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Science for Those Who Hate Science

Decades ago, there was an article titled "Jazz for People Who Hate Jazz". The idea was to introduce those who did not know to those who did know. More recently and unfortunately, government-sponsored dogma has promoted an anti-science movement – ironically – in the name of "science". Disgustingly, mainly for power and money. . Ironically, those that think they know are now preaching to those who don't want to really know.

Fortunately, in physics and politics there is another renaissance building. Today's political current excesses are becoming "too much" and could be inspiring another great reform.

As Mother Nature is still running the solar system there is much to be hopeful about. This article reviews disasters in what government calls science as well as the wonders of real climate at a time when another breakthrough in physics seems to be underway. Hopefully, some readers will realize that not only is climate change methodical but the way it really works is amazing.

To be blunt, if today's concepts used to promote man-caused global warming were used to build airplanes there would be no such thing as frequent flyer points. Unfortunately, the results are vastly impractical: electrical power from "free renewables", mainly wind turbines and solar cells. Because these are intermittent it upsets the distribution "grid". Moreover, each unit of this capacity needs a unit of ordinary power on standby to provide electricity when needed. Doubling capacity, at more than double the costs.

The essential problem with "free renewables" is low energy density. Whereby, be it wind or solar, the energy system needs to be huge in area. Which is costly in many ways, particularly in the amount of energy used to create inefficient energy production.

Nuclear power is very concentrated, but unfortunately still provokes superstition.

As with authoritarian ambition, whether in science or economics, the theory promoted has been the one that enhances the power and revenues of the state. Because political power is so corrupting, statists have become intolerant to criticism as well as the norms of constitutional limits.

Fortunately, political history is again in a reform mood where all bureaucratic rituals and promotions will be clinically reviewed.

In England in the early 1600s a long inflationary boom collapsed into a contraction and the Crown in its authority imposed a make-work program that essentially doubled clothfinishing capacity. Redundant expenditure as such capacity already existed in Holland, which was the commercial center of the world. As this was going ahead, veteran merchants in London condemned it as "Tyrannical Duncery". A useful description of unrelenting political power pushing impractical visions in any century.

That period of history is fascinating because of the struggle against authoritarians who had been abusing power for more than a hundred years. Which had corrupted most everything including turning the Church into a murderous and venal bureaucracy. The religious side of it has been called the Protestant Reformation.

Focus upon the first seven letters "protest" and you can understand what was going on. Actually, all authoritarian intrusions were reviewed and where possible reduced. Authoritarian science was bypassed on what can be called a great reformation through independent inquiry.

Government science was extremely settled. The Solar System revolved around the Earth. Astrology often guided government decisions and there was faith that alchemy would ease fiscal concerns. On the latter, a newsletter published by a huge bank in the late 1500s noted that it was mainly governments that funded alchemists. Ironically, the great astronomer, Kepler, found that the authorities would pay him for casting horoscopes but not for his science.

To criticize or doubt such settled science was heresy, enforced by threats to one's freedom, prosperity and even life. The Church, religion, science, and the state had become monolithic, including an attempted monopoly on the media. One should look up England's Star Chamber.

However, with growing prosperity, the middle classes gained independence of mind and politics. Moreover, there was enough private prosperity to fund exciting advances in science as well as in applied science. With the improvements in business techniques and shipping, the modern world of freedom and honest inquiry had arrived. On the political side, England's "Glorious Revolution" of 1688 says it all. The last attempt at absolutist government was thrown off by a popular uprising. Thankfully, the authoritarian James II saw the tide of opinion turn against him andfound solace in authoritarian France.

That free markets and limited government brought unprecedented prosperity was widely accepted until around 1900. Then out of nowhere another experiment in authoritarianism got underway. Most people, then, could not imagine the future horrors inflicted by theoreticians driven to impose the ideal political world.

International socialists were out to create the "Perfect" man. For national socialists it was the "Perfect" race as well as land space. Despite those atrocities, today's authoritarians are determined to set the temperature of nearest planet at the "Perfect" level.

That bureaucrats are discussing setting the temp at 1.5 or 2.0 C above some arbitrary level is preposterous. Perhaps the greatest absurdity since Medieval Schoolmen debated how many angels could dance on the head of a pin.

There have been times when opinions independent of dogma were severely condemned. One was when Rome had become a police state, but ordinary people eventually won with the exquisite "Render unto Caesar...". Christianity helped end that experiment. Over much of history, the default position has been affordable and benign government.

On the next experiment in authoritarianism, the Church was corrupted with the Vatican insisting that the Solar System rotated around the Earth. As with today, persuasion was consensus-based and supported by cited authority. At the time, scripture.

All to promote an uneconomic bureaucracy that eventually became destructively unaffordable.

As part of a return to independence, a magnificent renaissance in science helped create the modern world of prosperity.

One tragic exception was Soviet Lysenkoism imposed from the 1920s to 1964. That politically correct movement "disappeared" skeptics as well as farmers. Which contributed to recurring famines that killed millions, mainly in Ukraine the breadbasket, but not in Moscow.

Beyond this, for hundreds of years, scientific research was relatively free to follow curiosity, but it had to be practical enough for discriminating funding. Theories that were not confirmed by evidence were rejected as failures. Until the 1960s when politics took a turn towards authoritarianism. And there have been two main promotions used to impose control.

Ambitious macro-economists armed with newly available main-frame computers in the 1960s claimed that their "models" could prevent recessions. Perhaps not realizing that a similar tout had been behind the formation of the Fed. There have been 8 cyclical recessions since the "Macro" boast and 18 since the Fed opened its doors in 1914.

Regrettably. the central bank that dared not to be called a central bank has been corrupted to provide unlimited funds for another costly experiment in unlimited government. The Fed is the fiscal agent for control freaks. The only "science" behind policymaking is the sad consensus that arbitrary manipulation is needed, and even more pathetic, that it works.

There is only one financial history and it amounts to a "due diligence" on every weird notion dreamed up by financial adventurers – both private and in policy. Blunders in the latter have been immense. Ironically, there is no such thing as a discrete national economy for policymakers to "manage". The idea that artificial Fed expansion of credit drives a business expansion is just another primitive syllogism. Confusing correlation with causation.

An unsupportable economic theory of intrusion became dominant only because it enhances the power and revenues of ambitious government. The latter has always been a threat to constitutional norms. In bypassing limitation, the result has been corruption by bureaucrats funded by deliberate inflation.

In real time, the media had much to sensationalize with the exceptional heat and drought of the 1930s. And while folk have talked about the weather since language was invented no one tried to make fortunes out of it until the media became ambitious. Temperature declining into the 1970s, provided the next compelling story and it was promoted and featured with many reporters and science writers making a living out of "Cooling".

Today's control freaks insist that that cooling was nothing, not understanding that headlines and magazine covers of the day were sensational. Global cooling was real and feared. One proponent, Dr. Arnold Reitze, insisted that democracy had to be ended to prevent freezing.

When those who hate modern society, saw the chart of rising temperatures since the mid-1800s and in also hating the Industrial Revolution, exclaimed "*Ahah*!". Roosters cause the Sun to rise and modern life, through CO2 emissions causes "Global Warming". But the main "greenhouse" gas is water vapor which is hugely influential. But CO2 is a trace gas with little warming effect. With zero influence on the long history of the climate alternating from ice ages to interglacials. Indeed, for millions of years, evidence shows that a turn to warming precedes an increase in CO2 by some 600 years. Warming, repeat warming, forces CO2.

Ambitious promoters have not understood that atmospheric concentration of CO2 at 400 ppm, is geologically low.

But then, IPCC was deliberately limited in its review. It was charged to investigate only one thing. That society's emissions of CO2 forces global warming. And other influences on climate – like the Sun – were not to be reviewed.

Back in the early 1960s, there were, essentially, two theories to explain ice ages as something more than weather gone wrong. The obvious was that ice built some two miles deep and then flowed to Chicago where it melted. One theory was that it needed a lot of snow and that would be provided by a miraculously open Arctic Ocean. Somehow this would provide snow to a somehow much colder continent.

Too much conjecture

The other theory was by Milankovitch which was that cooling or warming trends were driven by the amount of energy received at the Earth's surface. This would vary as the distance from the Sun varied as did the angle at which our planet leaned towards the Sun. And all of the changes were periodic according to orbital mechanics.

But back in the early 1960s, there was not enough evidence to decide either way.

Since then a reliable temperature history of the Earth has been established. This is from, core drilling of ancient glaciers and stalagmites in caves as well as sedimentary layers on lake bottoms or in coral reefs. And the results confirm Milankovitch periodicity driven by orbital mechanics. Real changes in the climate have been natural, and now well understood.

That the Earth is the "Goldilocks" planet is solely due to its wonderful distance from the Sun. And changes in that distance also forces regular change in the seasons, and regular change in climate.

The effect of distance and tilt are easy to visualize and there is one more thing to heat transfer. If you are a long way from the fireplace there is not much warmth. When too close, as with fashionable society in the 1700s, fire screens were needed. In a desert on a clear fall day, it can be 90 degrees and when the sun goes down the temp rapidly drops to freezing. With miniscule water vapor to hold the heat, the heat of the day is lost quickly to outer space. CO2 has nothing to do with swings in temps. In an equally hot, but humid climate, water vapor limits temperature swings.

It gets better, over the past decade Henrik Svensmark and his team as well as Nir Shaviv have observed that the world's cloud cover varies periodically. One, it is great to be able to measure cloud cover extent. Two, that there is enough evidence to suggest a theory. Three, that it has been confirmed in the lab and in the great outdoors is an important breakout in science. The first includes the Hadron Collider which confirmed "in the lab" that cosmic rays force cloud formation. In the big world, confirmation shows up with strong particle surges from the Sun. Coronal Mass Ejections (CMEs) are brief outbursts which are associated with reductions in cosmic ray intensity. Known as *Forbush Decreases* the decline is quick in the order of a few hours with the recovery taking some days.

This is how the physics of our Solar System really works.

Much further out in time, Shaviv has related cosmic ray intensity to changes in our galaxy. With timing in the order of 23 million years.

The drive to alter the climate is audacity hitherto only attributed to gods. This has been part of in-your-face and in-your-wallet bureaucracy, which is becoming costly and tedious.

So, from the lab, to changes by the hour or by the day with "Forbush" events, and right out to changes in the spiral arms of the Milky Way variations in cloud cover are methodical. And all of the climate changes in Earth's billions of years of history have been driven by a mechanism that makes sense.

For this writer, classroom lectures in physics provided some "Eureka" moments. Climate studies have been a subset of geophysics and as the data base has built over the past 40 years there have been other such moments. And the best being the links between solar activity, cosmic rays, and real climate change.

Additional "Eurekas" have included popular uprisings when politically driven ambition becomes too much. Right back to Ancient Egypt, there are wonderful examples of bullying governments being reformed.

Nature is there to be understood and admired, including mankind's accomplishments. Not to be twisted by unrelenting political ambition.

Accumulation of data continues to confirm that climate changes naturally with little influence from free society. More of the public is getting "fed up" with in-your-face and in-your-wallet bureaucrats. Milton described it as "inquisitorious and tyrannical duncery", that is increasingly being seen as costly-stupid.

There is much to be admired in another renaissance in physics, and a reformation in the politics of fear and hate is needed and developing.