

Elegant Technology...economic prosperity through environmental renewal

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This short essay was the first in a five part series explaining traditional American Populism, from a modern perspective, for the readers of the [Daily Kos](#).

Kossack Populism

Populism keeps creating controversy here at Kos. Populism has never lacked for critics so it is not surprising when some of the good middle-class liberals who are most active at this site retell the standard slander. Joke Line summed up the prevailing mood when he described Populism as a “witlessly reactionary bundle of prejudices: nativist, protectionist, isolationist, and paranoid.”

Anyone who took political science from any self-respecting liberal arts college in USA probably learned to spout the same reactionary nonsense.

Me too. However, since my university days I have discovered a great deal about the subject and have learned that virtually everything I was taught about Populism is a bloody lie.

A brief history of Populism

There was a real political party in USA called the People's Party. It was founded in 1892 in Omaha Nebraska. Party members called themselves Populists. Ignatius Donnelly of Minnesota wrote [the party platform](#). A Google search on Donnelly reveals 147,000 hits and there are probably that many opinions of him, but one of my favorites was written [by an Australian](#). Donnelly was a gifted public speaker and a prolific writer who was Minnesota's first Lt. Governor and served 4 terms as a Republican Representative to Washington. Upon his return, he became the organizing force behind the National Farmer's Alliance in Minnesota.

The People's Party was an outgrowth the National Farmer's Alliance which was formed to address the deplorable conditions of rural life following the Crash of 1873. As a result, at LEAST 95% of Populism was about economics. The cultural descriptions of populism have almost always been formulated by Populism's enemies.

Make NO mistake, Populism has enemies precisely BECAUSE of their economic doctrine. The cultural criticisms are merely the distraction.

The Economics of Populism

Corruption is Public Enemy #1. Life is difficult enough without having to support a parasitical class. Rid ourselves of corruption and our public sector and infrastructure will bloom.

Public education. A poor person is as likely to have a good student-offspring as a rich one. (Perhaps MORE likely.) Universal education will uncover those most skilled to organize the community's necessary tasks.

A MIXED economy. The REASON regulated capitalism works better than deregulated capitalism is because regulations protect the honest operator. Take away industrial regulation, and the result is Enron--scheming thieves creating economic opportunity from industrial sabotage.

Democratic controls on the creation of money. If there is not strict regulation of financial institutions, they become dictators. Or as James Carville put it when he heard the Goldman-Sachs instructions on what part of Clinton's 1992 promises to the middle class were going to be forgotten, "In my next life, I want to come back as the bond market."

Usury Laws. High interest rates cause class warfare and other harmful distortions.

The cultural assault on Populism

Let's see. The Populists wanted democratic, public controls over the creation of credit. They wanted to cap interest rates. They wanted to regulate large enterprise. They wanted to give poor kids the same shot at success as a rich one. And they wanted to throw crooks out of public life.

Guess what--this agenda has made them powerful enemies. Enemies who actually owned colleges the way John D. Rockefeller owned the University of Chicago. How hard do you suppose it was for John D to find a professor willing to write about those silly peasants and their goofy ideas?

If you wrote that Populists were dirty, uneducated, hicks, chances are you would be gainfully employed--especially in academe where collegial committees are formed to determine what is respectable thinking.

And so a fault line opened up between a self-defined elite and their self-defined task of smearing Populism, and the outsiders who wanted to crash the gates with their obviously superior economic agenda. Sadly, the organized distraction was highly successful--almost NO modern reference to Populism refers to the economic agenda.

Regional Populism

Because Populism grew out of the economic problems of agriculture, different regions of the country had slightly different agendas based on the facts on the ground. A tobacco farmer in Georgia obviously had another set of problems than say, a wheat grower in North Dakota.

The National Farmer's Alliance was founded in Texas. And Texas Populism has had a significant influence. The economics department at the University of Texas at Austin was the best place to learn the economics of the Populists--especially under the legendary Clarence Ayres. They now have James Galbraith so it is probably still possible to get an advanced degree from UT in some subset of Populist economic thought.

The Kansas variation was interesting because of abolitionist settlers--enough so Kansas entered as a free state. The abolitionists tended to be well-read and so Kansas gave Populism more than its share of writers and speakers.

The Northwest arc of Wisconsin, Minnesota, and North Dakota initially contributed just Donnelly. But all would show amazing staying power. North Dakota's follow-on movement, the Non-Partisan League is arguably the most successful progressive political movement in history. Minnesota would form the Farmer-Labor party (the FL in DFL), elect a governor who defined politics as pro-labor for 50 years, while the state university provided a home for variations on Populist economics such as Keynesianism. Robert LaFollette, the guy who founded Progressive Magazine to explain his movement, still influences Wisconsin politics.

The South's best organizer was Thomas Edward Watson of Georgia. Southern problems included war related destruction, currency shortages, and a wounded or destroyed labor force. To this pile of woe was added a corrupt band of marauders who were trying to make off with anything of value.

One especially favored form of piracy during Reconstruction was political corruption. Watson was pretty pure about "all farmers, black or white, face the same economic hazards" for a long time. Eventually, after losing several elections to petty graft--black voters purchased with trinkets--Watson decided to play the race card. Next door in South Carolina, a cheap demagogue named Pitchfork Ben Tillman turned race-baiting into an art form and got elected to the US Senate.

Virtually all valid slander of the Populist movement is based on the actions of self-defined Populists of the post civil-war South. The Populists from North Dakota or Kansas certainly have nothing to apologize for. However, regional distinctions like this are minor inconveniences for someone who wants to slander an entire

movement.

Populist examples

Probably the best way to understand Populism is to examine some of the better examples of the practice.

Best analytic tool. Veblen classified knowledge into two groupings. There was exoteric knowledge--the useful information necessary to support the community such as the melting point of tool steel, and esoteric knowledge--the kind of information that is not useful except to demonstrate that you have a lot of leisure time, such as what Marc Anthony said about Julius Caesar in the play by Shakespeare (or any question on Jeopardy). One of the reasons that academics, whose earnings often depend on teaching esoteric knowledge, like to pick on the Pops, is that their scorn is so richly reciprocated.

Who proved Populist economics works? Henry Ford

What economic principle did he prove? In order for industrialized societies to thrive, workers must be able to buy back production.

Most interesting Populist cultural contribution. Industrial Design is not simply an economically important skill, it is actually a profoundly political statement about art. In the elitist definition of art, it must be done one at a time like an oil painting or a stone sculpture. In the Populist definition of art; since machine tools can make perfect copies of any given design, the greatest artists should work for factories so that everyone can benefit from their great design genius. Think Michael Graves designing for Target or anything at IKEA.

Favorite Intellectual. No competition--Thorstein B. Veblen. I have a web site mostly dedicated to [recovering the history and reputation](#) of this amazing genius. Veblen is a triple-distilled version of Minnesota Populism--[farm kid, son of prosperous immigrants, with a Ph.D. from Yale in the philosophy of Kant](#). He was uniquely able to discuss the human condition from both an esoteric AND exoteric perspective. Veblen, the [intellectual's intellectual](#), is the perfect response to those who would call Populism "anti-intellectual."

Best Political Idea. "There is as good in the ranks as ever came out of them."

Kossack Populism

The Daily Kos is actually more important than simply a place for citizens to vent during the Age of Ignorance. The Pops believed that there was a great untapped potential in the lives of "ordinary" people in their struggle for existence. Now look at those Kos

diaries--at LEAST 1/3 of them are better written, more thoughtful, and more important than ANYTHING I have seen on CBS or read in the Washington Post for at least 25 years.

Kos is an historic Populist superstar for providing a place where those "in the ranks" can prove they are BETTER than those who would strut their "elite" status. Kos may have provided the final nail in elitism's coffin. Thanks to him, I know that georgia10 is a better writer than Joke Line.

This is not a small thing. It is the validation of a VERY important political idea.

See also:

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Kossack Populism--Size matters

Any society formed by humans eventually has to grapple with the question, "what is private? and what belongs to the group as a whole?"

In spite of historical examples where virtually everything of value is thought to belong to individuals (laissez-faire capitalism) or the whole society (communism) such extreme examples have tended to be unstable because humans instinctively seem to believe that an effective social order must be a mixture of private and public.

The Populists of the late 19th century found themselves in the middle of this dilemma. On one hand, they believed that the owner-operator arrangement in agriculture was not only history's most efficient, it had been [endorsed by Christ himself](#). On the other hand, they wanted to use government power to regulate big business. Even if these seemly conflicting demands made instinctive sense, it laid the Populists wide open to the charge inconsistency. "If," asked Populism's critics, "private ownership and management is such a good idea for farmers, why isn't it a good idea for [Standard Oil](#)?"

The Populist response was to insist that while private ownership by individuals posed few problems, corporations, trusts, cartels, and other artificial combinations were prone to evil. The idea that individual proprietors were virtuous while corporations were naturally evil may have satisfied some of Populism's supporters, and to some extent this formulation is still repeated today, but in truth, it explains little and adds virtually nothing to the larger private/public debate.

What 100 years has taught us

Here is the problem that is exposed when a Lefty starts labeling everything he or she doesn't like as "corporate." There are over a quarter million corporations in USA, so generalizing too much about so many actors is impossible.

And some corporations are formed for perfectly splendid reasons. I know a guy who founded a successful company that made institutional furniture. As he got close to retirement age, it became perfectly obvious that none of his offspring were going to want to run his business--not enough status. So he decided he would sell his company to the employees and spend his old age giving the money to his favorite causes. The ONLY way he could have pulled off that maneuver was to incorporate.

Then there are lefties who just get their facts wrong. I once was talking to someone who described butter maker [Land o' Lakes](#) as "[too corporate.](#)" That's odd, I mused, because they are a producer's cooperative that was once so admired that Minnesota's Farmer-Labor governor called for the state to become a "[cooperative commonwealth](#)" during the depths of the Great Depression. "Oh you know what I mean," says she. But the truth is, I have NO idea what someone means when they describe something as "too corporate."

So if organizational types don't explain the problems of modern capitalism, What does? IMO, the obvious answer is SIZE! Small organizations have a limited ability to cause damage. Large organizations, by contrast, can impact the lives of millions.

For example, virtually all businesses of any size require a reliable supply of electricity at affordable prices just to open their doors. How the small stationary shop in the mini mall runs its business is a pretty minor affair. How the power company in the area performs not only affects the stationary store, but all the other shops, industries, and customers as well.

The Populists and Progressives only vaguely understood the importance of size when inventing modern industrial capitalism. Yet sometimes they legislated magnificently. IMO, we as a nation are just beginning to understand how good the rules were that governed financial institutions and large industries like electrical generation.

But as yet, I have not discovered evidence that our grandparents understood--theoretically--that THE important variable was size. The closest example I have discovered was when John Kenneth Galbraith wrote that he had discovered in his role as head of the Office of Price Stability during World War II that the only prices he could fix were prices that were already being fixed.

In fact, it took until 1980 before the pure problems of size were addressed systematically in a book called [Human Scale](#) by [Kirkpatrick Sale](#). This book is a work of genius for it explains through myriad examples how MANY problems are caused when things get too big.

Unfortunately, Sale and his many acolytes seem to forget that

there is also problems when things are too small. [Chinese Communist Mao Zedong](#) had the wild idea that every village should be able [to make steel](#). The resulting fiasco should have disproved a great deal of flawed lefty thinking. The "Small is Beautiful" crowd has actually [formed an institute](#) to develop more "human-scale" technology and have discovered that designing successful products according to political dogma is damn near impossible.

Size and regulation

One of society's primary roles is the regulation of human behavior--what rules must everyone accept to become a member of the group. Americans certainly don't like the rule-making crowd very much. With good reason. When I was a city-planning intern, I got to comb through the city ordinances for rules that could be eliminated. My favorite was a law against animals having sex outdoors.

Yet the evidence is in. Sound, logical, well-written rules are NECESSARY for the successful operation of a science-based society. For example, the automobile culture in the USA is simply not possible without a set of widely agreed upon and enforced rules. Yes the rules are a hassle and enforcement is mostly absurd, but because everyone agrees to travel in more or less the same speed and direction, today's freedom to move about is beyond that of kings 200 years ago.

Some would have us believe that rules stifle creativity. Well yes they can. Yet good rules can also stimulate incredible creativity. A fairly fat rulebook in football hasn't eliminated the 500 page playbook. The narrow rules of the fugue certainly didn't keep JS Bach from composing masterpieces.

1 + 1 = 2

If the obvious need for great rules is combined with the equally obvious idea that large organization affect more people than small ones, you get a mind-bogglingly obvious political principle:

Because societies are by necessity involved with the regulation of human behavior, it is clear that the regulation is most needed by LARGE organizations.

Let us be clear what this means. It means that governments are necessary to regulate the behavior of electrical companies, not the sexual behavior or drug intake of their citizens.

Size matters when it come to regulation. There is NO inconsistency between complaining about government intrusion and also wanting their governments to pass regulations that keep coal-fired electrical generation smokestacks from also producing acid rain.

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Kossack Populism--a matter of class

The study of class has one overwhelmingly powerful motivation--the belief that people of similar economic status should share political views. This was the official position of the Political Science, Sociology, and Economics departments at the University of Minnesota from 1967-74, so that is what I was taught.

However, to say I learned class analysis at UM would be misleading. This was the era of USA assault on Vietnam. Supposedly, the Vietnamese were to be killed with high explosives because they were Marxists. This message was not lost on my professors who either claimed their interest in class analysis had absolutely nothing to do with Marx, or in rare cases, taught party-line Marxism to demonstrate their opposition to the Vietnam War. Neither true believers nor weenies tend to be effective teachers.

I left school still fascinated with the idea of class analysis, a working understanding of the tools that could be used like the SPSS software, and a vague idea that this was something of an outlaw subject because of its historic roots in Marxism. This is somewhat less than the definition of learning a subject.

If someone like me, who was actually interested in class analysis to the point where I took graduate-level courses in the subject, could be so indifferent to my educational outcome, one can only imagine the level of interest in the general public. By the time I left school, class analysis had truly become the tiniest of niche subjects.

And maybe any class analysis rooted in Marx deserved to die. If the late 20th century taught anything it was that there were many interest areas that crossed economic class lines. In one especially telling example, billionaire Malcolm Forbes took up the VERY proletarian sport of riding Harley motorcycles because he thought it was cool.

Ronald Reagan opens fire in the latest Class War

But just because Marx proposed a class analysis that never much fit the American experience did not mean that class had lost

importance, no matter how irrelevant it had become in academe-- as the American worker discovered when the Republicans opened naked class warfare during the Reagan administration. The first shot was the firing of the air traffic controllers.

The destruction of PATCO was the USA part of a world-wide effort to roll back the gains workers had made since 1932. In England, Margaret Thatcher accomplished the same sort of demonstration of naked class interest by destroying the coal miners union. Since the Brits can talk about virtually nothing without discussing class, the Thatcherite assault on blue-collar living standards was routinely described in terms of class warfare. But while the Brits discussed class warfare, the Americans rarely did. Interestingly, the outcome for the people who live off their paychecks was nearly identical on both sides of the Atlantic.

Class Analysis--American style

The open class warfare in the 1980s reawakened my interest in class analysis. Because I soon found Marx as irrelevant as when I had dropped the subject in the first place, I started looking for alternatives. Eventually I discovered the writings of Thorstein Veblen.

Unlike Marx, Veblen thought that the differences in income levels were not nearly as interesting economically as human habits. And the most interesting habits were those associated with making a living. On one hand, you had the [Leisure Class](#) who lived off the efforts of others, and the Industrial Classes who performed the community's necessary tasks. Since these habits were independent of income, it was possible to have BOTH rich and poor members of the Leisure AND Industrial Classes.

This wasn't merely an improvement on Marx: this was a wholly new train of thought that was seemingly unrelated to any intellectual traditions I had heard of. Veblen's biographer seem equally confused comparing Veblen's detached perspective to someone from Mars.

Not surprisingly, Veblen's ideas had NOT come from Mars. In fact as I carried my research deeper into the roots of the Midwestern progressive traditions, I discovered that Veblen's most interesting economic idea was actually common among the Minnesotans who helped form the People's Party. And where Veblen saw differences between the Industrial and Leisure Classes, the Pops saw Producers and Predators, or Makers and Takers.

(Anyone interested in the minutia of this class analysis is welcome to [read further here](#). I have even attempted to make a [short video](#) using 3D software to illustrate this improved class theory.)

The BEST way to determine whether Producer / Predator class analysis is valid, is to try it out on some recent examples of human

economic behavior and see if it describes reality better than competing methods.

Example #1 Energy

When it comes to the big topics like the end of the age of petroleum, it is obvious that there are essentially two real responses.

1) There is a business-as-usual response which says we are not actually running out of crude, that higher prices will cause more drilling and exploration, so eventually the markets will work as usually described.

2) There is the "crude is finite on a finite planet" response which says that it matters little how many holes are drilled into an oil field, it doesn't change how much crude is available. Therefore, if crude is running out, it makes sense to design and build a new infrastructure that will run on something else (the something else is usually described as hydrogen.)

Let's call number (1) the Mad Max strategy because it is highly irresponsible gibberish. Let us call (2) the Invent, Design, and Build strategy (IDB). Further, let us assume that ethical humans with large frontal lobes are likely to flock to this second strategy.

It is obvious that an IDB strategy relies on the successful work of highly skilled Producers. The question is, How can such a strategy be implemented if the society's super-producers are lacking training, resources, and political / cultural support? The answer is, it cannot.

For example, this country decided that we wanted to clean up toxic waste sites before the toxins polluted drinking water. We passed a law called Superfund. 20 years later, we discover that virtually none of the Superfund sites have been fixed. Looking closely, we can see why. Significantly less than half of the money actually went to those who do remedial work--the majority went to lawyers, bureaucrats, and other assorted pencil pushers. Whatever social value lawyers and bureaucrats may have, it is obvious they cannot solve IDB problems and even worse, they get in the way by diverting money that MUST go to IDB types into their own pockets.

We live in a society where lawyers have more status than engineers--to the point where lawyers actually get the money that should go to engineers. Why this is so is an interesting question.

But it is clear that lawyers, financiers, or real estate developers will not produce the nuts and bolts necessary to convert to a hydrogen economy. ONLY Producers can do that!

Example #2 Business vs. Industry

It all starts with the question--how does the community organize its necessary work? The basic social struggle is between those who do this work, and those who live off those who do the work.

The key indicator of any society's success is how good are the working conditions of those who do the productive work. Do the Producers have power to control their workspaces? Do they have enough pay so they can basically stop worrying about the problem of simple existence? Etc.

The nearly-perfect example of the ideal Producer workspace would probably have been Intel when Robert Noyce ran things. But there were many other such places in USA and western Europe post WWII. And BECAUSE there were such ideal workspaces, they produced nearly miraculous products.

What is most interesting is that the Producer super-achievers from the dawn of the industrial age broke almost every economic "law" taught in our more backward schools these days. They paid the help more than the minimums (Ford) they lobbied for protectionism (everyone) they lobbied for currency reform (Abraham Darby and almost everyone else) they organized cartels (German chemical industry) they mocked highly stratified organizations (Noyce, Nokia) etc.

In MANY societies, however, all the RESPECTABLE jobs are non-productive jobs--law, finance, military, religion, sport, etc. What this means is that it makes almost NO difference to those whose jobs are cursed with the "unfortunate" description of necessary, whether those respectable types call themselves leftists or libertarians.

So Producers are threatened from all directions. From the left they get political correctness, social scorn, and other forms of conformism. From the right, they are threatened by the vultures of finance capitalism (hostile takeovers, usury, etc.)

The trouble with this nearly universal outbreak of attacks on productive behavior is that important elements of society are starting to show catastrophic strain. After a generation of glorifying destructive pirates like Jack Welch, the American society is no longer technologically able to maintain itself. The condition of vital infrastructure is ghastly.

Even worse, the major threats to human existence--climate change, desertification, depletion of freshwater aquifers, etc.--are problems of the uncompleted agendas of the Fords and Noyces of history. Just at a time when we need nothing less than the Second Industrial Revolution, we have destroyed our Producer genius.

Just remember, deregulation of the energy industry (a core belief of the Predators) did not produce better ways to dispose of nuclear waste, or a better way to negotiate the end of the age of

petroleum. It gave us Enron, rolling blackouts, and price gouging.

There are thousands of equally good examples out there that are easy to see and describe. The fair and logical conclusion is that the Pops invented a form a class analysis that works even better now than when it was first discussed in the 1870s.

The Public Policy implications

Needless to say, Producer / Predator class analysis appeals most strongly to the Producers. And of course, that is what it was created to do--instill notions of class solidarity and pride in the economically exploited and scorned.

The Populists never advocated an armed revolution--most of them were small rural landowners (with an oversized mortgage) and were as unlikely a band of revolutionaries as that description suggests. Nevertheless what they wanted was a highly regulated civil infrastructure including publicly owned banks. (And they call Clinton a liberal--this is what mostly Republican farmers wanted by the 1880s).

No matter how angry they were or how justified their demands would have been, the Populists never called for the guillotine or re-education camps. Instead they sought power through voting and reform. The reason the Populists are often described as the most successful political party never to have won the presidency is because they understood the value of setting the agenda. And informing their agenda was Producer / Predator class analysis.

The Populists who represented millions of economically devastated people, would settle on an awfully lofty strategy when they determined that good ideas should be able to triumph over the savage habits of the Predators. But it was internally logical. If you do not advocate killing people for economic reasons, you have figure out how to allow them to live. The key was to understand how Predators could be allowed to operate in society without letting them wreck things.

1) Regulation. Example: the Pops didn't think much of bankers. Instead of putting them out of business, which would have been foolish, they surrounded them with a host of new rules and alternative lending institutions. Instead of outlawing usury, they set interest rate ceilings.

2) Funding Producers first. In a normally operating society, the Predators usually wind up with most of the money anyway. The Pops claimed (correctly) that when economic stimulation went FIRST to the Producers, everyone would become prosperous (a rising tide lifts all boats-JFK) and the necessary work was done well. Under the theories of "trickle-down" money goes first to the

Predators. This is like claiming that "rising yachts lift all tides." Not only does such a plan leave most Producers in poverty, it means that much of the community's necessary work goes undone.

The Populist economic prescriptions not only produce just and prosperous societies, they enable the technological miracles that happen when the Producers are encouraged to think freely. With oil running out and the atmosphere overheating, we are going to need more than a few technological miracles.

See also:

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Modern Populism--Marxism NOT

In my [last essay](#), I dipped my toes ever so gingerly into the troubled waters of class analysis. For my troubles, I was informed by some commentators that all studies of class were derived from Marx and that I had made fundamental errors because I had not properly understood the master.

Because this is a widely held belief, I believe I need to provide a history lesson on American progressive movements to clear up some confusion.

The REAL issue is industrialization

The French and American Revolutions were about making social adjustments to the trappings of feudalism--including slaveholding, serfdom, and indentured servitude. Of course, there were some rumblings about the conditions of trade and manufacturing, but these were mostly line items on a much larger list of grievances.

In the meantime, there was a very real revolution going on in England. Some may scoff that the Industrial Revolution does not qualify because there was so little armed struggle involved, but it was the most important revolution of all.

Away from the capital and denied the benefits of a proper Oxbridge education, Quakers and other dissenting Protestants combined a love of tool-making precision and a fascination with fire to produce a recipe for generalized prosperity that is still widely copied throughout the world. We call it industrialization.

Of course, the potential for widespread prosperity and its actual realization are two very different things. In a few cases, the new wealth was shared out fairly, but mostly, industrialization made the rich richer, more powerful, cruel, and loathsome.

By 1848, with the anti-royalist sentiments spawned by the French Revolution safely contained in Europe, folks were ready to start a

revolution over the huge gap between the potential for widespread prosperity promised by the Industrial Revolution and the hellish reality.

The [Revolutions of 1848](#) spawned probably the most important piece of political writing in the history of mankind. The [Communist Manifesto](#) by Karl Marx made him a superstar for those whose jobs were dangerous, dirty, and horribly underpaid.

How important was Marx? Marx had more disciples than Jesus Christ, his writings were the most widely published of any person in history, and at the height of their influence, his followers ruled half the earth. Yet ultimately, Marxism crashed and burned. There are still a few nostalgic folks who refuse to believe that Marx is finally dead but it is unlikely that his influence will ever again reach the heights of, say 1968.

The rise and fall of Marxist thought

Marx was important because he was utterly correct about one BIG subject--the lives of workers can and should be meaningful no matter how lowly the job. He wasn't the first or only person to believe this but because he was the first to make the claim in the context of the Industrial Revolution, and by doing it so well, Marxist thinking became a benchmark. From 1848 on, those making the economic case in favor of the folks who performed the community's necessary tasks were going to be called Marxists by their enemies--even if they only agreed with Marx on the BIG subject.

And in fact, there have been a whole host of pro-producer strategies tried in attempts to spread the prosperity of industrialization. There were religious colonies like the folks in [Amana Iowa](#) who created industries to support the community. There were self-styled [enlightened industrialists](#). There were company towns where [subsidized housing, food, and health care was used to purchase employee loyalty](#). There were [producer cooperatives](#). And of course, there were [guilds, trade unions](#), and other collective attempts to regulate working conditions.

Virtually all these activities would have been tried even if Marx had never written a word. And in fact as recently as 1916, Marxism was merely one of the contenders for intellectual dominance in minds of those who would champion the exploited. But after the Russian Revolution, the folks who called themselves Marxists ruthlessly eliminated any competing progressive agendas. And in the rest of the world, competing ideas were overshadowed by the success of the Bolsheviks.

But in the end, it did not matter. Neither intellectual intimidation nor police state brutality were enough to keep the Marxists in power. Because even though Marx was undeniably correct about the BIG subject of respect for work, he was wrong in so many other

areas that eventually the Marxist experiments had to be abandoned.

What went wrong?

The Marxist dead-enders would like us to believe that the great experiments failed because those who led the revolutions were insufficiently pure in their understanding of the great teacher. Or perhaps because the forces of rollback were simply too powerful. And such people have a point. But it is a small point because MOST of the failures of Marxism can be directly traced to teachings that were faithfully applied.

There are good reasons to understand why Marxism failed. The biggest one is that no one wants to see the BIG subject discredited. THAT is simply unacceptable. And maybe it is time for those competing BIG subject strategies that were destroyed through Bolshevik ruthlessness to be given a second look.

ONE: Marx did not understand the revolutionary nature of industrialization. By the time they became rich in Marx's mind, industrialists were as parasitic as any landowner, priest, or tax farmer. In fact, they were worse because they invented new ways of human exploitation. The fact that industrialists were devout [Protestant pacifists](#) (Quakers were heavily involved in early stage industrialization) who were in the business of applying scientific rationalism to the problems of production seemed to have never gained traction in Marx's mind. To prove that he really didn't get industrialization, he claimed that the problems of production had been solved in early capitalism. Solving the problems of production is an ongoing and evolutionary process.

By underestimating the importance of industrialists, the Marxist countries became known for shoddy, UGLY, and environmentally insane production. Turns out the problems of production not only had NOT been solved, they are a LOT harder than they look at first glance. Political agendas mix very poorly with industrialization's tyranny of the facts on the ground. At one point in his Great Leap Forward, Mao Zedong declared that [villages should have their own ability to make STEEL](#). People were executed for pointing out that such an idea was insane--even though those troublesome facts proved that it WAS insane.

In 1989, there was a miner's strike in the Donets region of USSR. [One of the key demands was for sufficient soap](#) to clean up with after a day under ground. Imagine a system striving to be a worker's paradise that cannot provide soap to miners. It is such a perfect example of what happens to those who assume to problems of production have been solved and all that remains is proper political supervision of distribution.

TWO: Marx was openly scornful of agriculture. His "idiocy of rural life" remark was probably the MOST damaging of his life. It may

be possible to get by with industrial junk like Ladas, but it is impossible to get by without food. With Marx ringing in his ears, Stalin thought nothing of destroying his agriculture system. He actually [murdered the people who could grow food](#). The politically-driven replacement of collectivized farming was such a perennial failure that the Ministry of Agriculture was where political careers went to die. Mao's agricultural experiments [produced famines that killed millions](#).

Marxism might have succeeded in USSR if they had just maintained a LITTLE respect for the difficulty of growing food well. Hard to respect people you call idiots!

There were other gaping holes in Marxist reasoning but time and charitable intent leads me to end this here. After all, if you cannot feed yourself and cannot make anything worth buying, you have truly produced a failed society.

The Progressive alternatives

After visiting East Germany in 1970 and USSR in 1972, I became convinced that Marxism in practice clearly had too many problems to be taken seriously as an alternative. And trust me, I was looking for something better than the cold-war Liberalism of USA. I was horrified by the Vietnam War and the lies this society had to tell its citizen in order to gain public backing for mass murder and mayhem.

It required some small amount of bravado to travel in the East to see socialism in action during those Cold War years. But I had to see it for myself. I had met an intensely bright Finnish scholar who had assured me that my government had told me some large lies about the Marxist states. Considering that military briefings in Vietnam were actually called "[The 5 o' Clock Follies](#)" in the press, I had reason to believe he might be correct.

In many ways, he was. Turns out EVERYONE in Finland is a self-proclaimed expert on Russia. Maintaining their independence from USSR after World War II was an awesome struggle considering their lightly defended 1000 km border. The Finns survived because they developed a no-nonsense view of their powerful neighbor. My Finnish expert was a credentialed Marxist scholar in country where news of the USSR was regularly featured on the front pages of the papers. If he said it was worth looking at the East, I could rise above the paranoia of knowing that any such trips would become a permanent entry on my passport record. I was PUMPED!

Whether you traveled from Scandinavia into USSR or from West Germany to the East, the visual shock was stunning. The Nordics and Germans are a fastidious lot who take a rigorous approach to maintenance. Aesthetically, it was like falling off a cliff. In West Germany, they made [Porsches](#) and [Mercedes Benz](#). In East

Germany, they made [Trabants](#) and [Wartburgs](#). In Sweden they made [Volvos](#) and [Saabs](#). In USSR, they made [Ladas](#) and [Moscovitches](#).

Some might argue that I was being grossly unfair to judge an economic system by the quality of vehicles it produces. Yet motor vehicles were simply the most visible manifestation of a wider set of problems. And sure enough, when Marxism crumbled and USSR's industrial practices were exposed, it became quite obvious indeed that her incompetent vehicles were even exceeded in trashiness by other elements of her industrial infrastructure. In one notorious example, nickel [processing plants near the Norwegian border](#) produced hundreds of times the pollution for each ton of nickel as a Norwegian plant.

Back in USA, I started a serious search for something that was neither Cold War military-industrial capitalism nor its ruthless, industrially backward Marxist opposite. Fortunately, I didn't have to look far. For all around was the evidence of some profoundly progressive thinking and with a little diligence, I could uncover the ideals behind it.

Upper Midwest (Western) Progressive Populism

The Revolution of 1848 come to USA indirectly. This was also the year that Wisconsin became a state. As the Revolution was crushed in Germany, many of the high visibility figures joined their countrymen in a migration to USA. Many landed in the newest state. The [so-called 48ers](#) helped found the Republican Party as an anti-slavery party.

A farm boy who was one of the first graduates of the University of Wisconsin, [Robert M. LaFollette](#) would become the very personification of progressive ideals. A lifetime booster of the University, [LaFollette](#) supported the "[Wisconsin Idea](#)"--that his beloved land-grant University should serve every citizen of the state. It is because of LaFollette that we tend to think of Progressives as left Populists with a college education.

This citizen-university arrangement would lead to such legislation as :

- 1) Primary elections,
- 2) Workers' compensation,
- 3) State regulation of railroads
- 4) Direct election of United States Senators
- 5) "Progressive" taxation

Wisconsinites will also claim that the enabling legislation for Social Security was crafted at UW.

In 1889, North Dakota became a state. It was also the year that

Germany passed its first social welfare legislation under the administration of Otto von Bismarck. In a bid to woo enlightened capital and investment from Germany, North Dakota would name her new capital Bismarck.

But North Dakota would struggle for its very existence. The problem was a gang of crooks that stole the settlers blind. Finally, in a bid to end the corruption, the [Non-Partisan League was formed](#). The NPL achieved its greatest success when the party won control of the state legislature and elected Lynn Frazier as governor in 1916, leading to the establishment of state-run agricultural enterprises, such as the [North Dakota Mill and Elevator and the Bank of North Dakota](#).

In the middle was Minnesota which may have had the most progressive traditions of all. There was Ignatius Donnelly who wrote the constitution for the People's Party. There was the [Farmer-Labor party](#) that ran the state during the worst years of the Great Depression.

And then there was Thorstein Bunde Veblen. Veblen was the son of Norwegian immigrant farmers who was born in Wisconsin in 1857 and moved to Minnesota in 1864. He was clearly one of history's great geniuses. His seminal work *The Theory of the Leisure Class* was first published in 1899 and has not been out of print since.

Because he was almost two generations younger than Marx and was a severe critic of predatory capitalism, Veblen is often misclassified as a sort of Marx-lite. But while Veblen and Marx were both political economists, the similarity ends there because Veblen was the first to really understand industrialization as demonstrated by his monumental work "The Instinct of Workmanship." He also had a deep and profound respect for the problems of agriculture.

The lessons learned

Agriculturally and industrially illiterate social thinking is more than merely anachronistic, it is profoundly dangerous--especially in the hands of zealots who think nothing of murdering those whose worldviews do not match their own. The greatest difference between the American Progressive Populists and the Marxists is that the Pops actually respected the people who grow and make things, while the Marxists destroyed their lives and often murdered them.

There is an ugly idea that folks cannot be true leftists unless they have a working understanding of Marx. This idea is demonstrably false.

Why this is important

In the struggle to feed the world, global agricultural systems teeter on the brink of collapse because of soil erosion, aquifer depletion, and an over reliance on fossil fuels.

At the same time, a the global manufacturing systems faces similar problems caused by the end of cheap liquid fuels and the saturation of carbon sinks like the atmosphere.

It is also true that the current system of rule by finance is leading to ruin. Something MUST be changed in our understanding of political economy.

So yes indeed, we are going to need real Progressives. The LAST thing we need is to be sidetracked by the pseudo-religious teachings of Karl Marx. They are profoundly ignorant. They are known failures. And people who called themselves Marxists have been some of history's greatest mass murderers.

It IS important to learn from history. It is even MORE important to choose the lessons carefully. Fortunately, there are plenty of lessons worth learning from the [Progressives](#) who helped the USA become the success it once was.

See also:

Part One: [Kossack Populism](#)

Part Two: [Kossack Populism--Size matters](#)

Part Three: [Kossack Populism--a matter of class](#)

Part Five: [Kossack Populism--technological literacy](#)

Elegant Technology...economic prosperity through environmental renewal

Communication

The Book and Essays

Veblen and History

What Is Elegant Technology?

The Book

More Essays

The Origins of an Idea

This short essay was the fifth in a five part series explaining traditional American Populism, from a modern perspective, for the readers of the [Daily Kos](#).

Kossack Populism--technological literacy

[In my last diary](#) I mentioned technological literacy without providing much definition or context to the concept. This caused quite a bit of misunderstanding and confusion. And so I find it necessary to explain what technological literacy is, and why it is important to have the technologically literate in any successful society.

The ability to operate tools is the main difference between humans and the other intelligent forms of life. Civilizations are the product of tool users. About the only thing humans can actually build by hand is a clay pinch pot--everything else requires tools.

Because everything we use requires tools to make, tool creation represents the most sophisticated form of manufacture. It is difficult to make DRAM chips: it is much MORE difficult to make the tools that can make the DRAM chips. And of course, it is insanely difficult to make the tools that can produce those DRAM making tools, etc.

Because there are greater and less difficult forms of tool use, tool users stratify along skill lines. It is in the creation and use of tools that we discover the origins of meritocracy. In the world of tools, it does not matter your age, race, social class, looks, or gender--only your skills. And because these skills can be learned, we also have the origins of social mobility.

Social Mobility

The goal of social mobility for the technological literate has unfortunately been a promise that has been kept only on rare occasions and in few societies. But when it happens--when the tool makers and users are accorded respect and the income that goes with it--the society enters a golden age.

There is a good argument to be made that the VAST majority of power and influence the USA acquired over the years was due to her reputation as a paradise for the inventors of tools and their users. Ben Franklin, Thomas Jefferson, Thomas Paine, and Eli Whitney were all first-rate scientists / inventors; Sam Adams was a brewer; George

Washington was a surveyor. Compared to the useless protoplasm that has ruled most countries for most of history, USA truly was founded as a tool maker's paradise.

But such is NOT the historical norm. Thorstein Veblen's most popular book was called "[The Theory of the Leisure Class.](#)" In chapter after chapter he cites examples of how status and income are usually accorded to those with no tool skills at all. In fact, the key contrivance the Leisure Class employs to defraud and keep the tool users in their place is to portray the useful as dirty, stupid, and low status.

A Personal Note

When I was growing up in rural Minnesota, I would have scoffed at Veblen's descriptions of Leisure Class dominance. I was surrounded by gifted tool users. My father, a preacher, was not one of them but all the farmers in his churches were. I still recall the burning shame I felt one day in fifth grade when I realized my father was the only one of my class who could not weld.

This was also the age of [Sputnik](#)--when skills in aerospace were considered essential for national survival. I learned science out of brand new textbooks, I built a five-tube radio in 6th grade, and wasted the rest of my youth building model airplanes. All of them flew--some MUCH better than others.

Since I grew up in a culture that measured a man's worth by how many tools he had mastered, my intent was to become a great man with the great skills necessary to defend a great nation built by great tool-making geniuses (adolescent males tend to be a bit overdramatic, as you can see).

And then I went to college. For the first time in my life, I met grown men who were proud of their lack of tool skills. I did not actually believe these absurd creatures were serious until one bitterly cold January night, I came upon two professors trying to get a car started. One had discovered a set of jumper cables in his trunk (put there by his wife) so they actually had the tools for the task. But a quick glance told me that they had NO idea how this little job was performed.

Where I came from, young boys were expected to KNOW how to jump cars. It is a simple job that can easily be done exactly wrong--get the terminals backward and you can blow up a large lead-acid battery which leads to chemical burns, blindness, and other unpleasant side effects. Jump starting a car was a lesson taught with DIRE warnings complete with a "check four times before you hook up" philosophy. So not only were my professors not starting their car, they were actually endangering their health.

In about four minutes, we had both cars running, hoods closed, and the jumper cables coiled in the trunk. The professors were kind and exceedingly grateful that I had happened along so late at night. And

then one of them recognized me and said with an odd note of disappointment, "You're one of my students, aren't you."

By the time I got back to my room, I was livid. "How," I shouted, "can grown men in Minnesota not know how to jump start a car? Why am I paying money to learn from such idiots?" And, "Can you believe that fool was actually disappointed that I was a student and not some member of the campus custodial staff?"

Parallel Universes

Even though they are usually the most educated people in the community, grinding poverty is the lot of most small-town preachers. So while I was expected to go to college, I wasn't going to get any financial help from home. Fortunately in those days, big guys with a passion for tools could get well-paying jobs in construction. Until the late 1970s, it was possible to actually pay for a decent college education with wages from summer and part-time jobs (yes it is true).

And so I found myself in two contrasting cultures. When I was a student, I listened to professors decry the dehumanizing evil of technology. As a construction worker, I worked with folks who wanted to get their hands on the best technology available.

It was often a task trying to remember the differing cultural norms. I rarely offended the tool culture. But on occasion, I would commit a Leisure Class faux pas. For example, I once forgot myself and disclosed that I knew how to build a house during a graduate level course on housing policy--the classmates who had spent THEIR summers interning at HUD actually gasped.

But while I made an effort to be bi-cultural, my inclination lay with the tool users. Once in [Everett Washington](#) I saw them lower the HUGE tail section of a Boeing 747 into position and watch it literally snap into place. It was much better than magic! (and they do it three times a week.) I was so impressed, I nearly swooned. I'll confess I have never been that impressed by a lecture on Chaucer.

In my book, *Elegant Technology*, I devote THREE chapters ([history](#), [class analysis](#), and [cultural difference](#)) to observations on the gulf between the tool culture and the Leisure Class. There are that many differences between the two. But to my mind, the most fundamental is their differing conception of truth.

In the world of the Leisure Class, it is possible to have passionate debates about the interpretations of Shakespeare or post-structuralism without causing much damage. The truth in law is determined by who is able to convince 12 jurors. Truth in academe is determined by how many citations of authority (footnotes) are included in a paper.

By contrast, truth in the tool culture can only be discovered. It matters not one whit who you are or what you believe. If it is wrong, you will be found out. And if you make your error while operating a large airliner or a tower crane, the penalties are VERY high and often people die.

When Pontius Pilate asked Jesus, "What is truth?" he was obviously demonstrating his Leisure Class training. If Jesus had responded like a carpenter, he might have said, "Listen you Roman fool, truth is the fact that if you want crops in the fall, you must plant in the spring. Truth is that no matter how powerful the ruler, he cannot alter the tides. In fact there are so MANY truths beyond ANY rational dispute, you could spend every minute of your life searching for new ones and still only discover a tiny fraction of them."

The Triumph of the Leisure Class (even in USA)

The incredible has happened. USA, one of the inventors of the high tool culture and certainly one of its greatest practitioners in history, has become, as a culture, Veblen's Leisure Class--times 1000. (There are many reasons why his 1899 description of the Leisure Class now seems so understated, but one stands out: He never saw television--how could he possibly have foreseen the industrialization of status emulation?)

Lest one believes I overstate the case, it has been estimated that as late as 1962, the USA had more manufacturing than the rest of the world combined. In 1969, we landed men on the freaking moon. Members of the tool culture have more reasons to have nostalgia for the 60s than the most devoted Deadhead.

And then it all came unglued. In 2006, we have a merchandise trade deficit of over [\\$2 billion...per DAY](#). With the exception of weapons, we make almost nothing the rest of the world actually wants to buy. We've lost over [three million manufacturing jobs](#) in just this decade. We lost an important American city because [some Mickey Mouse dikes failed](#). Civil engineers generously rate our [infrastructure as D](#).

Except for the obvious fact that wrecking things is a LOT easier than creating things, this total meltdown of the American tool culture is still almost impossible to comprehend (and I watched it happen in real time). The demise of the world's greatest tool culture required a left jab and a right cross.

The left jab was cultural. Educating the young to believe that technology was evil and dirty and that no self-respecting gentleman would be caught dead touching any of it can make some sense if the only people with access to the higher learning were the useless sons of the landed gentry. But in a society that opened its academic doors to the children of the productive middle classes, teaching them to parrot the inanities of the losing side of the Industrial Revolution proved disastrous.

The Left Job

The most important left-wing critic of the tool culture was, of course, Ralph Nader. He called himself a consumer advocate and organized a critique of the producers. He wrote a book called, "Unsafe at Any Speed," which targeted the automobile industry in general and General Motors' Chevrolet Corvair in particular.

The Corvair was an interesting attempt by GM to make a small car to roll back the successful invasion of Volkswagen. Like the Volkswagen, it would have a rear-mounted, air cooled engine connected to the wheels with swing axles. Unlike the VW, it would have a more powerful six cylinder engine. The problem with putting the engine in the back is that it makes the car tail-heavy. Arrows fly straight because the weight is concentrated in the nose. So tail-heavy cars always want to swap ends. The VW worked on some level because it was grossly underpowered. Corvair's much higher power magnified the natural flaws of a rear-engine arrangement. In fact, unless you read the owner's manual and carefully inflated the rear tires to 30 psi while only inflating the front tires to 18 psi, [your Corvair was an ill-behaved beast](#).

To make things worse, the delightfully light and brisk steering inspired driver over-confidence. And since most drivers automatically assume that every tire should get the same amount of air, the Corvair became a death trap. So Nader had a legitimate target.

Interestingly, the only car with a similar configuration was the Porsche 911 series and it also had legendary handling flaws. The nastiest was called trailing-throttle oversteer (if a driver got into a curve and thought he was going too fast and lifted his foot off the gas, the car would abruptly spin out). Porsche owners thought it was a charming flaw that separated the good drivers from those who should never have set foot in a driver's car in the first place (real men NEVER back off in curve).

The Corvair was a really good object lesson in the many things that can go wrong when designing and building an automobile. The most obvious was that just because a competitor had achieved success using an unconventional configuration, that did not make it a good idea. It took Porsche until the late 1980s to really make the rear-engine automobile safe for their orthodontist customers. This redesign required thousands of engineering hours and millions of Deutschemarks--the kind of investment even GM was unlikely to lavish on an entry-level car.

Ironically, the Corvair got a new rear suspension in 1965 that was MUCH better. Nader seized on this development as "proof" that GM knew it was building a dangerous car in the first place. In effect, Nader was accusing GM of deliberately wanting to kill its own customers. Sadly, many readers would believe him.

Keep in mind here that the Corvair was no worse than the sainted VW

"Beetle" and was probably better in many ways--IF the tires were inflated properly. Since air for tires was free at most gas stations, this was a very MINOR requirement. The idea that GM had resorted to this clever trick to kill its customers was utterly insane.

But the damage was done. By insisting that evolutionary redesign was evidence of corporate crime requiring the work of expensive lawyers, Nader was attacking the very soul of the tool culture. Innovation is impossible without the courage to build something that cannot be known down to the last detail. Nader's preposterous assault on the Corvair absolutely ripped the heart out of GM's willingness to innovate. In the 1960s, GM was arguably the most innovative automaker on earth. Their little Olds F-85 had a [jewel-like aluminum V-8](#)--the tools were sold to [Rover](#) and they produced that V-8 for years, the Toronado had a seven-liter front-wheel drive system when the experts claimed such a configuration was limited to two liters, their Pontiac Tempest had a flexible driveshaft coupled to a rear transaxle, etc. etc. Yet to call GM innovative today would be pure madness.

The Right Cross

Nader and the other Leisure Class lefties would prove a minor annoyance. They were only the enablers. The real death blows to the tool culture would come from the greedy, reactionary right.

The industrial economy that was promoted by the Keynesians was ideal for the tool culture in highly important ways. Difficult tasks require time and investment. Deliberate government policies made possible incredibly complex tasks. The most important were:

- 1) The primary goal of the Keynesians was to increase the purchasing power of the lower economic classes. This made it possible to invest in large and complex projects because a large consumer pool was reasonably assured.
- 2) The costs of basic research were socialized. There was still a large amount of private research but that was largely problem-solving. The government would pay for the more esoteric research. Government would not only finance basic research, but even more importantly, it would buy early production.
- 3) Tax policy was formulated so that companies could retain earnings that would be used to finance massively difficult endeavors. These nest eggs were essential for innovation.
- 4) Financial regulation ensured that moneylenders helped build the tool culture. Of all the organizations in need of social control, finance is at the top of the list. And the MOST important regulation is a cap on interest rates. If interest rates are low, finance enables the tool culture. If interest rates are high, finance is the parasite that destroys the tool culture.

The moment the tool culture was toppled is subject to interesting debate but a prime candidate has to be the day the Nobel committee awarded the memorial prize in economics to [Milton Friedman](#). The economic theories Friedman taught at the University of Chicago were almost exactly the ideas believed by most economists when they proved that they were utterly unqualified to advise governments in 1929. By 1976, however, the people who remembered clearly why the pre-industrial conservatives had been discredited were mostly dead--[apparently even in Sweden](#).

While championing the ideas of antiquity is a harmless Leisure Class diversion in philosophy or theology, it would prove deadly to the tool culture. While speculators carved up the industrial giants, destroying cities and the future of USA in the process, the Friedmans of the world would rationalize the plunder. His main rationalization for predatory excess was that management owed their total allegiance to the shareholders. The rest of the stakeholders--INCLUDING the existence of the company itself--were owed nothing! The workers, the communities, the governments that paid for infrastructure improvements, the states that had built world-class schools of higher learning, the public funding of basic research, the environment, etc. etc.--none had claim on a corporation. Only the moneylenders would have power--and only the market would regulate human activity.

The shift from productive capitalism to the predatory version was astonishingly swift. But such is the nature of the beast. When some punk puts a rock through your window and wrecks your dashboard to steal a radio, he MIGHT get \$50 for the \$600 radio. You lose a week getting the damage fixed and it costs \$4000. When the punks start throwing bigger rocks like leveraged buyouts, they also make off with some easy profits but the damage they cause is incalculable.

And there goes the future

The biggest dilemma caused by a destruction of the tool culture is that the Industrial Revolution was about half finished. It may have solved the problems of almost unlimited production, but it had only just begun to address the environmental problems caused by this stunning productive capability. Unfortunately without the ability to innovate, these problems cannot be solved.

In the Dark Ages, the Europeans could look at the Roman aqueducts and wonder how they could be related to the people who built them. Today's Easter Islanders cannot explain how their ancestors erected those amazing stone heads. In USA, we not only have folks who could not BEGIN to describe how the Apollo Missions were organized, many actually believe the [moon landings were a hoax](#) created on a sound stage. Our Dark Ages are truly upon us.

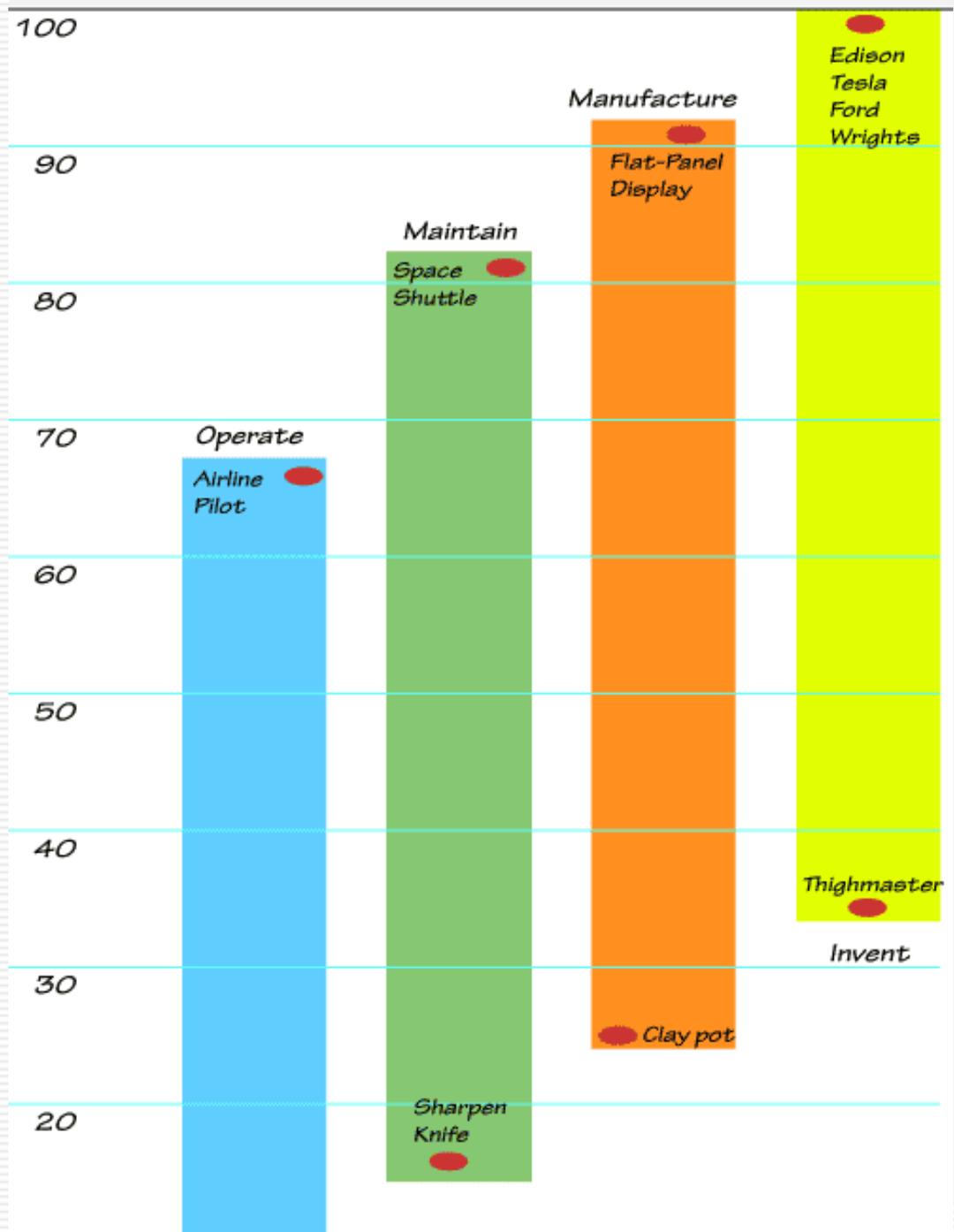
Al Gore suggests in *An Inconvenient Truth* that we still have 10 years to address the climate change caused by humanity's infatuation with fire. This is an obvious example of the sort of problem that can ONLY be solved with a healthy, innovative, and vibrant tool culture. I look

around at the pathetic remains of the culture I fell in love with as a child and sadly ask "healthy?" "innovative??" "vibrant???"

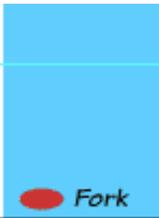
Rating your own technological literacy

The following is a scale of TL

- **Operate:** Give highest points if mistakes are costly or life threatening
- **Maintain:** Highest points go to very complex maintenance with high costs for failure
- **Manufacture:** Highest points for difficult and precision cutting, joining, and processing raw material
- **Invent:** Highest points for originality, difficulty, and impact on the culture



10



Index of Technological Literacy

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Add all columns

- Less than 25 -- stay away from sharp objects
- 25-50 -- your friends seek your technical advice
- 51-100 -- you probably make your living with tools
- 101-150 -- you have probably advanced the toolmakers art
- 151 and up -- You are qualified to discuss the general themes and directions of the tool culture

See also:

Part One: [Kossack Populism](#)

Part Two: [Kossack Populism--Size matters](#)

Part Three: [Kossack Populism--a matter of class](#)

Part Four: [Kossack Populism--Marxism NOT](#)

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