Make sense of it all.

Become an FT subscriber. Pay annually and save 20%.

Subscribe now

FT Magazine Life & Arts

Billionaires want to save the world. What's so wrong with that?

Today, practically everyone above a certain net worth has a 'World-Saving Project'

Andrew Hunter Murray JUNE 30 2023

Receive free Life & Arts updates

We'll send you a *myFT Daily Digest* email rounding up the latest Life & Arts news every morning.

Enter your email address	Sign up
,	

In February 2009, James Wilsdon was attending a conference in a bitterly cold Chicago when he got a phone call with an intriguing invitation. The caller hoped that Wilsdon's boss, the president of the Royal Society in London, might visit Richard Branson's Necker Island, where the tycoon was assembling a scientific and financial supergroup for a new initiative, the "Carbon War Room". When the president declined, Wilsdon went in his stead.

A small private plane whisked him from Chicago to Beef Island, Necker's nearest airstrip. Then, he was escorted to a white speedboat and, shortly afterwards, he arrived in Branson's living room, still in his winter coat. Around the room sat the founders of Skype, Microsoft and the Dutch postcode lottery as well as scientific directors, fund managers and, inexplicably, Vivienne Westwood. Branson had assembled this small band of big money as a shock brigade on the climate crisis.

The Carbon War Room gathered in the "temple", an expansive pitched-roof villa originally constructed by Branson for meetings of the "Elders", a group of panglobal leaders established by Branson and musician Peter Gabriel in 2007. (As Necker can be hired, pictures of the temple can be viewed on TripAdvisor.) There followed a series of briefings on what could or couldn't be done to solve the problem of the Earth's rising temperature. Wilsdon came away impressed by the appetite of people with "a certain amount of financial freedom" to make large-scale climate interventions, but unsure whether their grand plans could or would materialise.

The Necker Assembly interests me for several reasons. First, as a novelist who's just written a book about an island-based plutocrat with a distinct vision for humanity's future, I would have rejected it as unrealistic. (A temple? Too much.) Second, it now seems Branson's scheme was merely a prototype for the breed of magnate that has appeared in the years since, one who wants to rescue the planet from the industries and systems which, in many cases, made them rich in the first place.

As Wilsdon told me the tale of the Carbon War Room on the phone from his University College London office on an unseasonably warm spring day, one term in particular stayed with me: "Greenfinger". Back in 2008, when climate expert David Victor coined the term, the word described a theoretical "self-appointed protector of the planet" who might fund a big, risky, climate-saving scheme and unintentionally do substantial harm in the process. The idea is usually the preserve of sci-fi. But talking with Wilsdon, I began to consider how far climate philanthropy had changed.

Today, practically everyone above a certain net worth has a World-Saving Project or WSP. Elon Musk (\$225bn) has pledged \$100mn to the winners of his XPrize for carbon capture. George Soros (\$7.16bn) wants to refreeze the Arctic. As well as defeating death and going to Mars, Jeff Bezos (\$153bn) has announced \$10bn for his grant-giving Bezos Earth Fund. Former Reddit chief Yishan Wong intends to plant a trillion trees. The potential benefits of all this funding are, of course, huge. But a wealthy individual's financial nimbleness, and their limited accountability, potentially create the kind of risks that Victor warned of back in 2008. Might the world's first real Greenfinger appear in the not-too-distant future?

Wilsdon is now director of the Research on Research Institute, which works to improve public R&D. He remains politely sceptical about deep-pocketed funders. His view is that what we need is "not some sort of uber-tier of incredibly omniscient billionaire philanthropists picking where to put the money", but a "well-lubricated, funded, secure research system" that has the strength and capability to turn to big problems as they arise.

He tells me the UK government's R&D budget is approaching £20bn a year, and that private-sector R&D now exceeds public money roughly threefold. In the philanthropic space, there are foundations like the Wellcome Trust or Cancer Research and individual donors riding their personal hobby-horses.

While he welcomes all science funding, Wilsdon believes that, during Covid-19, for example, "the people who made the really big differences were people who'd been working in very proximate areas for a very long time and could then pivot. The idea that you can sweep it all away and reinvent it from scratch much more effectively is a bit naive." He reckons that the Covid response from private funders like Fast Grants, which awarded \$50mn to hundreds of projects at the start of the pandemic, was somewhat overhyped. Existing funding bodies are perfectly able to pivot towards sudden challenges; in 2021, work on Covid featured in 9 per cent of all scientific papers published, even though most funding was allocated prepandemic, showing that scientists who had been funded for something different were nonetheless able to contribute to the pandemic response. (A representative for Fast Grants' co-founder, the Stripe billionaire Patrick Collison, declined to comment.)

Some researchers have seen their fields substantially disrupted by a rise in philanthropic funding as enthusiastic donors have piled in. "It has changed considerably over the two decades I've been involved," says Filippa Lentzos, a biosecurity expert and associate professor at King's College London, who works on biorisk management and biological arms control. "There is clear benefit to that, but what's happened with my field is that it's relatively niche and philanthropic funds have flooded the market", leading to an imbalance in research funds.

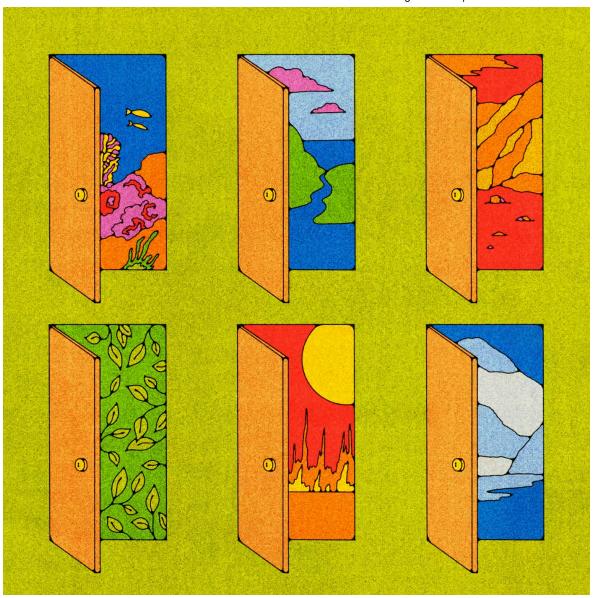
Mysteriously, nobody seems to know how much private money goes into scientific R&D. Both the UK's Department for Science and the US's National Science Foundation told me they don't track that data because the bewildering array of structures used — foundations, charities, limited liability partnerships, spinouts — make it too complex to count.

Yet there are clearly advantages to these private cash injections. Dozens of world-changing technologies were supported through their first fragile years by private money. Agronomist Norman Borlaug was hailed as a hero for developing new varieties of dwarf wheat that doubled or trebled crop yields. Many believe he saved millions in India and Pakistan from famine; in 1970 he won a Nobel Peace Prize. His chief funders were the Ford and Rockefeller Foundations, the ossified fortunes of earlier millionaires.

When the UK's Medical Research Council refused to countenance work on IVF in 1971, US philanthropist Lillian Lincoln Howell supported pioneers Edwards, Steptoe and Purdy (a fact only acknowledged after her death in 2014). In the 1950s, Michigan millionairess Katharine McCormick single-handedly funded development of the pill, at a time when the government and pharmaceutical industry had shown zero interest and 30 states legally restricted the sale of contraceptives.

Perhaps most striking, in the 1930s, after the RAF derided high-speed seaplanes as money-burning "freak machines", the manufacturer Supermarine was on the brink of abandoning its new project, the S.6B, until Dame Fanny Houston, England's second-richest woman, wrote them a cheque. That plane's eventual successor, the Spitfire, played a substantial part in winning the Battle of Britain.

These innovations were significant. But the technologies being researched today have the potential to make even greater impacts.



© Kate Dehler

The most popular idea among the potential Greenfingers is solar radiation management (SRM), a technology nurtured in its earliest years by grants from wealthy individuals including <u>Bill Gates</u>. It would involve <u>spraying fine aerosols</u> into the upper atmosphere, probably from a fleet of high-altitude planes, in essence dimming the sun slightly and thus cooling the atmosphere. This is the idea Wilsdon briefed Branson's Carbon War Room on. It would require billions of dollars, but it's by far the cheapest option suggested.

Many experts consider SRM fraught with risks. It could alter rainfall patterns. Once we start spraying, we might not be able to stop, for fear of a catastrophic release of pent-up heating called "termination shock". The odds of global consensus on deployment seem slim. Nonetheless, after years of the tech being regarded with suspicion, the US government has announced its own five-year research scheme into "climate interventions". Within the past year, a couple of tiny real-world experiments have been conducted by individual scientists.

Could an individual Greenfinger start dimming the sun without state support? Neither enthusiasts nor sceptics think it would be possible (the US air force could blow any Greenfinger planes from the sky without difficulty). David Keith, a Harvard climate scientist of 30 years' experience, whose own research into the science of SRM was backed by funders including Gates, tells me that while "technology exists to do some forms of geoengineering", arguments about deployment are for governments. I ask him if billionaires might have outsize influence on the course of research.

"I see a problem in democracies of rich people having too much power to shape events," he says. "But I don't see that as black and white, and I don't see governments as necessarily better." He points out that Gates's funds have had an "outsize influence" against malaria and HIV.

Opponents insist SRM is too dangerous even to research, and their arguments are powerful (and terrifying). Frank Biermann, professor of global sustainability governance at Utrecht University, is concerned that even discussing this technology is to normalise it. As he puts it, "Development inevitably leads to deployment." He has spearheaded a proposed Non-Use Agreement on Solar Geoengineering with 450 signatories, but he fears corporations and billionaires will lobby the tech into existence: "The problem with developing such a technology is that you don't know who will eventually use it." He uses a *Star Trek* analogy to explain. Captain Kirk, the hero, has autonomous control over the course of his spaceship, aided by his multinational crew and the unlimited knowledge of his sidekick Mr Spock. "That is what many people, especially in the natural sciences, seem to believe the planet has." The problem? "There is no Captain Kirk," Biermann says with a smile.

The US might deploy this technology; so might Vladimir Putin. A geographically fractured, stop-start, "chaotic deployment" seems more plausible than a single actor. But the simplicity is tempting: "It's almost like John Wayne in a sense," says Biermann. "The world is chaos, you enter the saloon, and then you solve it with a couple of shots."

What if a Greenfinger became intrigued by "self-spreading vaccines"? This is the idea of commandeering harmless but transmissible viruses, matching them with viruses we want to inoculate against, and letting the transmissible "taxi" virus carry the vaccine across the world. The risks are many: vaccines combining with human pathogens, becoming dangerous decades from now or the increased odds that bad actors will gain the ability to make lethal viruses super-spreadable.

Even if there's no sinister Greenfinger waiting to unleash their aerosol-spraying planes or virus-riding vaccine, these technologies are exactly the kind you might expect from a cadre of (predominantly) men who were enormously successful in tech, and who changed the world's infrastructure along the way. Why shouldn't another bold, tech-based solution work, they might ask? By contrast, they are a long way from how earlier billionaires donated their fortunes. Andrew Carnegie built 2,500 libraries. Cornelius Vanderbilt commissioned Grand Central Station. The new WSPs make the work of Michael Bloomberg — who has pledged \$500mn for lobbying US states to close their coal power stations — seem rather old-fashioned.

The most popular idea is solar radiation management.
Opponents insist it is too dangerous even to research

Many people, myself included, worry these are high-tech distractions. The idea of carbon reduction gets little plutocratic attention compared with infinitely splashier carbon-capture technologies. But at a time when the world has a limited carbon budget left before lethal temperature rises are locked in, the idea of a giant silver bullet might be either a pointless diversion or, even worse, an excuse to do nothing. "The

debate about the technology being available in 2040 or 2050 might have a chilling effect in terms of what needs to be done in terms of cutting emissions," says Biermann.

It seems to me that there's a huge accountability gap here too. Consider Oceankind, a grant-giving body founded in 2018 which has sunk over \$120mn into oceanic research. Most is uncontroversial, but it has also supported Ocean Alkalinity Enhancement (OAE): essentially SRM at sea, scattering millions of tons of finely ground rock into the oceans to absorb carbon and fight acidification. Even when Oceankind bankrolled an OAE conference in 2019, few attendees knew who was paying. Only last year was Oceankind's founder and director revealed to be geneticist Lucy Southworth — wife of Larry Page, the world's eighth-richest man. (Oceankind declined to comment for this piece.)

Oceankind funds some vital work, from decarbonising shipping to reducing fishing by-catch. The question is: does the public have a right to know who is funding potentially planet-changing technologies? The principles of private enterprise seem to say no. But when it comes to inventions which might govern the 21st century, does that work? Greenfinger might actually be an old-school lobbying story — in a field with global implications.

Where are the watchdogs? Many of the bodies researching the area of "existential risk" — and human technologies are high on the threat list — have taken money from Big-Tech philanthropists. Oxford's Future of Humanity Institute and Cambridge's Centre for the Study of Existential Risk have both received funds from Elon Musk, whose concerns have oscillated from runaway AI to establishing his own version of ChatGPT.

Lentzos of KCL worries that certain risk researchers in her field of biotech are too focused on huge, existential pandemics that might kill us all. "If that's all we focus on, our entire policy apparatus will be skewed. We need to focus on all the risks, many others of which are much more likely. But that's so much less sexy to talk about than the end of the Earth." She sees a role for private funding, and has received some herself, but acknowledges that government funding is important because governments are "democratically accountable. They have to take into account the values and principles we build our societies on."

IVF and the pill were technologies for which governments weren't ready. And this has been the philanthropists' real superpower — as long-term incubators for technologies they believe in, keeping them ticking over until governments do listen. Few would wish to uninvent those technologies, and Harvard's Keith insists that "research is just research".

I'm not so sure. Every invention brings unintended consequences. Norman Borlaug's crops have since been called into question by some ecologists who maintain that his new breeds damaged soil fertility and genetic diversity, required more water than local ecosystems could spare and displaced countless peasant farmers. The jury on Borlaug is irretrievably hung, a troubling testimony to the law of unintended consequences — not what his backers might have expected.

Wilsdon briefed his audience about the Royal Society's study on geoengineering, "essentially to warn them off doing anything too rash". After three days, the conference ended. Some years later the Carbon War Room was swallowed up by the Rocky Mountain Institute, which shares the mission to accelerate the clean energy transition.

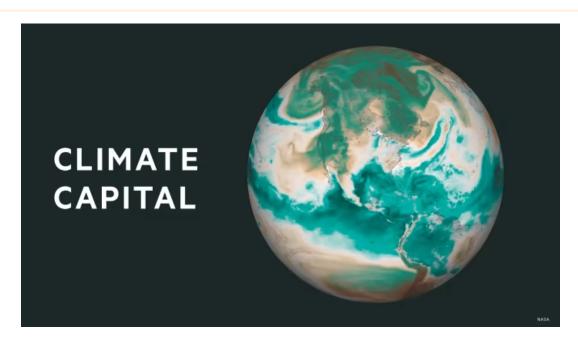
What will happen to all these WSPs? I suspect we'll keep inventing new technologies to get out of the scrapes we got into with our last bright idea. I'm glad I haven't found a Greenfinger — even the most powerful billionaires would crumble against determined state intervention — and the planet-savers clearly have the power to do tremendous good. But their unaccountability, their obsession with techno-fixes and their need to focus on the entire risk spectrum worry me. Most concerning of all is the potential for us to make irreversible, unwise decisions if we listen to only one kind of pitch.

In my novel, Sir John Pemberley, the plutocrat on his Bond-villain island, does whatever he thinks best because no one is prepared to stop him. I wrote the book in the hope it would stay fictional. Will it? We'll probably know this time next century.

Andrew Hunter Murray's "The Sanctuary" is out now

Follow @FTMag on Twitter to find out about our latest stories first

Climate Capital



Where climate change meets business, markets and politics. <u>Explore the FT's</u> coverage here.

Are you curious about the FT's environmental sustainability commitments? Find out more about our science-based targets here

Letter in response to this article:

Moonshot funders need more grounded ambitions /	From James Cher	1,
Chairman, Chen Yet-Sen Family Foundation, Bath,	UK	

Copyright The Financial Times Limited 2023. All rights reserved.