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Petroleum Junkies of the World, Unite!



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I'm a fossil fuel junkie. I drive a car and use electricity. My computer, TV, telephone, refrigerator, stove, lights, water, and sewage all run on carbon-based energy.[1] All of the materials used to build my house and furniture were made with hydrocarbons. The wood, sheetrock, cement, metals, glass, wiring, pvc pipes, and other plastics were all manufactured with carboniferous energy. My high-energy lifestyle mainlines fossil fuels.

The petroleum coursing through the veins of our global economy allows me to do miraculous things. If I have the money, I can hop on a plane and be scuba diving in the Caribbean in a matter of hours. I can pick up a phone and talk to people anywhere in the

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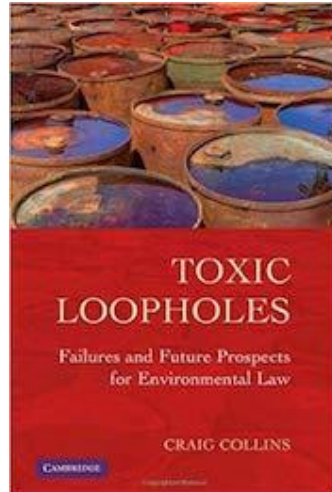
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world. I can buy coffee shipped from Kenya, tea from India, mangos from Mexico, rice from Thailand, and bananas from Ecuador anytime I want for a few dollars. I never have to do the backbreaking work of growing my own fruits, grains, and vegetables or raising my own livestock. I can light and heat my home, cook my food, do my laundry, and take a hot shower without ever having to collect and chop wood, haul buckets of water, or even start a fire. My family can toss their luggage into the car and journey hundreds of miles in a few hours for the cost of a tank of gas. Even with a host of servants and slaves the great kings of old could not have imagined doing many of the amazing things I can with do with the energy of fossil fuels. Power like this is addicting.

It may sound odd, but I didn't realize I was addicted to petroleum until I was about 30. Like most Americans, I was born into a lifestyle of cheap energy and took it for granted. Growing up in the latter half of the 20th century, cars and electricity were just part of daily life. Nobody thought of it as addiction; it was progress. Every new electronic device and labor saving appliance was a testament to the miracle of modern science and technology. The future was usually portrayed as a technological utopia where all our wants and needs would be met by some new scientific wonder. Remember The Jetsons?

I felt fortunate and proud to live in America because it was the most modern country in the world. It never occurred to me that our prosperity had anything to do with our dependence on oil; in school we were told our affluence was the product of free enterprise, liberty, and democracy. I knew that every country in the world aspired to be as modern as the United States. Poor countries were trying to copy our success and our enemies behind "the iron curtain" claimed they would soon out-modernize us. Growing up, I felt sorry for people who still lived without the conveniences of modern life.

It took me years to realize that our supercharged lifestyle depends on a vanishing supply of fossil fuels and cannot possibly be reproduced on a global scale. If the people of China lived like Americans there would be more cars in China than there are in the entire world



today.[2] Their cars would need all of the oil the world produces plus fifteen million extra barrels a day. China would consume two-thirds of the world's grain harvest; burn more coal than the entire world uses today; and use twice as much paper.[3] And this is just China. The Earth simply does not have enough land, water, and hydrocarbons for everyone to live the high-energy lifestyle of Americans. In fact, America's coveted lifestyle is running on empty and on the verge of going bust, like the boomtowns that became ghost towns after the gold rush panned out.

Throughout the 20th century, the world was preoccupied with modernity, progress, science, and technology, yet no one was crediting the amazing energy source that made it all possible. Even today, we routinely underestimate and overlook the unique characteristics that have made fossil fuels the energy source that has utterly transformed human life on this planet.

Fossil fuels are the most concentrated, versatile, inexpensive energy source ever discovered. Energy is the capacity to do work, and we have harnessed fossil fuels to do unbelievable amounts of it. There are about 23,000 human labor hours (12.5 years at 40 hours per week) in every barrel of oil, and humans use about 85 million barrels of oil every day.[4] Just one gallon of gas can do as much work as 350 to 500 hours of hard human labor. How much would you expect to be paid for 350 to 500 hours of hard work? At \$15 an hour, your labor would be worth between \$5,250 and \$7,500 dollars. Now compare that with how much you spend for a gallon of gas. [5]

Modern industry and agriculture would be impossible without fossil fuels. According to Michael Pollan, it takes about 10 calories of fossil energy to produce and transport each calorie of supermarket food we eat.[6] In the United States, food typically travels between 1,500 and 2,500 miles from farm to plate.[7] Supermarkets and fast food chains survive on a life support system of cheap fossil fuels. Agricultural machinery, irrigation systems,

petrochemical pesticides and fertilizers, huge centralized feedlots, slaughterhouses, food processors, and refrigerated storage all rely on hydrocarbons—as do the trucks, ships, trains, and planes that move food around the world.

Thirty years after realizing that I'm a petroleum junkie, I'm still discovering the depth and the impact of my addiction and trying to figure out what to do about it. I find it hard to recognize my condition for what it really is because everyone around me is addicted too. Our entire culture is structured to encourage and promote a petroleum-addicted lifestyle, so it just seems normal. Our utter dependence on fossilized hydrocarbons is masked by everyday life, where it hides in plain sight. Pumping gas is our most obvious encounter with petroleum. Americans pump about ten thousand gallons of gas every second.[8] But even then it stays hidden in our gas tanks. We hardly realize that our cars are made with enormous amounts of fossilized energy and that nearly everything in them, except the glass and metal, is made of petroleum-based rubber, plastics, and textiles. Most of us completely overlook the fact that nearly everything we work or play with, sit or sleep on, wear, watch, or read are made of, or with, petroleum.

Because we can just flip a switch, we easily lose sight of the fact that burning coal, oil, and natural gas generates most of the electricity to light our cities and homes and power our refrigerators, stoves, washers, dryers, heaters, and air conditioners. Of course, the factories that make all of these products are powered the same way; and so are the global communications networks that keep our TVs, cell phones, and computers connected with each other. I find it unsettling to realize that even alternative energy sources—from hydroelectric dams and nuclear power plants to geothermal technology, wind turbines, and solar panels—all use cheap fossil fuel energy to build them.[9]

These days there is a tendency to malign fossil fuels and dismiss their astounding value because they are so frequently wasted and misused; also, the environmental consequences associated with their extraction and combustion are monumental. Environmentalists emphasize these damages, while politicians and political analysts decry our dependence on foreign sources. Social critics point out how cheap energy has accelerated the pace of life, fueled rampant consumerism, and replaced tight-knit, interdependent communities and neighborhoods with the lonely, impersonal rat race of modern life.

These are all extremely serious problems, but fossil fuels are not the villain in this story. Hydrocarbons are a precious gift of fossilized solar energy passed down over eons from the primeval plankton of our planet's distant past. One gallon of oil contains the condensed, concentrated energy of about 98 tons of the original prehistoric plant life that

collected its energy over millennia from the sun.^[10] For millions of years, the Earth cooked and compressed this ancient sunlight into the most potent, accessible, versatile source of power humans have ever used. Had it been used in moderation—frugally, equitably, and wisely—it could have improved the quality of human life, making it easier and more rewarding for many centuries with little or no damage to the planet or us. By minimizing life’s drudgeries, it could have afforded everyone with more time to pursue the endeavors that make our lives more interesting, creative, and fulfilling.

However, this priceless gift was not used prudently or for the betterment of all. In the early decades of the Industrial Revolution, those who gained control over fossil fuels, and the technologies and weapons they developed to exploit them, wielded their newfound power to suit their immediate commanding interests. Thus, the benefits of coal and oil went primarily to an exclusive handful of industries and nations who used them to become immensely profitable and powerful.

While living standards rose unevenly in the most developed nations and advances in medicine, science, and technology improved many lives, this has never been the prevailing purpose of modernization. The elites that managed the flow and function of the planet’s vast deposits of hydrocarbons were enterprising capitalists. Their primary pursuit was profit, which became the driving force behind the industrial age, even though the poster child of the age was progress. The promise of wealth and progress was the irresistible lure that profit-hungry petroleum pushers used to reshape modern society around a petroleum-addicted lifestyle.

Coming to the realization that my petroleum addiction is as “normal” and American as TV, cars, and shopping has helped me realize that our addiction is fundamentally systemic and social, not individual. Thus, my individual recovery from addiction must be part of a great social recovery and collective transformation. Since fossil fuels are a rapidly vanishing finite resource, one way or another we will eventually kick our addiction. The real question is are we going to do this the hard way, by postponing our recovery until we hit rock bottom and must endure the extreme trauma of trying to rebuild society on an exhausted and ravaged planet? Or are we going to use our remaining resources to rehabilitate ourselves and restore our communities before we ruin our country and pillage our planet in a frantic search for one final fix?

Unless we come to our senses soon, we will have sacrificed our future to feed our addiction. But the odds are stacked against us. We’ve become so consumed by the demands, conveniences, and diversions of our fast-paced, petroleum-powered lifestyle that

we hardly notice the self-destructive course we're on. The petroleum pushers like it this way; our addiction gives them control over us. Their commercials tell us life would be dull and empty without the wonders of petroleum-powered progress. As long as we work long hours in order to buy the trendy, high-powered lifestyle they push, they get rich. Like all enterprising pushers, they'll do anything keep us off the road to recovery. They want us to stay hooked until the oil wells run dry, even though the consequences would be catastrophic.

What will the future look like if they succeed? It will be grim indeed if the petroleum pushers overpower every effort to stop them from burning through the Earth's hydrocarbon reserves, pushing the climate past its tipping point, and unleashing ecological havoc; if nations waste lives and ravage the planet in a series of escalating resource wars; if millions perish because shrinking stores of fresh water, fertile land, and food go only to those with the power and money to acquire them; if corrupt, bankrupt governments and economies can't provide jobs, social services, and disaster relief, or protect citizens from social decay, corruption, and crime.

Today, denial still maintains its tenuous grip over the general public and even those who recognize the peril ahead are reluctant to face the question of how to organize a mutiny against the heads of state and the captains of industry and finance. But mutiny we must; because if they are left in charge, they will devour, demolish, and contaminate the planet that keeps us all alive.

Mutiny is an act of courageous desperation that reasonable people consider reluctantly. Only reckless adrenaline junkies and revolutionary zealots romanticize rebellion and mistake reluctance for cowardice. Reluctance is entirely understandable. It's hard enough to overcome denial and despair; kick our addiction to petroleum; heal the planet; and build resilient communities that can survive without the advantages, comforts, and conveniences of industrial civilization. But if success requires us to defend the future from the wrath and greed of the powers that be, then our task seems nearly hopeless. However—since any future under their control is a dead end—mutiny is essential. Our most important weapons in the insurrection ahead were clearly identified by Antonio Gramsci: pessimism of the intellect and optimism of the will.

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Mother Nature and Rising From the Ruins: Catabolic Capitalism & Green Resistance reformulate Marx's theory of history & social change and examine the emerging struggle to replace catabolic capitalism with a thriving, just, ecologically resilient society.

Notes.

[1] Fossil fuels and electricity from the grid are the lifeblood of conventional water delivery and wastewater treatment systems, which are designed and built to rely on fossil fuels as their sole energy source. Without fossil fuels, these systems would not function. See: Yang, Jo-Shing. "[How to Get Your Home Off the Water Grid](#)" (Alternet, Feb. 9, 2009).

[2] McKibben, Bill. Deep Economy. (Holt, 2007): 184.

[3] Brown, Lester. Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble(Earth Policy Institute, 2006).

[4] de Sousa, Luis . "[What is a Human Being Worth \(in Terms of Energy\)?](#)" The Oil Drum: Europe(July 20, 2008).

[5] Martenson, Chris. The Crash Course.(Wiley, 2011.): 140.

[6] Pollan, Michael. "[The Food Issue: Farmer in Chief](#)" (Oct. 2008).

[7] Halweil, Brian. Home Grown: [The Case For Local Food In A Global Market](#) (WorldWatch Paper #163, Nov. 2002).

[8] Margonelli, Lisa. Oil on the Brain: Petroleum's Long, Strange Trip to Your Tank(2008): 14.

[9] Fridley, David. "[Nine Challenges of Alternative Energy,](#)" Energy Bulletin(Aug. 10, 2010).

[10] Siegel, Lee. "[Bad Mileage: 98 Tons Of Plants Per Gallon](#)" University of Utah Press Release(Oct. 26, 2003).