets of their particular constituents, the upper-middle and upper classes.

The third pay-off from throughput is military dominion. American soldiers may or may not be more brave and well trained than any other, but they do have a lot of heavy armored vehicles and aircraft on their side. That makes all the difference. The same infrastructure that mines iron ore to build Buicks also provides metal to build tanks. As a result of having an enormous throughput economy, we have an infrastructure second to none in terms of its ability to build armaments. And we make use of that infrastructure. In 2005, U.S. military spending constituted 43% of all the money spent by all governments on the Earth.<sup>1</sup> Quite some "defense."<sup>2</sup>

The profitability and economic stimulus of throughput, of extracting resources, chewing them up, and spitting them out of our economy with or without a particular purpose, is the heart of the problem of environmental degradation in our time. We can preach with high-minded science and moralisms as much as we like, but until we can address the cultural and political impacts of throughput, we aren't going to have much real impact. We can talk about conservation, but the reality is that the more we destroy, the wealthier we become.

None of the aforementioned is likely to be exceptionally revelatory to the well-informed reader, but I do not think the modern environmental movement in any way appreciates the importance or power of throughput. Let us look then at a few sectors of the economy and examine the impact of throughput. Understanding the influence throughput has had on different aspects of how we live informs how we might go about actually influencing our society towards a more sane and sustainable future.

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1 Langton, Christopher, *The Military Balance 2005-2006*, The International Institute for Strategic Studies, London. Also at <http://www.globalissues.org/Geopolitics/ArmsTrade/Spending.asp> and <http://www.armscontrolcenter.org/archives/002244.php>

2 This too is one fundamental reason for the cultural differences between Europe and the U.S. We in the U.S. are the defenders of the western industrial empire. As such, we have a more stratified, economically polarized, society that is less politically aware society. We also need a more aggressive program of economic growth within our society to maintain social stability in the absence of the social welfare net of the European states. If we didn't fill the role, then one of more of the western European nations would probably be compelled to behave more like the U.S. in terms of aggressive foreign policy, patriotism, and the suppression of information in the media.

The two largest sectors of our economy work together to propel economic growth, and those sectors are automobiles and housing. Before the car, the trolley systems dominated American cities. These trolley lines radiated from the center cities like spokes on a wheel. Developers built houses along these trolley lines. The first great automobile/ housing boom occurred in the "Roaring Twenties." Following World War I, the U.S. entered a recession. Automobile manufacturing and sales not only pulled the country out of recession, but by the mid 1920s, automobiles represented the largest industrial sector in the country as measured by value of output.<sup>1</sup> The fact that the "Roaring Twenties" roared at all is a testament to the cultural impacts of throughput. Henry Ford took it upon himself as a populist mission to provide the average American with an automobile. The price of a Model T actually fell steadily for twenty years. Having started at nearly 1000 dollars, the last of the Model Ts sold for under 300 dollars in the 1920s.<sup>2</sup> Ford was successfully sued by his shareholders for not seeking profits appropriate to the corporation. The trolley owners were by and large corrupt railroad interests who squeezed trolley riders for as much money as possible, so Ford's populism was well received by many American citizens. The automobile companies also conspired, starting in the 1930s, to buy out the trolley lines and destroy them. They were successful.<sup>3</sup>

At the beginning of the 1920s, a minority of Americans owned cars. By the end of the 1920s, a majority owned cars. Automobile transport allowed housing developers to build in between the spokes of the trolley lines, and well beyond that. The automobile companies, and Ford in particular, had sales representatives spread all over the country who paid personal visits and made phone calls to try to get a car, paid for with cash or credit, into the possession of every American family.<sup>4</sup> One study in Muncie, Indiana found that in the 1920s, the average family owed more on its car than on its house.<sup>5</sup>

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1 Seltzer, Lawrence H, *A Financial History of the American Automobile Industry*, Houghton Mifflin Co., 1928, p.4-5

2 Davis, Donald Finlay, *Conspicuous Production: Automobiles and Elites in Detroit, 1899-1933*, Temple University Press, Philadelphia, 1988, p. 120-122

3 Sale, Kirkpatrick, *Human Scale*, Coward, McCann, and Geoghegan, New York, 1980, see also *Taken for a Ride*, a film created by James Klein and Martha Olson.

4 Seltzer, Lawrence H, *A Financial History of the American Automobile Industry*, Houghton Mifflin Co., 1928

5 Davis, Donald Finlay, *ibid*, p.1

Cars are expensive to own. More people have died in automobiles than all of our 20th century wars combined.<sup>1</sup> And certainly as a means of mass transit, they have clear limitations as personal cars have long clogged the roads of every American city. But the economic stimulus provided by the auto overrides these restraints. In the 1920s, the production of autos stimulated production in steel, wood, rubber, oil, metals and glass. The steel and plate glass industries were revolutionized, as they developed continuous production techniques to meet the demand created by the auto industry.<sup>2</sup> Advertising was revolutionized by a massive influx of cash from the auto industry. Rather than focusing on the virtues of their products as such, automobile advertising attempted to associate their product with social status.<sup>3</sup> In our time, we encourage people to inflate their tires properly, or to buy more efficient cars. But the Model T was more efficient than the average vehicle on American roads today.<sup>4</sup>

Housing is the other major throughput sector of our modern economy. Cars make housing booms possible. Every modern economic boom has been caused by automobile and housing construction -- in the 1920s, the 1950s, and now. Cheap credit, and the consumption of housing and cars are the backbone of the American economy. In past decades, heavy industry was traditionally the pipeline for throughput in the American economy. As that industry has been increasingly shipped overseas, we have now created a new "factory" of production, and consumption, called housing. This operates at several levels. First, the costs of construction and value of housing are enormous. Homeowners can borrow against their home values, and according to the Federal Reserve, *those values are nearly double the total value of all stocks and mutual funds traded in this country.*<sup>5</sup> American consumers borrowing

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1 Kimbrell, Andrew, *Car Culture: Driving Ourselves Crazy*, Washington Post, Sept 3, 1989

2 Seltzer, *ibid.*

3 Davis, *ibid.*

4 *Sierra Club Ads May Dim Ford Party, Environmentalists Press Automaker to Boost Fuel Economy*, Mark Truby, The Detroit News, Wednesday, June 4, 2003, at <http://www.wanttoknow.info/030604fordmodelt25mpg>, see also <http://www.cmr.cornell.edu/education/ask/index.html?quid=46> Current fleet efficiency, see Bureau of Transportation Statistics, [http://www.bts.gov/publications/national\\_transportation\\_statistics/2005/html/table\\_04\\_23.html](http://www.bts.gov/publications/national_transportation_statistics/2005/html/table_04_23.html) [http://uspolitics.about.com/od/energy/i/cape\\_standards.htm?once=true&](http://uspolitics.about.com/od/energy/i/cape_standards.htm?once=true&)

5 June Kim, *Housing Bubble -- or Bunk?*, BusinessWeek online, June 22, 2005



against their home equity pump several hundred million dollars per year into the American economy.

The cost of our housing binge is well beyond our financial means, and thus the U.S. is now carrying two kinds of debt, public debt financed by foreign investors and private debt borrowed against home equity. In referring to these twin debts, Paul Krugman has quipped that “Americans make a living by selling each other houses, paid for with money borrowed from China.”<sup>1</sup> Krugman's comment also points to some of the benefits the U.S. reaps from being the owner of the global trade currency, the U.S. dollar.

The importance of housing in keeping the economy moving after the “dot com bubble” burst has grown even more pronounced. Dean Baker of the Center for Economic and Policy Research summarized the economic impacts of housing in the U.S. economy. “This [housing] bubble sustained the economy through the 2001 recession and provided the basis for the recovery. The housing sector directly employs more than 6 million people in construction, mortgage issuance and real estate. The indirect effect of the bubble was even larger, as people took advantage of the rapidly growing value of their homes to borrow huge amounts of money. This borrowing binge supported rapid consumption growth in a period of weak wage and job growth. It also pushed the U.S. savings rate into negative territory for the first time since the beginning of the great depression.”<sup>2</sup> Without exorbitant housing construction in the U.S., our throughput economy would crash.

Given the decline of traditional manufacturing, the housing market is essentially holding up the American economy at this point, but the ecological price of such consumption is gargantuan. Since 1982, about 34 million acres in the U.S. have been developed for residential and commercial purposes. That's an area the size of the state of Illinois. Most of that land was converted directly from forest, farm, and pastureland into subdivisions and shopping malls.<sup>3</sup>

Housing construction has had an enormous impact on the development of the American economy. In the United States, the size of

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1 Krugman, Paul, *Days late, Dollars Short*, The New York Times, August 30, 2005

2 Baker, Dean, *The Coming Housing Crash*, published on TomPaine.com, July 31, 2006

3 USDA, NRCS, National Resources Inventory, *Urbanization and Development of Rural Land* (2001), at <http://www.nrcs.usda.gov/Technical/land/nri01/nri01dev.html>

the average house has more than doubled since the 1950s. But households have also grown smaller. Thus the amount of space per person has tripled.<sup>1</sup> The growth of retail space has been the most striking. Since 1960, the amount of retail storefront space per capita has grown a staggering 10 fold.<sup>2</sup> You would think, given that we have so much more space, so much more wealth, that we would be happier than our grandparents' generation. As Alan Durning explores in some depth in his book *How Much Is Enough*, the number of people who assert that they are happy in response to sociological studies has remain essentially unchanged since the 1950s in spite of huge increases in consumption.<sup>3</sup>

The environmental movement has been encouraging people to improve the efficiency of their homes. But we fail to recognize how much our economy profits from destruction. One might assume, given that Americans only started insulating their homes with any sincerity after the 1970s oil price shocks, that insulation is a modern invention. The truth is that people all over the world have been insulating their homes quite effectively for millennia. People all over the world have used straw, seaweed, and all manner of available material to build well insulated houses.<sup>4</sup> In the U.S. at the turn of the last century, mechanical bailers were commonly owned by farmers in the western U.S. Some farmers, lacking wood, bailed straw, stacked up the bales, stuccoed them, and made houses, some of which are still standing today. Straw bale houses are more fire resistant, and dramatically more thermally sound than wooden construction. But wooden houses were seen as higher status housing than straw bale housing. Status symbols have trumped efficiency in terms of the style (wood versus strawbale) of American housing. Status is likewise trumping efficiency as Americans opt for ever larger houses.

I can speak of these issues with some personal experience, as I

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1 Housing size from *Housing Facts, Figures and Trends 2004*, Public Affairs National Association of Home Builders, 1201 15th St., N.W. Washington, D.C. 20005-2800, NAHB.org Housing size per capita extrapolated from previous and *Historical Statistics of the United States, Earliest Times to Present, Millennial Edition*, Cambridge University Press, NY NY, 2006

2 Mitchell, Stacy, Acres for America: Wal-Mart's Cynical New Greenwashing Campaign, Published April 27, 2005, at <http://www.alternet.org/envirohealth/21820/> and [http://www.reclaimdemocracy.org/walmart/acres\\_america\\_greenwashing.php](http://www.reclaimdemocracy.org/walmart/acres_america_greenwashing.php)

3 Durning, Alan Thein, *How Much is Enough, The Consumer Society and the Future of the Earth*, Norton, 1992. p.39

4 Oliver, Paul, *Dwellings, The House Across the World*, Phaidon, Oxford, 1987

have built a number of houses, conventional and super-insulated, including the straw-bale house in which I currently live. I have also worked as a handy-man, doing remodeling and construction on new and old houses. I have also built and maintained numerous solar hot water and photovoltaic systems. The amount of money spent on petty aesthetic detail radically exceeds the amount of money spent on insulation or other thermal improvements in an average American house. (Single family housing is, in any larger picture, unsustainable. The real gain in efficiency is cooperative living, which we will discuss in the final chapter.) Expenditures on the order of a few hundred or at most a couple of thousand dollars per house would radically improve the energy performance of those houses.

The average American house -- all American houses save a precious few -- absolutely ignore simple principles like solar orientation. Socrates gave advice about solar orientation to his Greek kinsmen. While photovoltaics are a new, expensive technology, solar hot water heating is not. Hot water batch collectors are cheap, and idiotically simple. Even more sophisticated systems are financially profitable. And yet solar hot water of any kind is not widely applied in the U.S. When a behavior is repeated by hundreds of millions of Americans, we cannot plausibly say we do not know any better. The reality is that American individualized housing results in the consumption of an enormous amount of energy in the construction, maintenance, heating and cooling of the house. The homeowners pay for that energy. Their consumption is an economic stimulus for the entire society. Reagan's taking down of Carter's solar panels represented an act of disdain. As much as we point to powerful leaders and abhor their greed, cultures are systems. America's disdain for efficiency or alternative energy is the mental manifestation of the material impacts of throughput. That which generates profits creates beliefs. Mental follows material, as much as we like to think otherwise.

The ecological price of extracting the volume of resources necessary to mass-produce automobiles and houses is enormous. A gradual shift to more efficient cars and better insulated houses cannot and will not provide a graceful shift to a more sustainable economy. There are a couple of reasons for this. The first is that we simply do not have the time it would take for the wealthier classes of our world to slowly decrease their consumption, particularly given the proximity of a peak in oil production. The conservation efforts started in the 1970s were half-hearted and abandoned much too soon. Those conservation efforts made some difference in efficiency per unit of GDP, but *they were more*

*than offset in the construction of increased residential and commercial square footage per person, as well as miles driven.* The fundamental problem is that consumption equals economic stimulus, which in turn equals a belief in the virtue of those choices. A ramping-up of consumption has accompanied every prosperous period our modern economy has ever experienced. An acceleration of throughput, or "economic growth" as it is commonly called, is embraced by every Democrat and Republican, the vast majority of economists, every policy maker, even a host of liberal environmentalists. Destruction equals wealth. It is the most terrible conundrum of the modern economy.

When one expands the view to more sectors of the economy, one can see that the American belief system has evolved to influence behavior to increase, not decrease, resource consumption. The modern environmental movement encourages Americans to buy more efficient appliances while advertisers encourage us to buy the latest "convenient" appliance. The net result is that the total number of appliances owned by Americans has steadily increased, and the energy used by those appliances has increased as well. The efficiency of some of those appliances has actually declined in some cases. The average refrigerator in the 1940s was more efficient than the average refrigerator made in the 1970s.<sup>1</sup> Since that time, California single-handedly revolutionized the refrigerator market by demanding that refrigerators sold in California be more efficient. The refrigerator companies complained bitterly, and with a minor amount of engineering, complied. Now national standards are in place that have increased efficiency by three-quarters.<sup>2</sup> When millions of Americans engage in a pattern of behavior that collectively serves to escalate the resource consumption of society as a whole, and when that behavior results in greater immediate prosperity for society, we cannot simply call that coincidence. Nor can we plausibly say that it is entirely a result of individual tendencies writ large.

Historically, the electric power companies have also done their part to increase consumption by encouraging people to use more electricity. They would offer rebates for houses built without a chimney, because then they would be entirely dependent on electric heat, even though electricity is an inefficient and expensive way to heat a home. They would offer commissions to sales people for selling air

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1 *Alternative Energy Sourcebook*, Real Goods, 1990, p.189

2 Collaborative Labeling and Appliance Standards Program, Energy Efficiency Standards and Labeling Information Clearinghouse, 1414 G St. SE, Washington DC 20003, USA, <http://www.clasponline.org/>

conditioning systems. Some power companies still encourage consumption, albeit in a more subtle manner.

Looking at other sectors of the economy, the average American consumes a diet that is rich in animal products. The high consumption of animal foods, being high in fat content, has impacts on American health. In fact, the three leading causes of death in the U.S. (heart disease, cancer, and stroke) are directly linked to high fat intake.<sup>1</sup> There is some speculation that the life expectancy of the current generation may actually fall below that of the previous because of the prevalence of obesity and high-fat diets.

The meat and dairy industries had a substantial hand in writing the dietary guidelines known as the "Four Food Groups" that emphasized meat and dairy products. The Four Food Groups dominated nutrition advice from World War II up until the 1980s, the precise time period in which American farmers suffered most severely from over-production. Before the four food groups, there were at various times food advice charts of 7 or 12 food groups that emphasized a broader dietary approach. Michael Jacobson, Executive Director of the Center for Science in the Public Interest, is quoted as saying that the lobby made up of "meat, dairy, and egg industries and their academic and political allies [has] not only influenced our nation's food and nutrition policies, it has *determined* those policies" (emphasis in original).<sup>2</sup>

The current United States Department of Agriculture "Food Pyramid" encourages people to eat a lot of starch, vegetables, and fruit (the bottom of the pyramid) and to eat less fatty foods (the top of the pyramid). The Food Pyramid discourages the consumption of animal foods, especially compared to previous schemes of nutritional advice. The Food Pyramid had to await the point at which the number of farmers has fallen below 3% of the population. Now in the 21st century, especially with the arrival of the biofuels movement and escalating energy prices, the food situation is tightening globally. I don't think we will be returning to the Basic Four. There is, however, a backlash in the form of the Atkins diet and other dietary advice that encourages the consumption of animal products.

Our genetic make-up is largely inherited from our gathering

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1 Robbins, John, *Diet For a New America*, Stillpoint, Walpole N.H., 1987, p. 206

2 Michael Jacobson in Hausman, Patricia, *Jack Sprat's Legacy, The Science and Politics of Fat and Cholesterol*, Richard Marek Publishers, New York, 1981, p.16.

ancestors. Sustained high fat diets were simply not an option for them (or would be highly mal-adaptive for nomadic peoples). Our tendency to like fatty and sweet foods is an adaptation out of place. But there is another side to the story, and that is throughput. We may like sweet foods, but we don't idealize them. We don't say sugar is critical to health. Americans believe that a high protein intake is healthy. The medical facts do not support this belief. Osteoporosis is a result of excessive protein intake, and is suffered by Americans and Inuit (Eskimos) alike who both eat a high protein diet. (A high protein intake acidifies the blood. The body takes calcium out of the bones to neutralize this acidity, but in the process, calcium is leached from the body. The result for the average American in drinking a glass of milk is a net loss of calcium.)<sup>1</sup> Animal foods concentrate grains. The American farmer has suffered from over-production and depressed prices for decades. The U.S. Department of Agriculture has as its mission the aid of the American farmer. One could not dispose of excess agricultural production by getting Americans to eat more corn muffins. But feed that corn to cows, and teach Americans to eat lots of milk, ice cream, and meat, and the economic stimulus is powerful.

Have you ever noticed that everything conversationally defined by Americans as nice ("nice car," "nice clothes," "nice house") are precisely those things which are difficult to maintain, things that through an addition of energy and labor have been transformed into an artificial state that is prone to entropy and degradation? A perfectly trimmed lawn is arguably pretty boring compared to one with wildflowers in it, but the former defines the status of the owner as being wealthy, or at least middle class, and is prone to almost immediate break-down. The same can be said for "nice" clothes, or anything else we define as desirable. Status is conferred to the owner of new possessions that are prone to entropy. The desire for status is certainly a driving force for behavior of people in any stratified society. But at the social level, economic stimulus that results from the constant maintenance and creation of entropy-prone commodities is powerful. The economic stimulus of this behavior influences our belief system.

The bottom line is that the general "need" for throughput, resulting as it does in both immediate prosperity and global political/military dominion for the U.S., trumps any effort we might expend to incrementally or through regulation substantively protect the global environment. The miles per gallon of the average car has marginally

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<sup>1</sup> Robbins, *ibid*, p. 170-202

improved, but the miles driven per person has increased. The efficiency of appliances and the insulation of American houses have improved, but that has been more than offset by the growth in the size of the houses and the number of appliances used. We use less energy and generate less pollution per unit of GDP, but all of those improvements in efficiency are trumped by increasing overall consumption. *Throughput dictates that we will be allowed to regulate only economically marginal aspects of our society, whereas the vast majority of ecological damage is done by industries and consumption in central sectors of our economy.*

The mainstream environmental movements have for decades been encouraging people to trim a little off of their resource usage. The logic is that such trimming could add up to substantial reductions in energy usage over time, and that we could build on such incremental improvements. In combination with government policies, we could incrementally reduce our energy usage to a sustainable point. That logic is particularly appealing when combined with Green Taxes that would tax non-renewable resources and pollution, shifting taxes away from worker's incomes.<sup>1</sup> If we had stuck with it in earnest after the 1970s, perhaps it could have worked. It didn't, but the environmental movement can't seem to come up with another plan. We are still encouraging people to check their car tires to make sure they are inflated properly, as if that could somehow arrest the mighty juggernaut of economic growth and ecological destruction around us.<sup>2</sup> Meanwhile, energy use in the U.S.

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1 Durning, Alan Thein, Yoram Bauman, *Tax Shift, How to Help the Economy, Improve the Environment, and Get the Tax Man Off Our Backs*, Northwest Environment Watch, Seattle Washington, 1998

2 The list of "what to do" from Al Gore's website, <http://www.climatecrisis.net/takeaction/whatyoucando/index.html>  
 Replace a regular incandescent light bulb with a compact fluorescent light bulb (cfl), Move your thermostat down 2° in winter and up 2° in summer, Clean or replace filters on your furnace and air conditioner, Install a programmable thermostat, Choose energy efficient appliances when making new purchases, Wrap your water heater in an insulation blanket, Use less hot water, Use a clothesline instead of a dryer whenever possible, Turn off electronic devices you're not using, Unplug electronics from the wall when you're not using them, Only run your dishwasher when there's a full load and use the energy-saving setting, Insulate and weatherize your home, Be sure you're recycling at home, Buy recycled paper products, Plant a tree, Get a home energy audit, Switch to green power, Buy locally grown and produced foods, Buy fresh foods instead of frozen, Seek out and support local farmers markets, Buy organic foods as much as possible, Avoid heavily packaged products, Eat less meat, Reduce the number

continues to grow, as does global energy use, as does American and global carbon output. How many times do we have to lose this battle before we realize we need a new strategy?

In all due humility, oneupmanship is easy, and I hold no illusions about the willingness of Americans, or anyone in the global upper class, to hear more radical messages, no matter how skillfully spoken. However, the effects of the narrow approach to ecology that focuses on petty improvements of efficiency has the following impacts:

- 1) It avoids the deeper economic analysis of the economic stimulus of consumption in the popular discussion of environmental issues.
- 2) It avoids any discussion of economic dominion of the U.S. economy over the rest of the world. Most American environmentalists aren't willing to recognize the price of our privilege any more than anyone else, but it leaves us woefully ignorant of what we are up against.
- 3) It avoids any discussion of the military dominion of the U.S. over the rest of the world, the economic impacts of that dominion, and the influence of those economic benefits on the American belief system.
- 4) It avoids the discussion of truly sustainable and equitable social and economic systems. Even if most are unwilling to listen, shouldn't we be saying what needs to be said?
- 5) Because it avoids so many issues, our focus on petty improvements in efficiency displaces any long-term development of a deeper understanding of how our culture works.

Point #5 is the probably the least recognizable as important, and also possibly the most important. A previous chapter looked at the abortion debate in South Dakota. For a feminist organizer to stand up on a podium and lecture people about the history of male supremacy, or the influence the economy holds over social roles and political beliefs would be a real sleeper. As an organizer, you have to try to get to people personally, to try to get them motivated to DO SOMETHING. Not an easy job. The same with the environmental movement. Lecturing people about the big picture does not motivate them in any immediate sense. More academically minded people have the time to dig deeper. Some of these are sufficiently politically motivated to want to speak hard truths,

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of miles you drive by walking, biking, carpooling or taking mass transit wherever possible, Start a carpool with your coworkers or classmates, Keep your car tuned up, Check your tires weekly to make sure they're properly inflated, When it is time for a new car, choose a more fuel efficient vehicle, Try car sharing, Try telecommuting from home, Fly less



and yet they remain the voices on the fringe.

The reason the efficiency movement that started in the 1970s didn't work is because of the economic and military advantages that the U.S. enjoys because of throughput. Those reasons haven't changed.

There are real answers, and they are not even particularly difficult. But they do demand changes in how we live at a level that most people simply do not think about. Private cars and private houses, for example, are far beyond the pale of sustainability, but are also powerful status symbols and powerful economic engines in the consumptive economy.

Make no mistake, the global ecosystem that holds up our industrial economy, that makes life on Earth possible, is rapidly collapsing. The political fallout that will result from this collapse in the coming decades will be in the direction of authoritarian government. The current "change your personal trivial lifestyle habits" approach (the 101 ways to save the Earth) will have no effect at all. We are destroying the global environment, destroying four billion years of genetic heritage that has woven itself into a most extraordinary and intricate living Earth. We are degrading any possibility future generations may have of living comfortable, healthy lives under conditions of political freedom.

The slave states that preceded modern democracy lasted 5000 years. The age of slavery we are about to enter into may, given the permanent depletion of oil and the relationship between democracy and economic prosperity, be permanent. We are doing all this out of a fear of embarrassment. Not hunger, not cold, not life or death -- embarrassment. The modern environmental movement is trying to get people to do things that they don't find embarrassing. But by not saying things that make the industrial middle class uncomfortable, we are not saying much of anything at all.

The solutions are not difficult. They simply demand that we, in the short term, endure a measure of embarrassment. Small price to pay for a livable planet, one would think. We will examine these solutions in the last chapter.

# Witch Hunting

## Terrorists, Communists, Drugs and Sorcerers: Wars that Were Never Meant to be Won

When I talk to people about the threats and challenges that face modern industrial civilization, it invariably seems that the response is more emotional than intellectual. People who want to have an optimistic view of the future often try to put a positive face on our future. They suggest that consciousness is awakening, and as great as our struggles may be, we can still overcome them. Others who have a less optimistic personal outlook point out the overwhelming nature of our problems and predict some kind of global collapse or the extinction of human beings.

Neither optimism nor pessimism is the wise response to our circumstance. If you are on a big ship, and someone runs onto the deck saying there is a hole in the hull, what would be more appropriate, an “optimistic” or a “pessimistic” response? Should you ignore the warning and hope for the best, or seek to make the people on the deck feel better? Should you preach gloom and doom to the people on the deck? Or should you get some folks together, go down into the hull, try to get a sober, objective assessment of the problem, and try to fix the hole or get people into the life boats? Associating our global ecological circumstance to a simple mechanical problem makes it a baited question. The point here is that we tie the concepts of optimism and pessimism to large, inscrutable circumstances, and we tend to put human society in that category.<sup>1</sup> We do not tend to think about our social problems in such practical terms as a leaking ship. We are forbidden by a host of political pressures and cultural norms from any such practical approach.

The optimists tend to think technology will save us. The pessimists tend to think we are going to collapse, but don't really say

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<sup>1</sup> The academic social sciences, sadly, seek to reinforce that sense of that human culture is overwhelmingly complex and cannot really be understood as it justifies the separation of PhD sociologists or psychologists from the rest of us.

much about what that might mean. Recognizing that most mainstream Americans would consider it pessimism, I think it is undeniable that economic growth as we currently define it will have to end as oil production peaks and falls. We are likely to enter a period of economic contraction. Particularly for some of the people in the Peak Oil movement, the notion of collapse is a black hole. Other than vague allusions to political trouble and unrealistic assessments of mass starvation in the industrial world, very little attention is given to what contraction means on a political level.

This book argues that the slowing of growth has already had political impacts on American society. It is most important that we understand how contraction in the future will affect us. It is highly unlikely that technology will magically rescue us from the upcoming age of economic contraction. It is equally unlikely that all of humanity will simply fall over dead. Barring a runaway greenhouse phenomena or an asteroid impact, a lot of people are going to be living on the Earth for a long time to come. It is not, once we get past all the political crap and academic obscuring of the truth, difficult to see how human societies respond to contraction.

Witch hunting is a central part of that response. The term “witch hunt” is in common use in our language to mean any unjustified persecution of a person or group. We are going to try to provide a more specific definition of witch hunting here. Understanding how and why people turn against each other is absolutely critical if we are to navigate the coming contraction. We do, in spite of the scale of the challenges that face us, have choices. There are a number of very divergent potential paths in our future. The choices we make now will determine which of those paths we take.

### The Global Phenomena of Witch Hunting

Every culture has some belief in the supernatural. Every culture holds some beliefs about the ability of people to harm, or help, other people through supernatural means. If we define witch hunting as the circumstance in which individuals are accused and persecuted by the group for doing supernatural harm to others, then witch hunting happens all over the world. It does not, however, happen in every culture, and the severity of with hunting varies enormously. Understanding when, where, and why people turn against each other is important.

Many human cultures believe there is no such thing as a natural

death, that humans never die from old age or disease, only from being killed by a sorcerer or witch. In such cultures, every death is a murder, and that murder must be reconciled. For us educated westerners, it might be tempting to think that those silly pre-industrial peoples just don't get it. But alas, they are as smart as we are, they simply use their intelligence in very different ways.

If we divide all human cultures into those which are stratified and/ or at war (which is, sadly, the vast majority), and those that are peaceful and not particularly stratified, the latter group does not practice witch hunting. It would be most interesting to catalog a list of cultures and their practices as regards witch hunting, but that would be a much longer book than I intend this book to be. But looking at a few examples is illustrative.

The Kaluli are an indigenous group in New Guinea. They were studied in the 1960s by Edward Schieffelin who reported them to be a passionate and expressive people.<sup>1</sup> (Most ethnographers make such comments. We westerners are evidently remarkably staid compared to most non-industrial peoples.) The Kaluli are a group that believes humans never die a natural death, but rather can only be killed by witches. The Kaluli were also, traditionally speaking, a warring culture. Prior to their submission to colonial rule, villages raided each other to seize witches guilty of murder. Any time a person died, a witch in a foreign village was blamed. Negotiations might be engaged, which would give the opportunity for the accused to offer food and other gifts in recompense for the supposed murder. Failing such successful negotiations, a war party would try to surprise the village, capture and kill the accused witch.

Such beliefs are, clearly, a recipe for never-ending war. If every death is a murder that potentially provokes further killing, there is endless provocation for warfare. Why small cultures choose to engage in warfare is a most interesting question, but not one that we will take up here. We will offer a one-sentence explanation to say simply that primitive warfare serves to keep people more spread out, thus reducing ecological stress on the land, and improving nutritional standards for those who remain.<sup>2</sup> Schieffelin reported the Kaluli as a powerfully

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1 Schieffelin, Edward L, *The Sorrow of the Lonely and the Burning of the Dancers*, St. Martin's Press, NY, 1976

2 Vayda, A. P., and Rappaport, R.A., *Ecology, Cultural and Noncultural*, in Clifton, J.A. (ed), *Introduction to Cultural Anthropology*, Houghton-Mifflin, Boston, 1968

impassioned people, prone to effusive expressions of anger, joy, or sadness with only the slightest provocation.

If you asked the Kaluli how witches behave, how one might identify a witch from among a crowd of people, they would tell you that a witch is prone to over-reaction to insult. If a person displays a violent reaction to a petty disrespect, then they might be a witch. But that is precisely how many Kaluli, taught as they are from childhood to express themselves passionately, might be tempted to react. We can thus see a purpose of a belief. Apart from creating warfare, the assigning of potentially disruptive behavior to witches serves as a powerful restraint on potentially disruptive behavior. In a general sense, witch hunting is a powerful means to encourage conformity, as any individual who breaches social norms might be accused of being a witch and killed.

A most instructive example of how witch hunting does and does not work in small human cultures is an interaction that Colin Turnbull recorded in his book about the Mbuti (Pygmies) in the Ituri Rainforest in Africa.<sup>1</sup> Turnbull wrote about the Mbuti whom he had lived with in the 1950s. The Mbuti maintained a close relationship with the villages around the perimeter of the Ituri forest. The Mbuti were hunter/gatherers, having been so from times immemorial. As is the case with a number of other gathering groups, the Mbuti did not practice warfare, and lived in egalitarian bands. The villagers surrounding the Mbuti were, like the Kaluli, a larger, somewhat more stratified and warlike culture. Turnbull tells a story of a set of events that occurred when the Mbuti were visiting the villagers to trade produced goods for meat caught by the Mbuti. While they were in the village, an elderly Mbuti died of natural causes. The villagers believed, as do many cultures, that there was no such thing as natural death. The villagers arrived in the Mbuti camp, and began questioning people to try to figure out who the sorcerer might be who committed the "murder." The Mbuti soon found themselves harassed, and certainly had no use in blaming someone for what they could see was obviously a natural death. The Mbuti retreated to the forest, and left the villagers to their own devices.

One purpose of a belief in witchcraft among small cultures is that it is a powerful means of enforcing conformity. Anyone who breaks social norms could be accused of witchcraft, with potentially dire consequences. Stratified and militarized groups hold a belief in witches, and persecute witches duly. Egalitarian and non-militarized groups have no need for such a practice.

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1 Turnbull, Colin M, *The Forest People*, Simon and Schuster, 1962

In much larger societies, a belief in witchcraft becomes a means for the upper class to divert blame for social ills away from themselves. The most striking example of this circumstance was the great witch hunts that occurred in between 1400 and 1700 A.D. (Marvin Harris' *Cows, Pigs, Wars and Witches* is a very readable, powerful book addressing the subject of witchcraft and other cultural riddles.)<sup>1</sup> This was the time of the Inquisition, the most extensive witch hunt ever practiced in modern times. Throughout this period, some 500,000 peasants were convicted of witchcraft in Europe. For this crime, these people were tortured and burned at the stake. The torture would only be stopped after the accused had named other people whom they knew to be witches, thus insuring an unending supply of victims. This Inquisitors were the clergy, the victims were primarily women, and always poor. The crime for which these people were executed was that of being in league with the devil in various ways, including flying on broomsticks to Sabbats.

The historical period during which these events took place was one of great social and political turmoil in Europe. There were large numbers of peasants living in wretched circumstances who were the victims of famines and plagues. The Church was inextricably intertwined with the State and both held onto wealth and power with a strong hand. There were numerous messianic upheavals and revolutionary movements as the peasantry fought against the wealthy and powerful who ruled over them. Marvin Harris states that:

“I suggest that the best way to understand the cause of the witch mania is to examine its earthly results rather than its heavenly intentions. The principle result of the witch-hunt system (aside from charred bodies) was that the poor came to believe that they were being victimized by witches and devils instead of princes and popes... Did the price of bread go up, taxes soar, wages fall, jobs grow scarce? It was the work of the witches. Did plague and famine carry off a third of the inhabitants of every village and town? The diabolical, infernal witches were growing bolder all the time. Against the people's phantom enemies, Church and state mounted a bold campaign. The authorities were unstinting in their efforts to ward off this evil, and rich and poor alike could be thankful for the energy and bravery displayed in the battle.”

"The practical significance of the witch mania therefore

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1 Harris, Marvin, *Cows, Pigs, Wars and Witches, The Riddles of Culture*, Vintage Books, New York, 1978

was that it shifted responsibility for the crises of late medieval society from both church and state to imaginary demons in human form. Preoccupied with the fantastic activities of these demons, the distraught, alienated, pauperized masses blamed the rampant Devil instead of the corrupt clergy and rapacious nobility. Not only were the Church and state exonerated, but they were made indispensable. The clergy and nobility emerged as the great protectors of mankind against an enemy who was omnipresent but difficult to detect. Here at last was a reason to pay tithes and obey the tax collector. Vital services pertaining to this life rather than the next were being carried out with sound and fury, flame and smoke. You could actually see the authorities doing something to make life a little more secure; you could actually hear the witches scream as they went down to hell.<sup>21</sup>

The witch hunts served as a tool for eliminating dissent, as many populist leaders were executed. Witches always came from disempowered groups, women and the poor. By making people fearful of each other, the hunt made them more dependent on the established authorities for protection. The clergy made themselves appear as the saviors of society - they were protecting the common people from the power of Satan. The common people were encouraged to be dependent on the established power structure and suspicious and blameful of each other.

Periods of witch purging in other early civilizations were periods when messianic movements arose to oppose imperial rule. Witch hunting and messianism are mirror images of each other, the former a tool of the wealthy, the latter a tool of the poor. The most well-known of these militant messianic movements were the early Christians who organized the Jewish population against Roman rule. The early Christian era was a period when revolutionary movements were organizing against Roman rule, and the Romans in turn ascribed to Christians the status of witches. Messianic movements organize the poor under a banner of communal utopianism. Witch purges frighten and divide the poor masses against each other, and make the state and the clergy appear indispensable in protecting the populace against the supernatural and pervasive powers of the witches.

The popular notion of witches being burned at the stake in Salem or in Medieval Europe gives only a narrow view of the witch in class-

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1 Harris, *ibid*, p.205

divided societies. Though the pattern varies greatly, the basic structure is the same: class divided societies maintain a mythology of supernatural evil, and the wealthy blame their enemies for whatever ills may befall a village. The Christians were the witches of the Roman Empire, the Jews the Witches of Nazi Germany. Witches are always deemed to be evil, and almost always believed to have great, if not supernatural, power. For the people who carry out the hunt, witches are real. Their existence is proven over and over again as evil is fought. Witch hunting occurs in every class divided society, and tends to become particularly acute in times of economic and ecological stress.

### American Witch Hunting

Looking at witch hunting in modern America is instructive to understanding how this practice is carried out in a modern context. The War on Drugs serves as an excellent example by which we can establish a model of how the process works as the history of that hunt is well documented. It is all the more useful because so many liberals have bought into the hunt, supporting the War On Drugs in one way or another. The War On Drugs fits the broader picture of witch hunting as a global human phenomena. Understanding this is very useful in preparing for the economic contraction we are facing.

America currently imprisons more of its population, as an absolute number and on a per-capita basis, than any other democratic nation on earth, ever. Nearly two million people are locked in steel cages in the United States, most of them for non-violent "crimes," most of those being drug offenses.<sup>1</sup> There are a number of organizations struggling for penal reform, trying to raise the public consciousness about the waste and destruction caused by that system.<sup>2</sup>

Does locking up two million Americans make the world a better place.? Then why do we do it? Because "drugs" are bad for people? That would be a most peculiar conclusion at which to arrive. Millions of Americans take both legal and illegal drugs. More white people than black people take illegal drugs, but more black people get caught and go to jail.

If drugs are bad for people, then why has the use of legal drugs spread so much in recent years? Millions of people in the U.S. are

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1 <http://www.prisonsucks.com/>, <http://www.criticalresistance.org/>,  
<http://prisonactivist.org/>

2 *ibid*



prescribed psychoactive "medication". Recent research has uncovered numerous studies conducted by the drug companies but never published. These studies indicate that many of the leading psychoactive "medications" prescribed for depression in the U.S. have a statistically insignificant effect when compared to placebos.<sup>1</sup> Many psychoactive medications have demonstrable negative side effects that rival or exceed those of illegal drugs. Which begs the question, why are particular drugs legal while others are illegal, who gets prosecuted for taking illegal drugs, and why? The smartest way to answer that question is with a little history.

People have used mind and body-altering substances for thousands of years. In the U.S. in the 1800s, opium derivatives were used in hundreds of patent medicines and prescribed medications. Women used them to calm anxiety, or to sooth their children. Opiate derivatives were not perceived to be a social menace. Morphine was heavily used in the Civil War, and there were some recorded instances of addiction, but neither was that at the time considered a social menace. Opiates were even prescribed by doctors to help alcoholics break the habit of alcohol abuse, it being judged that alcohol was the more dangerous drug. Medical evidence supports this conclusion. The real menace, it turns out, came from abroad, or so that was the story at the time.<sup>2</sup>

Chinese immigrants were heavily employed in building the western railroads, in mines, and to some extent in agriculture and other occupations. They streamed in from the Far East to California and the western states in the mid 1800s. The competition between workers and lower-paid Chinese immigrants sometimes caused conflagrations and waves of anti-Chinese sentiments, a circumstance exacerbated by the use of Chinese immigrants as strike-breakers. When the nation found itself in the midst of a depression in the 1870s, anti-Chinese sentiment boiled. There were calls for forced repatriation. Chinese immigrants had been smoking opium for many years, but the "opium dens" of San Francisco overnight were proclaimed a public menace and were banned by law in

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1 *Is it Prozac? Or Placebo?* Gary Greenberg , Mother Jones November/December 2003 Issue

2 The story of drugs and minorities is outlined in Helmer, John, *Drugs and Minority Oppression*, Seabury Press, New York, 1975. For general information about addiction, opiates, and some history, see Brecher, Edward M., *Licit and Illicit Drugs, The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, Marijuana, Including Caffiene, Nicotine, and Alcohol*, Little Brown and Company, Boston, 1972

1875. Other western cities followed suite. An Oregon court recognized the racial nature of the nation's first drug laws, recording that "smoking opium is not our vice, and therefore it may be that this legislation proceeds [more] from a desire to vex and annoy the 'Heathen Chinese' in this respect, than to protect people from the evil habit."<sup>1</sup> The myth of social contagion developed, giving the opium smokers almost supernatural powers in the common mind to entice middle and upper class young women and capture them in a stupor in their opium dens. This mythology has been further developed with each successive wave of drug wars. The first drug laws gave the police the right to raid Chinese homes and businesses in the context of a wave of anti-Chinese sentiments in a severely depressed labor market.

After the Civil War, blacks entered American politics in numbers unprecedented even until current times. At the end of Reconstruction, an enormous backlash developed. Using lynching ropes and poll taxes, there was a widespread and systematic effort, particularly in the South, to drive blacks out of the political process, and out of ownership of land and private business.<sup>2</sup> The newspapers started running fabricated stories of cocaine crazed black men raping white women. The objective evidence, such as it exists, indicates that cocaine use and addiction was extremely low among southern blacks. But drug wars were then, as now, remarkably immune to fact.

The peak of political participation of blacks was during Reconstruction. After that, under a siege of violence and intimidation, blacks were driven out of politics and into economic marginalization. The image of the cocaine crazed black man was used to whip up a fervor. This was also a period when the American Medical Association was rising ascendant. The AMA wanted control over as many areas of medicine as possible. They drove midwives, herbalists, and homeopaths out of business and into economic marginalization.<sup>3</sup> They rounded up the mentally ill people and put them in freshly built asylums where their rates of recovery declined.<sup>4</sup> The AMA lead the charge against abortion

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1 Helmer, *ibid*, p.40-41

2 Piven, Francis Fox and Richard A. Cloward, *Why Americans Don't Vote*, Pantheon Books, 1988

3 Brecher, *ibid*, Helmer, *ibid*, see also Haley, Daniel, *Politics in Healing: The Suppression and Manipulation of American Medicine*, Potomac Valley Press, Washington, D.C., 2000, see also Griggs, B. *The Story of Western Herbal Medicine*. Vermilion Press, ISBN 0-09-181461-8

4 Warner, Richard, *Recovery from Schizophrenia: Psychiatry and Political*

rights in the mid-1800s because it gave them a "moral" argument to cover their economic interests. After abortion was banned, the AMA turned its attention to controlling the drug market. In time they drove almost all the patent medicine providers off the market. Opiates, and cocaine (the latter have been discovered to be an excellent local anesthetic) became prescription-only drugs. Even as prescribed drugs, opiates were still given to patients to help cure them of alcoholism. The first drug war had been launched against the Chinese in the midst of a depression. The second drug war was launched against blacks to legitimize Jim Crow and segregation.

The third drug war was launched against Mexicans in the Great Depression. In 1935 federal legislation was passed that referred to marijuana as a nationwide menace. An editor of the "Daily Courier" in Almosa, Colorado wrote in 1936, "I wish I could show you what a small marijuana cigarette can do to one of our degenerate Spanish-speaking residents. ... While marijuana has figured in the greatest number of crimes in the past few years ..."1 The arrest records from that time show no actual correlation between marijuana use and other crimes, nor heavy marijuana use among Mexican immigrants.

Given the lack of an actual drug problem, why did Mexicans get so much attention? In the period of agricultural growth that preceded the Great Depression, farmers had welcomed the Mexican immigrants as a supply of cheap labor. In the midst of the depression, anti-Mexican sentiment began to grow from working class people because of the competition for increasingly scarce wages, and from the farmers because of increased organization and unionism among the Mexican workers. The anti-marijuana campaign occurred in conjunction with an escalation of violence and harassment toward Mexicans, and the forced repatriation of 200,000 Mexicans to Mexico. The repatriations were arbitrary and violent. People of Mexican origin were simply rounded up and put on trains and trucks, regardless of their length of residency or legal status.

The next drug war was again focused on blacks. As agriculture in the South became more mechanized after World War II, and mechanized agriculture became more profitable in the west, southern blacks moved

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*Economy*, Harper and Row, NY., 1985, J. Leff, *The International Pilot Study of Schizophrenia, Five Year Follow-Up Findings*, Psychological Medicine, 22, 1992, p.131-145, Assen Jablensky, *Schizophrenia: Manifestations, Incidence and Course in Different Cultures, A World Health Organization Ten Country Study*, Psychological Medicine, Supplement 20, 1992, p.1-95

1 Helmer, *ibid*, p.55

into northern cities. The great migration of blacks into the urban North corresponded with the onset of urban blight in many of these cities as developers and businesses moved increasingly to suburban and undeveloped areas. The concentration of young blacks in urban areas created the potential for political trouble, as well as for an expanding drug market.

The fourth War on Drugs was launched, and intensified, as the civil rights movement and urban riots broke out in northern "ghettos" in the 1950s and early 1960s. The communists were also implicated, as numerous legislators claimed that the reds were behind the drug "epidemic" and were using it to destroy America. As with all of the previous drug wars, the increasingly punitive and aggressive nature of the law gave police the right to arrest almost anyone at almost any time in urban areas on the basis of suspicion. Court records from that period indicate a high number of arrests that did not result in convictions. Thus drug law became a means of intimidation and disruption of any individual or group the police might choose to engage.

The drug warriors turned their attention in the late 1960s and 1970s on the new left and urban radicals, using the pretext of social contagion (the imagined threat to virtuous middle class children, particularly girls) to arrest and intimidate different individuals and organizations whom they chose to suppress. There was little evidence that marijuana or LSD ever posed a significant public health risk, especially compared to alcohol and tobacco, but they were convenient means of escalating law enforcement pressure on the newly resurgent left.<sup>1</sup>

The most recent drug war started in the 1980s. The context for this new battle is the economic re-polarization of America. The populist movements of the early 20th century were responsible for progressive income taxes (where rich people pay more) as well as increased wages for workers. The affect of these changes was to mitigate, and to some extent reverse, the polarization of wealth in American society. Throughout much of the twentieth century, the gap between the rich and the poor got smaller rather than larger in the U.S. That was dramatically reversed in 1980 with the election of Ronald Reagan. The progressive tax system was rapidly dismantled. A very tight fiscal policy was introduced, dramatically increasing interest rates. The affect of these measures was a severe recession, the deepest the country has seen since the Great

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1 Hoffman, Abbie, *Steal This Urine Test*, New York, NY : Penguin Books, 1987

Depression.<sup>1</sup> The purpose of this recession was, in the words of a Reagan economic adviser, "to break the back of the unions."<sup>2</sup> And it worked. As poverty increased, a new War on Drugs was launched. Again focusing on social contagion and the threat to middle class youth, again using the imagery of epidemic expansion regardless of whether the evidence supports any such claims. The economic polarization of American society increased steadily in this period, as did the prison population.

The objective medical research indicates that alcohol and tobacco are among the most dangerous substances people commonly use. Tobacco kills an estimated 400,000 Americans annually, and alcohol about 300,000. The combined total deaths from overdoses and other biological affects off all illegal drugs combined is a little over 2000 per year, or less than 1% of the total from alcohol and tobacco. In laboratory tests, nicotine is the most addictive of commonly available drugs, more addictive than heroin or cocaine.<sup>3</sup> Heroin users often put themselves at risk of hepatitis and HIV infections from using dirty needles, but the affects of the drug itself are highly over-dramatized. A number of famous and "highly successful" business and political leaders, particularly in the 1800s, suffered from opiate addictions. The use of opiates does not appear to have any deleterious biological affect on the body, whereas the affects of social ostracization and criminalization are substantial. It has been clear for over a century that the legal and political response to the use of various drugs has nothing to do with their health risks.<sup>4</sup>

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1 Korten, David C., *When Corporations Rule the World*, Berrett-Koehler, Kumerian Press, West Hartford, 1995, Phillips, Kevin, *The Politics of Rich and Poor, The American Electorate in the Reagan Aftermath*, Random House, New York, 1990

2 Zeigler, Alexis, *Conscious Cultural Evolution, Understanding Our Past, Choosing Our Future*, Ecodem Press, Charlottesville, 2003, p.138, also at [conev.org](http://conev.org)

3 For the impacts of alcohol and tobacco, see <http://www.globalink.org/tobacco/trg/Chapter3/Chap3MORTALITY.html>, [http://www.cdc.gov/tobacco/research\\_data/health\\_consequences/mortali.htm](http://www.cdc.gov/tobacco/research_data/health_consequences/mortali.htm), [http://www.cdc.gov/alcohol/factsheets/general\\_information.htm](http://www.cdc.gov/alcohol/factsheets/general_information.htm)  
For mortality data relating to illegal drugs, the Centers for Disease Control maintains an online database at <http://www.cdc.gov/> For interesting summaries of some CDC data, see <http://www.briancbennett.com/writing/drug-deaths.htm>, <http://www.briancbennett.com>

4 I am not in any way encouraging the use of any drug. I have never used any mind altering substances, legal or illegal, and haven't taken an aspirin in over a decade, nor do I drink coffee or tea.

A brief mention of the failed drug wars is also worthwhile. In the height of the AMA's drive to control the field of medicine, including patent medicines, and in the midst of a wave of anti-Irish sentiment stirred up by immigration prior to World War I, Prohibition was passed. As with other drug wars, organized crime got involved, and people continued to use the illicit substance. What was the difference between alcohol and the drugs that remained illegal? Middle class people were drinking, and middle class people were smoking. They would tolerate only so much harassment, and thus the prohibition of alcohol was dropped. In the last few decades, tobacco use has shifted downward on the class ladder from the middle class to the working class. As fewer and fewer middle class people smoke, we are seeing increased regulation of tobacco, which is arguably the most dangerous legal or illegal drug commonly available on the market today.

The truths and fictions of addiction and contagion have had nothing to do with any of the successive waves of drug wars. Which begs the question, can we ever win the argument about sensible drug sentencing? Not through current political means. Why not? Because the War on Drugs is an integral part of class-based society. All class-based societies have extensive measures to support their social structure, the most prominent among these being the witch hunt.

What is the future of true information about "drugs" and our modern American witch hunt? Culture has the power to turn the world upside down. As societies develop belief systems and those beliefs evolve, people can be taught to believe anything. Given the increased corporate influence at the Food and Drug Administration, increasingly dangerous drugs are being used as prescribed "medication." The current tally of known deaths from prescribed but poorly tested "medications," and from prescription errors, is over 170,000 people per year, *exceeding the deaths caused by illegal drugs by twenty to one*.<sup>1</sup> "Medication" is sold by rich people, "drugs" are sold by poor people, and the factor of harm is another matter entirely.

### The Future of American Witch Hunting

What of the future of the hunt in America? Certainly wealthy

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1 For deaths from legal drugs, see *Is US Health Really the Best in the World?* Barbara Starfield, Journal of the American Medical Association, JAMA. 2000;284:483-485 at <http://jama.amaassn.org/content/vol284/issue4/index.dtl> For deaths from illegal drugs, see footnote on previous page.

conservatives support it. The majority of liberals support it to some degree, having been convinced of the supernatural class contagion of "drugs." Even if we manage to achieve some justice in some places in relation to some drug laws, the hunt will continue. It is deeply embedded in the fabric of our class divided society. The only way we will ever stop the hunt is by gaining a popular awareness and conscious influence over the organization of our culture as a whole.

This is terribly important in our time because the environmental constraints we face are only going to escalate the hunt. Specifically, the degradation of natural "renewable" resources, and increased demand, is going to drive prices upward. Global oil production is nearing its peak. Per capita energy production, per capita grain production, and seafood production all peaked in the 1980s even as the demand for energy continues to climb.<sup>1</sup> Increased population growth and the increased abilities of people in less-developed countries to mimic the consumption patterns of Westerners are going to continue to drive demand for fish, meat, paper, and other natural resources. These resources are renewable only so long as they are used within the ability of natural systems to replenish themselves. As demand puts increasing pressure on supply, prices will go up.

The same scenario will play itself out in our use of mineral resources. We naturally mine the highest concentrations of minerals first, and pump the shallow oil first. As time passes and economic "growth" consumes ever greater quantities of mineral and fossil resources, we find ourselves digging deeper mines, using lower-grade ores, and pumping oil from deeper and less accessible places. The affect is an increase in the cost of these resources.<sup>2</sup>

Our class based society has, and will continue to, shift the burden on increased resource prices onto the lower class. The specific means of such shifting is fiscal policy. As resource prices increase, prices increase, creating inflationary pressure. The Federal Reserve responds to inflationary pressure by increasing interest rates. This drives up unemployment, which pulls down wages, and thus relieves to some

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1 Brown, Lester, *State of the World 1993*, Norton, NY, 1993, p.12-13, Gardner, Gary, *Shrinking Fields, Cropland Loss in a World of Eight Billion*, WorldWatch Paper 131, WorldWatch Institute, 1996, p. 20, [http://www.heifer.org/Learn/World\\_Ark\\_Online/Lester\\_Brown.shtml](http://www.heifer.org/Learn/World_Ark_Online/Lester_Brown.shtml)

2 For an extraordinary account of the role of technology and resource depletion, see Wilkinson, Richard G., *Poverty and Progress, An Ecological Model of Economic Development*, Methuen and Co. Ltd. London, 1973

extent the pressure of inflation. There are myriad other measures the money managers could use to run our economy, but their preferred means is to use unemployment among the lower class as a hedge against economic pressures. They refer to this hedge as the NonAccelerating Inflationary Rate of Unemployment, or NAIRU.

Consider for a moment who we normally blame for urban decay. A teenage drug dealer stands in the popular mind, like the witches of the Inquisition, as the supernatural force that has destroyed urban neighborhoods. The reality is that urban poverty is planned, a means of keeping wages down and profits up. When corporate profits collapsed in the 1970s, structural poverty had to be increased to drive wages down and increase profits. The tight fiscal policies of the 1980s ravaged many local economies, and the new witch arrived on the scene to distract the populace from the real causes of modern human misery. It is a most amazing sleight-of-hand that is preformed in front of the American public.

We mentioned the structural poverty in the first chapter, that being the level of poverty deemed necessary by the economic managers to limit aggregate demand and thus inflation. Structural poverty is intimately linked to racism and witch hunting in America. Racism cannot be overcome by encouraging people to give up their prejudice, no matter how widespread such a campaign might be. There is a hidden economic pay-off to such prejudice, hidden in the plain light of day in the form of purposeful, structural poverty in America. As long as we manage our economy in a fashion that demands a poor class, then different identity groups, ethnic or otherwise, will compete to attempt to avoid the lower position. Racism will invariably grow out of such an economic arrangement, and witch hunting will continue to be used against the lower class and disempowered ethnicities as a means of deflecting blame for economic deprivation.

There is also considerable evidence that the CIA was involved in bringing cocaine into the U.S. in the 1980s in order to raise money for the "Contra War" in Nicaragua. While the U.S. was involved in southeast Asia, heroin produced in Asia was brought in for similar purposes, and as our geopolitical focus shifted to Latin America, miraculously, the drug of choice on the street shifted from heroin to cocaine. A well documented account of these activities is Alexander Cockburn's *Whiteout*.<sup>1</sup> It sounds like a "conspiracy theory" to those not familiar with the issues. The

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<sup>1</sup> Cockburn, Alexander, Jeffrey St. Clair, *Whiteout, The CIA, Drugs, and the Press*, Verso, London, NY, 1998



evidence is solid. One cannot reasonably imagine that those involved in bringing cocaine and heroin into the U.S. to finance their activities were unaware of the social impacts of those drugs.

As resource prices increase, more people will be put out of work to balance the economy. As more people are put out of work, witch hunting will be escalated to put more pressure on a potentially restless working class. If this sounds too theoretical, it is precisely the scenario that resulted in the recent escalation of the hunt. The oil price hikes of the 1970s triggered precisely that set of events. The conservative movement made use of the economic stress, and pushed the impact onto a growing lower class. The War on Drugs was recreated anew. If we continue down the current path, the hunt will escalate. The pressure on the lower class to absorb the impact of environmental constraint will grow. The severity of witch hunts corresponds to the severity of the stressors facing a society. Given the scale of the ecological circumstance we face, a new Inquisition will soon be upon us if we do not change course.

It is time we abandoned conservative fear-mongering and liberal complicity. We have to consciously remake our society, devolving power away from transnational corporate oligarchy and into local communities, and evolving a sustainable and conscious culture based on locally accessible power. From that base of local power, we have to form a movement that can transform the patterns of history, and build a conscious and wise society to replace the blind and divided one in which we live. We can drop the petty political reformisms, remake our common political consciousness, our economy, and our society, or we can wait for the sound of the baying hounds.

# Why Large Groups of Intelligent People do Foolish Things

That which unifies, makes us strong.  
That which unifies, makes us blind.

As the evidence of global warming and its potentially devastating consequences mount, why are we, intelligent humans as we are, not responding? A similar question could be asked of other issues. Even with the moral disagreements about abortion, why can we not conduct an open discussion about the implications of different choices, particularly choices that concern providing contraception to youth and poor women around the world? Or at a more basic level, why does male supremacy exist, and why are we still held in its clutches? Or concerning the pending peak of oil production, how could we blithely continue to follow a path of economic growth with no recognition of its pending end? How could the biofuel movement gain so much momentum with no recognition of the environmental devastation that has been wrought in the past by biofuel extraction?

The obvious answer to these issues is that while our mechanical technology has developed at a rapid pace, our awareness of social issues has lagged behind. The obvious answer is wrong.

Our lack of social awareness does not represent a primordial vestige of ignorance, it is actively created and re-created as part of the social structure of our society. It is, in a peculiar way, useful. Social awareness is actively, systematically suppressed in our society. If we want to possess a greater social understanding and make use of it to consciously guide our future, we have to understand how and why such awareness is suppressed, and the benefits derived from that suppression.

From the Bully Pulpit

It is to the benefit of every politician, every preacher, every political organizer, whether they are electing a president or fighting for some local cause, to convince you of the importance of immediate issues and the rightness of their ideas. It is to in no one's interest to educate

people about the long-term, economic and ecological structures that hold our society together. It just does not work for anybody who is building any kind of movement to stand up and say "don't listen to me, what I am saying is not important, some unseen forces of economy and ecology are more important than what I am telling you." That would not work. Imagine a professor of philosophy lecturing in front of an auditorium. The professor says to their class; "The primary influences over culture, over human beliefs, are ecological and economic changes. Therefore, every philosophical insight we examine is secondary to these deeper forces." Or a professor of anthropology or sociology; "The subjects that we need to examine are innately highly politicized. Everything I say is going to tend to get you into trouble. Ultimately, most of what you or I think has nothing to do with the future course of society." A politician is giving a political speech; "I could espouse different policies, moral directions for America, but the reality is my policies are quite divorced from the moral choices people make." Or a preacher standing in the pulpit; "I could offer you moral direction, but people tend to adapt to their environments, and the economic and ecological foundation of society has more to do with those choices than any of my moralizing." Would it work for an activist working on the abortion issue in South Dakota to try to motivate their audience by telling them about how economic relationships tend to influence human behavior and belief?

What we are told by academics that philosophies, ideas, social and material inventions matter. We are told by politicians that policies are important. We are told by preachers that faith and morals matter. The net message we are told, even in a highly sophisticated academic analysis of history, is that humans guide their cultures forward with their conscious decisions. The average academic historian would have to cut his or her own throat, figuratively speaking, to tell you the truth.

The belief that humans consciously direct our own societies is like the flat Earth. You can look around you, where-ever you are, and see that, notwithstanding a certain local lumpiness, the Earth is flat. It is completely obvious, undeniable, and dead wrong. The same is true with our belief that we consciously direct our society forward. It is undeniably obvious, and dead wrong.

I play this game sometimes when I am speaking to people. I tell them to imagine an isolated human society living on an island in the South Pacific. The waters around this island are rich with fish. The people on that island live mostly by fishing. I ask my audience what they think the Gods of the people of this island culture look like. They might

look like sea creatures, or humans that bestow upon the people a good catch. I ask my audience where the islanders build their villages, up on the mountainside, or around the lagoons near the ocean. Near the water of course. I ask my audience if the villagers' political organization is structured around building boats and nets, or is it structured primarily by other factors. Baited question of course.

Then I ask my audience about ancient Greece, about why it became a more democratic society out of a tribal and royal tradition that was quite the opposite. They give answers relating to the philosophy of the time, the leadership and political invention of various characters of that age. Then I ask why the United States developed as a democracy (limited as it is in that regard). They give me answers relating to the philosophy and ideas of men among our "Founding Fathers." Then I ask why they related the political and even spiritual tendencies of a theoretical island culture far removed from ourselves to their economy, but when asked about human societies in our own tradition, they completely reverse logic and talk about the importance of the ideas of particular people. They look at me funny.

Why is it that we can look at a theoretical island people and see the influence of economy and ecology on their belief system and social organization, and yet such insight is immediately abandoned when we are talking about ourselves, or civilizations in our immediate heritage? Because with the theoretical but non-existent island people, there are no current "vested interests." With the Greeks, the modern philosophers have an interest in explaining how Greek philosophy shaped Greek society. The modern economist is interested in how economic policies shaped Greek society. Most historians are concerned about how different beliefs and political decisions shaped past societies, and by extension, ours. The concept that we lofty, modern, enlightened humans are mentally influenced, even dominated, by economic and ecological influences is considered vulgar because it dethrones all of our intellectual traditions, and throws our notions of progress into the mud. That does not mean that a more materialist perspective is not true, it just means we don't want to hear it.

There is another, more disturbing reason why we are resistant to seeing the material influences over our behavior. There is no denying that the mechanical technology of our age is far beyond anything that came before us. We have created machines that can fly and compute, miracle medical procedures, and weapons of stunning power. It is all an undeniable testament to progress, to our advancement over previous

generations. It is but a small and flattering step from mechanical invention to social progress, to the notion that we have advanced in a social sense beyond the primitives, the cannibals, the fascists. To suggest that our democracy is an adaptive response, no more or less consciously guided than the social order of any of the aforementioned bad guys is horribly insulting, humiliating even. And yet, it is true.

Human history is full of altruism, mutual aid, and elaborate social networks. It is also full of warfare, cannibalism, male supremacy, and horrible cruelty. In modern times, the Nazis have become an archetype of evil. This is unfortunate in some ways because it tends to put them in a category by themselves rather than seeing them in a historical context. This is not the place to look at the issue in depth, but I would point out that prior to World War II, the colonial winners, those being the western powers, took a more democratic turn. The colonial losers, including the states that became the Axis powers, all adopted more authoritarian governments. I would not suggest that any peoples' fate is absolutely pre-determined by their material circumstance, but I would suggest that such material circumstance does make particular outcomes more or less likely. The democracy enjoyed by the western powers was fostered by our being the colonial winners, the masters of global trade. We were, and are, no more conscious of the material underpinnings of our choices than were the colonial losers.

Mark my words. We have not evolved morally beyond the Nazis. The difference between our social order and theirs is material wealth, colonial victory, and the democratic privileges that have evolved from these. We no more understand the roots of our own behavior than did they, nor are we in any greater control of our social evolution. And that is precisely why we do not see the roots of our own behavior. To look at them is humiliating. The comforting illusions of progress are far more pleasing.

### Vested Interests

There are other fairly transparent reasons that social awareness is suppressed in our society, one of those being the influence of vested interests in a highly stratified society. Vested interests do not want to be told, or for anyone to be told, things that contradict their world view, or their bottom line. Thus while there is a scientific consensus at this point that global warming is a serious threat to the future well-being of humanity and assertive mitigation should begin as soon as possible, the

issue has been greatly muddied by vested interests who have paid "scientists" to generate public debate that makes it appear as if there is great disagreement about the issue. ExxonMobil has been the primary organizer of this disinformation campaign, and they have been successful to a large degree.<sup>1</sup> While there is virtual unanimity in the scientific community about the seriousness of global warming, most media outlets report on the issue as if it is contested, as if there is great disagreement.<sup>2</sup>

Particular vested interests obscure information about global warming. Others obscure information about poverty, about tobacco, about meat or dairy products, about crime, poverty, or abortion. With each issue, the public debate is skewed by the centralized power of wealthy vested interests. The issues that affect the lives of the poor are obscured, and witch hunts are directed against the marginalized.

As unfortunate as these events may be, they also result in the suppression of social awareness at large. It was not possible to build an internal combustion engine until the complimentary technologies had been developed. Those would include metallurgy, an understanding of electricity to charge the spark plug, etc.<sup>3</sup> The construction of computers came after the development of transistors, vacuum tubes, and supporting technologies. In the social realm, the development of complimentary social "technologies" is suppressed by vested interests. Each vested interest (tobacco, big oil, etc) suppresses social awareness in a particular realm. The net result is that a general development of "social technology" is stifled. A certain amount of unwillingness to examine uncomfortable issues may be inevitable in any human society. But the consolidation of power in our society, and the resulting suppression of multiple facets of social awareness, leaves us blind.

### The Intensification of Production

For most of humanity's existence, we lived in gathering bands.

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1 [http://www.stopexxonmobil.org/global\\_warming.html](http://www.stopexxonmobil.org/global_warming.html),  
<http://www.democracynow.org/article.pl?sid=05/04/22/1338256>,  
[http://www.motherjones.com/news/featurex/2005/05/exxon\\_chart.html](http://www.motherjones.com/news/featurex/2005/05/exxon_chart.html)

2 Gore, Albert, *An Inconvenient Truth, The Planetary Emergency of Global Warming and What We Can Do About It*, Rodale Press, 2006, p.262 see also <http://www.fair.org/index.php?page=1978>

3 An excellent look at the complimentary development of technology can be found at Wilkinson, Richard G., *Poverty and Progress, An Ecological Model of Economic Development*, Methuen and Co. Ltd. London, 1973

These bands were egalitarian, both in their general social structure and between the genders. In the last 10,000 years or so, larger groups of humans have formed into civilizations that are very stratified, militarized, and male dominated. The original impetus for the development of social stratification was population growth and ecological depletion. As human populations grew, they started farming to feed themselves. The original village headmen were, among other things, village cheerleaders who encouraged people to work harder to produce more. The village headman became the center of a system of intensification of production and redistribution. The headmen and chiefs were also war leaders, and their power was greatly increased in times of war.<sup>1</sup>

The term "intensification of production" was coined by anthropologists to explain the social transformations that growing human societies have undergone to adapt to their expanding size and the ecological depletions that cause them to have to work harder.<sup>2</sup> The growth of social hierarchy served to intensify production. At first it was a benign process of rewarding hard workers with greater social prestige. Chiefs served as central collectors of foodstuffs that were redistributed. Eventually, the hierarchies grew large, coercive, and leaders grew self-serving. But the original impetus, and a large part of the function of social hierarchy even now, is to encourage people to work harder to achieve a higher social status.

The great social transformations that humans have undergone, as we have grown from small to large societies, have been incremental. The people who experience them, like ourselves, experience such sweeping changes in slow motion. The people who were participants in the creation of early civilizations were no more aware of their personal influence over the culture at large, or the direction of the culture at large, than are we. For the individual to understand the direction of change

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1 Information on these subjects can be found with such writers as Cohen, Mark Nathan, *The Food Crises in Prehistory, Overpopulation and the Origins of Agriculture*, Yale University Press, 1977, Boserup, Ester, *The Conditions of Agricultural Growth, The Economics of Agrarian Change Under Population Pressure*, Aldine Publishing Co., 1965, Carneiro, Robert L., *A Theory of the Origin of the State*, in *Science*, August 1970, p733-738, Johnson, Allen W. and Earle, Timothy, *The Evolution of Human Societies: From Foraging Group to Agrarian State*, Stanford University Press, Stanford CA, 1987

2 Harris, Marvin, *Cannibals and Kings, The Origins of Cultures*, Vintage Books, New York, 1978

certainly becomes more difficult as cultures grow larger and the pace of change accelerates.

I would argue that the very means of adaptation to growth -- intensification of production -- serves to suppress social awareness in the population at large. Material need has trumped mental development. The process of getting people to work harder, getting them to focalize their efforts on production and warfare, generates conformist social movements that are enormously powerful but not socially intelligent. It is in essence a short-term adaptive process, though the use of the term "adaptive" in this case may be overly generous. Social hierarchies were originally created for purposes that benefited the group as a whole. But as those hierarchies grow taller, at some point different classes come to serve their own ends more so than those of the group as a whole.

Social hierarchies were created, and grew larger, as a means of intensifying production as populations grew and easily accessible resources were depleted. As competition for resources escalated, so did warfare. Motivating people to fight in warfare does not make the culture socially aware. It tends to have the opposite influence.

### The Enculturation and Education of Children

The primary means by which stratified cultures create conformity at the expense of social awareness is through child-rearing practices. Small children are cognitively very different from adults. They do not differentiate themselves from the other people around them. They comprehend the world as a seamless whole, with themselves at the center, and events in the larger world connected to them personally. Childish egocentrism is not narcissism. It is a lack of differentiation of the self from the larger world. Childhood egocentrism leads to magical thinking, and a kind of absolutism. Small children sometimes think that the moon is following them because they see it "moving" through the trees as they walk. They may also see rules as absolutes handed down from higher authorities, unchangeable and eternal realities. Children tend to have an innate supernaturalism that adults entertain with stories about Santa Claus, or the Easter Bunny, or other fanciful tales.

Children overcome their innate egocentrism through peer interaction. Cognitive change is driven by social interaction. Over the course of growing up, if they are socialized normally, children are forced to deal with other children on equal terms. They have to recognize the needs, thoughts, desires, frustrations, approval and disapproval of their



peers if they are to be a part of social groups. This process of socialization wears away egocentrism, and builds in its place a more sophisticated adult understanding of the larger world. Children come to understand themselves as one member of a larger social group. They come to see rules as social agreements that can be changed with the consent of the members of the group.<sup>1</sup>

Childhood cognitive development can be manipulated, and it is in stratified societies. In more egalitarian societies, children assume adult roles early on in life. They are not restricted by social norms other than those of the group at large. In stratified societies -- those societies that actively seek to intensify production/ focalize effort -- children are put into structured, hierarchical social groupings over which they have no say and are kept there throughout their development. This mimics the circumstance that they face naturally as small children when they are dependent on parents and adults for protection and support. The effect of placing children in hierarchical, structured social groups over which they have no control is to selectively perpetuate elements of egocentric thinking into adulthood. It is normal for small children to see the rules of parents and society as absolute when they are very small. If they are kept in a subservient position to particular social conventions throughout their development, then that childhood way of thinking about those conventions is perpetuated into adulthood.<sup>2</sup>

Childhood egocentrism also has an emotional component. The lack of differentiation between the child and the adult creates a seamless interconnection that feels secure and comforting for the child. As a child grows in a stratified society, they are kept in a subservient position to institutions of power, and thus hold an emotional sense of security based

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1 This is a summary of Piagetian developmental theories. See Piaget, Jean, *The Child's Conception of the World*, Littlefeild, Adams, and Co. 1965, Piaget, Jean, *The Construction of Reality in the Child*, Basic Books, New York, 1954, Piaget, Jean, *The Moral Judgement of the Child*, The Free Press, New York, 1965. The cross-cultural existence of Piagetian developmental patterns has been extensively researched. With some dissent, the general conclusion is that the patterns of childish egocentrism as found by Piaget are universal among young children.

2 The political uses of childhood egocentrism are explored at Rosen, Hugh, *Pathway to Piaget, A Guide for Clinicians, Educators, and Developmentalists*, Postgraduate International, 1977, Rosenburg, Shawn W., Dana Ward, Stephen Chilton, *Political Reasoning and Cognition, A Piagetian View*, Duke University Press, 1988, Rosenburg, Shawn W., Reason, *Ideology and Politics*, Princeton University Press, 1988

in their childhood cognitive constructs vested in those institutions of power. And that is the reason so many people feel emotionally attacked when those institutions of power are challenged. People take their patriotism personally because they are vested from a young age. It is not accidental.

The perpetuation of childhood cognitive patterns into adulthood is "adaptive" for the culture at large because it serves to focalize effort/intensify production by generating a populace that is more conforming, patriotic, and devote. It also serves to make the culture collectively less socially conscious, more blind.

### The Factory School

The essential structure of any culture is set by its core economic institutions. The peripheral institutions of culture tend to take on the form of the core institutions. In our society, we inherited a tradition of social hierarchy born out of the thousands of years of intensifying of production. Our core economic institutions are hierarchically organized to maximize production (on a growing resource base) and to maximize military power. But a myriad of peripheral institutions are also organized in hierarchical forms, mimicking our central institutions, because that is our paradigm. Our understanding of intelligence is hierarchical. So powerful are our paradigms that they can cause us to interpret events in the world with absolute certainty to the exclusion of the evidence.

The mathematical systems of most non-industrial cultures are exceedingly simple. There are many small cultures who don't count past three or four.<sup>1</sup> Anything beyond that simply becomes "many," or is described by non-specific terms. Never mind geometry, trigonometry, calculus, or advanced physics. If you take western IQ tests and administer them to non-industrialized peoples all over the world, they don't score very well.<sup>2</sup> It is most peculiar to recognize, however, that such non-industrialized peoples are much closer in social organization to our gathering ancestors than are we. Those gathering ancestors, in an evolutionary sense, *created* our intelligence. And yet they would score poorly on our modern "intelligence" tests. Clearly there is something astray in how we define intelligence.

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1 Turbull, Colin M., *The Mbuti Pygmies, Change and Adaptation*, Holt, Rinehart and Winston, NY, 1983 among others.

2 Fish, Jefferson M. *Race and Intelligence, Separating Science From Myth*, Lawrence Erlbaum, Mahwah NJ, 2002, p.201-281

We have this notion that some people are much smarter than others. As soon as small children arrive in school, they are given individual tests, and are, by and large, tracked according to intelligence. These smart children then do better on future tests, confirming the original paradigm that they are smarter. Children are pressured, and perform, according to the expectations placed on them. The phenomena was first discovered in the 1960s. It is referred to as the Pygmalion Effect, named after a Roman myth in which a carver falls in love with the statue he has created, beseeching the Gods to breathe life into his new love. Hundreds of studies have been conducted confirming the Pygmalion Effect, though it has not had any substantial impact on schooling in America. (Yet another example of how social technological insight does not lead the development of culture.) The Pygmalion experiments involve telling teachers that certain students are “potential bloomers.” These students then proceed to accelerate their academic performance. Researchers trying to figure out why the students make such gains find that they are given more intimate attention, are asked more questions, responded to more quickly, and are given more constructive feedback. There are other corollaries to the Pygmalion Effect as well, including the research finding that smart black children (children who are potentially breaking out of their assigned social role) are given negative feedback. They are seen as trouble-makers, disruptive.<sup>1</sup> (Oddly enough, the same effect can even be achieved using rats. If students are given rats, they will give the rats more or less encouragement depending on whether or not they are told the rats are “smart” or “slow.” The “smart” rats then respond to the encouragement given and accelerate their maze-running.)

There are also numerous studies that indicate that young girls often accelerate in academic tasks in elementary school, but then fall behind, particularly in mathematics, in high school.<sup>2</sup> (This circumstance was more pronounced a few decades ago than it is now.) Are boys smarter, or is there something else going on? Our entire understanding of human intelligence is shaped by our paradigms of hierarchy that originate in the stratified economy. A different interpretation of all of

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1 Rosenthal, Robert, *Pygmalion in the Classroom; Teacher Expectation and Pupils' Intellectual Development*, Holt, Rinehart and Winston, 1968, reprinted 2003. See also Smith, Glenn, and Charles R. Kniker, *Myth and Reality, A Reader in Education*, Allyn and Bacon, Boston, 1975, p.292-303

2 Pipher, Mary, *Reviving Ophelia: Saving the Selves of Adolescent Girls*, Grosset/ Putnam, New York, 1994

these circumstances is in order.

An explanation of all of these phenomena lies with understanding the social nature of intelligence. Although personal experience is not compelling evidence compared to cross-cultural analysis (which is also far superior to psychological theories that extrapolate from individual tendencies to social systems), my personal experiences in this realm have led me to a different understanding of all studies of intelligence. I have lived all of my adult life in communal groups. The first thing you notice living in a communal society is that the social matrix is radically more complex than anything to which the average American is accustomed. Social relations become an enormously complicated and ever-changing puzzle, one that stretches the limits of one's perceptions and even analytic abilities. Predicting the behavior of one's fellow humans in a communal society means understanding their motivations, their alliances. Such a social matrix also redefines social status. Every social organization is a mix of hierarchical and cooperative components, and behaviors that do not fit neatly into either of those categories. In mainstream American society, status is largely defined by external symbols of wealth and power. In cooperative communal societies, cooperation is highly valued. There is a hierarchy of sorts, though not such a pronounced one. Persons who can master the social matrix, effectively build alliances, who can engage the cooperation of the group, foster cooperation among other members of the group, and who work for the benefit of the group, are more highly respected.

In nearly every ethnography of non-industrialized peoples conducted by western anthropologists, you will find some mention of how the anthropologist had to adapt to the socially intensive atmosphere of the people whom they were trying to study. Gift exchange networks that serve to create and maintain a social fabric are universal among such peoples. The kinship system of every pre-industrial society is extensive and elaborate. In terms of the evolution of intelligence, the ability to make tools and weapons certainly improved the survival rate of our forebearers. But many unintelligent animals dig roots and eat other animals. The real dividends of our intelligence lay with the ability of hunter-gatherers to cooperate, to communicate with each other and devise complex plans for catching animals, harvesting plant foods, or fighting other groups. (This is by no means a new insight, as anthropologists have made the same point many times.)

The point is that intelligence is fundamentally social, and that social intelligence improves one's status in the kind of cooperative

societies in which human beings evolved. Such hypothesis is corroborated by the evidence in as much as socially skilled and charismatic individuals in modern gathering societies are likely to be highly respected in their groups. More likely, even, to have more sexual liaisons and thus leave more children.

Humans are deeply social beings. We are "hard wired" to find a place in the social order. For the child in school, "smart" is one place in the social order, as is "pretty," or "entertaining." Even the "bad" kid has a place in the social order that is clear and secure. Girls traditionally fall behind boys in academic studies because there is pressure on them to be pretty, but not too smart or assertive. Black children, in many (most?) social environments in America are encouraged to be athletic, but not too smart.

There is no doubt that even infants have components of unique personality, that some people are innately more musical, artistic, or mathematically inclined than others. But in a hierarchy, the positions at the top are few. Children conform to their position in the social order, the expectations placed on them. Children are assigned to a particular social class because that is how our economic system is organized. To maximize the social power or perceived intelligence of each and every member of a hierarchical social order would be enormously disruptive to the hierarchy. And that is precisely what we must do. An intelligent culture would seek to maximize the intelligence of each and every person, to maximize the social understanding of each and every person.

In our technological society, there is a need for education. Even so-called unskilled labor often involves complex tasks that are greatly aided by a basic education. Our school system takes that need for education and directs it in a manner that is beneficial for the upper class. Our school system, simply by its organization and scale, is designed to teach conformity. The dominate function of primary education is socialization, not education as such. The primary purpose of secondary education is class differentiation. We have to understand that the capacity of humans to understand and analyze their social environments is far beyond our current paradigms of educated versus not educated, smart versus ordinary. Our current educational practices serve first and foremost to *limit* the willful intelligence of most children who are not at the top of the hierarchy.

Our culture is no less mythological in its orientation than any before. Our social class structure is implicitly based on ability. That, like progress, is one of our cornerstone myths. The fact that so many students

are placed in the custody of one teacher, in an institutional setting that demands their quiet conformity to that social environment, in a circumstance where the students themselves are given no say over the organization itself, values socialization into that environment far ahead of maximizing the abilities of each student. Our school system as it is currently organized was created in the late 1800s in the Gilded Age. This was the age when mass production in large factories were growing to dominate the economy, and time-motion studies were applied that sought to maximize efficiency of industrial production (Taylorism as it was first called, which later gave birth to Fordism). Thus our schools were established on the model of factories. A number of books have been written cataloging that transition.<sup>1</sup>

### The Economy Tells Lies

Cultures are systems that try to perpetuate themselves. In a culture that has been through hundreds, even thousands, of years of successive waves of intensifying production to meet the needs and demands of ever growing populations, the stress-response process gets built in. It becomes part of the systemic response. If a group of gatherers, or villagers without a strong headman, were presented with a stressor, then they would certainly turn to existing charismatic leaders or powerful personalities that exist within the social fabric of the group. But when a large culture such as our own faces a stressor, such as a "terrorist" attack, then many people in our society turn to established leaders in a manner that is deferential. If you multiply that stressor in intensity, and repeat it again and again over a course of years, it is not difficult to see how a democracy such as our own would degrade into authoritarian government. Some would argue that we are already moving along that path.

People are more likely to defer to leadership in times of crises. But the far more important point is that such deference grows out of the economic organization in society. One could say that, in a sense,

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1 Spring, Joel H., *Education and the Rise of the Corporate State*, Boston, Beacon Press, 1973, and Callahan, Raymond E., *Education and the Cult of Efficiency, A Study of the Social Forces That Have Shaped the Administration of Public Schools*, Chicago, University of Chicago Press, 1962, Gatto, John Taylor, *The Underground History of American Education, A Schoolteacher's Intimate Investigation Into the Prison of Modern Schooling*, Oxford Village Press, NY, 2003

information travels from the economic level of our society to the political, intellectual, and spiritual levels of our society. That is the primary reason we are not responding to the environmental crisis we are currently facing. As much as numerous activists try to explain to the public the need for action, the "information" that is emanating out of the economy of our society tells us that everything is fine. That relationship as it exists between economic and mental is established, and reinforced, over time. Not only is everything fine in the industrial society as far as the information we are receiving from our economy is concerned, it has been fine for a long time. We will never have a substantive impact on the course of our society until we are able to influence the relationship between the economic system and political beliefs.

### The Systemic Nature of Non-Conscious Culture

The core institutions of our economy create a framework in which all other institutions operate. Our culture evolves through a non-conscious means. These simple statements outline why we, the intelligent species, are so unintelligent in large groups. Any activist in any field comes to the realization at some point that the larger society is not really trying to solve the problem on which they are working. But because our politics are so issue oriented, because there is no immediate political pay-off for developing a larger theory of cultural change, we possess no such science.

We have examined a few political issues in this book. Matt Simmons is an oil financier who is trying to raise public awareness about oil depletion issues. He points out that there is no tracking or realistic accounting of global oil supply or consumption. There is one private company that claims to have spies in harbors all over the world counting oil tankers. This "data" is then the basis for many estimates of global oil production. The nations of the Middle East consider information about their oil supplies and production to be "state secrets." Nothing is more central to our modern industrial life than energy supplies. Are we not mad for making no count of the most basic raw material of our civilization? Never mind all the complicated arguments about energy saving schemes, shouldn't we simply try to understand how much oil we have? I suppose these are the questions that Simmons has been asking himself as he was writing his book about these issues. In our blind culture, we take no account of our energy future.

The activist who looks at any particular issue is subject to similar

harsh awakening. Heart disease is the leading cause of death in the U.S.. The fact that heart disease is caused by excessive fat intake has been known to science since at least 1908. But as a culture we have responded very slowly. The feminist activists who work trying to reduce the level of violence directed against women in our society know there are answers, and that we as a culture are not adopting those answers. Male supremacy is an integral part of our economy, the driving force behind the intensification of production/ focalization of effort that our society has developed to respond to stress, population growth, and imperial competition. But there is no common consciousness of such.

We can see the same disjuncture between our social symbolic constructs and material reality in concern with other issues as well. The American school system has been getting progressively re-segregated, to the point that American schools are now as segregated as they were in the 1960s.<sup>1</sup> Economic segregation -- wealthy and middle class Americans choosing to live in the company of other similarly endowed citizens -- has replaced legal segregation. As long as we have an economic system that maintains a purposeful layer of structural poverty, we will have racism. It is simply too tempting, too convenient, for more powerful groups of people to try to categorically save themselves from such poverty by pushing other groups into a disadvantaged position. We call that racism, but we have no common awareness of structural poverty and its relationship to racism.

The list of issues that are obscured from our vision can be continued to aspects of our health care system. The recovery rates for serious mental illness are higher in some non-developed, very poor areas of the world than they are in the U.S.<sup>2</sup> How could that be? How could it

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1 *Resegregation in American Schools*, Gary Orfield and John T. Yun, June 1999, The Civil Rights Project, Harvard University, 124 Mt. Auburn Street, Suite 400 South, Cambridge, MA 02138, crp@harvard.edu, www.law.harvard.edu/civilrights,

<http://www.commondreams.org/views01/0718-04.htm>,

<http://www.washingtonpost.com/ac2/wp-dyn?>

[pagename=article&node=&contentId=A26073-2004Jan17&notFound=true](http://www.thirdworldtraveler.com/Education/Segregation_Redux.html),

[http://www.thirdworldtraveler.com/Education/Segregation\\_Redux.html](http://www.thirdworldtraveler.com/Education/Segregation_Redux.html)

2 Warner, Richard, *Recovery from Schizophrenia: Psychiatry and Political Economy*, Harper and Row, NY., 1985, J. Leff, *The International Pilot Study of Schizophrenia, Five Year Follow-Up Findings*, Psychological Medicine, 22, 1992, p.131-145, Assen Jablensky, *Schizophrenia: Manifestations, Incidence and Course in Different Cultures, A World Health Organization Ten Country Study*, Psychological Medicine, Supplement 20, 1992, p.1-95



be that poor villagers in the dusty corners of the Third World are more effective at treating serious mental illness than are we with our most sophisticated technology? Because the social support system of village life is far more effective than all of our miracle pills. Fair enough. Perhaps it is not worth rearranging our whole culture for the sake of better helping crazy people. But how many mental health professionals even know about such information? It is yet another suppressed piece of reality.

The list could continue as we examine each piece of our cultural reality. In many cases, there are explanations for our behavior that differ from our story. Sometimes our story is harmless. In other cases, our story blinds us in a most devastating manner. Our culture is not accidentally or incidentally blind to a particular set of issues. Because our society is highly stratified, because of our history and ongoing practice of intensifying production and maximizing our competitive military stance, our culture is *systemically* blind. That systemic blindness leaves us horribly vulnerable to the great ecological changes of our time. It will remain blind until we address the systemic cause of that blindness.

# Real Solutions

## The End of the Conservative/ Liberal Piecemeal Crap

All of our notions of social progress are ultimately based on an assumption of economic growth -- growth that is going to come to an end. No one has an answer to the end of economic growth. No one has a means to address the social problems of our time in the absence of growth. The truth is the answers are not complex, not even difficult. The answers simply presume a kind of change that we are not comfortable with or accustomed to.

There is a joke that some preachers tell. A man dies and goes to heaven. Saint Peter greets him at the Pearly Gates. The man says to Saint Peter; "Good to meet you, pleased to be here, but you know, before I step inside those big gates, I wonder if I could take a quick trip to hell. I have always been curious what it looked like down there." Saint Peter thinks that's a fine idea, and off they go, descending to Satan's realm. They get to hell, and surveying the scene, they find that they have arrived at mealtime. They see thousands of famished, anguished people. Everyone is sitting beside a big pot of soup, and each person has a spoon so long that they cannot reach their own mouth. So they are doomed for eternity to sit hungry in front of the pot of soup, teased but unfed. The man has had enough, so he and Saint Peter return to heaven. Upon entering the pearly gates, the man is stunned to see exactly same scene. Everyone is sitting in front of a big pot of soup. Again the spoons are so long that no one can feed themselves. Except everyone has learned to feed each other. The people are eating, laughing, and happy.

The state of our world today lies in the middle of those two images. We are possessed of unprecedented abundance, economic polarization, warfare, and colossal denial. The solutions are at hand, but they are not being implemented.

Energy prices are escalating. It is very likely that the world is at or near a global peak in oil production. But do we have an "energy crisis"? In terms of meeting our expectations of economic growth, we certainly do. No one knows exactly what the rate of global oil depletion

might be once we pass the peak. It could be 2% per year. It could be 8% per year.<sup>1</sup> If you extrapolate that depletion rate out ten or twenty years, the energy available to us on a per-capita basis is still far greater than that which was available to our grandparents, or any generation before them. Similar points can be made about the availability of other resources.

We have myriad technologies, many of them small and simple, that can make life abundant and long for our children's generation. But only if we step firmly outside the ruts of history. If we remain in those ruts, we are with absolute certainty going to experience something very similar to what was experienced by other imperial democracies as their empires declined. If we do not change course in how we use energy and the abundant resources provided by that energy, then totalitarianism will be our fate.

The changes we need to undertake will be of a much different kind than that to which we are accustomed. There are myriad suggestions in print about how to reduce our resource consumption. I hold no illusions that I might print something of such power as to cause others, who have thus far been unwilling to make even small changes, to make much larger changes. But one should also be aware that our political culture drives our will to change, and we are about to see a window opened. As we round the top of economic growth and energy consumption, as we teeter on the downward slope, there will be a great questioning. There will also be a generating of mythology by competitive political movements that will serve to further obscure the roots of the change. Once we have slipped too far down the slope, the window for a conscious, purposeful, beneficial social revolution will close, probably for a long, long time. We should prepare for that window, and to what extent we can, help push it open. Right now that means making suggestions that seem impossible.

There are two kinds of challenges we face, which might be called political and ecological. Political change moves on a short curve, the pendulum swinging one way and then another in relatively short spans of time. Ecological changes move on a long curve, with large powerful changes occurring over greater spans of time. One of the primary purposes of this book has been to show that there is an intimate, if often invisible, relationship between the short curve and the long curve. The short curve of change compels our attention. The long curve moves like a

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1 Heinberg, Richard, *The Oil Depletion Protocol, A Plan to Avert Oil Wars, Terrorism, and Economic Collapse*, New Society Publishers, Gabriola Island BC, 2006, p.18

silent, mighty wave under the surface.

As smart and technologically sophisticated as we think we are, the evolution of culture remains blind, as it has been for thousands of years. The long curve of ecology, when the time comes, absolutely trumps the short curve of politics. And yet it is hidden from us. We will see enormous political changes -- I would argue that we already are -- triggered by deeper changes in resource availability. But as the ecological margins narrow, do not expect the powers that be to stand up and announce one day that these changes are occurring, that the changes you are seeing are based in environmental constraints. Both the stressors and our responses will be hidden by politics. The entire foundation of our culture will remain mythological, if we continue on our current path. The long curve ultimately drives the short curve, but without our knowledge of such.

The difference between heaven and hell for our children comes down to whether we follow the long curve, or lead it. What does that mean? In a simple material sense, leading the curve means reducing our resource usage more quickly than we are forced to do so. For example, when we arrive at a point when global oil resources are falling at 2% annually, if we reduce our actual demand by 4% annually, then we would be leading the curve, creating a surplus even in a time of contraction. Such a simplistic example should not be understood as the sum total of the change we need to undergo.

There is a terrible temptation, an overwhelming pressure, on Americans to remain within the status system of our culture, to behave as respectable middle-class people should behave. The majority of Americans identify themselves as environmentally concerned, but social pressure and tradition cause them to express that concern through minor modifications of behavior. That is following the curve, not leading the curve. If we change in slow increments, and we allow resource constrictions to blindly trigger the stress-responses built into our culture, that is the road to hell.

The changes we will need to undertake are of three orders:

- 1) We will have to create a socially intelligent society based on a systematic understanding of culture, of the unseen side of cultural evolution and how it influences us. A socially intelligent culture will pursue child-rearing and educational practices that maximize the intelligence and empowerment of youth and the society at large.
- 2) We will have to limit the growth of global and national population.

3) We will have to pursue a purposeful economic restructuring with the intent of creating an economic order that supports the kind of political and social structure in which we would want to live.

### Intelligent Culture, Conscious Cultural Evolution

For thousands of generations, humans have inherited their culture from their parents, their traditions, their ways of growing food, finding shelter, and living. Not only do we inherit our culture, but we are taught to be highly emotionally invested in differing institutions of that culture. But for all of those thousands of generations, never have a people been taught to systematically understand, or choose, the basic elements of their culture.

How can we teach people to understand their culture, its evolution, so they can be the building blocks of larger social organizations that are themselves intelligent? Our child-rearing and educational practices must be directed toward empowerment, not conformity. For the last hundred years, the leading educational reformers (John Dewey and Jean Piaget among others) have pointed out that passive education is not the most effective way to help children learn.<sup>1</sup> These reformers were coming at the issue primarily from the perspective of helping children learn, not analyzing the unrecognized functions of social institutions as such. They advocated active schooling, integrating learning and doing, teaching by directly engaging children in the activities that they need to learn about.

There have been numerous kinds of "schools" that seek to remake the conformist school by providing children more of a sense of empowerment in their educational setting. In the 1960s there were "free schools." Some of the charter schools in modern times operate on such models, and their number has grown. Some still call themselves free schools.<sup>2</sup> There is also an "unschooling" movement that seeks to reintegrate learning with doing, to essentially break down the walls of the

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1 Piaget, Jean, *To Understand is to Invent, The Future Of Education*, New York, Grossman Publishers, 1973, Dewey, John, *The Way Out of Educational Confusion*, Harvard University Press, 1931

2 The most famous of the "free schools" is described in Neill, A.S., *Summerhill, A Radical Approach to Child Rearing*, Hart Publishing Co., New York, 1961 Some contemporary free schools include Albany Free School, [www.albanyfreeschool.com/](http://www.albanyfreeschool.com/) and the Brooklyn Free School <http://www.brooklynfreeschool.org/>

school and help children learn about adult activities in the world by integrating them with those activities.<sup>1</sup> Wealthier parents have more resources to offer their children outside of school, whereas for working class and poor parents, they cannot easily homeschool, and have less resources to offer their children by way of experiences outside of their immediate circumstance (such as access to computers or travel). School has long been sold to the poor as a release from poverty. Opportunity is a powerful myth in our society. It is a lie. Poverty is purposefully managed in our society. No amount of job training or education will ever correct that.

We must maximize the social intelligence of all children, and empower them to understand and create the social institutions which shape their lives, our lives. That will involve a fundamental restructuring of what we call education.

The conscious society will not take social science as it exists in the Universities and disperse it to the masses. There has been valuable work done in sociology, psychology, and anthropology, often by academic misfits. But the kind of social intelligence we must develop must occur as a social movement among the people. It must at once seek a broader understanding of cultural evolution that is open-ended instead of blindly ideological even as it demands that that we defend the rights of future generations to a livable Earth. A conscious revolution, if you will.

The witch hunts weigh heavily on our society. Attempts will be made to escalate the hunt under conditions of economic contraction. The witch hunt feeds on ignorance. Many lower class people, particularly minorities, possess a social analysis that is far beyond academic sociology. They have to in order to survive. They are told so many lies, given so many deceptions, by the dominant society that seeks to exploit them or take advantage of them, they have to learn to see through all of that. How many academic sociologists conduct studies that tacitly or explicitly endorse the War on Drugs? How many black people, particularly from the working class, know that the War on Drugs is merely a disguised means of holding them down? In my experience, most. We should build on that.

Perhaps we will never be able to construct a society in which vested interests, or diverse interests, offer conflicting perspectives on issues that concern them. Perhaps we would not want to. But we can, and

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1 Griffith, Mary, *The Unschooling Handbook: How to Use the Whole World as Your Child's Classroom*, 1998, see also <http://www.unschooling.com/>

must, educate our youth, and each other, about the manner in which powerful interests obscure reality to hide and secretly advance their agenda. Witch hunting is a pattern that can be easily understood, and should be taught to every child in the world. A systematic education of the manner in which vested interests in the past have purposefully obscured our social reality would make the recipients of such an education more resistant to future deception.

At a psychological level, the heart of the intensification of production is emotional attachment. The process of intensification of production/ focalization of effort, bound up as it is with patriotism and loyalty, seeks to maximize personal emotional investment in the institutions of the state. That investment then makes many people blind, unable to think critically about those powerful institutions. What if a physicist were so emotionally invested in Newtonian physics that they would not allow any consideration of relativity? That scenario has in fact played itself out many times in the sciences as younger or more creative scientists find that they have to maneuver around entrenched ideas. In the social realm, the only means of such maneuver is politics, which lends itself more to ideology than systemic social analysis. The conscious society will direct attachment to immediate social circles. Trust your friends, not powerful leaders. Anything beyond that level would be subject to relentless scrutiny.

## Population

Any discussion of global or national ecological limits eventually leads to the issue of population growth. The first point to be made about population is that one American consumes as much as 300-500 Sudanese or Ethiopians, depending on whose estimate one cares to use.<sup>1</sup> In terms of reducing environmental impacts, in terms of influence over the globally held ideals of what constitutes the "good life," we Americans have more influence than anyone else in the world.

Having said that, the growth of population has enormous implications for our collective future. Population growth will ultimately come to an end, either by an elegant plan implemented by ourselves, or by more brutal means. The mainstream demographers and economists suggest optimistically that population will naturally peak and level off as a result of a global "demographic transition," such a transition being the

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<sup>1</sup> <http://www.mindfully.org/Sustainability/Americans-Consume-24percent.htm>  
They cite their source as Paul Erlich, author of *The Population Bomb*

natural tendency of wealthier and more urbanized peoples to have less children.<sup>1</sup> There are numerous problems with this theory. First, the Malthusian notion that people naturally have as many children as possible is wrong. Thomas Malthus himself was a very conservative Christian who saw the poor as sexually and morally degenerate. The truth is that stable cultures find their own means of stabilizing population growth. Many of the cultures disrupted by the advance of European colonialism were destabilized, which in turn unraveled their normal population control mechanisms. In 1922, Sir Alexander Carr-Saunders published an extensive survey of population limiting activities of pre-contact peoples. In speaking of the Murray Islanders, he noted that some cultures limited the number of children they had "lest the food supply become deficient." Many of these peoples limited the number of children they had to two or three. In the case of the Sandwich Islanders, some would rear only one.<sup>2</sup>

The population explosion in our time comes partly as a result of the growth of food supply allowed by industrialism and fossil fuel, but more so as a result of cultural disruption and the *purposeful* seeking of population growth. All of the European powers were imperial states that sought population growth. The powers that be in the U.S. want immigration to continue in order to keep the price of labor down. (I would not suggest for a moment that criminalizing and harassing immigrants is a solution.) The Russians are paying women to have children. The wealthy and powerful classes have for centuries benefited from the rapid growth of the population of the poor. Each player in the imperial battle wants more workers and more soldiers on their side. To stop population growth would mean, first of all, to stop *seeking* population growth.

Another problem with the current theory of demographic transition is that, even if it were possible, we don't have time at this point. Because of the contraction of the energy supply, the contraction of the global economy is going to begin long before populations reached their "natural" peak, if that peak even exists.

The final, and largest, problem with the current theory of demographic transition is that the spread of global democracy and industrial wealth is a lie, the largest piece of propaganda ever

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1 Brown, Lester, *State of the World 1987: A Worldwatch Institute Report on Progress Toward a Sustainable Society*, W.W. Norton and Co., New York, 1987

2 Carr-Saunders, A.M., *The Population Problem, A Study in Human Evolution*, Oxford, 1922, p.219-220



promulgated on the face of the Earth. Democracy, as we currently define it in the context of a class-based society, is the means by which economically empowered people express that power in a political context. The idea that everyone could someday be economically empowered, and thus democracy global, is an enormous lie. It defies the very structure of the modern economy. And it is also the great opiate of our time. If everyone thinks their circumstance is improving, even if there are difficulties in the present, then they are much more supportive of the status quo, much less rebellious.

The current regime of fiscal management and industrial organization demands an underclass. To a limited extent, this underclass has been segmented across national lines such that they are not able to direct their discontent toward the corporate parties who control their economic fate. But the economic need for this underclass belies any claim that we could ever be fully democratic under such a regime. The drive for political and economic dominion by powerful states is one of the fundamental forces driving population growth. De-escalating that conflict is key to our survival.

One of the primary factors affecting reproductive rates in any society, industrial or agricultural, developed or "undeveloped", are the social status, economic opportunities, and education provided for women. We saw the impact of that in the previous chapter about the abortion debate in the U.S. The impact is even larger in agricultural societies where the education level and economic opportunities provided for women have a substantive influence over their choices concerning the number of children they have. It is surprising to some to realize that even in areas where the population is impoverished and reproductive rates are high, most children are intentional.<sup>1</sup> Children are beneficial to many poor families who have little other opportunities. Providing economic opportunities for women is the single greatest contraception in the world.

### Economic Restructuring

A conscious culture would seek to be open and frank about the economic relationships between the wealthy countries and the rest of the world. Even our most liberal discussions about social issues in current times tend to obscure that reality. Liberals and conservatives alike are supportive of biofuel because they both are in denial of our economic

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<sup>1</sup> Rich, William, *Smaller Families Through Social and Economic Progress*, Overseas Development Council, 1973

relationship to the rest of the world. The economic system that sends the majority of the world's material resources and money through western economies fosters unsustainable population growth, ecological degradation, and political instability. While the strength of the industrial economies and the promise of democracy and progress make this circumstance stable to a degree under conditions of economic growth, the conditions of energy contraction will utterly destabilize the current international order if we do not change course. Our blind, Machiavellian, deception-oriented politics must give way to a culture that is purposefully intelligent, a culture that seeks more elegant solutions than brute power.

In economic terms, the contraction economy means a shrinking economy. If we redistribute what we have, then we can still have plenty in a time of contraction. The first battle is going to be over money. If you imagine a room with 20 people in it, 10 of them have a dollar each and are hungry (aggregate demand), and each of the other 10 have one small loaf of bread (supply). How much will a loaf of bread sell for? A dollar perhaps? Now repeat the experiment, but give the first 10 people 10 dollars each. The price of bread goes up (inflation). The volume of currency in circulation relative to the volume of products impacts the price. Now lets make it so that some people in our room have a lot of money and others have a little. There is still enough bread to feed everyone, but because of the disparity in wealth, some people might go hungry. Now lets add some extrapolation to our economy; hairdressers, massage therapists, people providing desired services that are not material services or critical to the survival of the people. How large of a service economy can be stacked on top of the material economy? A large one, evidently, because that is precisely what we have.

Still using the same scenario, we are going to start reducing the number of loaves of bread. All other factors -- disparities in wealth, a large service economy -- remain in place. There is still enough bread to feed everyone, but less than before. How do we contract the economy in an orderly fashion, without either recession (a collapse of trade) or skyrocketing inflation (excess aggregate demand relative to supply)? By taking some of the money out of the room. But the question becomes who do we take money from, the poor or the rich? Because of the disparities of political power, we have in the last few decades taken the money from the poor. If we had the political means to take money from the wealthy, even as the supply of bread (energy) decreased, we could deflate the economy in an orderly fashion up until the point of actual

scarcity. The successful implementation of a contraction economy is thus likely to be a highly politicized undertaking. The upper class will violently resist, and will employ all manner of political myth-making to forestall any such plan. Even if it should force a broader economic collapse, still they will resist. That in essence describes why the Great Depression was so vicious and enduring. There was a mighty struggle under the surface about who was to control the flow of currency.

At a conceptual level, the kind of economic transition we need to undertake is simple. Economists like to talk about "economies of scale," meaning that it becomes more "efficient" to make products in large factories, or in regions that possess particular attributes suitable to the production of specific goods. They do not tell you that every economy of scale is a dis-economy of energy. If a large factory makes loaves of bread, there are machines that conduct each specific operation in preparing, baking, and packaging the bread. Human hands never touch the product. A baker in a small bakery, on the other hand, touches each loaf of bread. The bread from the factory has more energy and less labor invested in it. The bread from the hometown baker, generally speaking, has more labor and less energy invested in it. One can say that New Zealand is well suited to grow apples, but shipping them in refrigerated containers to North America is not an efficient way to feed people. It is no coincidence that the growth of large-scale factories and globalization occurred in an age when our energy supply was expanding rapidly, and the cost of labor was rising. The scale of industry is invariably a consequence of the balance of the costs of labor and energy.

The comparison of large and small production processes is not simply a metaphor. Studies in numerous industries confirms the general pattern. When the auto industry replaced human welders with robots, the energy invested per unit of output increased.<sup>1</sup> Small farms all over the world are more efficient than large farms, but large farms dominate because they have much better access to the flow of capital and thus can withstand the vagaries of seasonal and market changes.<sup>2</sup>

Ultimately, producing goods more efficiently is of no use if we do not address the throughput economy. But there again, that can be done by downscaling. We can produce less, consume less, and generate

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1 Ward, Barbara, *Progress for a Small Planet*, W.W. Norton and Company, 1979, p.128-130

2 Lipton, Micheal, "Creating Rural Livelihoods: Some Lessons for South Africa from Experience Elsewhere, *World Development*, Vol. 21, No. 9, 1993, p.1515-1548

employment all at the same time by producing and consuming on a smaller, more local scale. That is leading the curve.

Economic downscaling is central to everything we must accomplish. We are headed, soon perhaps, for macro-economic and ecological conflict that can be successfully managed if we downscale, and will guide us straight to totalitarianism if we do not. One conflict will be over food. Given that the margins within the global food system are tightening, given that oil prices are escalating, given the global market dispartes between the rich who own cars and the poor who struggle to find enough to eat, we may soon face a direct conflict between feeding people and feeding cars.<sup>1</sup> Private cars are simply unsustainable, never mind how "efficient" they might be.

We wealthy westerners are also going to have to eat fewer animal products. People often take it terribly personally when you say that. I don't know why. Apart from the ethics of the issue, apart from even the food-vs-fuel competition, in our age of industrial agriculture, food is energy and energy is food.<sup>2</sup> We have grown accustomed to a rich and fatty diet that contains an enormous amount of embedded energy. We cannot live that way forever. We only get to choose whether we lead the curve or follow it.

Local currencies are part of the solution. The American dollar is the dominant currency for global trade. Controlling the global trade currency provides enormous benefits to the American economy as every nation on the face of the Earth must have access the currency of the dominant trade partner. Dollars are the currency of the global oil trade. (Saddam Hussein wanted to sell his oil for euros. To what extent that influenced his fate is a matter of conjecture.)<sup>3</sup>

We have grown so accustomed to centralized currencies in our time that we can hardly imagine anything else. But the truth is the age of centralized currency grew with centralized production, based as it is on cheap energy. In U.S. history, for instance, the eastern industrialists in the early 1800s favored a "tight money" policy that favored restricting the money supply, keeping it based in gold and silver, and not printing paper money. As the colonists displaced the indigenous population and moved westward, the supply of restricted eastern currency was

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1 Brown, Lester R. , *Starving the People To Feed the Cars*, Washington Post, Sunday, September 10, 2006; Page B03

2 Pfeiffer, Dale Allen, *Eating Fossil Fuels: Oil, Food and the Coming Crisis in Agriculture*, publishers unknown

3 <http://usgovinfo.about.com/library/weekly/aa021601c.htm>

inadequate to the desires and needs of burgeoning towns. The solution was that in nearly every town of any size, a bank was established, and that bank issued notes that served as currency. By the time of the Civil War, there were about 7000 local currencies in circulation. Vendors kept a phone-book sized registry of all the currencies and all known forgeries. Local currency built the mighty U.S. economy.<sup>1</sup>

The most successful local currency system currently in the U.S. is in Ithaca, New York.<sup>2</sup> In other parts of the world, local currencies are used more, as in Australia where the government supports the development of local currencies in small, remote towns. Many local currency projects have struggled in the U.S. In spite of the economic constrictions that the lower classes have faced in America, we are still a very centralized economy with a currency that is relatively plentiful. Local currencies exploded in the Great Depression.<sup>3</sup> Local currencies will likely be an important part of a contraction economy.

If you listen to the news every day, then every day you are offered stories about how projects all over the world need, and lack, adequate funding. But given that money is a created medium of arbitrary value as assigned by the creator of the funding, what does it tell us that development projects, or aid projects, all over the world lack an adequate supply of this stuff called money? It tells us how much control the western industrial powers have over global trade, the flow of resources around the world. You need an American dollar to buy goods produced in America. The national and global currency systems are going to have to be decentralized, localized. The currency system must match, in form and function, the economy itself.

The local recirculation of currency has enormous impacts. When a dollar (or a unit of local currency) is spent locally, it is respent locally 5 or 6 times before it leaves town. This is called the multiplier effect. Money given to centralized retailers (i.e. chain stores) leaves town immediately.<sup>4</sup> The combination, then, of local currencies, re-spending of local and national currency on a local level, and the downscaling of

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1 Galbraith, John Kenneth, *Money: Whence it Came, Where it Went*, Houghton and Mifflin, Boston, 1975

2 <http://www.ithacahours.com/>

3 Greco, Thomas H., *New Money for Healthy Communities*, Thomas H. Greco, Publisher, P.O. Box 42663, Tuscon, AZ., 1994

4 Gunn, Christopher, and Gunn, Hazel Dayton, *Reclaiming Capital, Democratic Initiatives and Community Development*, Cornell University Press, Ithaca, 1991

production can increase abundance even as the total resources consumed are reduced. We can produce plenty even in a time of contraction, but not by making minor improvements in efficiency to our American lifestyle. Such plenty demands that we substantially re-organize production, agriculture, and the distribution of goods and services.

Decentralized production that uses less energy and more labor will make the use of smaller-scale, alternative energy technologies more economically viable. The desire to paint alternative energy over the American lifestyle -- to power suburbia with wind and solar, to power our cars with "renewable" fuels -- is very misguided. Those energy sources cannot keep up with our current level of consumption, and trying to do so will only escalate the environmental problems which we face. Solarizing American suburbia is expensive, so much so that it is rarely done. If one were to try to take the solarized American suburb and export that model to the peoples of the world, then the model is utterly inviable.

Cooperative and communal organizations have more power to reduce resource consumption than any material technology. That may sound terribly odd to the average American given that we are such an individuated society. People cherish their "homes" and cannot imagine living any other way. The single family house is an adaptation to individualized wage labor, to capital accumulation and status differentiation expressed by the home "estate." All of those things are tied to the growth economy. An ability to change wisely will, as with many civilizations before us, determine our future survival.

Up until a few thousand years ago, all humans lived in cultures where the essential fabric of the society was kinship and relationship. The American individuated lifestyle is a very recent historical invention, an incredible anomaly compared to how most of humanity has lived throughout its history, and how much of humanity continues to live. There are modern groups in the U.S. who maintain communal and cooperative cultures. Some of them are religious groups who wish to maintain an identity separate from the mainstream, but some are simply groups of people who want to live communally, who want to live more lightly on the land. (See the footnotes for some resources.)<sup>1</sup>

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1 The easiest way to examine the modern communities movement is at the site [ic.org](http://ic.org). The "ic" stands for Intentional Community, and the site is run by the Fellowship for Intentional Community. They publish a directory as well that may often be found in libraries. *Communities Directory: A Comprehensive Guide to Intentional Communities and Cooperative Living, Fourth Edition*, Fellowship for Intentional Community, Rutledge, Missouri, USA 2005; ISBN:

Alternative energy is much better suited to cooperative housing, community economies, and efficient mass transportation. Fossil fuels allow the application of concentrated energy on demand, often through simplistic devices. Alternative energy sources are more dispersed, and often require more elaborate mechanisms. To put that more succinctly, a gas-fired furnace is a simple, cheap machine. A set of solar panels is more expensive, but deliver energy at a much lower long-term cost. The mix of alternative energy and cooperative living is powerful. If you spend the money and resources to develop and install alternative energy systems, then only a small increment of expense is necessary to make those systems serve more people. For example, a residential solar hot water system can, for relatively little added expense, serve a dozen people, thus the cost per person plummets. That is but one example of the possibilities that are opened up once we reach the level of being able to choose our own culture.

The reality is that we will all live in more communal and cooperative societies eventually, as our forebearers before us because such an arrangement is so much more efficient. We tend to see our own values, our own social organization as being something more than a simple choice. Our future survival will depend on our ability, our willingness, to consciously choose our social order.

### The Issue of Power

This book in some sense side-steps the entire issue of power. We have avoided focusing on the short curve to some extent to look at the long curve. Who is in charge in a current political sense is important. I have worked as an activist all of my adult life. I consider it to be the highest calling. We must not lose our vision of the long term while we struggle in the moment. But it begs the question, is leading the curve even possible without addressing the problem of who holds political power, particularly in the U.S.? The inverse question is also relevant; Is it possible, or more viable, to change who holds power by rebuilding a grassroots, decentralized economy in the shell of the old economy? There are no simple answers to such questions.

If we elected the right politicians, it would not do much to repair the long curve, the ecological crisis of our time, nor our pending confrontation with its power. The growth rates of pollution and energy use have historically responded to scarcity and pricing, not to which

party is in power. The demand for growth is uniform across the political spectrum. Enlightened leadership would offer some resources in addressing our environmental crisis, but it would not change the fundamental illusions built into our economy.

If one understands that beliefs grow out of economic relationships, then the conservatism of the U.S. can be understood as, at least in part, a result of our changing relationship to the rest of the global economy. The class contradictions, the legitimate resentment of the working class against the wealthy who profit from their labor, has been shipped overseas. Non-citizens hold no vote here. The majority of Americans own stock. In as much as the U.S. economy operates at the expense of peoples all over the world, it is not surprising that the beliefs and attitudes of our nation would tip in a direction that justifies an aggressive foreign policy. This insight is, among other things, a cause for hope. There are a lot of people on the Earth who are not wearing our blinders.

If we want to develop a more conscious culture, a society that purposefully directs the development of its own infrastructure to strategically influence the shape of the future political culture, that cannot happen overnight. The public needs to be informed about the many issues that could impact our future. The largest obstacle to informing the public about anything currently is the consolidation of corporate power, particularly corporate media. There are many alternative and community media projects growing in response to corporate media consolidation. They deserve our support.

When speaking publicly about the need for change at a deeper level, someone invariably asks me the question; "What about capitalism. Can we hope for any major social reform in a capitalist society?" It's a peculiar question really. If my neighbor grows a few tomatoes and takes them down to the farmers' market, then that's called capitalism. When ExxonMobil sells gasoline, after having manipulated public opinion and American politics with its power, that is also called capitalism. Some people even refer to the U.S.S.R. as "state capitalism," whatever that means. There is reciprocal distaste for "communism" that comes from the other end of the political spectrum. The communist label has been stuck on a wide diversity of governments, from democratic to totalitarian, small to large, politically pluralistic to homogeneous. At some point you would just as well say "good guys" and "bad guys" given how little these words mean once they get stretched so far.

Adam Smith was strongly opposed to corporate centralization.



He also spent more time writing about ethics, about the importance of a morally responsible society, than he did about economic relationships.<sup>1</sup> It is also enlightening to note that there have been dozens, if not hundreds of communistic movements, many of them messianic as we mentioned in the discussion of witch hunting. The early Christians were certainly "communists." It is a natural and moral response, in times when there is great poverty as well as a concentration of wealth among the ruling class, to imagine and advocate for a society where each share, "each according to their need, each according to their ability."<sup>2</sup>

Ideology as it is espoused by the leaders of the dominant powers is as cheap as ink on paper. Cynical leaders have for centuries spoken about the common good, in the name of freedom, democracy and capitalism, in the name of communism, while they claw and grasp for power. Perhaps unstable and highly competitive political circumstances, which are themselves the outcome of ecological instability, invariably lead to such outcomes.

A conscious society would be immune to manipulation from any leader. We humans evolved in face-to-face groups. We are hard-wired (genetically pre-disposed if you wish) to understand a social order on that level. We do not have a category in our minds for "president" or "king," so presidents and kings try to present themselves as benign and protective fathers. It is a terrible and effective lie. A conscious society would seek to empower, to construct social identity based primarily in local social groupings over which the individual has influence. We must purposefully choose our dependencies, not take what is given to us.

The conscious society would seek to reconstruct an alternative economy in the shell of the old regardless of what is happening on the political level. The empowering of people from the local economy upwards is the foundation to redress the abuses of power that occur at higher levels of power. We don't have to wait on anyone. Power has consolidated in America in the 21st century. Politics is a "winner take all" game. We failed to stop the invasion of Iraq. Corrupt politicians get elected and we feel demoralized. Rebuilding economy and refocusing identity locally would leave us immune from demoralization.

The teaching of powerlessness is a purposeful, systematic process that in affect makes our society more powerful in the short term

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1 Korten, David C., *When Corporations Rule the World*, Berrett-Koehler, Kumerian Press, West Hartford, 1995

2 Harris, Marvin, *Cows, Pigs, Wars and Witches, The Riddles of Culture*, Vintage Books, New York, 1978

but less adaptive in the long term. In our time, the distance between the individual and the larger institutions of society is enormous. We stand at the foot of the powerful organs of government, the unassailable corporate behemoths. The conscious economy would seek to empower all people to the greatest possible degree at the local level. When people are actively involved in the management of their own economic affairs, they feel more empowered to stand up to the larger institutions of society. There are numerous sociological studies that point out as much. Those people are involved in local civic organizations of any kind -- unions, local political parties, clubs -- feel much more empowered in their relationships with the mammoth institutions of our society.<sup>1</sup> People who are disengaged at the local level feel powerless on the national scale as well. We teach that powerlessness, particularly to the lower class, as they grease the gears of industry with their sweat.

Most of our economy -- food, textiles, services, many manufactured goods -- could be produced more efficiently (defining efficiency as the use of energy, not the price of labor) on a local level. But localization is as important psychologically as it is materially. All powerful social change movements have used local "consciousness raising" groups, cells, or similar structures to build a social network that can offer personal support to people as they make changes in how they live, and changes in how they address power in their own spirit. Traditionally, many groups, from the early Christians to many modern revolutionary groups, built a state within a state, providing social services to needy people to win their support for the new ideology. There is an odd competition over who is allowed to provide social service. In the U.S., the social service agencies we have were created in part to crowd-out more radical groups.

We must reconstruct local economies as building blocks of the conscious society. The conscious society will not buy its entertainment, its spiritual direction, nor its products from the centralized powers. It will maximize the intelligence, will, and economic power of all of its citizens.

There is a liberal notion that the dispersion of information automatically makes things better. We have lost the distinction between knowing and doing, between information and will. How many people read, attend endless workshops, and are moved to no passionate action? Is not the destruction of the very Earth on which we live, the very foundation that underlies every civil liberty that we hold dear, not worthy

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<sup>1</sup> Rosenberg, Shawn W., Dana Ward, Stephen Chilton, *Political Reasoning and Cognition, A Piagetian View*, Duke University Press, 1988, p.77-79

of every ounce of rebellion we can muster? Everything you hold precious is at stake. We cannot redress the challenges of our age with "what you can do personally" solutions. Your job, your family, the natural world that is not only beautiful but the sustaining force of life on Earth, all of these will be crushed under the weight of the blind culture as it reacts to economic contraction if we do not act. We have an alternative. We do not know what sacrifices may be demanded of us in the future, but the only sacrifice demanded of us now is that we break the chains of conformity. There is a terrible pressure to remain respectable. We must break that mold. We must act, in concert, and in doing so set the example that emboldens others to act. We must build a movement unprecedented in human history. Every large scale, powerful movement that has ever moved humanity has done so at the price of putting blinders on its followers. We have used ideological motivation to displace enlightenment. We have put the heart against the mind. We must bring them back together.

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### Further Reading and Sources

The following is a list of authors, many of them not well known, that I have found most useful in understanding the deeper roots of contemporary society. All of these authors are listed in the index so you can find where their material is used in the book. Naturally, this list is not intended to be exhaustive by any means, but rather to point the reader to writers that are often less than famous.

The writer who has had the greatest influence on my own thinking was Marvin Harris. He was a provocateur who loved a good argument, but he also had the courage to write in plain language about the cultural evolution of humanity. His protein theory is a bit over-extended, but his two books *Cannibals and Kings* and *Cows, Pigs, Wars and Witches* are perhaps the most insightful books about human cultural evolution ever written. His numerous other books are useful as well. He was part of a school of Ecological Anthropology that was prominent a few decades ago that did most interesting work, including such writers as Richard Lee, Esther Boserup, Mark Nathan Cohen, Robert Carniero, and others.

The most profound exploration of the ecological roots of technology can be found with Richard Wilkinson's *Poverty and Progress*. Every child in America should be given this book.

The most useful overviews of the evolution of women's roles I have found are Maxine Margolis' *Mothers and Such* and Charlotte O'Kelly *Women and Men in Society*. Riane Eisler's *The Chalice and the Blade* is also useful.

Thomas Africa is the most readable historian of Roman history I have found, including his Roman history, *The Immense Majesty and Science and the State in Greece and Rome*.

An informative writer discussing modern economic issues and structural poverty (not his term) is Bernard Nossiter's, *Fat Years and Lean*. John Kenneth Galbraith remains a foundation stone among open-minded economists. I have found his *Money, Whence it Came* useful in understanding the role of money in our society. Thomas Greco's *New Money for Healthy Communities* is a useful look at local currencies.

Environmental writer Lester Brown is quoted in numerous places in this book. I am pleased he has weighed in on the potential social impacts of biofuel. He is the author of numerous books and papers. David Pimentel has been writing about food and energy issues for many years, and Dale Allen Pfeiffer more recently joined the fray. John

Robbin's *Diet for a New America* remains a most enjoyable book to read about food issues.

All of Susan George's writing is useful. Though some of it is a bit dated now, her books about world hunger *How The Other Half Dies: The Real Reasons For World Hunger* and *Ill Fares the Land* remain very important insights into world hunger. (Frances Moore Lappe covers some similar ground.)

A very sober book about how the "third world" became third in line can be found with Mike Davis' *Late Victorian Holocausts*. The drug wars are best understood through John Helmer's *Drugs and Minority Oppression* and Alexander Cockburn's *Whiteout, The CIA, Drugs, and the Press*.

Raymond Callahan's, *Education and the Cult of Efficiency*, Joel Spring's, *Education and the Rise of the Corporate State*, and more recently, John Taylor Gatto's *The Underground History of American Education* tell the hidden side of American education well.

Reading Piaget is a bit slow, but I find his work most useful. Once you understand his general theory of child development, then *The Moral Judgement of the Child* becomes the bridge to seeing the political side of developmental manipulation. *To Understand Is to Invent, the Future of Education* is another of Piaget's most useful books. And no discussion of education is complete without A.S. Neill's *Summerhill*.

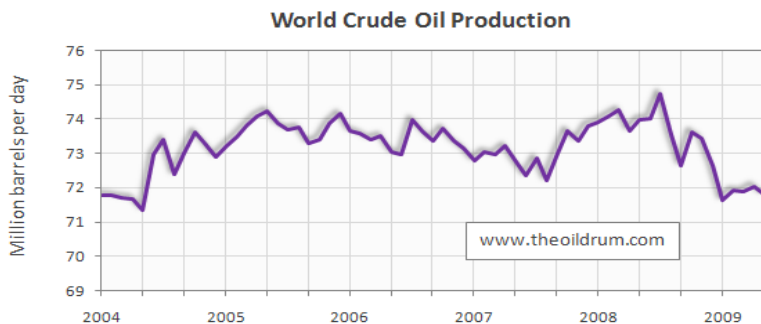
Among the people writing about peak oil, I have found Mathew Simmon's, *Twilight in the Desert*, and Richard Heinberg's, *The Party's Over* and *The Oil Depletion Protocol* to be the most useful. Colin Campbell's *Oil Crises* is also useful.

### Dancing on the Edge of a Precipice

Addendum to  
*Culture Change, Civil Liberty, Peak Oil, and the End of Empire*  
March 3, 2010

This chapter is not included in the index

In the couple of years since *Culture Change* was first published, much has changed. *Culture Change* predicted that in 2007 we were "at or near" global peak oil production, and that we would face a "large economic contraction" as a result.<sup>1</sup> In July 2008 oil production hit an all-time high of 74.8 million barrels per day and oil prices reached an unprecedented height of \$147.27 in daily trading.<sup>2</sup> Since then, the global economy has collapsed into a severe recession. Oil prices have oscillated wildly, and oil production has declined as global demand has decreased. Meanwhile, production from the giant oil fields which make up the lion's share of global production has continued to decline.



(Source, see <sup>3</sup>.)

There is a growing consensus, at least among those concerned about peak oil, that the July 2008 peak of production will probably remain as the all-time historic high for global oil production.<sup>4</sup> As of the

1 Zeigler, Alexis, *Culture Change: Civil Liberty, Peak Oil, and the End of Empire*, Ecodem Press, Charlottesville, 2007, p.15, 41.

2 Oil production numbers from <http://www.postcarbon.org/peak-oil-day>

3 <http://europe.theoil drum.com/node/5678#more>

4 Heinberg, Richard, <http://www.postcarbon.org/peak-oil-day>

"On July 11, 2008, the price of a barrel of oil hit a record \$147.27 in daily trading. That same month, world crude oil production achieved a record 74.8

most recent measure, more than 60% of oil producing nations are past peak and are now in permanent decline.<sup>1</sup>

And the response has been.... silence.

Among peak oil devotees, the discussion has continued; but in the popular media, the concept of peak oil has been all but forgotten. We have stopped talking about the most powerful limit to growth humanity has ever faced just at the precise historical moment that it sinks its teeth deeply into the global economy. The irony is mind-boggling. The impacts of peak oil are transforming our political culture before our very eyes, but the connections between ecological limits and political change remain absent from public awareness. These changes demand with new urgency that we address the problem of blind culture, of finding a way to make our society socially intelligent.

#### Did Peak Oil Cause the Global Economic Crash of 2008?

The explanations offered for our current economic malaise tend to focus on the housing bubble, and on reckless investments. And while many "peak oilers" were correct in predicting that there would be some kind of downturn, the precise timing and magnitude of such economic drama can never be predicted with certainty. Though there are many "causes" for the current economic downturn, one can be certain that the availability and limitations of energy supply have had an enormous impact.

The prescient question is; why did we have a housing bubble in the first place? *Culture Change* discussed at some length the role of automobiles and housing in the consumer economy. With a growing energy supply, new money can be "printed" in ever growing volumes to accommodate and spur economic growth. Prior the run-up in oil prices the Federal Reserve in the early 2000s kept interest rates very low precisely with the intent of urging the increased consumption of housing and automobiles. With the rapid escalation of oil prices, the Federal Reserve was faced with a no-win situation. They ramped up interest rates

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million barrels per day." "Maybe it's a stretch to say that the production peak occurred at one identifiable moment, but attributing it to the day oil prices reached their high-water mark may be a useful way of fixing the event in our minds. So I suggest that we remember July 11, 2008 as Peak Oil Day."

1 <http://www.theoil Drum.com/node/5576#more> and at <http://truecostblog.com/2009/07/14/is-peak-oil-real-a-list-of-countries-past-peak/>

to try to tame inflation, but that put strong downward pressure on the housing market, which runs almost entirely on borrowed money.

A number of prominent economists have pointed out the relationship between oil, interest rates, and the housing market:

*"Every major and minor recession in the past 38 years was preceded by a rapid increase in prices and expenditures on petroleum. This does not mean that recessions are caused, or caused solely by increasing oil prices or expenditures on petroleum, rather that it is a common pre-condition for recessions."* David Murphy, EROI Institute<sup>1</sup>

*"Oil shocks create global recessions by transferring billions of dollars of income from economies where consumers spend every cent they have, and then some, to economies that sport the highest savings rates in the world."* Jeff Rubin, CIBC, Canadian Imperial Bank of Commerce<sup>2</sup>

*"A rise in energy prices -> increased inflation -> higher short term interest rates -> a slowdown in credit-sensitive sectors of the economy such as housing and lending -> a general slowdown in the economy as a whole."* Steve Ludlum<sup>3</sup>

With freshly printed money flowing from the U.S. treasury like a mighty river in the early 2000s, investment became a pyramid scheme. As long as more and more money was put into the system, any manner of "derivatives" with no actual value in the material world made money. Houses were built and sold to an ever-widening market with little concern for the long-term payback of debt.

The flattening of global oil production was a pivotal factor in causing the oil price surge of 2008. Granted, a large amount of investment capital moved into "commodities" and helped fuel the fire. But that fire would have been quenched before it became an inferno if there had been significant oil available in excess of demand. Anybody who had extra oil would have dumped it on the market when prices shot up to near \$150 a barrel. The lack of oil available above demand in the face of relentless growth of consumption in the developed and developing world allowed the speculators to drive the frenzy further than it might have otherwise traveled based on normal supply and demand

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1 Murphy, David, <http://netenergy.theoildrum.com/node/5304#more>

2 Rubin, Jeff, <http://www.theoildrum.com/node/4727>

3 Ludlum, Steve, <http://www.theoildrum.com/node/5326#more>



interactions. Were it not for the underlying limits of production, they simply couldn't have gotten away with that kind of pricing.

With the stunning collapse of the global financial system, oil prices plummeted. And now oil prices are surging again, albeit at a less frenetic pace than in 2008. Again, limits of supply underlie the rise in the price of oil. Were it not for the restriction in supply, the recent escalation of oil prices to the mid \$70 range in 2009 would not have happened.

Where do we go from here? Oil prices will oscillate, as will the economy, but oil prices will never fall again to their "normal" historic lows. The economy may experience periods of limited growth, but **large-scale economic growth is over forever**. This is little more than common sense; economic growth is dependent on an increasing supply of energy. Human culture -- how we see the world -- is made up of equal parts illumination and suppression. Every politician survives in our time on promises of renewed growth. President Obama's budget forecasts growth at greater than 3% this year, and greater than 4% in the years to follow.<sup>1</sup> In the media and popular culture, there remains no recognition of the limits of growth in an era of declining energy supply.

### Oil Supply Constraints and the Rise of the New Caesars

The economic fallout of peak oil is rippling its way through our economy, but we are being distracted from the realities of what is occurring around us. The Housing and Urban Development Department recently released the stunning claim that the *"number of homeless has remained steady since 2007."*<sup>2</sup> Meanwhile, in the real world, newspapers are reporting *"61 percent of local and state homeless coalitions say they've experienced a rise in homelessness since the foreclosure crisis began in 2007."* (MSNBC),<sup>3</sup> *"Cities Deal With a Surge in Shantytowns"* (NY Times),<sup>4</sup> and *"There are reports of tent cities popping up across the country as unemployment rises in a worsening economy..."* (Huffington

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1 *Obama Budget Relies on Rosy Economic Forecasts*, Wall Street Journal, By WSJ Staff, February 26, 2009

2 Homeless Numbers Include More Families, KEVIN FREKING, Associated Press Writer Kevin Freking, Associated Press Writer, [http://news.yahoo.com/s/ap/20090709/ap\\_on\\_go\\_ca\\_st\\_pe/us\\_homeless\\_american](http://news.yahoo.com/s/ap/20090709/ap_on_go_ca_st_pe/us_homeless_american)

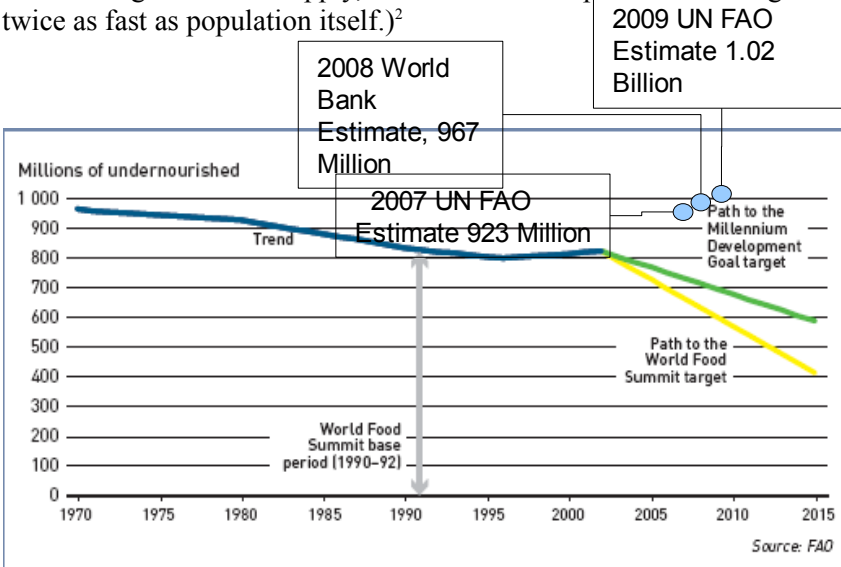
3 Associated Press, Thurs., Sept. 18, 2008

4 Jesse McKinley, March 25, 2009,

<http://www.nytimes.com/2009/03/26/us/26tents.html>

Post)<sup>1</sup> The social impacts of the global financial meltdown are rippling their way through the American economy, though we are loathe to admit it.

The economic impacts of the limits of oil supply extend well beyond the border of the United States. Globally, the number of hungry people in the world was decreasing up until the mid 1990s. Beginning then, because of the global debt crisis and the austerity measures imposed on poor countries by the International Monetary Fund, hunger began to climb. Since then, hunger is on a steepening curve upward because of the rapid expansion of biofuel, the expansion of meat consumption among the global upper class, and the impacts of global warming on agricultural production. (Biofuel is now consuming about 5% of the global food supply, and meat consumption has been growing twice as fast as population itself.)<sup>2</sup>



See source at <sup>3</sup>.

1 *A Tent City Near You? Tell Us About It*, March 13, 2009 10:10 AM

[http://www.huffingtonpost.com/2009/03/13/a-tent-city-near-you-tell\\_n\\_174609.html](http://www.huffingtonpost.com/2009/03/13/a-tent-city-near-you-tell_n_174609.html)

2 <http://www.theoil Drum.com/node/2431>, Brown, Lester, *Plan B 2.0; Rescuing a Planet Under Stress and a Civilization in Trouble*, Norton, NY NY, 2006, p.176

3 *World Bank: Global Food and Fuel Crisis Will Increase Malnourished by 44 Million*, Press Release No:2008/107/EXC

UN FAO: Briefing paper: *Hunger on the rise, Soaring prices add 75 million*

Why is the United States in an undefined "War on Terror" with no end? The graph above tells the story. When this graph was first created, the authors optimistically predicted that hunger would fall on one of the two lines to the right of the graph. The dots inserted show what has actually happened since the creation of this graph.

For every person starving in the world, there are many who suffer less severe privation. The upturn of hunger is a stark manifestation of the global polarization of wealth, driven to ever more bitter manifestations by a contracting energy supply. Revolutionary movements, congealed by religious fervor, are the face of the reaction from the bottom. The "War on Terror" is the witch hunt from the top down. The escalating war on terror cannot be ended by a change of administration or policy. It can only be ended by a fundamental restructuring of our economy.

We live on a finite Earth. That is obvious. Oil production has been declining, and we will likely never again surpass the production levels reached in 2008. Stalled oil production has triggered an economic contraction. But the connections between oil supply and political change remain hidden from us. Global class warfare under the banner of the "War on Terror" is escalating even as tent cities pop up around American cities. Meanwhile, the U.S. has elected the first black president, a Democrat who has promised to bring a more thoughtful and humane approach to politics in our country. The Bush administration was blamed for many of the ills that developed under its reign, but are those policies and problems being reversed? Or are they continuing to grow, fed by unrecognized resource constraints?

President Bush was vilified for his assertion of unlimited power in a time of war under the title "Commander in Chief." The Bush Administration set up the prison at Guantanamo Bay, ordered the military incarceration of "enemy combatants" without judicial review, ignored long standing principles of habeas corpus, set up military trials resembling those that operate under dictatorships around the world, established targeted killing of enemies on foreign soil, established a policy of the "rendition" of enemies to foreign governments or secret prisons where they might be tortured, ignored the Geneva Conventions concerning the treatment of prisoners, approved the use waterboarding and other forms of torture on prisoners, and established an extensive

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*people to global hunger rolls*

<http://www.fao.org/newsroom/common/ecg/1000923/en/hungerfigs.pdf>  
<http://www.fao.org/news/story/en/item/20568/icode/>

domestic spying program. How has President Obama responded to these challenges that he inherited?

*"Obama is actually strengthening (rather than "changing") the Bush/Cheney approach to Terrorism even more effectively than Bush did by entrenching those policies in law and causing unprincipled Democrats to switch from pretending to oppose them to supporting them, thus transforming them into bipartisan dogma."* Glenn Greenwald, Salon online magazine<sup>1</sup>

*"The new administration has copied most of the Bush program, has expanded some of it, and has narrowed only a bit. Almost all of the Obama changes have been at the level of packaging, argumentation, symbol, and rhetoric."* Jack Goldsmith, The New Republic<sup>2</sup>

*"If you mean the actual policy of how are we detaining people, how we are monitoring communication in order to gain intelligence, what we are doing with Predator drone strikes in Pakistan and so forth, the substance of what is happening now, and what was happening on, say, January 20, 2009 before noon, when Bush was president, is very similar, and there's some superficial changes like they're going to try to close Guantanamo, but the policy of indefinite detention without trials for terrorism suspects who are deemed too dangerous to release, but too difficult to put on trial, remain. So the essence of that policy is the same, whether it's at Guantanamo or somewhere else. Charlie Savage of the New York Times<sup>3</sup>*

There is no objective way to measure President Obama's record on civil liberties or to weigh that record against his more ameliorative statements on foreign policy issues. But, to re-frame the question: Imagine we are back again in the year 1999, ten years ago. Imagine that we could foresee the future enough to know that a Republican

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1 <http://www.salon.com/opinion/greenwald/radio/2009/07/02/savage/index.html>, Glenn Greenwald  
Thursday July 2, 2009

2 <http://www.tnr.com/politics/story.html?id=1e733cac-c273-48e5-9140-80443ed1f5e2&p=1>  
Jack Goldsmith, May 18, 2009

3 <http://www.salon.com/opinion/greenwald/radio/2009/07/02/savage/index1.htm>  
1 Thursday July 2, 2009

administration would be followed by Democratic one. Would you have guessed at that time that the aforementioned policies of detention without warrant or trial, domestic spying, expansion of the war in Afghanistan, or oversees rendition and execution would be unfolding as they have under a nominally liberal president?

Getting lost in the right-vs-wrong, ethics-vs-political necessity debate only buries the truth about what is currently unfolding in our society deeper in the mythological mud. The reality is that the United States is changing. We are part of an aging Empire that is now facing a constriction of energy supply, which will in turn exacerbate the impacts of other ecological and resource limits. Put simply, if the global supply of energy and resources is shrinking, and if the global upper class is intent on maintaining its lifestyle at current or expanded levels, the consumption of the rich must be supported by a reduction of consumption among the poor. If the energy pie is shrinking and we intend to continue to eat the same or more, than everyone else must eat less. What are the political and cultural ramifications of these changes? They are manifest in the changes we see in our political system. Maintaining current levels of consumption demands strong-handed intervention around the world, as well as growing state power at home. The number of starving people on the Earth has been growing substantially, and the number of people left out of economic growth has been growing even more rapidly. This economic polarization will of necessity breed political resistance. But we are loathe to recognize that our economic choices drive political change in our own society. We want to see ourselves as the masters of our own destiny. Now we have "liberal" democrats pursuing policies that we could not have imagined ten years ago. These changes are driven by the structural changes in our society, in our economy, and will continue to be so in the future.

The moral fabric of our society is not created by our conscious intent, even if we are hell-bent on believing that we are the conscious masters of our political universe. If we allow the ecological and economic foundation of our society to unravel, then the impacts of that unraveling will be overwhelming, and will be far more powerful than our ability to overcome poverty, racism, sexism, homophobia, or any other form of oppression by means of moral exhortation.

We see the unthinkable before us; large-scale domestic spying and state sanctioned extra-judicial killing around the world, initiated by conservatives but emboldened and carried forward by liberals. Large scale economic growth is over -- forever. For now President Obama is

trying to clean up the mess he inherited. Soon, it will be his mess. Already, there is a vocal movement on the far right to vilify him. When the economy takes its next dip, or fails to recover as his presidency matures, he will be blamed. It is hard to say exactly which social movements will succeed, or what symbolism they will employ or precisely what policies they will enact. The general trends are, however, predictable. The form of civil liberty that we have enjoyed until now was a product of economic growth. The demand to maintain very high levels of consumption under conditions of constricting energy supply will demand a further concentration of state power and a very aggressive foreign policy. Just as Caesar Augustus took Rome from being a limited democracy back to a dictatorship, our presidents will in the coming years enforce whatever measure of state power necessary to maintain access to resources. Civil liberty has always been to some extent constrained by class status. Civil liberty will become increasingly limited by class status as this process matures.

### Real Problems, Real Solutions

If you listen to the news every day, you will hear stories about bombings in Iraq and Afghanistan, the health reform debate, the state of the economy and the timeline for recovery, perhaps a story about the latest organization to take a stance for or against gay marriage. The myopic nature of our political and academic debate is dangerous. Instead of building the machines we will need to support ourselves as energy supplies decline, we continue to use the steel, glass, electronics, and energy to build the old economy. Even the most radical news outlets rarely mention limitations of energy supply, or the other limits we inevitably face.<sup>1</sup> And even then, a recognition of the connections between the limits of energy supply and current political changes is utterly absent.

The limitations we face are going to manifest in ever-hardening

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<sup>1</sup> We face innumerable limits to continued industrial growth on the Earth, and each of these limits it made more difficult by decreasing energy supply. Resource substitutions, such as using steel instead of wood as a building material, requires more energy. Limits such as soil erosion, water supply, declining mineral ore density are each made more difficult by declining energy supply. See Meadows, Donella, Jorgen Rogers, Dennis Meadows, *The Limits to Growth, The 30 Year Update*, Chelsea Green, White River Junction, VT, 2004 or Heinberg, Richard, *Peak Everything, Waking up to a Century of Declines*, New Society Publishers, Gabriola Island BC, 2007

global class lines. The escalating price of energy means that those who can afford to pay the higher prices will grumble and pay, while those who cannot will starve. As this crisis matures, the political obfuscation will only intensify. It is as if we are standing on the deck of the Titanic. The warnings have been issued, but not heard. We are waiting until we feel the water at our ankles. Remediation only becomes more difficult with each passing day.

In the larger perspective, we do not face an energy crisis at all. Even as oil supplies decline, we will still have a greater supply of energy and other resources at our disposal than our grandparents had. The vast majority of people live very frugally, simply because they have to. Even in industrialized nations, some people live much more frugally than others. The real issue is power. As we discussed in *Culture Change*, consumption is power, throughput is power.<sup>1</sup> The desire of the global upper class to hold on to power drives them to continue to consume, and that is creating a conflict over dwindling resources.

Since the publication of *Culture Change*, I became curious about the difference in energy consumption as it relates to differing ways of living in the U.S. To explore that curiosity, I conducted a small, non-scientific survey of the energy use of my friends and acquaintances, all dedicated environmentalists. I also conducted a survey of various groups who choose to live cooperatively, both rural and urban.<sup>2</sup> I was curious how the energy consumption of these various groups compared to each other and to the American norm. The results were startling. Among the people living in private homes, each using their own strategy to conserve, domestic energy use was *higher* than the American average. How could that be? The answer to the riddle is that the American average includes many people living in urban settings in apartments. An apartment with other apartments around it uses less energy because the apartments have shared walls. Single family homes, even when occupied by conscientious individuals, use more energy because they stand alone.

Various environmental groups have made the radical assertion that we need to decrease energy use by 80% or more over the next 50 years in order to address global warming. The startling discovery about people living cooperatively is that many of these folks are already using

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1 "Throughput is the volume of resources that must be passed through (extracted, processed, and sold) in the industrial economy to maintain employment, profit, and growth. Throughput results in; 1) economic stimulus, 2) political power, and 3) military dominion." See *Culture Change*, p.62.

2 <http://www.ic.org/>

75% to 90% less energy than the average American *today*, not 50 years from now. This subject has been pursued in greater depth in a book by the author, *Beyond Greenhype, Real Solutions for Global Warming*.<sup>1</sup>

Clearly, we have already discovered the solution to our energy problem. Real solutions involve living differently, and using alternative energy cooperatively. Alternative energies such as wind and solar are, relative to fossil fuel, expensive to produce, intermittent, and modest. Alternative energy is very poorly suited to private use, and well suited to cooperative use. If the solution is that simple, why have we not adopted it already? Because throughput is power. The voracious consumption of resources among industrialized nations ensures they will remain on top. We have a crisis of power, and the concentration of power is the single most significant factor driving the creation of blind culture. Social stratification and blind culture are two sides of the same coin.

To assert that "we" should live cooperatively or conserve energy is not likely to yield much result when speaking to the privileged classes. Every nation on Earth, save perhaps Bhutan, intends to continue economic growth. If they succeed, all of the graphs plotting the rates of consumption of vital resources will return to their vertical orientation after the current recession, if there is enough energy to power that growth. While many are aware of the serious nature of our environmental problem, very few take it seriously. The vast majority of even highly informed citizens of industrial society continue much as before: traveling, living, and eating as they choose. Many people feel overwhelmed by the complexity and scale of the issues we face. Some focus on one particular aspect of the problem by obsessively recycling or vehemently espousing veganism. But there is no identifiable movement towards the basic structural change of industrial society that is so desperately needed. This is not surprising given that, even in the environmental literature, readers are assured over and over that they can continue to live in their own private homes, drive private cars, and eat as they choose, as long as they make small adjustments over time toward conservation. In his latest book Bill McKibben even goes so far as to tell his readers that they "don't have to join a commune," without defining what terrible fate must await those who do cooperate, or why that fate is more terrible than global ecological collapse.<sup>2</sup> Over and over again,

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1 Alexis Zeigler, *Beyond Greenhype, Real Solutions for Climate Change*, Ecodem Press, Charlottesville Virginia, 2009, ISBN 0-9665048-3-6, <http://conev.org/greenhype15.pdf>

2 McKibben, Bill, *Deep Economy: The Wealth of Communities and the Durable*



Americans are assured that token conservation measures will suffice. The bottom line is the consumption is power, and those who have the power to consume will hold on to that power tenaciously.

Some people within the U.S. and other industrial states are truly committed to a sustainable transition, but they are not numerous enough to constitute a real movement. One has to assume that token gestures that leave current power structures completely unchanged will remain the norm for the near future in industrialized states. Globally, the situation is much more complex. There is growing resistance to the neoliberal agenda that seeks to further concentrate wealth and power. There are many movements and projects that are working toward real sustainability among people who are willing to live more simply, or heaven forbid, cooperatively, because they always have. Can those movements coalesce into a global movement toward real sustainability? Perhaps. Can that be achieved without severe class conflict? Probably not. Our future is messy and uncertain. The collapse of industrial civilization, if it manifests as a disorderly disintegration, will cause great destruction of people and the natural world, and it will not resolve the fundamental cause of the problem -- the polarization of power and the blinding of cultural evolution. It's up to us to do that.