Viewpoint: The 'assault on science' and human welfare by eco-activists who reject agricultural technology as 'corporate subterfuge'



n last year's excellent book <u>The Wizard and the Prophet</u>, Charles Mann juxtaposed two polemics on the environment in the 1940s during the turning point of agricultural development: Norman Borlaug and William Vogt. Borlaug (the Wizard) took the scientific approach to innovate and develop new tools to solve problems facing agriculture. Vogt (the Prophet and arguably the

founder of the modern environmental movement) would see an environmental problem as a reason for man to pull back and let the planet heal itself.

To this day, both approaches (to innovate or to pull back and take precaution) have defined environmental debates. There is no doubt which side I fall on. Borlaug's scientific route has allowed humanity to thrive over the last 70 years. The Green Revolution in agriculture led to global economic expansions as abundance led to generations of risk-takers being able to leave the land and develop other opportunities for wealth generation. Environmentalists argue that the agri-technologies have led to deeper problems from saturated soil and poisoned water tables to serious human health issues to climate calamity. Social justice theorists are proposing agro-ecology as a Vogtian response in pulling back from seven decades of agricultural development.

To cure or to let heal?

So which approach is right? Clearly we should be doing both. When a technology is not working, we should pull back and try to develop and utilize more innovative, more sustainable processes. In industry, this is a key element of product stewardship: continuous improvement. Farmers are developing better soil and crop management techniques with conservation agriculture practices. Utilities are finding more sustainable energy generating practices that are reducing emissions. Healthcare providers are improving the quality and success rates for a wide range of disease treatments.

But environmentalists in groups like Greenpeace and Friends of the Earth see innovation and stewardship as corporate subterfuge and insist on the Vogtian approach: get humans out of the way. This entails the pullback from any environmentally damaging practices: in agriculture, only promote practices that protect soil (except no-till and cover crops with glyphosate), demand only non-carbon-emitting energy sources (except nuclear). (Anti-vaxxers also promote this rejection of technology, but they are hardly acting in a precautionary manner.) Truth be told, these activists are more anti-capitalist Marxist ideologues than people who actually care about the environment.

Vogtianism, one could argue, is the doctrine that where man is believed to be the cause of environmental or health decline, the only solution is for man to pull back and let nature repair (heal) itself. Today this is best articulated via a certain interpretation of the Precautionary Principle. But as precaution (expressed as a pulling back from technology and innovation) gets more widely used in policy and personal decision-making by increasingly risk-averse populations, a dangerous anti-science mindset is cementing itself into our problem-based policy approaches.

This is the poison of precaution.



As I have written elsewhere, there are many definitions of the

precautionary principle, but the one the European Commission presently favors is what I call the David Gee version: the reversal of the burden of proof. Rather than proving that a technology is a threat, before a product, process or substance is allowed on the market, innovators will have to prove with certainty that it is safe. Safety and certainty are, of course, subjective, emotional concepts and activists have been busy over two decades setting all sorts of uncertainty traps to take technologies off of the market (from low-dose exposure to cocktail effects to potential endocrine disrupting properties all assessed from a hazard-based approach).

This version of precaution is now approaching its 20th anniversary. David Gee, a former director at Friends of the Earth UK, wrote Late Lessons from Early Warnings when he was serving as the head of science at the European Environment Agency (I wish I were making this up). His approach was to put science on trial for past missteps. The reversal of the burden of proof essentially said that science was guilty until proven innocent (and there was no hope of a fair trial with the emotional demands for certainty and safety).

The goal is quite simple: set the safety bar so high and create enough uncertainty traps that all technologies will fail the precaution test. This is the Vogtian Doctrine: use precaution as a systematic tool to pull back from the use of any (and ultimately all) technologies. Some examples:

 The EFSA <u>Bee Guidance Document</u> was crafted by activists to exclude any viable data to show no effect from neonicotinoids on pollinators (thus the most advanced technologies have been banned in Europe even on non-flowering crops). The demands for certainty and safety are so high that no crop protection tools, even pesticides approved for organic farming, could be approved for use (but the EU is not testing those since it was never really about the bees). Farmers have since been forced to use older, less effective technologies and are now rotating out of certain pollen-rich crops like oilseed rape (sorry for the bees). Caught under this Vogtian knot, soon their only option will be to leave the land or start growing trees (activist mission accomplished).

- Uncertainty campaigns against chemicals like bisphenol A, brominated flame retardants or certain phthalates have created a challenge for manufacturers to work in a world where certain plastics are no longer viable. Glass, paper and metal alternatives (the clear winners of this long-fought lobby battle) are often insufficient and inconvenient. This pullback approach neglected the needs of hospitals, care centers, food safety and public health services. The <u>EU Single-Use Plastics Directive</u> is a technology pullback (away from plastics) rather than a call for more innovative research on biodegradable polymers, recycling and waste management. Tell my hospital caregiver that we're going back to glass products and more risky in-house sterilization because the European Commission has adopted an anti-science, precautionary mindset.
- New gene editing techniques like CRISPR-Cas9 can target and manipulate genes in precise and beneficial ways, potentially allowing for human and plant genetics to dramatically advance, save lives and improve agriculture with fewer inputs and costs. But it is not natural so one can almost smell the precautionary pullback. In the case of seed breeding, last summer's rejection of such novel breeding technologies (via the European courts) was not about GMO uncertainties, but a desire of certain French peasant group plaintiffs to keep the right to only use older, heritage seed varieties. Social justice activists from Vandana Shiva to Olivier De Schutter hide their Vogtian ideology behind their claims of some contrived fight for seed freedom. What they are safely delivering is impoverishment among small-holders in developing countries.

This precautionary approach has not only denied benefits to European citizens (and worse to more vulnerable populations abroad), it has also fostered a narrative that pulling back is a more responsible approach than innovating and solving problems with research and technology. This has created a dangerous mindset among European leaders and influencers.

The anti-science mindset



After two decades of David Gee's perverted precautionary

approach, a frightfully large number of European leaders and influencers have adopted an anti-science approach. If something is suspect then the immediate impulse is that science and technology (imposed via their corporate demons) are to blame and, in true Vogtian fashion, the only solution is to pull back, impose precaution and hope Mother Nature can heal itself. We are no longer looking for new scientific solutions for our problems but rather relying on our regulators to ban technologies and get humans out of the way.

Some recent examples where this Vogtian/precautionary anti-science mindset has taken over.

The climate pullback

When the Extinction Rebellion crowd took over London for a week of media stunts during the Easter holiday, their demands were not for more scientific solutions to reduce our carbon emissions. Nobody in the organization was calling out for new lightweight polymer technologies or better research into carbon sequestration. Instead, they were demanding pullbacks – that we must all immediately stop flying, driving cars, eating meat and cease any industrial scale levels of production. If our governments continued to support the corporations, the Extinction Rebels preached the need for a revolutionary government led by citizen panels who would decide what technologies to allow (hint: none of them). No innovative technologies were called upon—they were the problems.

The sage of their movement, little Greta, is parked outside of the Swedish Parliament looking for her <u>government</u> to solve the problem, not science or industry. And our governments are only capable and only expected to pull back from our use of these technologies.

A plague on our crops

EU anti-pesticides campaigners have had a series of surprise regulatory victories on certain crop protection tools. Neonicotinoids have been <u>banned</u> in the EU making it harder, more expensive, less successful and more time consuming to protect plants against a variety of insects (according to the

European Commission's own <u>study</u>). When the precautionary principle was imposed, the European Commission did not say: "Once we develop a better alternative than neonics, we'll remove this technology from the market". They simply said: "We're pulling back!" and all of the activists cheered (regardless of the horrible consequences).



How many weeds does a Parisian gardener have to contend with?

On glyphosate, where politics and Predatort greed trumped science, the Vogtian pullback was even more ignorant. After the herbicide of the century was given a short reprieve in a divided regulatory process, French President Macron committed to stopping the use of glyphosate in France within three years. Did Macron have a viable alternative to allow farmers to win their soil-management battle against weeds? No. He set up a website to get farmers to voluntarily commit to pulling back from using herbicides and after three months, 11 farmers in all of France (including one in Paris) made the pledge (the <u>website</u> has since changed its approach). When faced with the threat of super-weeds and herbicide tolerance, the people who provide food on our tables desperately need more research, not precautionary pullbacks from slick, smarmy leaders.

A public health prayer

Most health officials will tell you their biggest fear is the rise of antimicrobial resistance. As more and more bacterial strains and infectious diseases are resisting the antibiotics at our disposal, the threat of a superbug pushing our health services over the edge is becoming very real. There are, to my knowledge, no new antibiotics in phase III clinical trials and many widely used treatments have been around for decades. The European authorities have effectively only one measure (outside of "more communication") they are presently taking to address the rise of antimicrobial resistance: use fewer antibiotics. Sorry but if you are a regulator and this Vogtian precautionary recklessness is your only policy response to the biggest threat likely facing humanity, I suggest you find religion ... fast!

Now granted, I recall two decades ago when our kids were small, doctors would prescribe antibiotics if cold symptoms lasted more than four days ... so there was, then, an over-reliance on quick fixes to clear doctors' waiting rooms. But now is the time to support more science and research and not simply rely on this precautionary pullback. Nature will not heal itself in the case of antimicrobial resistance, it will wipe us out. Regulators may reply that it is the pharmaceutical industry that needs to make the next great discoveries. I agree, but then lessen the regulatory nooses set by the precautionistas and their antiscience mindset that precludes more research endeavors.

Four hundred years after Francis Bacon's Novum Organum, and the need for a scientific approach to protect humanity from the harsh forces of nature (a life his contemporary, Thomas Hobbes described as "solitary, poor, nasty, brutish and short") we seem to have forgotten the benefits science has brought us. Two decades of David Geeism and Europeans seem to be demanding a return to those heady Malthusian days. This is absurd beyond belief and it shows how dangerously complacent our narcissistic, virtue-signalling leaders and influencers have become.

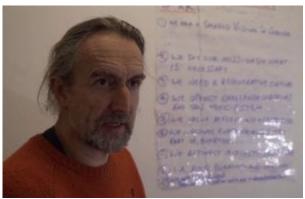
Anti-science groups like <u>Corporate Europe Observatory</u> or <u>Testbiotech</u> are demanding that scientists be removed from the risk assessment process (they started a rumor that a mid-sized ag-tech company paid off all of the regulators and scientists ... Yes ... all of them). These ethically-challenged opportunists propose that the experts be replaced with citizen science panels. This supports their strategy that technologies simply need to be removed from use and who better than a panel of petrified peers to implement this precautionary paradise?

Precaution has created this anti-science mindset – that the only solution to save the planet is less science and technology. This narrow-minded tribe of activists feel entitled to impose their ideology on the policy process, block technologies that farmers, doctors and consumers need and push humanity backward (particularly those most vulnerable).

But how long until the bodies start piling up? How long until the food stores are emptied? How long until the damage to public health and the environment from this mindset becomes unmistakable? When the wider public wakes up to the disasters these demagogues are preaching, how will they react?

Are we ready to give everything up to "save the planet"?

Of course not.



Roger speaks for 3.5% of the public

And this is where the precautionistas hit the cold wall of reality. The wider public, outside of Roger Hallam's 3.5%, don't like to make sacrifices or give up things that matter to them. The failure of the Extinction Rebels came when they demanded that others give up what these cosmopolitan zealots neither needed nor enjoyed (cars, meat, flying, industry jobs). Rather than pulling back, they should have been demanding lower emissions to keep the technologies and pleasures we have and want.

Does the wider public know what this tribe of narrow-minded zealots wants to do to them? Once consumers realize they are paying more or losing benefits (often both), they will stand up (either with <u>yellow vests</u> or with voting ballots).

The surprise results of the last month's Australian election reveal an important political reality: Telling people what they will have to give up is an invitation for them to tell you why they will have to give you up. The Australian Labor Party lost an unloseable election by telling voters what sacrifices were necessary in the battle against climate change. Even after a sweltering Australian summer, voters were not attracted to this precautionary Vogtism disguised as responsibility.

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Now before my green activist friends use this as a further reason to justify why they prefer to <u>avoid</u> the democratic process as much as possible, I should add that the Australian voters were perfectly reasonable here. Nobody wants to give up things they have. The public will support greener technologies (provided there are incentives) and sustainable innovations to combat climate change. They will not support the blanket precautionary removal of benefits and solutions because someone has a theory about how nature heals itself. Maybe it is time to drop this anti-science madness and accept that technology and industry are our best bet rather than our biggest threat.

Does the wider public want to pay 60% more for food? Will they accept to no longer have affordable meat and dairy products? Do they want to haul heavier, more expensive glass packaging? How much more are

people willing to pay for green energy? What will happen when people in the countryside can no longer afford to keep their cars on the road? It seems that these white, middle-class, cosmopolitan virtue signallers with the Extinction Rebellion flags don't get how the wider public thinks (but they seem arrogant enough to feel they can make decisions for them).

The wider public does not understand the policy tools these activists have manipulated. The wider public is ignorant of the consequences soon to be imposed on their lifestyle by a small, vocal, self-entitled tribe of eco-fundamentalists. The wider public is just trying to get by and hopefully have a better tomorrow. The wider public is not aware of the benefits that these dogmatic zealots are planning to take away from them.

Maybe someone should tell them.

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