

I did the math

I did the math. But I wish I hadn't. It was right after Hurricane Sandy. Over a week-long binge I read everything I could find. I work downtown, you see. And they'd lost power, but uptown I still had it. So I had this string of days. It was a time out of Time: the storm had stopped the world, but I was still moving. The city was wrecked. Well, a few parts of it – The Rockaways, Red Hook, Staten Island. The rest of us were a bit stunned, but fine. The Exchange was down; the Jersey guys who normally run the gym couldn't make it into the city. My normal routine was a mess. I went for a run in the Park, and camped out at Starbucks with my laptop and just started reading everything I could find – about Sandy, extreme weather, climate change; the deniers, the doomsayers and everyone in between. One link led to another, which led to another. I couldn't stop; I was in a kind of trance, doing the math as I went.

2°C: the baseline maximum increase in aggregate global temperature that the planet can handle without tipping into total catastrophe. Everyone – the UN, the US, China – everyone but the most fringe deniers – agreed on that.

565 gigatons: the maximum additional CO₂ we can safely emit and still stay under the 2°C limit.

2,795 gigatons: the total amount of carbon in the reserves – and on the books – of the world's fossil fuel companies. Five times the safe amount. Ergo 80% can't be burned. Choice: extinction or a \$28 trillion write-down.

I'm no scientist, but I am a numbers guy. A stock analyst. I've got a head for numbers, and numbers for me are realities you base decisions on. But those numbers hurt my head. They hurt my everything. 'I want the truth!' shouts Kaffee [Tom Cruise]. 'You can't handle the truth!' Jessup [Jack Nicholson] spits back. All that week, chest clenched, I played host to that spittle-flying scene from *A Few Good Men*, each one shouting each other down, till it felt like no-one was left standing.

The following Tuesday the power came back on, and I was at my desk early the next morning. The subway station downtown was pretty trashed – and would be for months to come – but the office was quickly back to normal. *Normal?* Nothing felt normal anymore. Don't get me wrong: I'm not picking up a protest sign, and I'm not signing any of those dumb petitions. Far from it. But that McKibben guy is right: all that carbon simply can't come out of the ground, and those Oil, Gas and Coal stocks aren't worth what the market says they are. Sure, in the short-term they might be an OK bet, but in the medium and long-term, they're just a bad portfolio waiting to happen. The industry, however, hadn't caught up to this yet.

At the first department meeting after Sandy I circulated a memo where I laid it all out, along with some revised criteria to take the 'carbon bubble' into account. A lot of puzzled looks at that meeting. My boss took me aside later that day and basically told me to cut the crap. I never brought it up again at work, but later that month I called my broker and told him to dump every last fossil-fuel stock from my own holdings. Wall Street could play the fool with other people's money, but I wasn't going to do it with mine.

It's been a couple years now since Sandy. The subway is repaired, grand plans for coastal berms are underway. The city is mostly back on track; but I can only pretend to be. I try not to think about it too much, but some days it catches up with me. I'll be on the treadmill at the gym, my mind chugging along with the iPod and the fake hill I'm going up and down. In a silence between tracks, a truck backfires on the street below, starting a chain of thoughts: truck...exhaust pipe...400+ ppm atmospheric carbon ... and in a cascade of associations, this horror comes over me. A horror that's by now all too familiar. I imagine the slow plink! plink! of Greenland's glaciers melting - there's been a 49% recession of Arctic ice since 1979!! I can almost smell the diesel fumes of Amazon earthmovers ripping out the lungs of the world. How can 78 million acres of Brazilian rainforest be lost every year?? And because I'm a numbers guy, I follow in my mind's eye the asymptotic curve of ocean acidification as it creeps along the graph paper, bending relentlessly upwards.

I know where all this is heading if we do nothing – and almost nothing is what we seem to be doing. What I don't know is where to go with this dreadful feeling. It feels like I've been told a terrible secret. A secret that could poison the happy days of everyone I know. A secret - sshhhhh!!! - 2; 565; 2795 - no-one wants to hear that, least of all me.

Let's party like it's 2099

The apocalypse is coming and we have no-one to blame but ourselves. We've screwed up the planet and we're never gonna turn things around in time, there's just no way. So fuck it. I don't have any kids. I'm gonna be dead by the time the worst of it happens. Why not just party? Just have the best time I possibly can. Dancing, drinking, jet-skiing – whatever I want – and to hell with global warming. The apocalypse is coming regardless. If, thanks to me, it comes five seconds sooner, who really cares?

I mean, really, what else am I supposed to do? Knock on doors, go to meetings, try to convince people to scrap their SUVs? Seriously? That's just sad. Almost a sin. That's a pathetic way to spend the little time we have left. No way. Not for me. Before the oceans roll in, before they jack up the price of oil, I'm heading out to Thailand, Machu Picchu, New Zealand, Paris, wherever – to see the world. I'm gonna scratch as many things off my bucket list as I can.

Don't get me wrong: I'm not happy about all this. But the way I see it, there's nothing I can do, and we're the last generation that gets to let it rip full throttle. When I hit the clubs with my friends, apocalypse is in the air. You can almost smell it, heady and voluptuous. I breathe it in. I feel fierce; I feel free. I'm a warrior of the now. I'm running down the clock, jonesing for more life at the twilight of all things. We're the last ones, after all. We have to make it count.

I am prepared

It's all going to hell, but I'm prepared. The rest of you can try to stop the disaster. Go to your protests, your fancy international treaty-meetings, and all that. Not me. There's no fixing this. It's all falling apart – and soon. Some of us are going to be ready; some of us aren't. My family and I are going to survive this, even if we're the last ones on Earth.

I've got the bunker all provisioned: enough canned food for two years. Ten guns. Lots of ammo. A generator and an underground tank of diesel. There's a couple of us in the same county. We're all self-reliant units, but we're in touch. The cities are going to be hell, a total race war. We have to be prepared to protect our own when the exodus comes. I've got the entrances booby-trapped and the exits camouflaged. I'm ready for things to get ugly. And, mark my word, they will.

It's gonna happen – but to somebody else

'Only the little people pay taxes,' said notorious billionaire socialite, tax-dodger and lover of little dogs Leona Helmsley. It's a gross and elitist sentiment, but I realise that's how I feel about the apocalypse. It's gonna happen, but it's going to happen to somebody else, not me.

It's gonna happen to those poor fuckers in the Pacific whose islands are disappearing. It's gonna happen to old people in the inner city with broken air conditioners when the next 'unprecedented' heat wave comes. (I think they're gonna have to retire that word soon.) It's going to happen to all those folks who live on the low-lying coasts – whether in Bangladesh or the Mississippi Delta – who don't have anywhere else to go. It's gonna happen to Africans. Why does everything bad happen to Africans? They're already half starving. Just wait till their farmland dries up and their crops fail and there's food riots in the cities and millions teem across the Mediterranean in teetering boats. Fortress Europa is going to go right-wing in a flash and turn all those boats back. To where? I don't know where. All I know is I'm not the one who's going to be doing all the drowning and starving.

Do I think justice is at work here? Hardly. It's pretty much the opposite of justice. I'm just telling you how it looks from where I stand. When I imagine the climate apocalypse, when I play out the nightmare scenarios, I'm never in them. When the final storm comes, I've always got someplace to fall back to. And the means to get there. And friends to be there with.

In my post-apocalyptic future, somehow I've always made it out of the City to a nice farm in Vermont. The rest of the world is a living hell, but I'm OK.

What will the future think of me?

I took Jean and my two boys to Normandy last year. We went to the sprawling graveyards at Colleville-sur-Mer, just above Omaha beach. You've seen the photographs, but it's quite different to actually be there. White crosses stretched in ordered rows literally for a mile. We walked and walked. It was beyond sobering.

It took a while, but we finally found him. *James Davies, 1922–1944*. My great uncle. Third Infantry. Killed in action around Bayonne three weeks after the invasion, just before the breakout across France. We'd brought blue ribbons, and each of us placed one on the grave. My youngest first. Then Jean and I. Then my eldest.

I stood there on the grass and gazed down at this man my dad had named me after. I envied him his place of honour, and – at least from where I stood – the moral clarity of his short life and death. This James Davies came of age at a heroic time. He'd stepped up, and made the ultimate sacrifice. The country still honours him. His family still remembers him. It doesn't say 'Hero' beside his name, but it might as well.

One day they'll lay me down. *James Davies, 1962–2050-ish*. Probably in the city plot, alongside Jean, back in Akron. Will my as-yet-unborn grandkids and grandnephews come visit me? Maybe. Though not with blue ribbons, I suppose. What will the future say about me? *He lived a full life, he was a good father, but he was asleep at the switch when we needed him most.*

We live in an age of soft comforts and distractions, sprinkled with some vague doom-dust. No-one would call this a heroic time, but maybe it never feels that way when you're actually living it – it's always just a slosh of headlines and noise. And yet we are a critical link in the chain of generations. Because before I die, if we don't get 90% of the global economy off carbon, we're toast. We don't need to be another Greatest Generation, we just need to *not* be the Worst Generation, the generation that blew it for all the generations to come.

Jean and the kids were looking the other way, so I don't think they saw me – and this is going to sound corny to most of you – but as I was standing there, I gave a tiny salute to this fallen young man who bore my same name, and I swore to him I'd do my part. For starters, when I get back home, I swore to him I'd finally sign that contract and install rooftop solar on the house. And I'd dig out that email from my old fraternity brother – maybe if enough of us make a fuss, we can get Ohio State to divest its fossil fuel holdings. In the scheme of things, none of this felt particularly heroic, but I realised: I don't need to be a hero. I just need to try to do enough decent things so the future won't think I'm a dick.

The apocalypse is my gravy train

I'm not going to bullshit you – or myself: climate change is a natural and social disaster of unprecedented proportions and it's heading our way.

I'm an engineer. I oversee large construction projects. I can be part of the solution here and, frankly, make some money along the way. I've got to put food on the table like everyone else, and this isn't war profiteering we're talking about. Our firm doesn't blow stuff up, we build things. And this is going to be the biggest construction boom in history. Bigger than the Marshall Plan. Bigger than the New York skyscrapers, Eisenhower's Federal Highway System, and the Beijing Olympics all rolled into one.

We're talking large-scale terraforming here. We're talking coastal berms, seawalls, you name it, whatever it takes to keep our cities safe. No offense, but it won't be about the folks in New Orleans' Third Ward this time. We're looking at Manhattan, Miami's Gold Coast and Boston's Financial District, for starters. Now that's some property there. I'm guessing the government is going to come up with the cash needed to do the job right this time, and our firm is well positioned to help. We operate on a long-term time horizon, and the sooner we can get started the better.

Some folks still don't realise this, but you always have to win the battle twice: once over the problem, and again around the solution. All you deniers – and all you enviros trying to prove them wrong – go on and have your silly votes in the Senate. Keep on arguing about the problem. That's all just a sideshow at this point, because us big boys have already moved on to the solution. That's where the big money is, and we sure don't want the kind of solution they're rolling forward in Germany or Boulder, CO, with municipally-owned renewables and every farmer with their own wind turbine. We're running out of time. This is a big crisis, and we need big solutions. On the energy production side: clean coal, concentrated solar thermal, massive wind farms, biofuels, and the next-generation nuclear – they're zero-carbon and we won't build them on top of an earthquake fault line this time. On the remediation side: carbon-sequestration sinks, heat-shielded residential, you name it, we're just getting going.

I'm planning for my firm's – and my family's – future. I'm honoured to bring my skills and my company's global expertise to the task. If we succeed, what greater legacy could I possibly ask for than having helped save the planet? If we fail, well, gated communities are going to be in high demand, and we build those too.

Bring it on!

We are living in sin, in a kind of hell, in what the Buddhists and Hindus call Maya. We recognise fewer than ten plants, but over 1,000 corporate logos. We're so lost in the supermarket, kids keep on killing each other over sneakers. The corporations have sweet-talked the FDA into letting them put so many chemicals in our food and air that we don't even know what things are supposed to taste or smell like anymore. A carbon disaster will free us. A disembowelling of industrial civilisation is what we need to bring us back to our true selves.

Everyone's all gaga for green capitalism, but that's just a kinder, gentler way to destroy the planet. You want a 'green roof'? Just wait for it to cave in. Let the seed pods land in the cracks in the concrete, they'll sprout, and take it all back. That's the only kind of green roof I want. When Nature finds its own rhythms again, we can, too. The only way forward is backwards. The only way forward is collapse.

Right now, I'm living in a squat and dumpster-diving my food. Any SUV that parks in the neighbourhood, we let the air out of its tyres. Small-fry stuff for sure, but we're just biding our time. After the collapse, we'll make campfires in abandoned office buildings, smashing up the cubicles for kindling. We'll hunt deer with bow and arrow through the hollow, echoing ruins of downtown. After the collapse, the rest of you had better know how to do these things too.

Most people find this pretty far-fetched, but you'll all see. Every civilisation before us has collapsed, and we're far more precarious and out of kilter than they were. We're literally consuming ourselves into oblivion; it's only a matter of time before the system implodes from its own exhaustion, fury and hollowness. My job? To help push things along.

There was a meeting last night in the basement. We all took the batteries out of our phones so they couldn't hear us. All kinds of things were floated: breaking animals out of the zoos, hacking the genetic trials at the university, even blowing up the dam up north. We'll see.

No matter what, it ain't gonna be pretty. Millions, maybe billions, will die. I can't say I'm not anxious about it, I just know the sooner it happens, the better – for us and the planet. So: Bring. It. On.

Better to be hopeful

For me, it's not about the future. It's not about what's going to happen or not happen. The science is dire, that's obvious. And I know humans have a long bloody track record of being our own worst enemy. I also know we sometimes pull it out in the clutch. But I'm not banking on one outcome or another. I'm not hoisting my flag over any particular narrative of history or view of human nature. I just know how *I* want to be in the world. And I want to have hope. I choose hope. It makes me feel better. I get fewer colds and stomach aches. I'm happier and more focused; I feel right with the world. I'm going somewhere. We're all going somewhere, and we're going there together.

Oh God, some of you are thinking, please don't pair me up with this Pollyanna-ish bore at group therapy. Don't wet yourself. I've got the full *Cards Against Humanity* box set. I've got my share of black moods and I do irony just fine, thank you. I won't reassure you that everything is going to be OK. It most certainly won't be. I'm not over-bubbling with enthusiasm and cheerfulness, I'm just quietly, soberly hopeful.

The world is fucked up. Anyone can see that. War, religious hatred, rape, thousands of square miles of swirling plastic in the ocean. The list is long. But life is beautiful. And that list is longer: the Chrysler building at twilight. Bill Murray. A mother cradling her newborn. The intoxicating smell of my girlfriend's armpits. Snow. The world is fucked up. So, so fucked up. But life is beautiful. And that is enough.

Defend this ground

I grew up here: Iron Mountain, Michigan, in the Upper Peninsula. Twenty street lights, three churches. I sang in the choir at Her Lady of Redemption until I was 14. Back then the town was 10,000-strong, mostly Germans and Swedes, along with some Italians, my folks included. Now, we're down to barely 7,500. The mining and timber companies ravaged the place, like they did the whole region. Took everything, left a few broken backs, and scars all over the land. My cousins worked in the mines. My step-dad was a cop. When he died I left the state. Came back decades later to take care of my mom. She'd gone blind those last years, and had no-one else. By the end, the place had become home again, and I've stayed on.

I have my dog, my garden, and pipes to patch after the winter. I've got things to take care of. I still battle the same old demons – the depression comes and goes – but I've developed some new disciplines: canning, pressing flowers, painting. I'm seventy now, I'm slow. I've got arthritis. My left leg is effectively lame. But I work on the things I can.

What keeps me going is this patch of ground, this sacred bit of Earth. Lake Superior, that God, is the heart and lungs of the continent. The Devil is the mining companies and the real estate developers. I don't have a lot of strength left, but I'm still putting up a fight where I can. I choose my battles carefully. I look for smart places to intervene, no matter how small. I find things I can do to keep these lungs breathing.

There's a development they've been trying to put in ten miles west of here. Summer home resort for down-staters: golf course, the works. We know what that means: dozers, clear cutting, chemical run-off, you name it. Our little group – two students, a retired lawyer, me – has had 'em gummed up in court for two years now. And that pipeline coming down from Canada – we pulled up the surveyor stakes from a three-mile stretch last spring. They know it was us, but can't prove it. They stormed into the county commissioner's office but he just shrugged. That was fun to watch.

I know what we're doing is just a sideshow of a sideshow of a sideshow – small rearguard actions in a centuries-long war. But you fight where you stand. You do what you can. You defend your little patch of ground. I'm not going anywhere.

Despair is our only hope

I used to believe. □ As a kid I trusted everything was more or less OK, that progress happened, that the people in charge were trying to make things better, and the good guys would eventually win. *Hawaii 5-0* was my show.

As a young man I realised that the people in charge were not trying to make things better for everyone, just for themselves. And so – because I'm a hopeful kind of guy – I came to believe that the people *not* in charge could get together and change all that. I loved the movie *Hair*. I used to believe the revolution was just around the corner, that before I turned thirty, we'd be celebrating in the streets.

Well, that didn't happen.

Into my forties, I still had faith in humanity. Not blind faith, not even a faith in our essential goodness. But I believed that we would somehow stumble through, that the small acts of kindness among people would somehow make up for the evil and folly of the gangland of States and capital. I could still see a future, maybe not a better one, but no worse, either.

I'm now in my fifties, and I've lost even that meagre faith. Now I binge-watch *Game of Thrones* and *House of Cards*. I have no illusions about how power operates. People talk about 'intersectionality', but it isn't so much movements that are intersecting, as catastrophes. I see no way forward. I am filled with a dark, desolate despair.

And then a strange thing happens: I feel fierce. I feel clear. I feel free. I don't give a fuck anymore. I've got nothing left to lose. I'm willing to take risks that I wasn't before. I say true things, things you're not supposed to say. And people notice. Hell, / notice. It turns out despair is its own kind of power, its own kind of freedom. And then I think: if enough of us fall into a dark enough despair, who knows what we can do together. This is the only hope I have left.

This means war

At first everything happened so piecemeal – a tragedy here, a little catastrophe there – I didn't know I was under attack. It felt like the rumble of far-off gun fire in somebody else's war. It took a while for it all to come into focus.

If it had been an army of Orcs led by the Eye of Sauron, or gangly robots from Mars, or jackbooted Nazis and their henchmen marching into town, then I would have known. I would have seen it plainly. I would have taken up arms, joined the Resistance. But our 21st Century Lords of Carbon, in their suits and pipelines and feel-good logos, blend in better. Their ultimate designs, however, are just as evil. They plunder the land, poison the water, slaughter our animal brothers and sisters. With five species lost to eternity every day, and the slow-drip of carbon dismembering the planet, they're driving us all to extinction.

What else is this if not war?

My enemies, it turns out, have names: Exxon. Peabody Coal. BP. Shell. David Koch. And addresses: with a few clicks on Google I can find their homes and headquarters. They are driven by a logic of endless growth regardless of the limits of nature. They can do nothing else. As such, my foe is implacable. I accept this without illusions. They will not – can not – listen to reason; only power.

We must raise an army to save the world.

And so, I cross over. I become an instrument of resistance, a vessel of necessity. I find my unit and train in the strange arts of civil war: encryption, encyclicals, sabotage, message discipline, persuasion, science, disobedience, justice, courage, love, mass action. Maybe I will not survive; maybe none of us will survive. So be it. I prepare myself for battle.

Hopelessness can save the world

We have broken Nature. We have broken the world. Even the moral logic of struggle has been broken. Gandhi said, 'First they ignore you, then they ridicule you, then they fight you, and then you win.' But in the shadow of climate catastrophe, we'd have to update that to: 'First they ignore you, then they ridicule you, then they fight you, *and then* a 6°C increase in the Earth's temperature wipes out all complex life forms.' Martin Luther King said, 'The arc of the moral universe is long but it bends toward justice.' But from where we stand now, it's more accurate to say, 'The arc of the moral universe might be long, and it might bend towards justice, but we're never gonna find out because: total ecosystem collapse.'

I used to run on hope. I used to sign those petitions, show up at those demos, knock on my neighbours' doors – because I believed we could change things. But I don't know anymore. As a good friend of mine recently said, 'So what if we're making progress on police brutality. Given the climate math, the police might as well shoot us all now.' It breaks my heart, but it seems our situation is hopeless, and our cause – all our causes – are impossible.

Then again, hasn't this always been the case? Look across the full sweep of human history, with its wars and rebellions, its dark and shining moments: every revolution is replaced with the slime of a new bureaucracy. Every time you manage to overthrow slavery it seems there's a new Jim Crow waiting for you. I used to think it was two steps forward one step back, now I'm not so sure. Things don't seem to change much for the better, and with the tick tock of carbon slowly poisoning the world, you just stop pretending that they will. Now, instead of fearing this loss of faith, I welcome it as a revelation: our situation *is* hopeless. Our cause *is* impossible.

Which leaves us with a stark choice: do we dedicate ourselves to an impossible cause? Or do we pull back and look after our own? The choice – once you've sat quietly with this question – is clear. You must dedicate yourself to an impossible cause. Because, just like Archbishop Oscar Romero said when he was asked why he was attending to the sick at a hospital for incurables: 'We are all incurable.' Because solidarity is a form of tenderness. Because the simple act of caring for the world is itself a victory. We must take a stand – not because it will lead to anything, but because it is the right thing to do. We never know what can or can't be done; only what must be done. I dedicate myself to an impossible cause.

I want a better catastrophe.

Climate catastrophe is coming. We know this. The only question is: What kind of catastrophe and exactly how bad will it be?

In the best case scenario, an unprecedented world-wide Marshall Plan transitions the global economy off of carbon in 30 short years, holding global temperature rise to only 2-3°C. This causes near-total polar ice melt, a 10 foot sea level rise by 2070, ocean acidification and major habitat disruption. We lose New York, Shanghai and many of our greatest cities. Hundreds of thousands of species become extinct but not all. Systemic crop failure and mass starvation lead to billions of climate refugees, global resource wars and partial social breakdown, but some of us survive, and civilization — in some form — stumbles through. That's the best case scenario. In the worst case scenario, run-away global warming of 6°C+ super-heats the planet and all complex life forms are wiped out.

In the worst case scenario there's nothing we can do to change the ultimate outcome. Catastrophe is total. But here's the good news: in the best case scenario, what we do matters. If projections tell us 50% of the Earth's species are likely to die off, and we can do something to help make that "only" 49%, shouldn't we try? Indeed. We must protect all that we can. We must do everything in our power to limit the damage, as well as become resilient enough that at least some of us survive with our core values intact. What we want here is a better catastrophe.

Imagine the protest rallies: "What do we want? A better catastrophe! When do we want it? As late in the century as possible!" Door-to-door recruitment: "Excuse me, Ma'am, would you sign this petition to only half-fuck over the planet?"

A defeatist attitude, you say? Hardly. It's hard-nosed, courageous, and full of hope for the future. What was Winston Churchill's rallying cry in the darkest moments of WWII? "I have nothing to offer but blood, toil, tears, and sweat!" Not exactly an upbeat message. He wasn't one to over-promise, and nor should we. He too had a choice of catastrophes: Europe as a Nazi-occupied Death Camp. Or Europe bombed to pieces and split down the middle, with some take-away wisdom about the nature of evil. He chose a better catastrophe and so should we. If catastrophe is where we're headed, let's fight hard — lay down our lives if we need to — to get the best catastrophe we can.

I have kids, hopelessness is simply not an option.

To borrow a familiar metaphor, it seems humanity is stuck on a train barreling forward into the unknown. The engine car is sealed off from the rest of us. The driver is either dead, his body slumped over the accelerator, pressing it towards maximum; or long ago lost comms with HQ and is dutifully following the last “forward at all costs” orders he received. Somewhere far far up ahead there’s a cliff, an unavoidable cliff.

When does the train head over the cliff? Before I had kids I had it pegged sometime around 2050 when the effects of run-away climate change were expected to kick in hard. My legs and lungs were due to give out before then, so I didn’t get too worked up about it. I was sad for humanity as a whole, but it was only a vague, world-weary kind of sadness. Then I had kids — a beautiful boy and a girl — Benjamin and Carson — they’re 15 and 17 now. Good kids. Sweet, smart, so much their own people. I can’t box the future off anymore. What happens late in the century matters to me now more than I ever thought it could.

The train—with my children aboard—will keep hurtling forward, and with it, a piece of me, a living, breathing, heartbreaking piece of me hurtles on into the future. I won’t physically face the horrors farther down the line, but my heart goes over the cliff every day. I feel the impossible vertigo, the impact, the dark waters rising.

Now, I have to believe that there’s a way to brake the train or miraculously switch tracks, or for some to jump clear before the end. I *have* to have hope. The alternative is a death sentence for my children. It doesn’t matter that the data hasn’t changed, my heart has. A few of us parents have been scheming up a plan to climb across the speeding train and smash our way into the engine car. It’s impossible, it’ll never succeed, but we’re going to try anyway. What choice do we have?

If it gets too bad, God will intervene.

Sure the climate is changing. It's always changed and always will. But that is the work of God and Nature. Man can't change the climate. Hurricane Katrina. Snowpocalypse. The drought in California. Spiraling temperatures. People say these are signs of the End Times. Could be, I don't know. In some mysterious fashion that we cannot understand, it's all part of God's plan for us. We can't know His mind, of course, but I sincerely believe that if things get too bad, he will step in. He's done it before—Genesis, The Flood, Parting the Red Sea—and if He needs to, if He chooses to, He will do it again.

I dated a girl in college. Briefly. A sorority girl. Nice enough, but — how can I say this? — she had no place to put her soul. She was groundless. To her it was all about numbers, and molecules, and “oh what a piece of work is man.” For her, the Bible was just another book. Not for me. I grew up with the Bible. It explains the whole world to me. It's my Lord, my home, my everything; more true to me than life itself. But I'm no fool: I also believe in science. I ride in airplanes, and obviously trust that the science and engineering that built the plane will keep me up in the air. I had triple bypass surgery several years ago; I trusted the science my doctors were trained on. Likewise, I trust the scientific instruments that have been recording the rise in temperature over the last 30 years. But the Earth and everything in the Universe is God's Creation. Unless it is His will, God will never let it come to ruin. If things get too bad, God will intervene. God will make it right.

Some things change in this world, and some things are Eternal, and I know on which side of that line my loyalties lie. So, I don't fret about the fate of the earth in any ultimate sense. No need to despair. No need to futz up our whole economy with a carbon tax. God can take the acid out of the ocean. God can take the carbon out of the air. God can put the glaciers back together. He can. *If* He wants to. Does He?—I don't know. Maybe these are the End Times. Maybe this is how it all ends. Either way, God's got it covered. This is His green earth, and I am happy to be here for as long as He sees fit.

Science will find a way.

Science got us into this mess and science is going to get us out. The blitzkrieg started WWII, but the Bomb ended it. We put a man on the moon, and a new heart in Dick Cheney. Science has pulled off miracles before, and now, with humanity's greatest challenge before us, it'll come through for us again. It has to.

It has to because it's too late for anything else. Government policy? You've got to be kidding. Bureaucracy, corruption, politics, inertia. No way. A citizen's revolution? Noble, but impractical. When was the last time one of those changed anything that wasn't already ready to change? Sure, the long arc of the moral universe might bend towards justice, but nowhere near fast enough. And, anyway, with 28 trillion dollars at stake, the most powerful industry on earth isn't going to kowtow to some rag-tag band of do-gooders. No, only science can save us now.

And I'm not talking about the everyday miracles that it's already doing: bringing the cost of solar down 100 times lower than it was in 1977. Or Tesla's new battery, which can power an entire home and help smooth out the electrical grid in the process. Not to mention electric cars, smart metering and all the rest. That's all good, but we needed it at scale 30 years ago. Bringing it on now only gives us a few extra years of breathing room because we're about to blow past all the safe carbon emission thresholds we've set. What I'm talking about has to happen at another level entirely. Manhattan Project-level breakthroughs, like pollution-free desktop fusion, or geo-engineering at a scale never before seen. Science got us into this mess, and science will get us out, even if that means putting huge solar reflectors in space, or seeding the atmosphere with sulfur aerosols or turning half the Pacific into a carbon sequestration sink.

Like the 7th Cavalry riding in at the end of the movie — only this time in white lab coats and thick-rimmed spectacles — science will save the day. It's the only card we've got left up our sleeves.

We can fix this.

We are facing the greatest challenge in the history of humanity. In a few short decades we must move the global economy off of carbon or else face total ecosystem collapse. The task is daunting but we can do it. We have the technology. We have the UN. We have the scientists. We have the People. We even have the Pope. With the possible exception of Exxon's lobbyists, we're all on the same team: Team Earth. Failure is simply not an option.

While I wish we had more time, there is still time. The only thing lacking is concerted political will. And that is shifting. 400K in the streets of New York. Strong agreements coming out of Paris. Keystone XL pipeline stopped in its tracks. The tide is turning. We are starting to win. The great transformation is beginning. None of this should come as a surprise: After all, we all want to survive, and nothing mobilizes people better than a clear existential threat.

This is not just a pep-talk I give myself. This is not just a bullshit story I tell myself to give me a reason to keep on trying. I sincerely believe we can and will turn things around. I can see the path forward—it's clear, doable, and necessary. Every day I wake up on fire, and I charge down that path. I keep my eyes on the prize and never look back.

The science is clear: we must fix this. The policy and technology is clear: we can. And in my heart I know we will.

We can't save the world by playing by the rules.

When I was eight years old I first heard about something called “climate change.” Apparently, it was something that humans had created by our way of living. I was told to turn off the lights to save energy and to recycle paper to save resources. I remember thinking it was very strange that humans, who are just one of millions of animal species, could be capable of changing the Earth's climate. If this were true, how could we be talking about anything else? As soon as you turned on the TV, everything ought to be about that. Headlines, radios, newspapers — you simply wouldn't hear about anything else. As if there was a World War going on.

But no one ever talked about it. If burning fossil fuels was so bad that it threatened our very existence, how could we simply continue like before? Why were there no restrictions? Why wasn't it made illegal? To me, that did not add up. It was too unreal.

I have Asperger's Syndrome. To me, most things are black or white. But we Autistics might be the normal ones. People keep saying that Climate Change is an existential threat, and yet they just carry on like before. If the emissions have to stop, then we must stop the emissions. Every day we use 100 million barrels of oil. If to survive, we need to keep that oil in the ground, then we must keep that oil in the ground. To me, that is black and white. There are no gray areas when it comes to survival. Either we go on as a civilization or we don't. We have to change.

Seriously change: Rich countries like Sweden and the UK need to get down to zero emissions within 6 to 12 years. How can we expect countries like India or Nigeria to care about the climate crisis if we who already have everything don't?

When most people think about the future they don't think beyond the year 2050. But if I live to be 100, I'll be alive in the year 2103. What we do or don't do right now will affect my entire life and the lives of my children and grandchildren.

When school started in August this year I decided: Enough. I sat myself down on the ground outside the Swedish Parliament. I went on strike for the climate. We can't save the world by playing by the rules. Everything needs to change, and it has to start today. It is time for civil disobedience. It is time to rebel.

We can get through this together.

This is going to sound corny, but I like people. And I like being, “in community,” as the kids say. Which is lucky for me, because if anything’s going to save us from the ugliness headed our way, it’s community. I get why “preppers” are prepping. Minus the guns and booby-traps, I’m kind of one myself. But the way I see it: we’re way stronger if we work together. My slogan: “Preppers, unite! We have nothing to lose but our lonely, rugged-individualist, go-it-alone bunkers.”

You see, I’m a “hopeful and helpful” person. I just am. And, turns out, I’m far from the only one. Who knew, but when you put your truth out there, you find your tribe. At that first meeting — no more than a pot-luck, really — it was such a relief to come out of the closet about it all. To just say, I think “some kind of Collapse is coming.” And to have the other folks there nod, and go, Yeah, me too. There was a kind of silence in the room, then. Everyone was looking at each other, and our eyes were saying, So, what are we going to do? And that’s quite a question. Because the government is not going to protect us. The corporations are certainly not going to protect us. We’ve got to do it for ourselves. We have to be ready as the shit hits the fan, and it’s already starting to.

The good news: There’s a power in “just doing stuff.” And, here in Greenville, we’re doing lots of great stuff. After that first meeting, we got to work. We set up a tool-lending library, a solar cooperative, a community-supported agriculture association. We’re learning about permaculture, wilderness medicine, living systems. A lot of people talk about “resilient communities,” but we’re actually trying to build one.

And here’s the thing: it’s not just necessary, it’s been kind of an adventure. I’m learning new things, and I feel myself changing in good ways. We love our little town, and we’re trying to do right by it. And maybe the best part? I’ve found my tribe. These people are fun, resourceful and skillful; the kind of people you want to be around in tough times. There’s an engineer, a few farmers, a retired lawyer — pretty handy for sorting out arrangements for limited-equity coops and such — a guy on disability, even a poet. Yes, a poet, but she’s also a mean bicycle mechanic. Surprisingly, maybe, we’ve got both Dems and Repubs — not to mention two or three Greens, and even a Libertarian — in our circle. It seems that when you start doing stuff at the local level that really matters to folks, the politics fall away a bit. The local Unitarian church is pitching in, and two of the city managers are starting to take notice. We’ve jump-started a conversation about re-municipalizing our local utility, and we’re even lobbying the State Capitol to nix those ridiculous restrictions on solar.

I say: Enough with the isolation and despair. Enough with feeling overwhelmed. Enough with expecting someone else to take care of it. We need to push through all that, and get busy. Find your tribe, start a group. An affinity group, resilience circle, prayer group, gardening club — almost any group will do to start. Governments are moving too slow—too much politics, too much division there. And individuals can’t do much on their own. At the community level, however, we have room to move. And it feels really good to move.