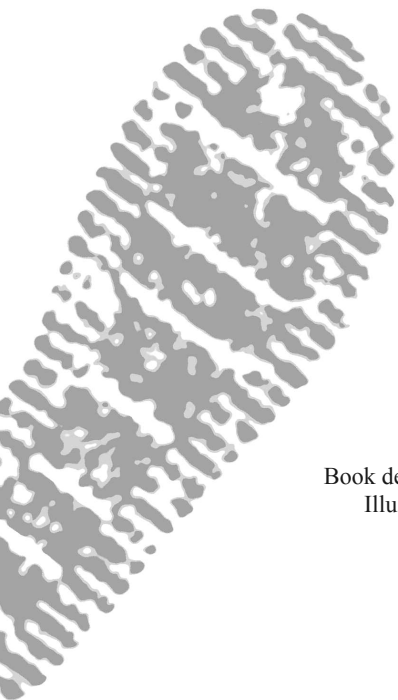


WALKING





Book design by David Lee Fong
Illustrations by Paul Jay

copyright © 2012 clevernonsense

PAUL JAY

WALKING

THE AUTODIDACT'S
GUIDE TO HEALTH, PROSPERITY
AND SAVING THE PLANET

**Promoting America's
least favorite pastime**

Dedicated to my father Robert Dean Jay,
who taught his children to walk.



1. THE PEDESTRIAN
2. CAR SEATS/WHEELCHAIRS
3. BICYCLES/SELF-PROPULSION
4. MILTON'S PARADISE
5. WALKING MAMMALS
6. DRIVING/DRIVING/DRIVING
- 7 COSTS/MORE COSTS
8. THE LYMPHATIC SYSTEM/BLOOD/OUT-DOORS/ INDOORS/DE-MECHANIZE OR DIE!
9. VALUE/PERAMBULATION IN THE DAY TO DAY
10. PHYS ED/WEATHER
11. OILADDICTION/REVOLUTIONS/WASTE/
HEALTH CARE
12. FINANCIAL/ENVIRONMENTAL HYPOCRISY/
COMPUTERS
13. THE RICH/THE MONEY I SAVE/THE HARD-
WARE STORE
14. PUBLIC POLICY/THE FREEDOM GAME
15. THE DANCE OF LIFE/MACHINES OF
THE FUTURE
16. WHAT TRICKLES UP AND WHAT TRICKLES
DOWN
17. BRILLIANT IDEAS/STUPID IDEAS

TEST YOUR I.Q.

*What do Americans prefer to walking to the corner?

- a) driving to the corner
- b) war with Iran
- c) frontal lobotomy
- d) a.o.t.a.

*What's the best way to get to the gym?

- a) SUV
- b) escalator
- c) treadmill with wheels (bicycle)
- d) water board

*In America, what percent of the population is on their feet at the moment?

- a) 2 %
- b) 3 %
- c) we have no idea

* What's more dangerous than running with scissors?

- a) sitting with scissors
- b) running with Romney
- c) getting stuck on an escalator

*Where are most Americans at the moment?

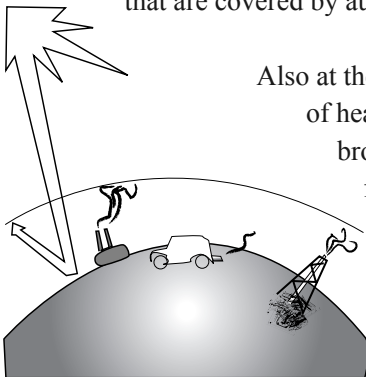
- a) outdoors standing up
- b) indoors sitting down
- c) outdoors sitting down in a car
- d) indoors standing up on the way to the car

*America's mechanized army has been fighting an un-mechanized army to a draw for eleven years. How do the Taliban travel?

- a) by bus
- b) through underground rivers
- c) by private jet
- d) by foot

Whenever Yahoo posts a story on climate change, I go right to the comments to duke it out, thumbs up, thumbs down, with the people who hate Al Gore and think global warming is a vast hoax. Some of these on-line debates are at the end of this piece, they can get pretty funny, but I think the country is about 50/50 on this issue, with very few neutrals but a vast majority of don't cares. Rather than spinning the usual invective, I try to be the voice of reason, the general argument being that in case 97%* of climatologists are actually correct about AGW, what does that mean? What are the ethics, and what are the practical solutions, and why the puzzlement towards anybody trying to keep their stay here on earth to something less like a hotel room trashing by cutting down on waste and personal energy use?

To most of climate and health problems, you can list walking as a practical solution if ever there was one. But my take on foot travel didn't come from these debates, it came from observing the difference in the way people get around in New York City and on Long Island. As a walker in the city, I also walk in the exurbs, but I am usually the only one doing so because walking is considered demeaning and everybody drives. I'm talking about short distances, walking distances that are covered by automobile, anytime, any day.



Also at the end of this piece is a sampling of headlines that relate to some of the broader implications that shoot out from this topic like sparks from a hammer.

*All numbers are approximations taken off the internet.

1.

THE PEDESTRIAN

Left, right, left, right... back straight, head back, arms swinging, a bit of hip motion. The balls of the feet are a kind of pump, so not only are you moving, but everything inside you is too. This is just one of the many blessings of self-propulsion.

Now we're getting somewhere. Walking is a great option for local travel, and it also, as a bonus, cleans the insides and flushes the organs, including the brain. This is not multi-tasking, it is multi-functioning; it is doing one thing that accomplishes many things. We humans, the walking mammals, have flourished as a species and covered the globe, mostly by walking, and in the modern world the multiple benefits of walking are supported by the fact that the walking city-dwellers are generally healthier than the suburbanites who drive everywhere. This is because walking is great for your health and too much sitting is bad for your health.

But thanks to the car, walking is dying out; we are driving twice as much now, individually, than we did twenty years ago. Self-propulsion, except as recreation, is counter-intuitive in the labor-saving, mechanized, social-networked world, where the word 'car' has been replaced by words like 'Nissan' and 'Explorer' and 'Tuareg', names that conjure the nomadic and blend it with images of power and ease, and with dancing visions of a better life where the cars can park them-

selves and gas can be bought on credit. A complete dependence on these road appliances has set into the car based communities of our familiar suburbs and people rarely walk anywhere any more. Fine, it's a free country and people are going to do what they want, not what some busybody says they should do, but since what they mostly want to do is drive, perhaps we should look at some of the numbers.

38% of us are overweight and struggle when we (if we) walk, and that number is climbing. At the same time, our personal energy needs are climbing, especially in traveling around the surface of our little blue marble of a planet, but also in our attachment to room temperatures 24/7, traveling or not. We all know the benefits of sitting down while traveling, we get to eat, drive, talk, read, drink, play with our phones, nap on the train, but what's the down-side? What's the trade-off?

U.S. gasoline consumption is about 19 million gallons a day, and that's a mighty river of petroleum, 4 times the flow of the Raritan River in New Jersey, all pouring into the air, of course, rather than to the sea. The gas stations seem well supplied with the stuff, but the supply is not guaranteed. For instance with a flick of the wrist the Iranian military could close the Straits of Hormuz, through which flows a third of the world's oil supply. This means a third of this mighty river of petroleum could be dammed up in the Persian Gulf. The stressed U.S. economy would get an unpleasant kick in the indexes, but to reopen the strait would require the U.S. to wage a naval war in the Mideast. There are elements in this country that love going to war (people who oddly call themselves Christians), but with other Mideast wars still raging

and spontaneously combusting, it makes sense to postpone the war with Iran indefinitely. What are the alternatives? And why am I discussing this in a book on walking?

Because the solutions being proposed, plan 'B', are not great solutions, and they escalate our ongoing war on the poor planet that we inhabit. These 'solutions' include:

*hydro-fracking, which releases tons of methane and poisons the groundwater...also causes earthquakes

*more drilling in the oceans and along our shores and wilds, like in the Gulf of Amoco...

*buying solar panels from China, also rare earths and everything at Kmart...

*building a leaky pipeline from the formerly pristine wilds of Canada to Houston...

*building more nuclear plants, hopefully not on tectonic faults or tsunami valleys...

*turning more mountains of West Virginia into atmospheric particulars, to fire the electricity generators that allow us to dry a towel in ten minutes...

These 'solutions' do keep our consumption of energy up, but don't really solve the basic problems that we are trying to flag here.

Here are some thoughts concerning how to easily cut our energy consumption by a third, and simultaneously soothe our guilty consciences. This would be an alternative to waging war, fouling our habitat and wrecking our climate; plan 'C', as it were. All we have to do is cut back on driving and do some walking. This would accomplish many things besides preventing war and confusing the neighbors.

The Amish in Pennsylvania believe that personal travel should NEVER be mechanized. The inhabitants of most parts of the U.S.A., including Long Island, think travel should ALWAYS be mechanized and they never leave the house except by car. Who is right? One sect drives quaint horse and buggies on the roads, annoying the motorers that have to pass slow-moving vehicles. The Long Island petrol-based life-style leads to empty sidewalks and traffic jams, poor air quality, heart problems, and a tolerance for sitting in traffic. This same gas addiction is spreading all over the world, so the idea here is, rather than choosing the extremes, to figure out a nice middle ground, a reasonable position between these life-style choices that even global warming deniers can agree on. From this middle ground we can see a way for each of us to easily cut our energy consumption by a third, while simultaneously improving our health and well-being. By walking dag nab it.

Walkers stay in shape without specifically exercising, like millions of people on the sidewalks of NYC who are doing just that. They are walking between here and there, traveling on foot, and getting nearer their destinations with every step, their metabolism speeding up while things are happening in-

side their bodies; lymphatic fluid and blood pumped to every corner, removing cellular debris, revitalizing the organs, performing vital detox functions, all automatically. Walking is such an important way to stay healthy, it's a surprize to find how little respect it gets as a mode of transportation. The alternative to walking, besides standing (I am usually standing at my computer) is sitting, on a couch or chair or bar stool, in a car, train, bus or plane. Sitting, it turns out, is hardly good for us, for reasons that we will discuss, and so here we have one solid reason to walk, to make real footprints instead of carbon footprints when we can.

What law says that all transport of the body should be mechanized? If we were ruled by reason instead of advertising we would walk more and drive less, to accomodate our migratory instincts, but instead we are at the mercy of the enablers of mechanization, which include car companies, oil companies, government agencies and pop culture. The relentless connecting of function and gas has created a great disconnect, a chasm between function and physical activity, so that anything useful, like getting somewhere, requires a reliable machine rather than physical effort. In a rational world we wouldn't have to fuel around everywhere all the time, and those that did would arguably be called energy-dependent gas addicts; we wouldn't have to plug in every tool, ride every escalator, we wouldn't have to reach destinations beyond our physical limits, every day all day, as a rule! There are many pleasures and advantages to be derived from the robotic life, but it creates more problems than it solves while robbing us of other pleasures..

*Mechanization = burning fuel. The future inhabitants of the planet will consider the unnecessary burning of fuel to be selfish, bad for the planet, bad for everything from air quality and weather patterns to peace in the Middle East.

*Mechanization = sitting, and sitting is bad for YOU. We all have to take some responsibility for our health. We should consider walking more and sitting less.

*Mechanization = mountains of dead tires and dead batteries. The less we use our cars, the less we contribute to these mountains of toxic death.

*Mechanization = catastrophic climate change. It's not a hoax perpetrated by Al Gore, it's famine, drought, super-storms and shore-line erosion. An island that disappeared under the rising waves would rise up in international court and demand retribution from the energy hogs.



So let's sum up this list of complaints from the planet herself: there's too much burning, not enough walking, and this trend is accelerating in the wrong direction. To promote personal/ecological health we should probably consider dialing back on the motors. We must all de-mechanize to some degree, for many reasons, but how do we do this without stomping all over our individual rights to perfect comfort and, simultaneously, freedom of movement?

Here is one way, not that anybody asked me: if common destinations are within walking/biking distance, the car could stay parked and the legs could get a much needed stretch on the sidewalk, at least occasionally, as an option. Outrageous idea but it is one solution. Carefully applied, which it is all over the world, it could lead to a walking addiction replacing a gas addiction. A need to buy turns into a great opportunity to sneak in a little hike, work the legs, satisfy that migratory prerogative, to rev up the machine. The urges and needs come from the body, but they are, and this is the basic problem, transferred to the car. The wrong machine is getting revved because we automatically jump into a car every time we run out of something.

While there are other ways to reduce energy consumption to discuss, the basic principal is the same as the walking philosophy: if a destination is within walking/biking distance, that should be the first option for getting there. The change I experienced following this general guideline was that my life gradually got more physical. My body got stronger from all the walking, and add to that the biking, raking, rowing, clipping and hauling, and for the first time in my long life I'm in shape.

There is no need for me to grab a bar bell or to jog or run on a treadmill or do push-ups and chin-ups... the life style exercises me! I actually feel good, and I walk my walk with better posture, strolling right by the local gym. (The gym has an escalator to the treadmills and large parking lot, evidence perhaps of over-mechanization in our society. I say this because while walking, my brain is being supplied fresh oxygenated blood and thinks in big words like 'over-mechanization').

Though it's dangerous to set my self up as an example of exemplary behavior, it's unavoidable; practicing what I preach and reporting on the results is part of this project, so please bare with me (pardon the pun). With all the considerations in this book, I still use much more energy than the world average, so any way to cut down has to be explored and practiced. Walking is a great way; I got into the habit of useful walking by trying to reduce energy bills, also as a great way to feel superior to people in their cars, and it also keeps me healthy, so what's not to like? Most of us are energy hogs. I noticed I had at least twenty power strips full of adapters and plugs, a fuel-inefficient car, computers going twenty-four hours, and also no health insurance. Using my own energy became –

- an efficient way to get around non-mechanically, as we do in the city, by walking or biking to everyday destinations and

- a large saving on gas and electricity, car repair, new tires... Then clang,

- a suggestion emerged out of all this that gas consumption was perhaps inversely linked to health!

So tuning up the car and turning off computers is all good, but there's a life-style change that pokes its optimistic head over the horizon, a direction to go in, a signpost on the road of life: put your body to work. There is plenty of science behind this point of view.

According to most grade-school textbooks we are all mammals, and mammals are as a rule migratory, which makes us migratory mammals. There are laws of nature, subsection migratory mammals, that should be examined and taken into consideration when day-to-day decisions are made and residential communities laid out. The arc here is that our comfort-driven lives, including the daily migrations, are becoming less physical and more gassed up, and even if you cut out any moral/ ethical concerns that this brings up, and there are plenty of those, the practical benefits to the more physical lifestyle, a lifestyle more in tune with our migratory imperatives, are enough to sell the program. Once people are exposed to a more physical way of doing things, something closer to what in our evolutionary history was the only way of doing things, it becomes a new normal and the mechanized lifestyle looks abnormal and banal.

I, responding to my physical needs as a migratory mammal, changed banks. I opened an account at the branch within walking distance of my little country digs so I could walk with purpose to the bank when need arose, rather than always driving in traffic through the densely-populated car-based suburbs. I share the sidewalk with the occasional soul also not wearing a car in public... and we nod. More important to me than free checking and bonus points and all that is

proximity; I no longer having to burn mined petrochemicals to get to my branch to deposit a check or get cash, or to get eggplant pizza or turkey breast dinner or the daily newspaper or the groceries. Walking and biking are more fun than driving anyway, and I get in shape and feel better and now I do all local errands on a bike, weather permitting. If I was Catholic or a Methodist and there was a synagogue rather than a church within walking distance, I would probably convert to Judaism, for my own good and the good of the planet. Anyway, almost nobody else on Long Island thinks like this as far as I can tell, they think I'm completely nuts, but they think this way in other parts of the world where gas addiction has not yet reached. The counterpart to walking is gas addiction, and there are so many positive ways to cure gas addiction that people are reluctant to try for many reasons. Reason #1: we are completely, happily, communally addicted to gas!

The bank-changing solution is not a popular one, and changing religions is not even being considered, but if you are looking for social design, these changes beat the social design shoved down our throats. In this alternate life-style, you get to the bank, or the train station or service or whatever is within self-propulsion range, but you walk or bike there instead of drive, as people do in most cities. Miraculously it eases many other problems at the same time, from health problems to financial problems to mental problems to environmental problems. The latter are of great concern because our entire world is affected by carbon build-up in the atmosphere, as I'm sure you've heard, and that build-up is accelerating, and that is the new reality that conservatives spend so

much energy and money denying but that unfortunately is knocking not very politely at the door. The accumulation of toxins in our bodies is also accelerating, so we would be wise to replace a machine with our physical strength whenever possible. That's the Occam's Razor of modern life, the Eleventh Commandment, the primary directive... and few Americans will go along with it. America is really *about* mechanization, hence the quixotic, bound to fail cloud over this walking issue.

Walking is a broad subject, without an obvious focal point... let's try this: in our modern world two trends come to mind: 1. Staying indoors sitting down. 2. Traveling. They are the same thing, since most travel is done by car, plane or train, which, except for strap-hangers at rush hour, is indoors sitting down. The evolutionary history of homo sapiens reveals a creature outdoors standing up, mostly walking, so here is a disconnect. A strong instinct to move physically, walking, migrating, results in the opposite: sitting. As physical limitations to travel recede into history, people can turn nomadic with less effort and have fewer reasons not to buy that round-trip ticket to a place far away, or to hop in the truck because a project is missing a screw.

'Mechanical' in the sense being used here means the use of external power, like gas, jet fuel or electricity from coal, to do something useful, like going to the deli or opening a can of tomatoes or flying to Mubai. This is an extreme of mechanization, what could be called 'motorization'. The bicycle is also a machine, but there is less difference between biking and walking than between biking and driving, so 'Walking'

stands in this universe for any useful physical activity, including walking, bike riding, even sweeping or raking leaves, activities that would otherwise be mechanized but that we can choose to accomplish with physical effort, like opening a can of tomatoes or standing up and walking to where you have to go. This can be done with a machine that uses human power, like a bicycle or a rake or a can opener or coffee grinder with a manual crank, all the tools of the pre-motorization era. Choosing the bicycle over the car is an example of de-mechanization, that is using the ‘walking’ model, which is often harder than it sounds, even physically impossible; it’s not a practical way to get to Europe (one could sail) or to the top of the Empire State Building (one could climb the stairs, ‘buildingeering’ instead of ‘mountaineering’) for instance, but even when it’s hard to do it is also very practical and necessary for many reasons. Reason #1: we spend more and more time indoors sitting down. If you come home from work physically exhausted, this message is not for you, though there is content here relevant to your weekend and vacations.

Reason #2: Mechanization and its residue is sending the poor planet into a death spiral, instigating an accelerating cocktail of catastrophes, from violent storms, to famine, ill health, drought, dead oceans and so on. The evidence for this is irrefutable, so preserving and maintaining the planet and the infinite intertwining forms of life that crawl, swim, fly and, in respect to humans, drive all over it should climb upwards on our list of priorities.

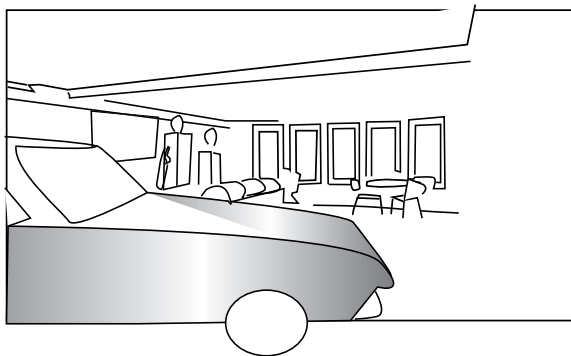
As a migratory mammal, I possess strong instincts to stand

up and go somewhere else. Another instinct to stay where I am keeps me in a conflicted state, which sounds like a personal problem, but I'm not the only one with this pathology. WE are all migratory mammals, all six (oops, make that 7) billion of us, with a powerful directive to move about on the planet. We also are driven to have sex, which means that number is only going to grow, meaning more and more moving about on the planet. Since we are physically staying put, and since there is no limitation to sitting, we move rapidly and constantly, any excuse not to be one place is because we have to be somewhere else. Distance and weather and physical strength are no longer a factor if your brother expects you in Duluth for his wedding, or if you want to go to college on the opposite coast, either for necessity or whimsey.

This moving-while-sitting whenever life calls for going is instinctively very satisfying, it satisfies both the instinct to move and the instinct to rest in one place and you can't ask for more. Evolution is a success story, and physically and mentally we are very successful, the trouble is that after the industrial revolution and the gas revolution and the digital revolution and the internet revolution, we have become mobile-while-seated, and this encourages environmental degradation, clogged arteries, and larger pant sizes. Walking is dying out.

A rich guy in England, realizing that people don't want to walk anymore, tried to ride this trend by buying the Segway company. Unfortunately the Segway he was riding sent him tumbling to his death, but meanwhile, the reason I bring this up is that the philosophy presented here is the opposite of the Segway idea.

Here is a picture of the realized dream of the sitting mammal, with walking taken out of the equation:



Most men would look at this man cave with envy, I look with horror. It is very indoorsy; there is no thought of self-propulsion, like a bike or a kayak, and there is an altar to gasoline and an altar to sedentary entertainment; it's a place to rot enjoyably. Maybe it needs a ping pong table, some antlers; it looks too much like a fortress protecting the manly man from the outdoors through energy dependence.

Placing one foot or hoof or paw before the other in endless migrations was always the way, pumping the cardio-vascular and lymphatic systems continually. Walking is our deep background, but what if a mammal, such as a human, exercises this instinct to move by turning on a car engine and shifting into gear? Walking or biking, any self-propulsion, is a better way to address this urge, it keeps our insides functioning and money in the pocket; some people know this already, instinctively, culturally, but on Long Island it is mostly forgotten which is why I'm writing on the subject. Walking and driv-

ing, as human choices to satisfy the peripatetic instinct, lead to different futures for the planet, the individual and the species, and it's a tough sell to a country that regards the automobile as a symbol of power and wealth and mobility. When we use this symbol of power and wealth for local transportation, human movement makes a geometric leap of scale, and what used to be instinctive wandering, as in foraging and pilgrimages and walkabouts and treks turns these relatively local migrations into fuel-powered and constant global travel.

In the animal world, mobility is earned through special powers, like flight or stealth or sharp teeth or size, or sheer endurance. For the middle class, mobility is earned by sticking a credit card in a gas pump. This is very convenient, something everybody does, and I can't imagine a different world, but there are costs associated with unlimited mobility. Much of the illness associated with aging that medicare is paying for can be prevented by being physically active. One can't walk as far or as fast as one can drive, but that is a function of where you are going, and that involves all the head-scratching decisions of modern life. If the government, representing society at large, has an obligation to keep people alive in spite of their personal habits, like smoking, drinking, eating processed foods and sedentary traveling, (hypocrisy alert: I do all these things) then walking should be taught to kids so that they stay healthier and less energy dependent throughout their lives. Many habits being taught to children, like being driven everywhere, contribute to illnesses which put them in the crosshairs of a voracious health industry. What is not clear is how much responsibility people have for their own health or the health of their environment, but

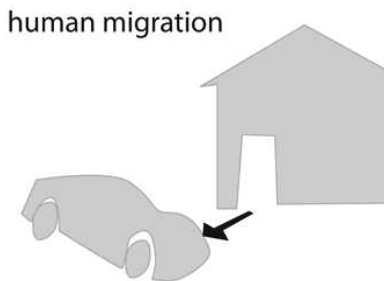
clearly if health is achievable without health care, that can't be bad.

In the city, foot travel is the most common way to get around, followed by bicycles and public transportation. Most cars in the city belong to people from outside the city who drive everywhere, especially on weekends. In the suburbs the default mode to answer the peripatetic call of the inner mammal is to turn the ignition clockwise, and often the inner mammal heads for the city. My sensibilities are easily offended by the inefficient and self-indulgent, especially since that describes me to a tee, but there are things my father taught me, wisdom for the ages which must be shared and broadcast to counter this dependence on cars.

You might think these rants betray a superior attitude or desire to dictate, but really it's just too much coffee and newspapers. Nobody listens to me anyway, I'm just a worrier from a long line of great worriers, believing that the future is often improved by people worrying about it. This walking issue is so broad that every day I find new things to worry about. My sister in law sings her hymn "Don't worry, pray instead!" and I of course argue with her; to me, praying is asking the deity for favors that we could grant ourselves. Praying for souls shows empathy, a good thing, but at any rate, worrying and praying are not a choice you have to make... you can do both or either or neither. I'm a worrier who if anything, prays to the devil not to mess things up, summoning him/her with

curse words. In this way worrying can be converted into kinetic energy and put to use cleaning the gutters or whatever needs to be done. But let's get back to the point: the choice one should make is how badly does this process, say raking the leaves, or going into town, need power assist? If it CAN be done without power assist, it SHOULD be done that way, and everyone will be better off by far. This rule alone could prevent the next war in the mideast by reducing demand for oil.

Generalizations generally have exceptions, so you might not connect with parts of this, or know contradictory information, or get annoyed at being told the obvious, or get beaten senseless by repetition of the obvious. There's enough obvious truth inside and outside, truth-dots just need to be connected so we can make basic decisions, like whether to walk or take the car. Though a relatively new invention, in fact a replacement for the horse, the car has become as much a part of our world as the sky and the house and babies and the rest of it, it's how we go from here to there, almost from the moment we are born. What does this mean for the walking mammal? Lots of things come to mind.

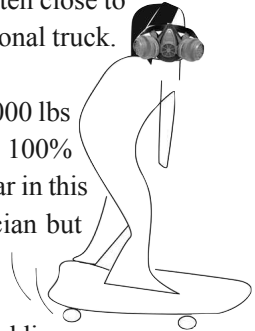


2

CAR SEATS/WHEELCHAIRS

Before teenagers get their first car, and at the point where they would avoid being seen on the street driven by their mother, they have to get around on their own steam, on bicycles and skateboards. Though they rarely wear helmets, the ones that survive are fairly healthy. But as soon as we get the wheels our lives start to settle down into an ergonomic seat, a fast, powerful, full-throated seat with heating and air conditioning and privacy and a great sound system. A teenager with a ride wouldn't be caught dead on a bike, and this carries over into adulthood. If you're not driving a car it looks (in your mind) like you can't afford a car. I grew up outside the city and I know the mystique of car ownership for a teenager. It quickly becomes the default way to get around, and this power-assist has, unfortunately, crept into all aspects of our lives. Personal transport in the U.S. suburbs is often close to 100% mechanized, thanks to the car and the personal truck.

Consider that cars are only about 5% efficient (3000 lbs of car, 150 lbs of human) and walking/biking is 100% efficient. We drive about 3 TRILLION miles a year in this country, at 5% efficiency. I'm not a mathematician but those are scary numbers.



It is the effortless mobility of cars that is most addictive, very like sitting in a wheelchair, rolling smoothly where

normally, that is a hundred years ago, we would be walking or sailing or riding or canoeing. Bicycles give the same feeling of rolling along, but leaning back on the cushions of a wheelchair there is nothing to complain about, and standing up is like rudely waking up from a pleasant dream. Legs have found an alternative to walking and they like it, protesting when they have to carry weight again.

Driving a car for local transportation is like using a wheelchair when one is capable of walking; it immediately leads to less walking, which leads to even less walking and a preference for the ergonomic seat. Driving becomes the norm and our legs lose the love of walking. Driving locally is like using a wheelchair when you are not handicapped, and it makes it more likely that you will end up in a wheel chair, handicapped, unable to climb stairs, and at the mercy of our health care system and late-night advertising. The car carries the same danger, and since smooth pavement is so ubiquitous and the danger so creeping, we must ask in worried tones: How can we stop this from happening to us? Are cars really wheelchairs? Ferraris? Porsches? Hummers? Dodge trucks? Yes, they are wheelchairs designed and promoted as sex symbols, also symbols of power and wealth.

Imagine the exotic alternatives; cross country skiing to town in the fresh winter air, as they sometimes do in Oslo, or visiting relatives by sail or paddle, as happens in some island countries, or riding an open sleigh or rowing a boat or riding a horse from one place to another. The only way these modes of transport are practiced today is out and back, the destination being the point of origin. Cars can be parked and don't

have to be tended to, making them ideal for our multi-tasking pressure-cooked society, but driving a car is prosaic and boring, no matter how pandering the interior and flashy the car ads, even walking is more fun than sitting in traffic. The mechanized life is banal and disconnected; it turns the outdoors into uninhabitable stretches of concrete where a walker looks and feels very out of place, like on the surface of the moon, or in a hostile wilderness. This further reinforces the indoors sitting down with the windows rolled up mentality, and leads to a feedback loop, if this were a disease it would be called terminal, a hopeless case. And as the human world turns indoors, the outdoors gets covered in roadways.

The spark igniting the gas and pushing that piston down the cylinder recalls the bullet down the barrel of a gun, also rockets and firecrackers, similar slaves of our will, so driving a truck and carrying a gun are really almost indistinguishable exercises of individual rights and many people feel naked without these augmentations. Denying people augmentation would step hard on their rights, but both the gun and the personal truck pose a measurable threat to the rest of us. They seem to complement the sitting-indoors habits, since the truck and the gun are doing the actual work and all the sitting mammals have to do is press on the accelerator or pull the trigger. It gives the armed driver the power to go anywhere and kill anyone, in case murder is ever legalized.

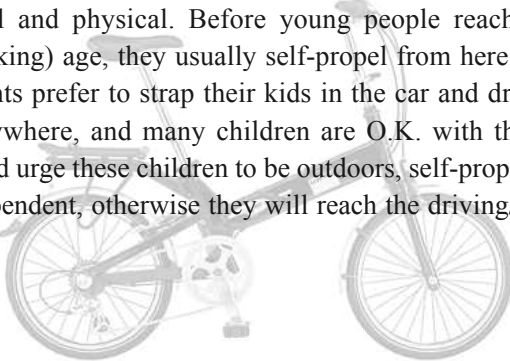
These gun/truck enthusiasts are not likely candidates for a walking program, but how about the rest of us? How do we reverse this general trend towards sitting indoors? Let's look at the bicycle, one of the keys to reversal.

3.

BICYCLES

In the suburbs, a bicycle is socially acceptable transportation if you are not going anywhere specific, just getting exercise. Recreational cyclists wear bright colored outfits to drive this point across and ride light-weight machines stripped of all other functions. Non-recreational cyclists, commuters, farmers, remind people of the dreary days before middle class neighborhoods became heaven on Earth, thanks to the car. The street bike with baskets, common in the city, carries the stench of poverty to the suburbanite, of human-powered labor, everything the middle class is trying to leave behind. A bicycle has no heating, air conditioning or power assist like the car or plane or train has. It also requires sweat and toil to get up a hill.

Within the city the bicycle is the most practical mode of transportation. The city tends to be less hilly than the country, and the distances to the nearest whatever tend to be less, but in contrast we see things we didn't see before, like the difference between mechanized (driving) and non-mechanized, which includes biking, or any self-propulsion, anything functional and physical. Before young people reach driving (drinking) age, they usually self-propel from here to there. Parents prefer to strap their kids in the car and drive them everywhere, and many children are O.K. with that, but I would urge these children to be outdoors, self-propelled and independent, otherwise they will reach the driving/drinking



age and not know what's going on on the street. More dangerous than a gun is a six-pack and a car.

The teenager is now off to college, and weight gain. The gym is the only counterpoint to pizza and beer, but it takes self-discipline to work out at the gym, and working out is all you are doing. Biking to classes and around on the day-to-day doesn't take discipline because you're going there anyway, so you do it without thinking about it. Those who have not abandoned the bicycle of their youth will be better off.

College rarely seems a place where one learns useful survival skills, like cooking a meal or walking. I wrote a book called 'The Bachelor Kitchen, How to (eventually) cook for a date', specifically to teach post-college types how to prepare food and how thereby to impress a visitor of the opposite, or same I suppose, sex. The danger is that without motivation, the young men I am addressing would spend the rest of their lives eating burnt meat (cheeseburger) and drinking corn syrup (soda), or 'light' beer, picking up the cell phone to order take-out rather than heating up the saute pan. Cooking habits are as important as walking habits, and they intersect when one bikes to the grocery store.

Young people often emerge from college with serious habits like drugs, chugging beer, gaming and social networking, but with very few self-preservation habits. Habit-making is a neglected part of schooling and the trick would be to get the habits of biking and physicality introduced at an early age, engrained to counteract the temptations of addictive games, powerful pot, cheap suds and corporate pandering. Young

people also emerge with student loans to pay off, so it perhaps is not a good idea to embrace the mechanized life-style right out of college. A student loan *and* a car lease *and* a drug habit? Obviously the only way to afford this is on-line poker, or becoming a drug dealer or day trader. Good luck, kid.

In the ex-urbs, where the college graduate might settle, there is a class distinction between the bicycle and the car. The automobile is after all a descendent of the horse-powered Royal Coach, wherein the monarch sits comfortably while the populace stands and waves. The knight on a charger, with elevation, armor, nobility, is also referenced in the model names, Charger, Crown Victoria, and Royale being three examples. Street bikes are associated with teenagers, rural Chinese and history professors, people lacking armor, elevation, nobility. Homeless people also are known to frequent public sidewalks, and these and other generalizations lead to the conclusion you should always be wearing a car in public, rather than walking or riding a bike, at least outside the city. Walking or biking or canoeing or riding a horse are just other things to drive to, not actual transportation. These old ways of getting around are now strictly recreational, part of the freedom of choice we have to enjoy ourselves outdoors. The power boat, a popular toy on Long Island, is a descendent of the Royal Yacht, and as with the car and the coach, the thrill involves sitting.

When people have a choice, they generally choose gas power over self-propulsion. Batman in his batmobile driving to the corner deli, in his bat-boat on weekends, in his bat-cave in the evening, avoiding the outdoors and the physical move-

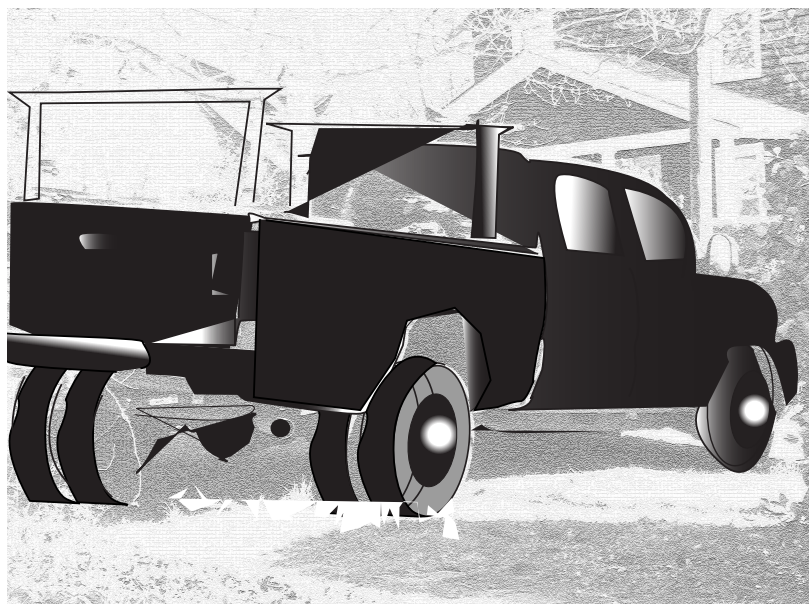
ment, except when working out in the bat-gym, and this is cultural, part of the general striving to imitate royalty and super heroes. Batman's super power *was* the batmobile and the batplane, i.e. mechanization. But in the grand scheme, if civilization is expected to survive, people may be asked to chose self-propulsion, bikes and shoes, whenever it is possible, which would require some kind of social engineering, or counter-engineering, as well as counter-programming. The new super hero would be Walkman or Bikeman.

Walkman's super-guideline: if it's a mile away, walk. If there's a wide shoulder on the road, bike. If there's a breeze, sail. If there's a stair, climb. There are so many things to do that don't require gasoline, it's always a shock to Walkman when people choose gas, i.e. make the wrong choice.

Choices fatigue the brain and we develop habits so we don't have to choose, so that our brains get some rest. Choices are part of personal identity, chosing a truck that has a hood five feet off the ground is who we decide to be, the truck is indistinguishable from the driver/owner/brains of the truck. Nobody can tell you to walk or bike to the store, you have to want to and you have to be able to leave the truck parked, to separate yourself from the truck for local errands. That ability can be taught early through youth expeditions and other programs to counter the gasoholism that is taught when the Escalades idle outside the high school or when the batmobile leaps through the air... that is really the core issue here, what to teach children. It happens to be the same thing that children can teach us.

Useful physical activity, working up a sweat while actually accomplishing something is traditionally the responsibility of the working class; farmers, servants, mothers, musicians, and even some eccentrics, like me, but the goal of the American lifestyle inventors has been to eliminate useful physical motion completely unless one is being paid for it. This creates a disconnect between what is socially required, say driving to the store, and what our bodies require, which is to hoof it. One minute there is the disconnect, the next we are inundated with cars, gas-powered lawn implements, heaters, coffee machines, air conditioners, dish washers and every other invention and resource for the day-to-day struggle of staying comfortable, clean and amused with a trimmed lawn. We must not stray from within the socially defined comfort zone, we must not be too hot or too cold or too tired or too bored or too dirty or smelly; there are appliances to protect us from these things, as long as we stay indoors and pay the utility and credit card bills. Our economy relies on this.

So what's the complaint? Every one of these products is a problem being solved, says economic theory. These inventions are the source of value. The counter argument, and I'm hardly the only one making it, is that there are problems being created that are far more serious than the problems that were solved by all the wonders of modern life. Moreover there are solutions that don't require batteries or gas stations or much sacrifice at all. Let's take an example of an ex-urbanite in his habitat.



4.

MILTON THE SELF-TRUCKER

Milton is a friend of long standing, someone whose habits I am well aware of; he lives on a little dead end street near the shore, within walking distance of beaches, waterways, long walks along the harbor, three super markets, a library, and four good restaurants. Milton drives a huge black ‘dually’ truck, with the double tires in the back, it’s his second home (actually his third home... he just bought a house on the North Fork). The back of the dually is usually filled with a grand assortment of windsurfing equipment. Milton runs every day, swims every day (even in winter, with a wet suit), eats out every night, but whenever he runs, swims or eats out, he takes the big black dually to the track, to the beach, to the restaurant. I, a friend and neighbor, also a nudge, have told him he should walk, I have told him this local driving is wrong on many levels, and Milton doesn’t seem to care. He won’t change his personal habits because of my concerns, and my inevitable conclusion, my concern here, is that this car dependence is more than an addiction. Judging by the number of cars on the local drag relative to the number of pedestrians (my count is 1000 to 1) it’s an epidemic.

Route 25A has for thousands of years been the main east-west drag for the north shore of Long Island, and until very recently travel along the route was on foot. Europeans brought horses, the gas revolution brought cars, now Milton

drives up and down it in a large truck, as do a lot of people. Milton might be driving to a job site or the track or for dinner or to the beach, every function involves the truck. There is for Milton a complete disconnect between exercise and useful physical activity, except during his working day, which he spends up in trees, usually removing the tree by hand with a chainsaw. Milton's comfort zone includes great heights and freezing conditions, and his body has limitless strength, and his power is only increased by the large diesel motor that moves him down 25A through the controlled explosion of mined petrochemicals. But Milton will not change, he will not walk to the restaurant. He does not see his world from the perspective of where he can walk to, but of where he can drive to. He will not leave the dually parked for a day, even on weekends, because at some point personal transport was hard wired in his brain to the big black truck and the strength that it represents. Sorry Milton, but you kind of asked for a carbon-footprint trashing. You could leave the truck parked all weekend, as I do, and enjoy the locality...

One evening there was a soft drizzle and I was trimming the bushes with clippers, shirt off in the moist air. The big black dually pulls up into the drive and Milton greets me with a suggestion that I use his gas-powered hedge clipper to get the job done in half the time. I explain for the umpteenth time that I have no health insurance, I have to do this by hand to stay healthy. I didn't see the point of firing up the gas burner when it wasn't needed and basically he thought I was stoned. This is how removed my logic is from the day-to-day on Long Island.

People in the area do walk, when the weather is nice, but they don't go far and they are never on an errand. If something needs doing, they take the car to do it, it's easy and reliable and that's that. These distances one chooses to drive are often no greater than the walking destinations in town, but it doesn't really matter how close or far things are, everyone drives everywhere they go. I have rarely seen another bike outside the Stop n' Shop or the library. I can't remember seeing someone on the sidewalk carrying groceries or books. In the city, carrying groceries on the sidewalk is normal. In most of Europe you also bring a bag to the supermarket, they don't provide the disposable waste of plastic, and people adjust. If gas was \$10/gal, people would adjust and leave the wheels parked for local errands. The bicycle would provide the local transportation, and people would be healthier and save money. Also their obese carbon footprints would shrink and they would look better.

Milton owns a bike, but it's a specialized sports bike with expensive air nozzles on the wheels. He tells me it's not for the street, that it is strictly, proudly recreational. My bike, by contrast, has baskets front and back, it is a street bike and it gets a lot more use than Milton's expensive sport bike, since I use mine for local transportation in the city and the country. In the country I don't use a lock, I know no one is going to steal my bike because they all have cars, they don't need or want a street bike. There is a deli within walking/biking distance of practically every house on Long Island, but the deli parking lots are full of cars, some as big as a house. Any bicycles outside the deli tend to be childrens' bikes. For non-teenagers walking is reserved for the distance between the driveway

and the kitchen, then it's up to the treadmill to provide actual exercise. Purposeful ambulation just isn't very popular judging by the total amount of people in Long Island who use the sidewalks. The number is in the low three figures.

The number of people who use the sidewalks of New York City is in the seven figures. What's the difference? Outside the city, the car with all its seductive attributes is right there in the private driveway, and infinite destinations are available. But inside the city parking is a chore so people walk everywhere. The sidewalks are teeming with visitors and locals, and most of the cars in the city belong to people from out of the city who drive everywhere they go. In the city, when you use your car you lose a parking space and need to find two more, one where you're going and the other when you return, and this translates into a situation where the car has more value parked than it does on the road. So if you have a car in the city, you only use it if absolutely necessary.

Not just the car! Here we have a rule of thumb! Any power assist should be the exception not the rule. It's the only way to be. I want to spread the gospel, the Occam's Razor of modern life: only use power assist when necessary, otherwise, use physical strength. Use it or lose it. Use the stairs, the sidewalk, the bike lane (something very rare outside the city), the rake, the clippers, the chopping knife, but most importantly, use your feet.

There's no use telling Milton about this new rule, he is hard-wired, as are most adults in the ex-urbs. Parents are telling children to strap into the SUV, which programs the young to

rely on a massive energy support system for the rest of their lives. They should be able to choose lifestyles, not be forced into them. This is physical socialism, total protection from the vagaries of weather or any other discomfort all the time, which is great except for the costs and the banality, which is evident in any environmental report or report on our general health or a look at the federal budget. But let's stay positive.

Yesterday Milton and I walked to a restaurant, and he bought lunch, and I am today more optimistic about social change than I was yesterday. We were the only pedestrians out yesterday, but we've set an example for the chronic drivers. It felt a little uncomfortable for both of us to be without our automotive armor, less for me because I was used to it. If we alarmed some drivers I apologize.



Evolution of energy

5.

WALKING MAMMALS

We are the walking mammal. Birds know how to walk (if you can call it walking... ha!) but we're the only mammals who walk upright. This ability coincided in evolutionary time with the rapid growth of our brain pans which gave us the power to wonder where we were walking to. Usually it was on to greener pastures, virgin clam banks, away from enemies and our own waste. There is a ravenous quality in humans; we voraciously strip the area around the encampment of every last source of nutritional value, a methodical feeding frenzy, consuming every bivalve, every berry, like a herd of goats. It was, in our mutual evolution, move or starve. We walked for survival, and our physiology is designed around lots of walking. Inherent in the symmetry of our bodies are the beautiful walking mechanics of the foot, the leg, the knees, the hips and torso... and the head, which records everything it sees like a camera.

Even the sedentary cow in a feedlot is descended from roaming herds of ancestors and somewhere down in the bovine brain is the instinct to put one hoof before the other all day long in endless migrations. Early humans migrated also, that is how they spread all over the globe, ambling along shore lines, through forests, living off clams and berries and game. The America of today is entirely settled by hundreds of millions of migratory humans who now drive hundreds of mil-

lions of cars and rarely walk anywhere. That's a big change, and everything changes with this change.

I'm a driver, proud of my skills at staying between the lines on the road. My driving habits have changed by these realizations; I drive much less. Part of this change coincides with the rising price of fuel, also the chronic transmission and brake problems of third hand cars, which has left me a little frightened of the damage the car can do to the wallet. Cars have always been a source of frustration, but equally it's the physical benefits of walking that my body craves. I luckily have the walking habit, being a part-time city dweller, and by habit I usually judge the walking distance to various local destinations, rather than the driving distance.

My father taught me to walk. He gave walking the same value as the other sports he pursued, sailing, canoeing (trips down the Allagash in Maine), skiing. He came from a time when you hiked up the mountain in knee-deep snow before you skied down it. Hiking in the White Mountains was a part of my youth, also the annual walkabouts for friends and neighbors in the nearby Caumset park, a continuing tradition. Cross-country skiing and sailing and long bike trips were also part of Dad's urge to pass along the equation – use the urge to move to get exercise and clean the body and feel great and be outdoors – all that came from him. Of course getting to the boat/mountain/river requires mechanized travel, which is just one more reason to avoid mechanizing the rest of the vacation. Don't use a motor for recreational purposes unless you really really need to, like when the wind dies (when the wind dies, I break out the oars. People in motor boats yell

‘Do you need a tow?’ I shake my head) I didn’t realize till I was writing this that it all came from him. He never taught me anything about banking (he was an international banker), he just made sure we could all sail and ski and hike and knew where to do these things. As a result, I have great recreational habits, which I’m trying to share here, and lousy earning habits, but this is not about me.

It’s really about Robert Moses. Discussing this with my mother she pointed out that Robert Moses disapproved of walking and biking and public transportation. He wanted people on Long Island to drive everywhere, and wanted his engineers to make that possible, and they were glad to and now everyone’s childrens’ children drive everywhere, as do most people in the country. This was public policy, creating jobs by selling cars and gas. It turns out that this public policy is flawed, since it brings people indoors sitting down, which equates with sedentary lifestyles and energy dependence. The carbon issue was then just a gleam in the eye of nascent environmentalism, even now that the effects are being felt this connection between driving and global warming is not high in the public consciousness.

6.

DRIVING

How do modern humans migrate? We go on vacations, south for the winter, we visit relatives for weddings and funerals, we get curious about other places and bored with home. We are constantly moving, and almost all of that movement is mechanized, pollutants screaming out of the car/plane/train, constantly hauling the populace around like a gassed up ant colony that has covered the globe. (Another metaphor would be clouds of electrons, jumping a quantum level up into the sky, or down into the subway) Unconsciously we climb into the car and start the engine, like dutiful puppets of the large oil companies, to go to the job/gym/bank/market/funeral parlor/hair salon. Any need that cannot be addressed in the house calls for a car ride. Long after we've retired, until we die, many of us keep driving everywhere for whatever reason. If I ever retire (I have nothing to retire from!) I'm making sure to live within walking distance of common destinations.

Moving from one couch to another, we settle into the accommodating vinyl, accessing some major torque, like in a dream. Walking is something that has to be tolerated as we go from one conveyance to another, assisted by escalators and moving walkways; soon we are boarding the powerful jet and roaring down the tarmac into the air. Meanwhile we are just sitting there, not exerting any effort at all, and this is

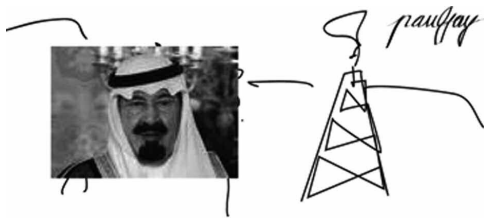
how we serve our instinct to move. On weekends the powerboat gets gassed up and we spend the day with the roar of the engine in our ears, then back to the car and back to the house where we fire up the grill to burn some meat. There is a brief period of travel between the parked car and the kitchen door when we're not burning something.

Power boats display these issues openly... a temple to the pleasures of sitting and burning, cup holders within easy reach, protection from the elements provided by clear plastic bubbles while powerful motors push the displacement hull through the brine, kicking up a foaming, heaving wake. These boats are not hybrids, they are gas machines and that's it, no oars or sails or paddles. They are recreational, and recreation is, within one's budget, 100% elective, you can do what you want with your leisure time. What many motor boaters want to do is burn gas; they are happiest when the engine does the work, anything else seems unnatural. More reasonable people anchor the boat and have a party, but even so this is usually a sit-down party. This would make sense if they spent all week at a physically demanding job, but jobs are more and more sedentary, and so is getting to them and home again. The weekends offer a respite from all this sitting by providing physical recreation to those so inclined... the kayak, the hike, the bike, the sailboat. More sitting is not what the doctor ordered.

In the city, snow is unnatural, and the mayor has to get rid of it quickly or he'll be destroyed in the next election. People hooked on cars are desperately trying to dig out and get on the road, before the street has even been plowed. In certain

other locales, snow is natural, something to expect if it's winter time. That's a big difference, and in a democracy, these popular tendencies, right or wrong, help determine who writes the laws that tell us what to do and who to yell at. In matters of snow, the city can learn from the country. In matters of walking, it's the other way around, the drivers can learn from the city dwellers. Of course thanks to global warming there was no snow this winter...

Getting the city people to accept the snow, if there is any, and getting the x-urbans to walk instead of drive, that's a challenge. Much of the city budget is spent getting rid of the snow immediately, rather than over a few days, which is a lot of diesel oil pushing a lot of heavy wet stuff, millions in overtime costs, our debt at work, the pure winter air laced with diesel fumes. After a blizzard covers the city with fresh snow I often try to go cross country skiing, only to find that all the park paths have already been plowed, at eight in the morning!



I ask all Americans to keep
using plastic bags
and driving everywhere.

7.

COSTS/MORE COSTS

Energy production is in a protracted feud with the forces of nature; the oil in the Gulf of Mexico, the atomic plants in Japan. The future we face because of energy addiction, also addiction to gadgets and distractions, is an uncertain one. The surprizes may not be pleasant, and it's us that created this change; it wasn't crooked polititians or extremists or 'the rich' or shadowy government groups; they carry some of the blame but the money trail leads to the pump.

A stark illustration of this point is the boycott of Cuba, which I used to oppose, now I'm confused about. We can see in a documentary, not personally of course without special visas, a pristine island, with the healthiest rain forests and coral reefs in the Caribbean, having been protected from our consumer ruled culture and the by-products thereof by the U.S. boycott. The human empowerment has been kept in check through socialism, the choices have been limited through bureaucratic control over the population. The nefarious influences on both sides, state socialism and state consumerism, have been de-clawed through protective boycotts. A question lands with a thud on the table, shaking our freedom ringing fundamentals: is energy consumption another assumed right, that we have and they don't, like manifest destiny, that will later be seen as legally unsupportable and ethically questionable, even wildly overreaching? In America, exercising our

rights, even questionable ones, is like a religious obligation, the reason we have a healthy gun industry. Energy consumption is one of these rights, at least in our minds.

The ethics are also interesting, and they shine a strong light on the freedoms Americans take for granted, including freedom of movement and right to bear arms. The American narrative can be seen, after a few drinks, as congregational voting rights leading to the separation of church and state, then the bill of rights and, after an epic struggle for human empowerment, by which I mean economic growth more than human rights, to Hummers. Human empowerment, in the full-bored American style, leads not only to the problems under discussion, but also to the denial of responsibility for those problems, and so in the future, human activity may have to be tightly restricted in the production and use of our energy resources, a la Castro's Cuba, or else we will be robbing future generations of a liveable planet. Environmental issues were not a topic of discussion in the constitutional convention, so the legal response to growing environmental issues is slow. We are forcing a confrontation with poorer countries through the U.N. and carbon caps, which we will ignore rather than comply with (a sign of addiction). The ethical dilemmas which tear at my soul are not even on the radar. The ethical paradigm is "does this activity address my personal/family needs?" and that is not likely to change any time soon, since these needs are programmed through everything that makes up our lives: infrastructure, education, advertising, public policy, even movies.

The car chase tells the brain "I better have a fast car, other-

wise my prey will escape. Or I will be caught” depending on whether the lead actor is the chaser or the chasee. Popeye Doyle commandeered a Pontiac GTO in French Connection. Hollywood movies are ads for cars and guns, among other products, and movies themselves are the ultimate sitting down experience, the feeling of motion without the effort. In a perfect world movies could promote self-propulsion and other saintly, non-anthropocentric activity; Lord of the Rings was completely unmechanized, at least in the walking fantasy it portrayed, but whether it turned hords of hobbit fans into walkers is another question.

The ethics of human rights is really like geometry: if we have the right to drive a truck everywhere so does the rest of the world. That right is assumed by average Americans, who publically display this right, which is part of the attraction of trucks, but what if in the grand scheme of things no one has that right? What if catastrophe can be averted by removing this right? What are the limits of human empowerment, based on this geometry? To find the answer to that, multiply every basic right by 7 billion. Driving a truck everywhere doesn't look like a basic right at all when you multiply it by 7 billion. And 7 billion is not the right number, it has to be multiplied by a factor of 'g', for generations. The 7 billion are regenerating and the geometry is exponential.

Individual Americans use four times as much energy relative to the rest of the world, but to correct this imbalance, this questionable example to the rest of the world, we are leading the planet into the abyss. The rest of the world is changing to be more like us, buying more and bigger cars and getting

more sedentary as a result, all the symptoms of energy dependence. A better adjustment would be if Americans developed a life style that embodied their own physical energy and brought consumption more in line with the rest of the world, and with the future hanging in the balance, this is the crucial choice for everyone, a choice one might have to make many times a day every day. It could go either way, but the smart money would be on more riding mowers and exercize machines, since the American Dream is mechanized.

In the back of our minds we see a future with alternative clean energy and universal health care, but it's questionable that these dreams will solve anything. I have friends looking for cold fusion, good luck with that, that would make a revolution in energy production, but realistically, the solutions lie with us. The walking solution, in combination with wind/solar and free hospitals, will improve the world. Walking will keep people out of hospitals, and this claim could not be made except without giving due credit to the lymphatic system.

8.

THE LYMPHATIC SYSTEM/BLOOD/OUTDOORS/INDOORS

There are important health benefits to the walking life; the lymphatic system, with infinite branches, cleans between our cells. It has to pump lymphatic fluid to and from every corner of our bodies, and it doesn't have a pump! The arterial system that carries blood has a pump, the mighty heart, but for the lymphatic system the pump is nothing except the moving body. That is the prime health benefit of physical activity, a good scrubbing of the interior flesh.

When we don't move the lymphatic fluid turns to something resembling cottage cheese, and the chemicals that got into the food chain and into the air we breathe and through our skin stay in our bodies. The result is often illness. That is the danger of the sedentary indoors sitting down life. The cow in the feedlot can not move, and has to be injected with strong antibiotics to keep from rotting. The cow's lymphatic system is useless. But we eat the cow anyway. If we don't move, we have to be injected with antibiotics, like feedlot cows.

Every living thing has found a way to expel toxins – if they didn't they wouldn't be a living thing; plants, animals, micro organisms, and these cleansing methods developed millions of years before Dupont Chemical developed pesticides and drastically increased our exposure to molecular abnormalities that play havoc with our health. Our primary cleansing



method to expel this social and cellular waste is the lymphatic system, which also expels the decaying proteins in our cells by straining toxins, bacteria and other waste out of the fluid through the lymph nodes and zapping them with lymphocytes. To be effective, this system requires physical activity like walking. Otherwise it will still work to some extent, I am told, but certainly not at top performance. After all, Stephen Hawking is, at this writing still alive, and he can't move at all.

I knew a fellow who would walk around Greenwich Village listening to a walkman and muttering to himself. That was in the 80's, and I saw him the other day, walking around, listening to an iPod and muttering to himself, looking exactly the same thirty years later. What's his secret? (walking)

Siskel and Ebert, movie reviewers on television... one died, the other doesn't look so good. What was their main activity? (sitting)

When we walk, the brain is pumped with fresh, oxygenated blood. This pleases the brain, which often has work to do.

Brain fuel, the food for thought, is fresh oxygenated blood. If we walk briskly, breathing deeply, outside where the air is fresh and clean, away from the fumes of mechanization the pure fragrant air leads to positive thinking, also to the renewal and creation of new brain cells.

In Chinese medicine, the movement of blood is the first concern in promoting health. Pain is attributed to the slowing, even stopping of blood, due to inflammation, therefore the forceful movement of blood during an extended walk or Tai Chi session is popularly thought to promote the cleaning and replenishing of the organs, including the brain.

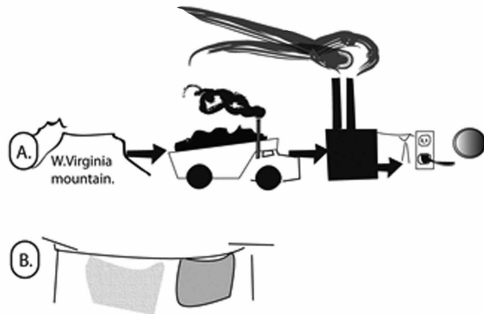
Thoreau walked 4 hours a day. Rousseau walked constantly, Bertrand Russell would return from a long walk with a an intact book in his short-term memory, Mozart with a symphony. Every idea in this book came while walking, lots of legwork, so you don't have to be a genius to benefit from a good stretch.

Most Americans are indoors sitting down staring at a screen, the blood slowing down and the joints getting weaker, many hours a day every day staring in front of them for work, for travel, for entertainment, for eating, for reading; even writing about walking, which is why it makes sense to write in the head, while walking, or to at least to stand at the computer and move around.

It was always the goal of the middle class to attain the (seemingly) effortless, except for chewing, lifestyle of the ruling families, ever since there was a middle class. Instead of gobs

of royal land and money, the middle class has had limited amounts of land and money, and this life-style lift had to be accomplished with technology, which the middle class provided and paid for. Trains, cars and airplanes. Washing machines, dish washers, microwave ovens, riding mowers, plumbing, air conditioners, personal computers, smart phones, fresh meat (lots of technological breakthroughs in the feedlots) treadmills (if you have a riding mower, you must have a treadmill, or you'll turn into an indistinct blob), the whole house is an appliance, but the most seriously overused appliance is the car, the traveling appliance. The industrious middle class of America buys these things over and over; every year is a new generation in technology.

**2 WAYS TO
DRY A TOWEL**



Driving trucks for personal transport started last century in Texas, where the distances were too great to do anything but ride a horse. Then came the automobile to replace the horse as the thing you ride, and the oil was so plentiful that there was no limit on driving. And everyone had a truck. Self-trucking spread throughout the country and now people use light trucks and SUV's to get around, spending a significant

percentage of their wealth at the gas pump. In modern Texas, moms drive their kids to school even if it's a block away, and following nature's ugly irony, the outside is getting less habitable... shopping malls separated by minimalls, persistent drought shrivelling the produce, unacceptable air quality, deserted sidewalks and so on.

The mammalian laws still apply, however, and also the laws of entropy and thermodynamics. As the world goes indoors (cars and planes are indoors, except for small MG's and cropdusters) the consequences for the outdoors are severe and probably irreversible, also up to now they have been preventable.

Race cars are at the opposite end of the scale of the sensible and functional, like the tractor. Race cars glorify the car, and the suburban sprawl is made for the car; it presumes, integrates, empowers the driver. Sidewalks and public transportation are afterthoughts, considering the extent to which consumer habits are built into our AAmerican infrastructure, and it becomes hard to see a reversal taking place. However, there are reports that members of the more recent generations are demanding freedom from the car.

Factoid: Real estate values in walkable neighborhoods are rising while the values in suburban car-based neighborhoods are falling.

Factoid: People in walkable neighborhoods on Long Island still drive everywhere.

A student who lives on my block was just driven home by an empty schoolbus, to the door of her house at the very end of this short little road. She could probably have been let off a half mile away, or even at the foot of the road, and walked the rest of the way, but the rule is to mechanize all function, and so she is let off as close to the door as possible. One problem with this arrangement is that when she does walk on the street, she will look lost and vulnerable, rather than confident and at home. When I grew up there was lots of room to run around and hang out without adult supervision, up in the giant beech tree, digging caves in the woods. That kind of childhood is no longer possible since kids get driven everywhere for whatever reason, and adults are always watching. I remember getting stuck on a tree limb thirty feet above the ground. There wasn't an adult for miles so I had to conquer my terror and vertigo and climb around the branch that was blocking me. Gangs would choose leaders, or visa versa, and the leader would issue orders, and we would follow no matter how ridiculous it was. But it was always outdoors and always physical. We would travel by bike or foot, occasionally by canoe. One of us had a pony, but once we started driving, that was the end of all that. I feel something terrible has happened as the country's mammalian population goes more and more indoors sitting down and this kind of physical, outdoors childhood is no longer available. Kids don't go outside because other kids aren't outside... it's deserted. The car, tv, computer, educational system have all pulled us inside onto our back pockets.

9.

VALUE/PERAMBULATION IN THE DAY TO DAY

I recently purchased of a battery-powered saw, \$100 including the cordless drill; Chinese labor is saving me labor! Labor-saving devices are great, I grant that, embrace that, but there is an imbalance in the system where health and the environment are being traded away through overuse of labor saving machines, so I often go back to the hand saw. This strategy gets my metabolism pumping and saves wear and tear on the cordless saw so that I don't have to buy another one next year.

Any mineral of value will be dug out of the ground and put indoors, sometimes in the form of a battery-powered saw, sometimes in the form of a car in the garage, or a tv set or a treadmill or raw a/c-pumping electricity. While creating convenience for the consumer, and commerce for the vendor, this process generally stresses the planet, leaving gaping holes full of toxic chemicals where there once were balanced biomes, polluted rivers and stress where there was perfect eden.

The economy relies on this process; the robust pandering to the pampered plastic-wielder, offering physical comfort and security that we didn't know we needed, suggestive destinations reachable by car and jet and remote that lure us into leases and cable deals and world tours, a cornocopia of possibilities a click away, exciting us and sedating us with snappy media. The infomercials on late night TV offer one

minute a labor saving device, the next minute an exercise machine. We can't begrudge people making a living and feeding their families through hucksterism, which is an American tradition, or any other way; making a living is a high priority of most people, the biggest issue in most elections, but this process means trouble for the future of the planet. Better ways must be dreamt up by the same inventors, they could offer the consumer well-designed tools that rely on human effort. I have a few of these tools clicking in my head, waiting for a forward-looking investor.

Our economy would collapse without the consumer spending habits, according to economists. Though it is true that perceived needs are the engine of economic growth, look where the oil profits go (big oil killed the windfall tax!), where the energy dollar goes (Enron was a typical example of a profit-driven energy company) where the soda profits go. They go to very large companies with overpaid executives and wealthy stockholders and two sets of books. These are the people that take all the money out of the economy and stash it overseas, so saving their fortunes is not a top priority. Meanwhile, the 99% perhaps should not be buying such robust quantities of gas and soda and electricity. Wealth is generated by social manipulation, by convincing people of what they need, so to save money, it would make sense to stop being manipulated.

I bicycle to the Stop n' Shop, or to the local fish store, bringing a shopping bag, and I wish more people did. It sounds very boy-scoutish but it's the new normal, or ought to be. That's the new miracle energy. Leg-o-sol. Footoil. The Strid-

ing 1000. The term ‘biker’ should refer to someone on a bicycle rather than to someone on a Harley Davidson.

Even after drastically reducing driving and use of plastic bags, I’m still creating huge amounts of waste. I know people who live healthy lives with minimal amounts of waste, much less than me for instance; they are freegans and lucraphobes from whom I learn much, having spent most of my life not following the suggestions in this book. There is a cultural memory of earlier times among all people, the skills of survival in cooking, hunting, farming, but now, as we load up the back of the SUV with double-bagged potato chips and shrink-wrapped plastic soda bottles of corn syrup for an increasingly obese family...there’s no memory of that except in the children who learn these habits. That’s the current trend that desperately needs an attractive alternative, and much of that alternative lies back in the days before over-mechanization.

The local farm stand is another half-mile down the road... puff puff puff. There’s no free like guilt-free, and if I can make it there today, it will be easier tomorrow, as I’m drawn to the fresh lettuce and bell peppers that haven’t travelled thousands of miles through the diesel-powered distribution stream just to nourish me. The head of lettuce in the super market has voyaged more in the last few days than I’ve voyaged all year.

I’m always on the lookout for a way to work up a sweat and get things done, the way some people go to the gym every day. I try to walk at least a mile a day; biking, maybe three

miles. I know some people who bicycle much more than that, some elderly retired people who want to stay out of the health care system. They are cheerful, their brains running on fresh oxygen. For those not drawn to the bike or the sidewalk, how are we going to accomplish this walking/biking distance, by panting on a treadmill to energetic pop music (with mechanical beats)? That's a good plan except that it means that if we've been driving a car around all day, all our physical movements have been mechanized, all day long. That is perhaps too much mechanization, the paradigm in most areas of the country, spreading rapidly to the rest of the world. It probably means the END of the world, and here we are questioning it. What is the alternative? More long walks and fewer roaring engines.

There is a nice strip mall a five minute walk from my house, with a butcher, fish store, a pharmacy, a music store, the only franchise is the gas station. If this were Europe you might see elderly people biking or walking to replenish whatever it is they live on, but though this strip is within a five minute walk of thousands of people, a statistically significant percentage, maybe 99%, of them drive. A statistically significant percentage drive right past this strip of shops to the supermarket to get the slightly cheaper produce from distribution. This savings is lost on the extra fuel costs, but that is rarely a day-to-day consideration.

As an alternative to grabbing the car keys, the suggestion here is that we grab a hat and a shopping bag and hike to the local store, or put the bags in a bicycle basket and pedal it, then make it home with a load of groceries using no disposable

bags (except the ones that get, at least in my house, converted to garbage bags for kitchen waste). Adopting this as a routine enhances life, but it is impossible for many people and distasteful for others. The people who do the same thing with a 3 ton truck are setting a questionable example for their kids who will forever have to rely on further mechanization, i.e. a treadmill, to get their exercise. As this goes on generation after generation, any effects, good or bad, get multiplied by the number of moderately wealthy people who subscribe to energy dependence, which is most of us, and that number has to be multiplied to the power of 'g' for generation. That's a lot of energy, a lot of burning, a lot of need, a lot of danger if the supply of energy is compromised. If people have forgotten how to walk, how are they going to get around if the gas runs out? Which brings us back to the top of this paragraph.

If you live too far away from the supermarket to bike there, then the next time you move, make sure you look for a place within biking distance of a supermarket. I think a tricycle that carries groceries would be just the thing to keep me fit as I get older. If you live thirty miles from work and have to drive every day, get a car that gets 30 miles to the gallon, then leave it parked for local errands on weekends. Parking as close as possible to the front door of the super market, office building, whatever, isn't totally required... you could park the car far away and walk, getting in your daily exercise and saving gas. With a little imagination, bit by bit one's life can be demechanized and simultaneously physicalized. I mow the lawn with a hand mower instead of a gas mower, and it provides the the lymphatic and cardio-vascular activity that improves how I feel. The tools I use, the bike, the mower, the clippers, the lit-

tle kayak, all have a more refined functionality than the thousand motored appliances required by the mechanized lifestyle. My yard is a functional gym.



10.

PHYS ED/WEATHER

Schools inadvertently teach that physical activity is divorced from function, part of a general tendency to compartmentalize education, but the effect is to forever associate exercise with special exercising activity, like treadmills or squash twice a week. There's nothing wrong with that, except that we are putting our money behind an artificial distinction.

The volley ball game is good for a lot of things, there's intrinsically nothing to complain about with sports. What's wrong is for people to forever associate physical activity exclusively with sports. There's a lot of activities that aren't really sports, and also a lot of sports derived from regular activities. Running is an olympic sport, but why is it totally acceptable that when the runners actually want to go somewhere they use a car? For anyone in the animal kingdom, which includes us, running is a high stakes race, and it's a race that over twenty miles, humans can win. That's how we got this far... after twenty miles the prey, or predator, gives up, but we don't. The biped can eventually outrun the quadruped. When it comes to self-propulsion, we are the equal of the eagle, the leopard, the marlin and the gazzelle.

This astounding human attribute is currently on display at the Olympics, every kind of self-propulsion imagineable with competitors standing in for the predators and prey: running,

swimming, riding, biking, rowing, kayaking... former modes of human transport that have been kicked upstairs to Mt. Olympus. This happens in a microcosm of physical excellence, but outside that world it is the machines that are fast and beautiful, it is gas that supplies the propulsion, the excellence is a result of business competition between car companies.

The human body is optimized, design-wise it's as good as it can be. It has reached a limit through the evolutionary process beyond which any change is getting worse, not better. The foot, the eye, the knee, they are all at their peak of development. Our practical lives are not similarly optimized, they have a long long way to go. At one point they may have been optimum, in an old Italian town for instance, or an Eskimo village of old or nomads in the desert, and in native and colonial villages, as self transportation, on horses, kayaks, canoes, camels, or feet leads people closer to nature, that is closer to physical and spiritual health (yes I know, people were often sick). Now, thanks to the car, Long Island is way over-mechanized and civilization is headed towards a sorry result. To reverse this process we have to follow some kind of logic, like the kind of logic I'm flogging here: only mechanize when you really need to.. otherwise get physical.

If we spent less time with cars and gas-powered lawn implements creating noise and pollution, we would take more pride in our physical abilities and our daily lives would provide plenty of exercise. Moreover, this exercise would be inadvertent, you would stop thinking of a distinction between work and exercise. You would take the stairs instead of the escala-

tor because it's obvious, the stairs represent an opportunity to perform much needed cleansing of the body, and the escalator denies that opportunity. We would use the clippers instead of the weed-wacker, the rake instead of the leaf-blower. Why do gyms have escalators? It's because of a disconnect which seems to vanish when we use muscle power to get things done.

The links between physical activity and health are not always straight and clear. For instance it is not healthy to be thrown from one's bike into the path of a truck. It is not healthy to fall down the stairs... but it is also dangerous to ride the escalator, sit in a car or watch television. The inert body has an inert lymphatic system, weakness in the muscles surrounding the bones, an inability to perform common tasks without power assist or discomfort. Common activities are frequent activities, by definition, and the body's need for physical action is also frequent. The daylight hours should be filled with enough errands and chores and pleasures to keep the body moving. Exercise should not divorce from function, and this should be true from youth to old age, for rich and poor. Life can be lived with less money, less need for medications, fuel and car repairs, and more energy, health and vitality by using our physical strength.

I wack the weeds with a scythe that requires a golf swing.. it actually conditions my back which is a blessing; I can throw heavy things around without damaging my spine.

Motor-less recreation should certainly be taught to children, sailing, canoeing, hiking, cross-country skiing, rather than

skimobiles, jet skis, cabin cruisers and all other recreational use of fossil fuels. Ideally one could sail or canoe to one's everyday destinations, but most buildings don't have docks so that's impractical. This should be shown to children, that everywhere you look are opportunities to get stronger, cleaner and healthier, and they are more effective when motivated by life's pressures, like getting to school every day, or getting back to camp before nightfall. They aren't all safe, so you have to be very aware as you walk along a road or bicycle home with 30 lbs of groceries, or canoe down a rapid river. You have to be smart, visible, sober, wearing reflective clothing, a life jacket or helmet, you have to be patient crossing a street. You have to be wary as a cat; cars are dangerous and they rule the road, and power boats are often driven by idiots.

Mother nature may also cause discomfort as we walk, though I usually find weather very stimulating. Some people shy from weather, would rather be indoors where the weather is 100% predictable. Room temperatures for the rest of the week with cloudless ceilings. If that's what you like, I advise you to get into cleaning, i.e. purposeful physical effort, indoor style.

Some crazy people like the weather, even uncomfortable weather. My father was always happiest surrounded by mesquitos or with an icy wind in his face, or steering through a squall. On winter family reunions, we would love to go out at night in a blizzard and walk to the beach to watch the frigid swells crashing in the darkness. Thankfully we had a warm house to come back to. This was back when winters were cold.

In the summer, I forgo the air conditioning, trying to adjust to the hot and humid atmosphere, usually by taking off my shirt. Once I acclimate, I dislike frigid a/c. In the tropics people simply go shirtless, as do I. A/C is **because** of shirts. The modern mansions have no open windows, they are climate controlled throughout the many empty rooms, hermetically sealed from the outdoors, a large machine to be rich in. This is on the opposite end of the mechanization scale from of the shirtless jungle-dweller with the reed hut... I'm somewhere in between these two extremes, inching slowly towards the shirtless guy.

The demechanized life-style certainly gets one closer to the grand varieties of the weather, and that's not boring. I would usually prefer some discomfort to the boredom of too much comfort, which is why I threw out the TV remote; getting off the couch to change the channel keeps me active and generally happier and less ADD, as does strolling through a hurricane or boating in the winter.

One thing a/c denies you is the crack of a thunderhead chasing the humid heat wave, lifting the curtains with cool, ionized air. Aaaaah.

11.

OIL ADDICTION/REVOLUTION/WASTE/HEALTH CARE

Machine-infestation is a product of a century-long commercial revolution, the **gas** revolution, and for comparison we have as examples two relatively recent revolutions: the **digital** revolution and the **internet**. The great prophets (profits also works) Bill Gates and Steve Jobs foresaw a future where all common functions would turn digital. They then extrapolated the needs and created the products. Al Gore as Vice President talked about the “Information Superhighway” which led to to the internet revolution. Then there was the wireless revolution, and there are undoubtedly other revolutions to come, but they haven’t been proposed yet. I am, with my usual humility, proposing a possible ‘next revolution’ that counteracts the damage of the previous revolutions. The main enemy, the general topic here, is the birth of the over-mechanization: the gas revolution at the beginning of the century which led us to the leafblower replacing the rake and the truck (SUV) replacing the feet. This followed the industrial revolution and effectively set us all down in some kind of chair, replacing physical exertion with the rapid ignition of petrochemicals. We basically need a counter-revolution to reverse the CAR-nage, to get back on our feet.

As I stroll the sidewalks, hopefully with purpose, my mind runs through the tools of everyday life to speculate on how these tools could be redesigned to use physical energy. There

is a push mower, invented in the 19th century, (lots of 19th century inventions use physical energy; the bicycle!) but I have trouble with the tall grass... and so it goes, soon I have a lawnmower that runs on a flywheel, human powered, silent and beautiful, whirring in my head. Such a thing could be designed, manufactured, and bought by the general public; commerce!

Commercial activity depends on these revolutions, and the next revolution is sure to come from a weird angle. I speculate that the next revolution might have to do with human powered machines... why not? What if the next Henry Ford or John D. Rockefeller, to name two people who were responsible for over-mechanizing us, dreams up a something like my lawnmower with a flywheel, one that replaces the gas-powered lawn mower and every other carbon-spewing noisemaker with a well-designed tool powered by exertion and sweat? Those that could be convinced to buy and use these machines would be healthier and would burn less gas.

There are many reasons to be healthier, and many reasons to burn less gas. After all, when we buy gasoline, almost a third of it is from Saudi Arabia. This money helps fuel Islamic extremism, like the Taliban, which we then have to fight on remote plains and mountains. This is to the detriment of our coffers and the carnage is unmetaphorical and real. There's nothing we can do about it because we are addicted to gas; the Saudi's can do what they want. As Americans we contribute a major trillion dollar donation to world corruption. The flash-point of our gas addiction is the Strait of Hormuz.

Another perspective on oil addiction comes from looking back at the effects of the fur trade on the the native populations of America. As trade goods replaced traditional pots, clothing and weapons, the Indians forgot the traditional crafts that made these things, and therefore became dependent on the trade with Europeans. This dependence on metal products for survival became a crisis when the critturs grew scarce and the tribes, having nothing of value to the whites except their land were forced to trade it for pots and knives and rifles. This led directly to the collapse of the native civilizations and cultures. Gas addiction works similarly; as we drive more and more we walk less and less and forget how to walk. Without the ability to walk, we are dependent on foreign oil, much as the Indians were dependent on iron pots and rifles. This dependence poses a very real danger, a certain catastrophe to our economy if the flow of oil diminishes, as it will for a number of reasons (the Strait of Hormuz!). Those that have weened themselves off oil, by walking, biking, etc, will be healthier and economically more stable.

Many of the engines were built for repetitious jobs, to replace muscle power and therefore make more money as more gets done in the factory. When machine manufacturers realized they could sell these labor-savers to the general public, that the guy with fifty square feet of lawn would pony up for a professional riding mower, something one would use on a trimming the side of a highway, all economic indexes went sky-ward. Trucks were originally made to haul things, to replace the horse and wagon, but now on Long Island they haul the driver around. Even if the bed has never felt a load, the driver has felt like a real pro because he looks like a real pro,

tooling up and down 25A at 15 miles to the gallon. The Citroen 2CV truck, 1973, which actually did haul things around, got 47 mpg. This consumption of gasoline, because of this feeling of stature, always feels justified while the costs, as listed elsewhere in here too many times, are ignored or discredited.

The avenues of NYC have been fitted with bike lanes. Good thinking Janette Sadik-Khan, it's as if you see the future by creating the future.

The mechanized life leads to multi tasking, which I am trying to steer away from. I propose multi-functioning as the way to go, as a replacement for multi-tasking. Do one thing that accomplishes many things. You can walk to the store... thinking, bringing home food, and exercising, all at once. Kids use bikes and skateboards to travel the streets, and the earlier they start, the more they feel at home on the street; they tend to get abducted when they look lost and vulnerable.

ISLANDERS

Long Islanders should make this metaphorical connection: we are all on an island and must conserve and protect our island. Deep space offers no food nor minerals nor escape from our island, it's all here and now, every bad habit multiplied by billions to the power of g. This perspective makes plastic bags look like a very bad idea, temporary solutions to what isn't a real problem if you bring bags to the store. Our consumer-pandering solution to forgetting the shopping bag is a thin indestructible plastic discarded in vast daily quantities, and this non-solution is permanent, building up in landfills

over generations, adding to stressed garbage dumps, or often at the bottom of the sea where the plastic breaks down into steroids and other harmful byproducts. Plastic bags, in fact most of our consuming habits, do not jive with the island mentality. Islanders should self-propel around the island when ever they can, not by force or guilt but for enjoyment and health, as a response to the migratory imperatives that rule our lives.

FUNCTIONAL SYSTEM:

Chickens eating the bugs off the tomato plants, as in old Europe or rural China. Tomatoes and chicken going to town on the back of a bicycle. The back of the bicycle carrying provisions back to the farm.

DYSFUNCTIONAL SYSTEM:

U.S. Buying gas from the Saudi's and fighting the Taliban in Afghanistan. The Taliban is backed by Saudi's with, one assumes, gas money, creating a cycle of perfect dysfunction... since the U.S. Military is highly mechanized. The Taliban bomb the gas trucks going through the mountain pass to fuel American forces, the Americans buy more gas from the Saudi's, the Saudi's feed some of the money back to the Taliban. And you wonder why it's so hard to leave Afghanistan. Bin Laden's deal with the Saudi's was the classic shakedown: the money that backs the Taliban is protection money. The 9/11 attack on the World Trade Center, which was financed by young Saudi princes, now deceased, was not a random expression of violence, it was part of a master plan to bring the U.S. into Afghanistan and thereby destroy our economy, as Osama (thought he) destroyed the Soviets. His plan is work-

ing perfectly, our economy is foundering under the brutal cost of a mechanized war in an un-mechanized country, and there is nothing we can do about it because we are addicted to gas. The Taliban isn't, and they think this gives them the upper hand. In this respect they hold the moral high ground, though in zero other respects.

Most medieval monasteries were founded on the premise that people had to be active to remain healthy, had to participate in the farming and the other labors of community life. The communities fell into corruption and obesity when more powerful monks had lesser monks doing the physical labor. Same as in the Soviet Union, same as the good ole U.S.A., where this work is done by gas-burning machines.

Obesity is traditionally a sign of a declining civilization, and most Americans are overweight. The ultimate reason for this adding of the pounds is that progress, our commerce, has been measured in how many machines replace human labor. When an electrical appliance is replacing human effort, the power comes from burning what was once a West Virginia mountain and is now carbon and sulfur in the atmosphere, where it messes with the climate. Meanwhile calories are being ingested but not burned

The poor have traditionally lived healthier lifestyles with less money, less need for medications, fuel and car repairs, and more energy, by using their physical strength in the day-to-day, to farm, fish, hunt, travel, build, ranch, whatever they did before machines took over. This is a complicated issue, when I run out of money, less food rots in the fridge, but the

impoverished, regardless of efficiency, die of disease and malnutrition, ailments that are not curable by walking. The point is to strike a balance. Over-mechanization is an imbalance, as is great poverty.

When people use machines all the time, they feel weak without the machines. Someone who always uses the elevator will feel tired and stressed taking the stairs. Someone who drives everywhere will have trouble going up the hill, whether on foot or on a bike. They would also be uncomfortable walking in the rain. For Milton (ch.4), driving everywhere is just a habit, since he would have no trouble with rain or hills, but for many of us, the body isn't ready for the useful physical activity. We can't blame this on the oil companies or anybody but ourselves. The money trail leads to the pump, just as the path from the kitchen door leads to the car. This ten feet can be extended gradually by leaving the car parked and foraging on foot or on a bike.

Oil addiction shouldn't be measured in miles per gallon, but rather in gallons per day. What is one gallon, a trip to the convenience store for beer? Multiply that by millions of Americans and eventually you get 20 million gallons a day. That's a lot of everything, including money out of the country, carbon into the atmosphere, oil spills, even nuclear meltdowns, since atomic energy is covering for the shortfall in fossil fuels. We feel a palatable need, also a right, a freedom, almost a duty, to go where-ever we want whenever we want in perfect comfort, and we put that need way ahead of the needs of the rest of the planet or of it's future inhabitants. Since this is a quality of almost 100%, including me, of the population

putting our individual/family needs first, we can call it ‘human nature’.

Every number that applies to ‘human nature’ must be multiplied by 7b (g), ‘g’ for generation, and now the problem becomes exponentially clear. If we are entitled to that extra gallon a day, so is anyone in the world including future inhabitants. If climate models are correct, this indicates an upward pressure in the price of energy to go along with disagreeable climate changes as the planet becomes less habitable.

Conservative scholarship on talk radio suggests that climate models are a result of scientists competing for grant money, that Anthropogenic Global Warming is basically a hoax perpetrated by Al Gore and George Soros on the American people so that we can be scammed with carbon credit shenanigans. This position is in defense of uninhibited ‘human nature’, the right to arm oneself to the teeth and drive a truck everywhere in the name of some religion and the American flag. This group would not be sympathetic to the arguments here. Michelle Bachman wants to keep gas prices at \$2./gal. as a way to bribe a larger more self-interested political base into voting for her.

When we talk about any kind of social misdesign, we are talking large numbers, billions of everything, from millions of tons of waste to oceans and skies and mountains of pollution – big numbers. This piece is about walking so we won’t get into these areas, the more depressing parts, but we keep them in mind because it’s all connected. Walking reduces waste.

Walking reduces health care. Health care is something to avoid, especially late in life. If you drive a car all your life, avoiding the sidewalk, you will likely end up in an electric wheelchair, dependent on our healthcare system. The person with the walking habit can keep walking into their late 90's. The places in the world where people are healthiest and live longest are on hillsides, in Greece or the Caucasus where you have to climb up and down all the time. The people of the Himalayas have no allergies, have little need for hospitals, and Alzheimers is unheard of. But in the west, closer to sea level, where we roll along flat roadways, it gets harder to walk as we get older and the urge to sit down gets stronger, and those that keep walking are the ones that can keep walking. Use it or lose it.

What you lose by walking is access to the handicapped parking spaces. But if you're on foot, there's nothing to park, so you haven't lost anything except a trip to the hospital. Hospitals are great and not so great. There are no plant-based medicines left in the pharmacy, for one thing, since the big pharmaceuticals have basically patented and synthesized any compound that affects anything. The result is that all medicines are pure chemicals. This makes little sense if you consider that all disease is inflammation, and almost all plants are anti-inflammatory. The food wouldn't hold up as the world's most nutritious, either, and the amount of movement you get, being necessary to clear out toxins, is up to the whim and energies of the occupational therapist. I'm generalizing, but the point is made... avoid the hospital.

Traditional plant-based medicines are complex, working through a combination of ingredients. Pharmaceuticals are pure, which to me means unbalanced (this is a long discussion). They say that wonderful medicines are available in the rain forest, one more excellent reason to save them, but in a world where all medicine is synthesized and patented, i.e. the hospital, these promises are moot. There are no medicines from the rainforest at the hospital, now they are found in little orange plastic bottles with twist-on caps and iron-clad patents, rather than in the tea of the bark of the pequi tree.

That is the mechanized side of hospitals, there are so many great things also. When disaster strikes, you don't call Superman, you call an ambulance. However, we all know that illness is something to avoid, and if popular wisdom is any judge, physical activity has a lot to do with avoiding illness. The best way to get that movement into one's life, the point of this book, is by dialing back on power assist.

12.

FINANCIAL/ENVIRONMENTAL COST HYPOCRISY COMPUTERS

Under costs of the mechanized life we list, generally and specifically: keeping the car running, buying gas, tires, treadmills to replace lost physical activity, bloated energy bills, global warming, rising sea levels, increase in carbon, nitrogen and particulates in the atmosphere, melting ice caps, acidification of the oceans, oil spills, destruction of habitats... Health insurance costs, health care costs, entitled health care, the country, states and cities falling into debt to pay for rising health care needs of sedentary population.

The toxic waste from technology is enormous. During the collapse of the World Trade Center, countless circuit boards were pulverized, and their lead was in the air (also silicon, sulfur, vanadium, nickel, lead, glass fibers, inorganic carbon, arsenic, PCB's, asbestos and dioxin). All those circuit boards would have ended up in the waste stream eventually, probably within a year as faster computers replace the old beige ones.

“Shut up Paul, your bicycle tires are made of petroleum. Stop telling us not to drive when your bicycle seat is made from the same petrochemicals.”

“Hey, I don't burn my bicycle seat to go to the store a mile away, I sit on it.”

There is a possible dark side to what I recommend here, and that is blaming people for their health conditions. This could be used to deny health care and could be classified as a right-wing position. I don't consider this social critique particularly right wing or left wing, but I have to be wary, if anybody actually reads this book, of these arguments being used to support positions I don't agree with, like blaming people for their health. Sometimes we are to blame, sometimes we are not, but by 'blame' we mean people unwilling to change catastrophic habits, unwilling to look at alternative choices available in the day-to-day... all creatures have some responsibility for their well-being.

Perhaps one could explain the lymphatic system to children, give them a general review of human physiology and animal nature to go along with social studies and sex education. An aware mammal is a healthier mammal. Explanations and self discovery are the goals here, discovering the limits of mechanization for mechanically empowered animals (us) and the limitless possibilities of de-mechanization. The public education children receive should be of general benefit, but what is being taught, like the separation of exercise from anything useful, and the practice of sitting, and of being driven everywhere, does not do the public that pays for it any good because they will eventually foot the bill on the health care for the sedentary adult that this education produces.

There is nothing in the design of computers that requires a chair, standing works and allows more walking around. There are always ways to tilt the screen and keyboard up and down, so one should ideally have a choice whether to sit or stand.

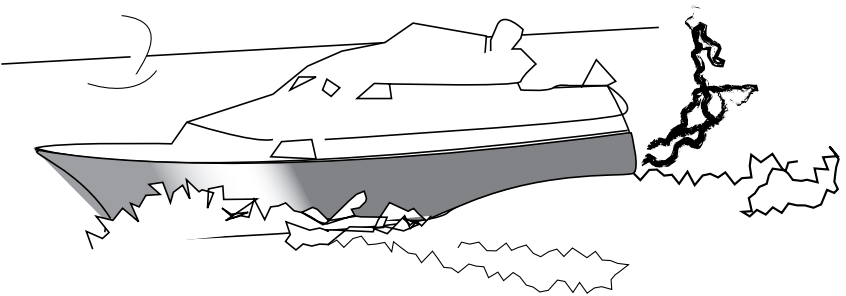
Changing the position of the monitor and keyboard doesn't even have to be mechanized; lift up the computer, onto some kind of desktop furniture, and stand for your next project because sitting is bad for you. When the body is upright it moves more.



13.

THE RICH/THE MONEY I SAVE/THE HARDWARE STORE

50ft displacement hull cabin cruisers blasting down Long Island Sound, a favorite recreation of the financially empowered who spend prodigiously on fuel for the large machines, inspiring envy while sitting down... the cabin cruiser has big plastic bubbles around the upper decks to make sure people are always inside sitting down, and kicking up a huge wake in celebration of the power and wealth at their command. The cabin-cruiser types never look back at the wake they are making to see the effect they are having on the surface of the water and on other boaters, never mind on the atmosphere; the outlook is forward not back, full speed ahead with the engines roaring. This provides us with a pristine example of the effects of gas on people's psychology. Gas creates blinders while providing purposeless super-empowered gratification.



Cabin cruisers are 100% gas. There is no hybrid power source, like sails, or oars... these things have been banished into the ash heap of history and gas has won. If one sees a kayak strapped to the stern, or bicycle for land excursions, these are usually in the sailing yacht, very rarely on the motor yacht. These people aren't into self-propulsion, they are into gasoline. Their wealth buys the fuel from the wealthy, not from the poor or the middle class, keeping the money among the moneyed, doing it's best not to trickle down on the rest of us.

Now that gas rules, what does that mean for the planet? The American style is to take advantage of cheap gas to ramp up our consumption, and the richer we are the more we consume. Since we are as nomadic as any other mammal, we travel constantly, sometimes on foot, sometimes in a little Nissan, sometimes on a bus, but sometimes on our own jet/yacht/ helicopter. Since wealth scotches any limit on spending at the pump, we multiply this conspicuous avarice by a lot of rich people, millions of millionaires, putting millions of tons of carbon into the atmosphere, and a link is made between wealth and carbon. We know fuel consumption is bad for the planet, for the future, but gratification covers the eyes of the gratified and the wealthy excuse themselves.

The wealthy have their own pundits who tell them gas consumption is good for the economy, and that the atmosphere needs more carbon. Sulfur dioxide trickling down on homeless people is the story on the ground, but they say burning gas is good for the planet. The scientists all say that burning gas is warming the planet, and strangely the Tea Party calls

that very consensus proof of a hoax. Since over-consumption is clearly unethical, the walker can proudly walk, the uber-consumer will probably be cursed by future generations.

Another connection between wealth and carbon: Rockefeller, Getty, Ford, Westinghouse... all the great fortunes, they mechanized us and put the government to work supporting the mechanization with zoning, roads, the grid, the whole car-based infrastructure that has replaced fields and meadows. Fields of grass have been replaced with fields of medicine surrounded by parking lots. This auto-land generates dividends for stock holders, that is for the heirs of the great fortunes of mechanization, and though nothing can be done about that, one doesn't have to participate. There are alternatives to throwing money at rich people.

Because I don't have health insurance, I have to stay healthy. I may be struck down by illness tomorrow but I do what I can to prevent it. I have no choice but to be in good shape, while leading a self-destructive life and on the short side of sixty. It's a challenge for anybody, not least for me since I could happily sit all day banging on this keyboard and never going anywhere. That's why I positively get a walk every day, hopefully on an errand of some kind. I invented a kind of art, 'Beachcrap Art' specifically because it required me to walk along beaches picking up interesting plastic things to take back home in the kayak or small sailboat. Once home I wash them and assemble them into art pieces. Usually these activities, walking, kayaking, sailing, are strictly recreational, but for me it's part of my job, or will be if people ever start buying my adorable creations.

The nearness of the hardware store is a critical issue, since any missing whatnot prompts a grabbing of the car keys. One mile is easy biking distance, especially if one stops for other errands, but if the pragmatic do-it-your-selfer jumps into the truck every time a bolt is required, that mile turns into many miles over a lifetime, much sitting and spewing. Sitting and spewing are what we are steering away from, so I bike to the hardware store. My new normal is perfectly pleasant, takes me right through a gas station, pedaling happily past the BMW's and Escalades. Righteousness fills me like air.

With a very scant income I have to save money wherever I can, and I find leaving the car parked in the drive as much as possible is a blessing on many cheeks. Fewer repairs, oil changes, fill-ups, new tires, tune ups, also the longevity of both the car and myself increases. Trips to the mechanic or the doctor diminish drastically. If something is wrong I usually take acupuncture, which usually does the trick, which is fundamentally the same trick that walking does, that is it gets the fluids flowing. If something is wrong with the car I take it to the mechanic then walk home.

The strength in my legs is a nice thing to have. Look at me! I'm biking to the library for my free movies, on the way to the super market with cloth plastic bags, what a saint. The library is free, paid for by society, and I'm careful not to harm society when I take advantage of it. Driving the car locally harms society by putting carbon into the air and bloating the oil companies with wealth and greed. Meanwhile, my legs get strong, the long steep hill is not the problem it once was, and my general health is better. The body has been cleansed

inside, but not so for the drivers of the many many cars in the library lot. This is a local library, almost by definition within walking distance of most people using the library, but few people stroll on the beautiful sidewalks because transport = driving. Walking is something you do if you have a dog.



14.

PUBLIC POLICY/THE FREEDOM GAME

Pressure to mechanize is constantly on children, to ride the school bus door to door, to sit in school except during recess and P.E., at which time they are free to burn off some of the processed calories which their bodies have been fed, that is if their school still has a phys ed. dept. The unfortunate part, for otherwise this makes sense, is that the useful and the physical are forever lost to each other. If it's a useful thing, like transporting self and family, it must be done by motor vehicle. This disconnect is arguably ruinous, teaching energy dependence at an early age, and something has to counteract this powerful influence on the progressive generations. The problem could be addressed with a machine that turns physical effort into useful energy that can turn on a computer or TV. This would be a rowing machine or a bicycle, anything that can turn an alternator. This machine would provide a non-mechanized experience, the students would be using the physical body in a way that is in line with their respect for the TV and the computer; it would connect the disconnect.

It can be argued that keeping state parks open, and bringing children to these parks for some outdoorsy non-sitting is more important for national security than a new aircraft carrier to bomb future Libya's. Walking should be taught through appreciation and experience.

Gas tax: since cheap gas makes possible the large cabin cruisers

and private jets, it sends a message to rich people that burning as much fuel as possible to private purpose in ones lifetime is a private choice, not an ethical or national security choice. That has to change, if one subscribes to a connection between rights and responsibilities, especially in the field of recreation. Having fun is elective, you can do whatever you want to enjoy days off from work. Sitting in a large expensive machine is very nice, but not physical at all, whether it's moving at top speed or tied to a dock or parked at a scenic overlook. Ideally gas for recreation would be taxed at a higher rate than the gas that keeps our economy afloat, and people would compensate by leaving the machines idle. Gas taxes are not very popular and since we live in a populist system it would take a lot of convincing to get people to move towards a more European system where gas taxes are high and cars are small and bikes are plentiful and they don't dispense plastic bags at the local grocery.

Plastic bags and light bulbs: Why does the government have to step in and legislate phasing out Edison's invention (incandescent bulbs) in favor is Nicola Tesla's invention (flourescents)? Because in America, as in most places, self-interest always trumps public interest, and what people are mostly self-interested in is their comfort level. People will not voluntarily stop buying incandescents, even if it saves them money, or stop expecting doubled plastic bags at the super market, even though they have probably never experienced a single bag breaking. They deserve double bags, it's comfortable not to have to worry about them splitting open even though the bags are going straight from the cart into the back of an SUV, with barely any stress at all, and so countless

extra tons of petroleum waste goes outdoors every day unnecessarily. Only public legislation can prevent this, what the right calls socialism, but in a populist system of government don't hold your breath on regulations. The legislative approach is currently being tried with light-bulbs, but you can't take away people's plastic bags; a long fight to legislate against them is too much work, but as an alternative, an educational/propaganda program, involving bumper stickers and t-shirts, grant funded, would be one way to address the plastic bag problem. Making fun of people puts them on the defensive, raising awareness.



Speaking of plastic bags, I ask a cashier for just a single bag and she looks at me like I'm a lunatic, but a single bag has never broken on me. In a sane world, people would bring a bag to the market, as they do in Europe. I just saw somebody double-bag a bunch of broccoli, which was already in a plastic bag! The double-bag habit came from the days when bags were weaker and more prone to splitting open. Now the bags are stronger and don't have to be doubled, but try telling that to your average shopper. Sometimes I do, becoming a pain in the ass.

THE FREEDOM GAME

In the formula 'rights = responsibilities' the responsibilities part is almost always legislated. If it wasn't, nobody would

pay any attention to their responsibilities. The use of plastic bags illustrates that. Founding Father John Winthrop thought his Living Saints in Boston would naturally conform to Godliness, but unfortunately they didn't behave at all, and that meant, and still does, legislation. Some legislation protects freedoms, like freedom of mobility, some protects order, like environmental laws, and the conflict between these forces is what we are trying to resolve in today's discussion.

Freedom has some rules. They are almost never followed, but we spend piles of national treasure on overseas military force to, putatively, promote freedom, without understanding the rules.

Rule #1: The rights we assume for ourselves could apply exponentially to all 7 billion of the planet's inhabitants, or certainly to those we liberate from tyranny. If we assume for ourselves total freedom of movement, for instance using a truck for personal transportation and to mechanizing all functions, including travel and exercise, that gives other people, non-Americans, a claim to this freedom, an appetite for it, something to strive for. The American lifestyle is a standard throughout the world and sometimes, as in Iraq and Afghanistan, we establish that standard by force.

Rule #2: If the limitations on my energy consumption are based on my finances or military power, it follows that anybody with unlimited finances and military power has unlimited rights to energy (think China).

Rule #3: The 1% exempt themselves from rules that might apply to other people.

Rule #4: People do whatever they can get away with. That's why I'm writing this book, because nobody can stop me. That also applies to the U.S. and China's energy consumption.

Since the planet is teeming with countless humans, these rules should be examined more closely. If, say, freedom and responsibility were doled out in equal amounts, then rule #2 would not apply, since energy consumption would not be based on finances but on responsibility. Unlimited mobility cannot be tied to unlimited energy consumption, the planet can't take it, and that means we're going to have to walk a lot more than we do to stay freely mobile.

The richer people are, generally the more self-involved they are, according to a recent study I read about. The 1% is less likely to worry themselves about world inhabited by the other 99%, they think more about their immediate world, which contains unlimited freedom of movement thanks to jets and yachts. It can be proven according to these rules that filling up the yacht or the copter with a hundred gallons of fuel is irresponsible, freedom without responsibility, which is precisely what leads to disaster, if climate models are correct. The pending climatic disasters will be traced to this particular twist of the freedom game, a game where there are no referees or any real consciousness of the rules or willingness to comply with U.N. carbon caps. American energy use is four times the world average per capita, and that is largely due to our wealth. The U.N. has to deal with what is becoming the world's biggest set of problems, and right wingers hate the U.N. even though they expect it to lock-step behind their agendas.

My goal and responsibility, according to the theory that freedom and responsibility are doled out in equal amounts, is to use $\frac{3}{4}$ less energy than the average American without losing any freedoms. This book is a road map to this goal, looking at ways life can be improved with, first, 20% less energy, then chopping another 20% of as things get more efficient, as tools are developed to create and store energy while providing exercise. This will radically reduce individual energy consumption at a time when energy costs are sure to skyrocket, while at the same time increasing freedom, especially freedom from the car.

WHERE THE TERM 'OH MY GOD' COMES FROM



YOU GAVE THEM *DOMINION*? OH MY GOD!

15.

THE DANCE OF LIFE/MACHINES OF THE FUTURE/MACHINES TO DISPOSE OF

Shaking to music is something all cultures, with a few notable extremist exceptions, have in their traditions. Strongly recommended here is rhythmic dancing to rhythmic music. Walking is a kind of dance, in straight/4 time, or 2/4, or cut four, depending on the mood. Mae West walked in triple time.

I am a recording musician, and can sometimes be seen dancing to my own music, which might seem narcissistic, but actually makes sense, that you have to move yourself before you can move other people. I also dance to other people's music, jumping around till the final vinyl of the night, translating the composition into physical movement. It's not a pretty sight, the lights should be off for this, but working the moves helps out the lymphatic system.

Walking is rhythmic, as in the opening shots of Saturday Night Fever. So is chopping vegetables. The engine is also rhythmic, which is part of its seductive power. Unless you are sitting at the drums, sitting is not generally rhythmic.

In the future, machines will have flywheels, powered by muscles..., at least on the domestic front; they will be off the grid, long lasting, health-providing. The human gets the flywheel going in the morning and uses the kinetic energy to do all

kinds of useful things, from cooking eggs to mulching twigs. Every few hours somebody gets on the bike or rowing machine and cranks up the speed of the large rotating cement disk.

Practical suggestions:

1. Throw out the remote. Getting up to change the channel or turn down the sound reduces television addiction, leads to a more active lifestyle. This works very well once you get used to it, and if the TV is at eye level, one doesn't have to sit down to watch it.
2. Throw out the riding mower, the leaf blower, all the gas powered tools in the garage. Unless you have a huge estate, the yardwork should be a manual part of daily exercise.
3. Leave the car parked for a day.
4. Stand at the computer.

As we step up our consumption of energy generation after generation, we are weighing more and more, which means more energy is required to move us, and this is generating a feedback loop that is sending the whole Humans on Earth experiment into uncertainty. Along with mechanization and the great indoors comes climate control, sitting in cars, standing on escalators, always at room temperature, and it suggests a physical socialism. We evolved outside standing up, walking, migrating, now we are always burning something and the outside climate is changing in ominous ways. Denying global

warming doesn't stop it, it makes it worse. It is a false justification for energy over-consumption. Conservatives think they are for small government, yet the mantra is energy over-consumption: big cars, driving everywhere. On public roads! buying federally subsidized gas! By relying more on a bike, one is blessed with not only smaller gov't but a smaller waist and a trimmer hospital bill. If you don't care about this, it's because you believe in medicare and highway funds, i.e. government spending.

Are we just a gratification-seeking mammal doing what it does? Thinking very little about future generations? Stealing the ground from unborn feet (W. Burroughs)? Or is this the generation that said 'STOP!, I'm walking the rest of the way' "Why Baby? Is it something I said?" "No, my lymphatic system needs pumping!"

16.

WHAT TRICKLES UP AND WHAT TRICKLES DOWN

These are just suggestions for planetary habitation, with easy fun-for-the-whole-family ways to improve our lives while reducing our use of powered machines and their fuels. Nobody said to cut them out completely, neither are we suggesting a new puritanism. Though this manual may contain a lot of ‘do this, don’t do that’, be full of blather and very against the grain of our misty-eyed freedom, there is an ethical scheme here: to gradually de-mechanize, and a positive spin as well: to get healthy. It is NOT hypocrisy to cut down on gas consumption while still living the modern life. De-mechanization is an incremental process, same as mechanization, and this is merely a how-to book to fight an epidemic. John von Neumann, the mathematician, was filled with anxiety about machines taking over, and this was before machines actually took over. He had just invented the computer, so he should know a problem when he sees one. In school we were forced to read Jane Jacob’s ‘Life and Death of American Cities’, the book that stopped Robert Moses dead in his tracks before he put an expressway through Washington Square Park. The park was saved (Greenwich Village had previously been saved from the grid by Clement Clarke Moore) but it was too late for Long Island, the damage was already done and now it needs to be undone.

The sciences don’t pay much attention to mechanization, they

prefer specific questions over general ones, and, significantly, they are themselves over mechanized. From neurosurgeons to physicists to microbiologists they have larger and more powerful machines. Recently my son had an autoimmune attack on his spine.. the neurologists gave him every test possible to determine what had brought this on, over 1000 tests, which all came back negative, the MRI's, CTR's, they even tested him for a mutant lymphocyte and they believed the test result, which was negative. But the attack had left no trace, there was no evidence of a mutant lymphocyte though it was still lurking in his body, unleashing more damage. The only way to figure out the puzzle was by using logic to create a chronology of the disease. The neurologists weren't trained in logic, and their machines were useless because all biological evidence had disappeared by the time he got to the hospital, so none of them were able to figure out what attacked my son's spine. Moral of the story: don't rely on machines, you'll only become dependent on them and forget basic skills like reasoning. Reasonably, one would think that mechanization and its causes and consequences would be more important than finding the Higgs boson, since existence on this planet depends more on the machine infestation of earth's ruling mammal than on the results of high-energy proton collisions, but scientists are reluctant to change the ruling paradigm. Richard Feynman could see the universe by watching ants, he could solve the dilemma of why the o-rings failed on the shuttle Challenger, with a glass of ice water. As for Higgs bosons, if they exist, they are all in my sock drawer; and if they were going to save the planet they would probably have done so already. (Oh, I'm just ranting... Yay Higgs Boson!)

Chinese delivery guys in NYC were always on bikes, but now, suddenly, they all use the electric bicycles.. Nobody has told them that without the effort of pedal-pushing a non-electric bike, they are missing out on vital muscular activity. This predictable trend, from physical to mechanized, is the reason energy consumption is such a feeding frenzy... nobody likes physical effort. But if they thought about it, compared their health and well-being on an electric bike and on a nonelectric bike, Chinese delivery personnel would probably go back to pedal-pushing.

Great fortunes have been made by systematically over-mechanizing an eager population. The big names: Vanderbilt, Carnegie, Ford, Rockefeller, Getty, even Microsoft and Apple have answered the call to mechanize our society and reap the great rewards. Rightly one could call on the philanthropies and foundations of these fortunes to promote programs of gradual de-mechanization, to reverse some of the damage caused by energy dependence, but if you look at the programs they fund, these issues are really not represented at all. They don't give money to de-mechanization programs because there basically aren't any, and there aren't any because nobody backs that sort of thing. Eisenhower and the industrialists built the interstate highways and put everybody all over the country onto the power grid, creating a society with unlimited freedom of movement, warm in winter, cool in summer, dishes shiny clean, a near utopia which along the way, has turned us all into energy addicts. To cure this addiction means calling on the fortunes of mechanization, the Ford, Getty, Rockefeller foundations, to help us de-mechanize. Highway-removal is one kind of project they could pay for, also putting in side-

walks, making communities walkable, youth programs, anti-mech propaganda campaigns, no-car zones...

Technology prowl's our discomforts looking for cures, making every possible activity into a comfortable sitting experience, such as mowing the lawn, or on-line shopping, and we go along with it. Expenditures in this life-style generally trickle up into the hands of the 1%. Energy dependence in young people combines with other addictions, and this can be seen by the debris along the side of the road- after all, when you're sitting you are usually seeking some kind, or many kinds, of gratification. Gratification and addiction, that's where the money is.



Many of the self-truckers and power-boaters display the flag of the United States on their vehicles, which suggests an association between mechanization and the patriotic soul of America. Since before the industrial revolution this country has been about mechanization and re-mechanization, and that momentum is going to be hard to slow down, let alone reverse. Mechanization is associated with jobs, and if people stop buying cars a major economic engine will sputter and stall, putting people out of work. The change I suggest is in manufacturing new devices and tools for a more physical

lifestyle that replaces gas with sweat. There's a whole new generation of machines to design and screw together and advertise.



TSUNAMIS

A byproduct of global warming that hasn't been discussed: tsunamis. You're saying to yourself: Isn't that a bit far-fetched, claiming that driving causes tsunamis? Not really. It goes like this... greenhouse gasses and global warming will lead, sooner or later, to a massive redistribution of water weight caused by the melting Greenland glaciers. This will shift the tectonic plates and cause undersea earthquakes. The rising sea levels will make these events particularly destructive on the east coast, which has never seen a tsunami and where millions of houses are within ten feet of rising seas. The destruction on Long Island will be unimaginable, with the bodies, boats, houses and cars floating out into the Gulf Stream. Those with houses on top of cliffs will not be spared, as the cliffs give way. Getting off the island except by boat can be ruled out, and there will be no warning. It may be wise

to learn to swim as well as paddle a canoe. The time-frame here is flexible, we basically have to buy time between now and catastrophe, but the arc is there, the story line is written.

The Tea Partiers get their denial nonsense from 1%ers and believe it, it makes sense to them to put scientists and leftists in the same box and trying to close the lid, but it does not make a even a whiff of logical sense. The propaganda campaign funded by the Koch Brothers is creating a gridlock situation in Congress, the same congress which will eventually have to deal with the disasters caused by global warming, as millions of lives are endangered, as when sea levels rise and a tsunami hits the east coast. This mud in the engine of state is making it impossible to deal with the energy problem through prevention, even if people did know what to do, which they don't. It's time for some congressmen and senators from the extreme right to explain why they are perpetrating a hoax on the American People and preventing action on climate change. Those who agree with the problem would answer 'because government doesn't know what to do about it'. Which is true. Perhaps government should read this little book and figure out what to do based on these considerations. That sounds unrealistic, but consider we are now seeing the effects of carbon put into the atmosphere 30 years ago.. what will the world be like thirty years from now? Will there even *be* a Long island?

Since the government is basically shut down on this issue, it's up to us citizens to make the easy choice and voluntarily adopt 'the Guideline': only use power assist when necessary, otherwise use your own strength. We can call it 'Voluntary

Curtailement', or the 'Sensible Shoes Approach', or, if I might suggest some battle cries: Down with American Oligarchs, LESS ROADS/ MORE PATHS, I GAVE AT THE PUMP

Bumperstickers:

NO-MOTOR SNOB,
MY OTHER CAR IS A BIKE
I'M CAUSING GLOBAL WARMING
I COULD HAVE WALKED
PUMP BLOOD, NOT GAS
POISON (next to a tail pipe)
Take a HIKE

IN CONCLUSION

Scientists are the paparazzi of the natural world, when they talk about the home planet one should pay some attention. But nobody likes a tattler tale, a whistle blower, especially if he's blowing the whistle outside your house. That's why people hate Al Gore. I tried to present some of these views to the Daily News opinion page, but realized all the editorials rage at the people in power, not at the general population, the paper-buying public. In a book format I can rage at anybody I want, including the general population.

Ideally there would be a general din about de-mechanizing, with politicians taking sides on this issue, but the reality is my spell-checker doesn't even recognize the word 'de-mechanize'. There's a reason we find the sinking of the Titanic so

resonant; we are on the Titanic, sitting comfortably before sea levels slowly rise and we are forced by salty waves to abandon the water-logged engines and swim for higher ground through the brine, while nature unleashes pent-up fury all around us..

To see this threat to civilization requires some extrapolation, but there is plenty of examples of human folly leading to disaster, like the sinking of the Titanic, which shares a common cause with the rising seas: it was Greenland glaciers slipping into the sea that sunk the ship and may sink Long Island, as extrapolation from the reports coming in suggests. These reports all confirm one another, and further confirmation is easy to find on a nice walk.



17.

HEADLINES/ONLINE

HEADLINES

*Two hours of TV-watching boosts heart risk

*OBESITY RATE CLIMBS TO 38%

*FUTURE FOR LAB-GROWN MEAT

*Study: Global obesity rates double since 1986

*Study: 1 hour of TV takes 22 minutes off your life

*City cyclists breathe in twice as much soot: study

*Warming could exceed safe levels in this lifetime

*Panel says wild weather worsens

*Biggest spike ever in global warming gases: US

*"It is widely agreed among scientists that global pledges so far for curbing greenhouse gas emissions are not strong enough to prevent "dangerous" climate change."

*UN: Concentrations of greenhouse gases hit record

*China alone was the biggest polluter with a spike of 212 million metric tons in 2010 over 2009, compared to 59 million metric tons more from the United States and 48 million metric tons more from India.

“Science tells us that we are driving in a fog headed toward a cliff but are unsure just how far away it is,” said climate scientist Scott Mandia.

“Given this warning, it is quite foolish to be stepping on the accelerator.” (Kerry Sheridan, AFP; Tom Boden, DOE)

*Tehran could retaliate by launching hit-and-run strikes in the Gulf and by closing the Strait of Hormuz. About 40 percent of all traded oil leaves the Gulf region through the strategic waterway.

*Florida Lawmaker Proposes Bill to Eliminate Middle School Physical Education Requirement.

*Shell oil spill off Nigeria likely worst in decade.

*Death toll among pedestrians wearing headphones triples. Half run down by trains.

*Car owners with a television are 27 percent more likely to suffer heart attacks than people who have neither, according to a global study on physical exercise and heart disease published Wednesday.

More broadly, the study – covering more than 29,000 people in 52 countries – showed that working up a light sweat may be the best preventative medicine against heart failure.

*Iran says received U.S. letter on Hormuz Strait.

*The world is expected to heat up by over 2 degrees Celsius this century due to increased greenhouse gas emissions.

*Chevron appeals \$18 billion ruling in Ecuador lawsuit.

*Exxon Mobil to Pay \$1.6 Million in Penalties for Yellowstone River Oil Spill.

*UN panel says retool world economy for sustainability.

*Some climate scientists say the rise is more likely to be between and 1 and 2 metres. They point to accelerating melting of the Greenland and West Antarctic icesheets over the past two decades. Both contain enough water to raise global sea levels by about 60 metres.

Other glaciers and mountain icecaps contain enough water to raise sea levels by nearly a metre.

*Until recently, Sceptic Society did not feel that global warming was primarily 'man made' Now, as more and more evidence has been compounded and data analyzed, that hypothesis has now changed. (One of the beauties of science... evidence) So how do we know that global warming is real and primarily human caused? There are numerous lines of evidence that converge to this conclusion. Carbon dioxide in our atmosphere has increased at an unprecedented rate in the past 200 years. The magnitude and rapidity of the warming represented by the last 200 years is simply unmatched in

all of human history. More revealing, the timing of this warming coincides with the Industrial Revolution, when humans first began massive deforestation and released carbon dioxide by burning coal, gas, and oil. Melting Polar Ice and Glaciers. The Larsen B shelf had survived all the previous ice ages and interglacial warming episodes for the past 3 million years, and even the warmest periods of the last 10,000 years □ yet it and nearly all the other thick ice sheets on the Arctic, Greenland, and Antarctic are vanishing at a rate never before seen in geologic history. Some people may still try to deny scientific reality, but big businesses like oil and insurance, and conservative institutions like the military, cannot afford to be blinded or deluded by ideology. They must plan for the real world that we will be seeing in the next few decades. They do not want to be caught unprepared and harmed by global climatic change when it threatens their survival. Neither can we as a society.

(I don't know who to credit for this frightening paragraph.)

ON LINE CONVERSATIONS WITH THE TEA PARTY

My post:

I don't understand what you tea-baggers want. unregulated carbon emissions? To claim that 98% of climate scientists are involved in a massive hoax? If we don't cap emissions, no one else will, then see what happens, actually what is happening now. Yr playing politics with a very dangerous situation. I support cap and trade.

Replies (2)

??Rick 10 minutes ago Report Abuse

No one wants dirty air, but you have to have priorities. Liberals need to learn that there is a bottom to the barrel// of bank accounts. Libs have no sense when it comes to spending other people's money!

??J M 12 minutes ago Report Abuse

Another scam on America Goldman Sachs will make more \$\$\$\$ on the rip off and carbon wont go down a bit... and what country Paul do you buy you DVD players, electronics and kitchen items from???? is it a country that pollutes its water and air with impunity, is it the country we send our jobs too????

I had no answer to this.

My post:

Junk science is an interesting term. The implication is that one knows the truth while the 'junk scientists' are dillusional lab rats scaring up research funds. But who has access to raw data, super computers, competing models, symposiums? The scientists, not the teabaggers. Deniers have no models, no data, no supercomputers. Attitude, though. Lots of attitude and alternative narratives, which must in the teabag world, mean good science, and implying that the more the attitude, the better the science. I don't know if I agree with that.

Ronnie: so now its a tea party thing to doubt global warming... tea party doesn't care about AGW, you are a liberal sheep

My post:–

What if 99% of climate scientists were right? Denial means we don't have to change the lifestyles that cause this problem. Denial means we can keep driving a huge truck for personal transportation. I use a bike. I'm not into energy consumption. What 99% of climate scientists say scares me, I don't want to be part of the generation that brought down civilization.

??Paul you're a certifiable turd,....go ride your bike off a cliff

Alan W 7 minutes ago Report Abuse

At least you'll have plenty of places to park your bike. In the buttracks of all the idiots that keep their heads buried in the sand.

One man is small, 7 billion is huge. People put over 25 BILLION tons of CO2 into the atmosphere EVERY year, year after year for energy production. CO2 amounts (.39 ppm) have never been this high in the history of the earth without a major basalt flood

How many studies have been done in how many universities? They all say we are driving too much, burning too much coal and putting too much crap into the atmosphere. The problem is mostly with the U.S. and China. The numbers are pretty staggering.

Deniers will get some of the blame for catastrophic climate change. they are slowing progress towards energy efficiency, even reversing it according to some of these posts.

These liberal scientist need to shut the f up

Someone needs to kick Al Gore's #\$\$%

I think, even if the sun completely shut down, these morons would say that global warming would continue.

Trying to control the little minds. If humans cause global warming what is the solution, starvation, freezing to death, forced sterilization, the big ovens? They always get to the final solution, these leftists, getting rid of the excess population, that means everyone but them.

If you've been given incontrovertible proof of massive fraud and choose to keep believing the fraud, you've crossed over from science to true believer. That puts you in the realm of religion, not science. Kiss Al Gore's ring.

Retired engineer and physicist on this end, BTW. I spent my whole life engaged in HONEST science.

0Thumbs UpThumbs Down0Paul · a second agoRemove
Massive fraud? one email on one section of one study at one university, among countless studies at thousands of universities, and it's massive fraud? That's just wishful thinking, so is denial. I'd prefer it was fraud to it's being real, but unfortunately, all evidence points to trouble ahead.

4Thumbs Up Thumbs Down7

I wish AGW was a fraud and a lie. There would be hope for the planet. However, the worst case scenario, the erosion, super storms, drought, dead oceans, is not something to ignore when plenty can be done to avert disaster. I ride a bike,

try to keep energy consumption under control. It's not that hard.

paul is stupid

Well played, Einstein!

Teabaggers aren't wondering if 97% of climatologists might possibly be correct. they are yelling FRAUD! There may be holes in that argument, to complement the holes in the ozone layer that are causing climate change. Get a bike, is my suggestion, just in case.

1 Reply

Marx · 2 mins 1 sec ago Report Abuse

Spoken like a true kool-aid guzzing FOO... Get a bike and get rid of your computer/cellphone/car/home/utilities/clothing/anything that makes your life comfortable. Hypocrtite!

LibsRtrash · 10 mins ago Report Abuse

Ditto what Marx and Mark said. I'm sick of kool aid drinkers. Go get a life! I bet you are an OWS libtard too.

Paul · 6 mins ago

I don;t drink koolaid. I drink coffee.

Paul · a second ago Remove

If I cut back on gas consumption I'm a hypocrite? It's not all or nothing, it's more or less. Finish grade school before you make statements like that.

The problem is that we are migratory mammals, but now all our migrations are mechanized. With 7 billion people on the planet that might become an issue. It's not just climate change, it's people forgetting how to walk.\

1 up 11 down comment hidden due to low rating
People using masses of data and super computers are being second guessed by people who listen to Rush Limbaugh. I wonder who the frauds are.



Thanks to: Robert Jay, Cynthia Jay, Dan Jay, Peter Klebnikov, David Lee Fong, Tony Phillips, Dominique Christophe, the Furies and the Muses, the Holy Mother and the Virgins, anybody reading this.