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An evil atmosphere is forming around geoengineering

21 July 2010 by [Clive Hamilton](#)

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IN 1892 Edvard Munch witnessed a blood-red sunset over Oslo, Norway. Shaken by it, he wrote in his diary that he felt "a great, unending scream piercing through nature". The incident inspired him to create his most famous painting, *The Scream*.

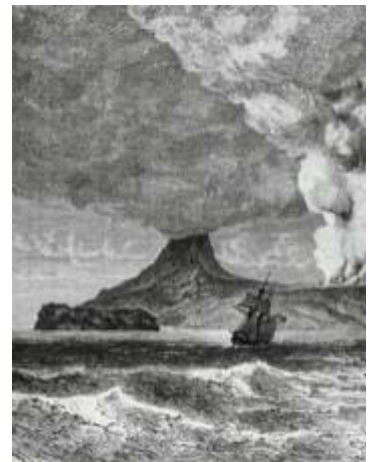
The striking sunset was probably caused by the eruption of Krakatoa, which sent a massive plume of ash and gas into the upper atmosphere, turning sunsets red around the globe and cooling the Earth by more than a degree.

Now a powerful group of scientists, venture capitalists and conservative think tanks is coalescing around the idea of reproducing this cooling effect by injecting sulphur dioxide into the stratosphere to counter climate change. Despite the enormity of what is being proposed - nothing less than seizing control of the climate - the public has been almost entirely excluded from the planning.

Up to now, governments have been reluctant to talk about geoengineering. The reason is simple: apart from its unknown side effects, it would weaken resolve to reduce emissions.

But it may soon prove an irresistible fix. This form of geoengineering is extremely attractive because its costs are estimated to be trivial compared to those of cutting carbon. It also gets powerful lobbies off governments' backs, gives the green light to burning more coal, avoids the need to raise petrol taxes, permits yet more unrestrained growth and is no threat to consumer lifestyles.

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Krakatoa - an inspiration for mo (Image: Roger-Viollet/Rex Feat

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No government is yet willing to lend support to geoengineering, but the day when a major nation backs it cannot be far off. It is even possible that a single nation suffering the effects of climate disruption may decide to act alone.

Indeed, Russia has already begun testing. Yuri Izrael, a scientist who is both a global-warming sceptic and a senior adviser to Prime Minister Putin, has tested the effects of aerosol spraying from a helicopter. He now plans a large-scale trial.

Izrael is the latest in a long line of scientists who have advocated planetary engineering. Two of the earliest and most aggressive were Edward Teller and Lowell Wood. Teller, who died in 2003, is often described as the "father of the hydrogen bomb" and was the inspiration for Dr Strangelove, the eponymous mad scientist of Stanley Kubrick's 1964 film. Wood was one of the Pentagon's foremost weaponeers, which led his critics to dub him "Dr Evil". He led Ronald Reagan's ill-fated Star Wars project.

Wood and Teller began promoting aerosol spraying in 1998. Reflecting the dominant opinion of the 1950s, they saw it as our duty to exert supremacy over nature. Both have long been associated with conservative think tanks that deny the existence of human-induced global warming.

A number of right-wing think tanks actively denying climate change are also promoting geoengineering, an irony that seems to escape them.

Of course, geoengineering protects their funders in the fossil fuel industries because it can be a substitute for carbon reductions and justify delay, but a deeper explanation lies in beliefs about the relationship of humans to the natural world.

While emissions reductions are an admission that industrial society has harmed nature, engineering the climate would be confirmation of our mastery over it, final proof that human ingenuity will always triumph.

Wood believes that climate engineering is inevitable. In a statement that could serve as Earth's epitaph, he declared: "We've engineered every other environment we live in, why not the planet?"

Advocates of geoengineering also court the super-rich. Wood is doubtful that governments can reach a consensus, but he sees no need for that, instead speculating about going ahead with support from a billionaire. "As far as I can determine, there is no law that prohibits doing something like this". He is right.

Perhaps the billionaire he has in mind is Bill Gates, who has been funding geoengineering research for three years. Gates is also an investor in a firm named Intellectual Ventures that is promoting a scheme called [StratoShield](#), which would pump sulphur dioxide into the upper atmosphere through a hose held aloft by blimps.

Richard Branson has also set up his own "war room" to do battle with global warming using "market-driven solutions", including geoengineering.

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The [Carbon War Room website](#) promotes a [paper](#) co-authored by Lee Lane of the [American Enterprise Institute](#), well known for its climate scepticism. It argues that the benefits of geoengineering vastly outweigh the costs. The authors worry that ethical objections from environmental groups may block deployment, before noting with relief that "in reality, important economies remain largely beyond the influence of environmental advocacy groups".

Geoengineering is not something we should enter into lightly or without proper public consultation. If we resort to it, then the concentration of carbon dioxide will continue to rise. It would then become impossible to call a halt to sulphur injections, even for a year or two, without an immediate jump in temperature.

It's estimated that if whoever controls the scheme decided to stop, the greenhouse gases that would have built up could cause warming to rebound at a rate 10 to 20 times that of the recent past - a phenomenon referred to, apparently without irony, as the "termination problem". Once we start engineering the atmosphere we could be trapped, forever dependent on sulphur injections. More than a painting, *The Scream* would become a prophecy.

If we start manipulating the atmosphere, we could become forever dependent on sulphur injections

Clive Hamilton is Charles Sturt Professor of Public Ethics in the Centre for Applied Philosophy and Public Ethics at the Australian National University. His new book, *Requiem for a Species*, is published by Earthscan



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Relative Economics

Thu Jul 22 07:46:33 BST 2010 by **Sandy Henderson**

In the second half of the 19th century physicists thought they had most of the universe "sorted", except for a few minor problems, like what kept the sun going when the fossil record showed the earth to be many millions of years old. Then along came relativity and quantum mechanics and we realised we didn't know the half of it. Economics needs to move forward. The beneficiaries of growth are mostly the already rich and its effect is to reinforce the differences between rich and poor. One thing that appears from the statistics on population growth is that the poor are increasing in number faster than the rich. Is it not reasonable to assume that improving the prosperity of the poor might be the least painful way of curbing human population growth. Is it also not unreasonable to require large concentrations of power, be it political or economic, to justify their privilege by superior conduct and responsibility?. Saying they own this wealth and power is an absolute ignores the fact that if there were no common agreements or laws, they would have difficulties keeping the wealth and power without spending large sums defending it, and would even then require trustworthy subordinates.

One of the lesser definitions of economics used to be satisfying human needs by the reduction of waste. Redefining needs and waste is crucial

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Irony?

Thu Jul 22 21:00:25 BST 2010 by **Rob Chansky**

<http://www.gapthemind.org>

"A number of right-wing think tanks actively denying climate change are also promoting geoengineering, an irony that seems to escape them."

I've seen a lot of contradictions like this. I chose a low-crime area to live in, yet I lock my doors. I took out life insurance, but I still try to live safely. I

don't subscribe to the warming hype, but I'm still glad some of my taxes are going toward funding alternative energy sources. I think problems on Earth should be worked on and solved, but I like space exploration funding also. Praise God and pass the ammo, folks.

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