

# Clean Energy

Those solar beams fuel future dreams  
Clean Energy! Clean Energy!  
It's on the way, that's what I say  
Clean Energy! Clean Energy!  
So let us raise the turbine blades  
Clean Energy! Clean Energy!  
Let's ride the waves and catch the rays

We still have hope  
We still have hope  
We still have hope  
That Earth can cope

It's on the brink, see what you think  
No need to burn, the tide has turned  
Let's just get rid. Transform the grid.  
Those gigawatts transformed our hearts.

Let's talk about the weather  
Let's talk about the weather  
Let's talk about let's talk about let's talk about the weather

We still have hope  
We still have hope  
We still have hope  
That our Earth can cope

Bad lyrics from mediocre song writers have a very similar flavour. I see that flavour all the time in my lyrics. If I look over my old lyric notes I find I frequently come across like a morose, introspective and talentless 15 year old. It takes some effort to weed out the promising stuff from all the drivel. A task that continues to this very day. Without this work, this song would have been something like:

Humans are rubbish  
we're stupid and mad  
We're fucking up the planet  
And that makes me sad

With some weedy minor chords plopped out on a piano. In terms of "self expression" this would have done the job - it honestly and accurately expresses the kind of miserable little musings that rattle round my head all day. Whenever drabness like this emerges I must necessarily go into disappointed teacher mode and write "must try harder" next to it in red pen. Similarly, when writing these notes, it's not simply about opening a tap and letting the rant inside my skull flow out onto the page. It's more about using the tool of language and an imaginary audience to help construct new and better thoughts, create order, and develop as a human being.

I just wrote that, and then was vindicated and smug to note that Margaret Atwood, no less, says in her Masterclass of Creative Writing that "expressing yourself" is overrated (and overused as an expression). Art is not just about expressing your *self*. It isn't about constantly spilling your ego into sonic (or written) form. It doesn't have to involve that at all. I find the idea that we know ourselves so well that all we need to do is "let it out" a bit suspect too. Do any of us know ourselves that well? Isn't art also about experimenting with the self? Testing the self? Augmenting the self?

The craft of songwriting is not simply a matter of setting your opinions to music. Creating art is a process of development, exposition and learning. Avoiding poor, default, cliched lyrics is a good part of that process, and avoiding poor, default, cliched opinions is too. Besides, what makes you think you have any coherent "self" to express anyway? We all have multiple conflicting thoughts inside of us. Art is a great way of carrying out a debate between those conflicting thoughts, by means of the extended, difficult manipulations of complex cultural material. We all know things can be shit - it's the default, maximum entropy state. Our job as artists is not just baldly stating the shitness, it is to find meaning within it.

I admit it can be cathartic to collectively wallow in our misery for feelings of communion, but ultimately unhelpful, and in the end a turn off. Musical events are, at the end of the day, celebratory gatherings. Even the most depressing funeral music is still a celebration of life, a commemoration of loss, a veneration of sorrow. So even when I feel the need to express the most depressing and screwed up things, I still make some attempt to rescue something, to snatch

some lasting value from staring into the void. So in this song I attempted to turn my depressed ruminating on environmental futility into a positive and uplifting song about the potential solutions. And, weirdly for me, the first flurry of notes does sound uplifting and hopeful, and the final fade sounds like it's heading into the future with determination and hope. Or at least I *hope* it sounds like hope.

As usual, this song started off as two ideas lying around on my phone. The arp that starts the track was one original guitar sketch, the other idea was the verse melody, which originally had lyrics: "Flat batteries! Flat batteries!". Because I thought I'd write a song about flat batteries and how much I hated them. But then, my inner Margaret Atwood frowned sharply at me over the tops of her glasses and I backed off. Besides, batteries are getting better, and [in fact are things that will help save our planet.](#)

There's a kind of geometry to the arpeggio that I really like, which I think is a result of me pressing for higher levels of interest in each individual part. Over the years I've become less inclined just to go with whatever I first come up with and really press on into the depths of something to extract the best patterns I can. My guess is that the first idea would have been just the notes of the F and the D# (or is it E flat? I've still no real idea how you actually work out which, despite learning the music theory three times) ascending and descending, but that was boring, so I added the slight 6th & 7th switcheroo at the end of the F, and a descending sequence during the D#. And that means that even though the chord sequence is deathly boring, it still feels distinctive, because it's not just a chord sequence, it's a riff with its own rhythm and melodic logic. Interestingly, if you play this pattern on the guitar it sounds kind of like something that someone would play on the porch of a low-tech farm in the midwest, kind of rustic and homespun. Something to play with an ear of corn hanging out your mouth. On the synth it hopefully sounds more like something someone would play on a hi-tech *solar* farm in the midwest. Something to play with a brushed aluminium canna-vape hanging out your mouth.

The arp is *meant* to give the sensation of looking up at a wind turbine rotating majestically through the air. It's meant to be a kind of airy, swooshy sound. The fact that it comes back in when the lyrics refer to the turbine blades should, in theory, add to that association.

In this track I have tried to use as little distortion as I could. Now, don't get me wrong I *love* distortion, it makes everything sound exciting and aggressive and interesting and massive. BUT, I can't help associating it with wasted energy, and

internal combustion. It's the sound of shit being burned. And this is exactly what clean energy is *not*. Clean energy should sound *clean*. Also, distortion is such a one button gratification machine, it's almost too easy... but then you pay for it later: once you have a distorted sound it becomes so hard to mix. It's like you've greedily used up a load of energy and then had to pay for it later by your music becoming far too hot and congested... there *is* a valid analogy with our atmospheric predicament here somewhere, honest. So I've tried to use nice, clean precise electronic sounds. Actually, there's a little zap sound that has a saturator on. So maybe I've blown it. Maybe I'll need to offset that zap by planting a tree in a later track.

In this song there are actually some samples of real wind turbine noise, for instance the whoosh leading up to the choruses. I sampled this off a YouTube video of a turbine. The first video I tried to get the audio from was made by someone who was "anti-turbine". They'd gone on a mission to go to a wind farm and record the terrible loud noise that it was making. When they get to the turbine they actually utter these priceless words: "actually you can't hear this one properly because of the noise from the road" without a trace of self-awareness. For once, I was really looking forward to reading the comments on this gem, but unsurprisingly "comments had been disabled for this video" indicating that my half of the internet had already poured a more than sufficient amount of scorn on these twats.

In using these samples of conceptually relevant sound sources, I am perhaps coming dangerously close to those conceptual artists who gather a data series from, say, the market price of solar energy, assign MIDI notes to that data, and then claim (using as much critical theory jargon as possible) that their resulting dissonant clangorousness is "confronting" this or "dealing with" that. Whilst I am a keen digester of modern and contemporary art, that doesn't mean I buy this crap. Merely sonifying something vaguely relevant does not "deal with" anything. Merely making annoying noise from some data that has no musical structure is not music or sound art or anything else. The fact that you can plausibly justify it using some academic sounding text does not help. If people *need* the text to appreciate the music then it's a failure. You don't need to know that I have used a wind turbine noise in the track to enjoy it, I hope.

So if this trick is meaningless to other people why do I do it? Well, I believe that doing this kind of thing is useful for the creative process itself. It is very much like the injecting constraints trick. I am not using wind turbine samples because you think the listeners will get it and think it's clever. I am not using wind turbine samples because I think it will "raise question about our

relationship to wind”, I’m using wind turbine samples because by forcing myself to use those samples I have set up an artistic problem that will take some creativity or craftsmanship to deal with. Why is that useful? Well, at some point in a track’s development it becomes clear that the shape of the track is more or less done, it becomes merely a mechanical process of fleshing it out, making it all join up and sound nice. The better you become as a craftsman, the earlier this “all over bar the shouting” stage is reached. It’s like those chess games where a novice wouldn’t think that anything at all was happening, but an expert sees clearly that white will win in seventeen moves. Of course, once this stage has been reached the creative process will become an uncreative process exceedingly boring. So then what you must do is deliberately place barriers and obstacles in your own way, shoot your inner craftsman in the foot almost. Tony the megalomaniac producer will often impose these ridiculous arbitrary rules according to some inner disruptive mania, and poor Cursor Miner will have to music his way out of this stupid task, but in the process up his creative game. This not only keeps you interested, it also prompts thinking outside the box, a box that you have deliberately placed yourself in. A related exercise here is using something like [Brian Eno’s Oblique Strategies](#). Having said all that, those wind whooshes are totally bleeding obvious, so it doesn’t always work.

The chords for the chorus are also quite obvious. Cm, Bb, F. It’s the old 5, 4, 1. Snoozefest. I’m sorry about that, but since there are nice interesting chords in most of this album isn’t it actually more interesting and surprising that there are boring ones in this one. Right? And jeez, you have Stephen Hawking *himself* making a guest appearance so what more do you want<sup>1</sup>? Predictable chords notwithstanding there’s a few interesting things about the structure, firstly the chorus is sprinkled throughout the verse: the RoboKids singing the song title “clean energy” are doing it after each line of the verse not in the chorus. And the “big” melody in the chorus is played on the synth, not sung by the vocals. The “we still have hope” vocals are somehow underneath the lead synth. So this track has the weird property of being a rousing singalong where none of the sousing sing along stuff is the chorus melody at all. This “confronts” the fact that as a species we have collectively realised the need for environmental action but have not stirred ourselves to actually act. This song is like the blueprint for an environmental anthem, but is not that anthem. There are gaps and spaces in there, there are merely artificial, conceptual and abstract voices singing the anthem. The song itself has yet to be populated.

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<sup>1</sup> Presumably, Stephen Hawking was the first person to be at risk for people deepfaking him saying stuff that he never said. Didn’t seem to do his reputation any harm.

Excuse me, did you just say RoboKids? Yes I did. There are RoboKids in this track. Why? Because the inheritors of our planet are the children. And also robots. So why not have robot children singing the refrain? Makes sense to me. Also easier than trying to conduct a room full of real kids. Robokids do what you tell them<sup>2</sup>.

Anacrusis. It's a nice word, isn't it and there's slatherings of that in here. There's lots of things leading up to other things. Again, lots of promising signs that things are going somewhere but it's not quite *happening*. Makes editing hard though, because edit lines are at the bar, and if you have lines *leading up* to the start of the bar you have a snippy bitch on your hands. So much of music technology isn't actually well suited to the music I want to make. Makes me want to rip all this tech up and start again. Speaking of which, it's really hard to do tempo changes, so that's what I thought I'd do next...

Yes, again, we have an Extreme Intervention™ . Oh no, the stupids are back! We can't have a song about sensible energy policy without at least reference to the stupid fucking morons that are stopping it from happening. Indirectly of course, it's just someone who would say, on a particularly cold day "so much for global warming eh?" or some such. A stupid with a stupid voice suggesting we talk about the weather. Again this little ascending semitone arpy riff was an idea floating around on the guitar before. It was actually really nice on the guitar, and it's a real shame that I abused that pattern so ruthlessly by making it so ridiculous. Can't make an omelette without breaking some eggs.

In the end the stupids get so ridiculously nonsensically hysterical that they vanish in a puff of idiocy, and only the clean, calm geometry of rationality is left. The signal triumphs over the noise, and we end the song with some beautiful, enticing, shining futuristic technological magic, which is what I still believe will get us out of this mess.

## A Few Notes On The Release

So here we are, January 2021, and the album came out five days ago. Which for some reason changes completely how I feel about the whole project. It's now a real thing out in the world (or a virtual thing in the digital world) and people can actually spend their money on it. If you should want to do such a thing, go here: <https://cursorminer0.bandcamp.com/releases>.

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<sup>2</sup> For now...

I have not released music myself in digital form before, so this is an entirely new experience. It is strangely intimate. Record labels pushed my previous albums into the world, showed me meagre sales figures, and that was it. Now I get an individual email for each sale on bandcamp, and get to see the name and email of the person who bought it, and in the main part these are friends or colleagues (or colleagues who are friends, which happens alarmingly often in this business). This really changes how things feel. Before I'd see a few hundred sales to who knows who and think, "meh". Now I see a single sale to a buddy and think "Awww, that's so nice! Bless their cotton socks". People attach personal messages of encouragement, and that's really nice to see. Some lovely people even pay more than they have to, which mystifies my inner Trollfield, and I marvel at their generosity.

It's extremely conflicting to balance on one hand how flattered and humbled<sup>3</sup> I am that a bunch<sup>4</sup> of top people, people who I respect, people of taste and discernment, have spent their precious hard earned on some nonsensical noise I made, and on the other hand how pathetically small the sales figures are relative to the amount of effort that went into that noise, what could have been achieved had I not wasted so many opportunities in my life, and considering the relative quality of that noise when compared to that which *does* sell. As always there's that inevitable comparison with "real", "well known" artists which still somehow stings despite my claimed ambivalence to the whole thing. Always, alongside this is my higher mind talking: these reactions of my ego are just that. They are fleeting thoughts and emotions that only impinge upon my consciousness occasionally. I am grasping at something that doesn't need to be grasped at. I genuinely have no real burning ambitions to "be a musician" anymore so why bother reacting emotionally in this precious up tight way to things that I really don't have much control over? Most of the time it doesn't bother me. Which is why actually engaging and trying to make albums and sell them is so bothersome, it brings up needs for validation which I'd rather just not have, and most of the time don't. Every time I release something it hurts. It really does, I hate it. I'd far rather just make music and not think about releasing it, because every time I release it it feels like a sickening slap in the face, a slap that smarts all the more because I know that to feel snubbed in that way is so utterly childish and entitled.

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<sup>3</sup> Apparently Mike has a rant about the use of the word "humbled" that he'll be spouting at some point.

<sup>4</sup> We'll go into figures later, but it's definitely a "bunch", not "a couple" but not "a horde".

## Sincere Thanks

So any road, first up, *sincere* thanks to everyone who has bought the album, further thanks to those who shared/retweeted and all that (as we all know now, it's all about that [basic reproduction number!](#)), and thanks even further for the personal messages of encouragement. Whilst I'd probably make these tracks anyway, and don't technically "need" the money, at least not right now, your contributions really have warmed the cockles of my heart, have provided me a weird sense of support and connection in this isolated time, and as I hope to explain, does make a big difference to whether I continue to put effort into new releases, and in particular whether I continue to put effort in to the parts of music making that I *don't* enjoy. And there's actually quite a bit of those, mainly to horror of actually releasing things. Ultimately, if I'm doing this purely for enjoyment, then there's no way I'm going to spend my precious leisure time doing the stuff that I can't stand. Right? And funnily enough trying to "increase impact" is exactly one of those things. On the other hand the nitty gritty are very much necessary to create and curate quality music.

## Conflicting Thoughts on Selling Music

So, then, given that I have conflicting thoughts about what I am *feeling* about how the album is doing, it might be useful to actually set out, in cold hard detail, how I *should* feel about it? Actually attach targets to the thing? Instead of having a confused sea of random reactions sloshing around in my head, actually tell myself *how to feel*? Maybe decide to feel something constructive in order to move the thing forward? Here goes.

So let's say we're talking sales over the next 6 months, after which I'll probably release something else. These sales are made up of the initial weeks' flurry, plus some randoms dribbling in over the course of time, which are very different phenomena. Ooh, can we have a table? Yes? Yay! Can't believe we haven't had a table yet in this book. What am I playing at? Table Time!!

Sales	Pathetic Ego Feels	Practical outcome
< 50	Painful. Ego would experience feelings of rejection.	Risk that I just won't bother next time in order to avoid this



		feeling.
50-100	OK, worth doing. But still wondering what I'm doing wrong.	Carry on as over the last 10 years i.e. half heartedly.
100-200	Satisfied. I 'spose.	Would start work on a new album and actually look forward to releasing it.
200-500	Pretty chuffed.	Might think about a physical release and start talking to labels. Would reduce days a week at the proper job to really put something special into the next album.
500-1000	Genuinely shocked, seriously stoked.	Might get more ambitious, think about getting videos made and preparing a decent live show.
> 1000	Ego becomes convinced I'm a magic music boss once more. Internal mythologies of self aggrandizement may resurface.	I become the Chairman.

My excitement about having a table has been sorely deflated. This table is ridiculous isn't it? A proper label or indeed any kind of small business would laugh at those numbers, and sneer at my fragile reactions to them, but you get the idea. And I have found it calming to actually put numbers here and try to admit or guess or just construct what my feelings might be. The interesting thing is that there seems to be a sweet spot. A region where things are worth doing, are satisfying, rewarding, and also manageable. Rather than saying something nonsensical like "I should be famous, why aren't I famous? Isn't the

world hateful and stupid for not worshipping me?”, or the exact inverse “I’m worthless, I’m wasting my time, I should stop this idiotic pretence, what’s the point in me trying?” (both are brainfarts that everyone’s ego module will vomit up from time to time<sup>5</sup>), one should be setting oneself realistic targets for what one would *actually* be satisfied with, and a target from which one’s life, one’s existing fans and one’s art would actually *benefit* from.

What puts a huge spanner in the works here is this. In order to make a decent living at this you have to be way *beyond* that bottom row. Which means that in order to do this thing full time you have to be in quite a weird, exceptional place. Given that someone buying my album is that heart warming emotional connection thing I mentioned, that bottom row means you have a huge number of intimate connections to people. In this era of continuous exposure via social media I don’t think I can manage it. To be honest I’m not sure I’m comfortable with that, or even capable of it. Which is why it’s so, so much easier just to go back to making the damn stuff instead of releasing it or marketing it.

What also puts a massive spanner in the works is the fact that the artist part of my brain table looks more like this:

Sales	Artist Feels	Practical outcome
< 50	So what?	Continue trying to make amazing tunes.
50-100	So what?	Continue trying to make amazing tunes.
100-200	So what?	Continue trying to make amazing tunes.
200-500	So what?	Continue trying to make amazing tunes.
500-1000	So what?	Continue trying to make amazing tunes.
> 1000	So what?	Continue trying to make amazing tunes.

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<sup>5</sup> A disturbingly mixed metaphor. Brain? Vomit? Farts? *Concentrate*, Tubb.

In other words, releasing music is more or less irrelevant to me when I'm actually thinking about or making the stuff.

Jesus Christ, talking about this is so difficult and self indulgent and boring. UGH! Blech! When's Mike coming on?

## Should All Music Be About Climate Change?

Meanwhile, whilst I fret about my silly little album, we're slow roasting the planet.

I propose a musicians' *strike*. The entire industry agrees to put annoyingly depressing lyrics about the climate in every single fucking song. No more happy clappy "ooh yeah I want your body" funtimes sexytunes until something gets fucking done. Every single tune will be like the most depressing Radiohead song ever. The fossil fuel industry will be brought to their knees in no time. There, right. Sorted. Next chapter! Oh wait what's this? Another fifty pages down there about climate change? Thirty by Mike Tropefield? Oh god...

## Conflicting Thoughts on the Environment

My thoughts on the environment tend to oscillate wildly, from "it'll all be fine" to "we're all utterly fucked" within the space of a few minutes. Ultimately, no one knows (and if you take one thing away from this whole stupid book, it should be that). Furthermore, when I'm thinking "we're all utterly fucked" there's a whole range of different emotional and intellectual reactions to that statement that immediately follow. It's not immediately clear which thing I really believe, it isn't clear how I really feel, or how I *should* feel, and it's not clear whether any of the emotional reactions are at all appropriate or meaningful, given the scale of the problem. The enormity of the situation makes it somehow a very slippery beast to think about. Almost anything I *can* think about it will be pathetically inadequate.

So, then, given that I have conflicting thoughts about what I should be *feeling* about how the ecosystem is doing it might be useful to actually set out, in cold hard detail, how I would feel about it? Actually attach targets to the thing? Instead of having a confused sea of feelings sloshing around in my head, actually tell myself *how to feel*? Maybe decide to feel something constructive in order to move the thing forward? Here goes.

A few days ago I kicked off the day by reading [the latest report from scientists](#) trying to get world leaders to actually wake up to the scale of the problems we're heading for. I got half way through it. It ruined the rest of the day. I could not concentrate on my job, which felt pointless. I felt physically bad, like my limbs were weak. My skull felt as though it had been drained of blood and I felt like I was going to faint. Actually trying to grasp the thing crippled me. I can completely understand why you would *want* to think the thing was a hoax. It's simply the psyche trying to protect itself. But then I've also been reading such things as the fact that solar power is now cheaper than coal, and that over half the energy in the UK is renewable. In some ways it sometimes seems like the hardest part is over. Also what must be factored in is [environmental alarmism](#), there is, like it or not, attention to be grabbed, citations to receive and money to be made by making out the crisis to be worse than it is. And then I chill out a bit.

So the aim of writing this chapter and the next was to sort out what I should think, and what I should feel. Of course, that's not what happened, the thoughts here are provisional and feeble, but I felt I progressed a bit, I feel less confused, and that's good, for me at least. Even if I've not actually helped the situation, thinking a bit more clearly is a good start. And actually I surprised myself a few times and ended up at the opposite of where I started. Mike, in his unhelpful way, helped.

This is one of the only songs on the album that exists purely as a result of the album being made, and purely as a result of the concept behind the album. Which I can now reveal! Woo. I know you're excited.

When collecting songs to put on an album I noticed that a lot of the songs were just versions of inner moans or rants, and generally quite dark or negative themes. Whilst it's perfectly valid to fill up an entire album with darkness and despair and make it magnificent, I wanted to swim against that somehow. So I then noticed that the positive tracks were somehow optimistic responses to some of the negative ones, they dealt with the same theme but in a positive, energising way rather than a nihilistic despairing way. After all, every negative value judgement implies a positive one, so why not write about the positive flip side of the thing you are worried about?

So once I had paired off a few "problem" tracks and a few "solution" tracks, it then remained to find solutions to a few of the excess problems. The "Cunts in Their Cars" are obviously a problem, so I then needed a solution to that. I didn't want to take the album concept too strictly, *literally* solving each problem in a

track would get tedious and restrictive. So whilst Clean Energy is not a precise solution to the entire car problem it nonetheless provides a counterweight. In this song I tried to counteract the default apocalyptic messages of despair with some hope.

Funnily enough a similar problem emerged when writing these notes. Immediately every piece began turning into a massive rant about the idiot insane stuff that people say on the internet. But we have enough rants about how shit everything is, which can be found on said same internet, and I really don't see how adding my rants to the pile of rants would help. I also have a strong feeling that the constant focus on what's wrong is actually the problem not the solution. Whinging about stuff ain't never solved anything. Ideally what I write would actually contribute a positive difference to what I think, and maybe even to what you think. So again, I applied the same logic to the writing as I applied to the track selection, for every one of Mike's lash-outs I needed to provide a counterweight, and for every vague arty fairy tale from me, Mike needed to chime back in with some cold hard face slaps. And, as you may have noticed by now, quite often the cold hard face slaps can be more positive and constructive than pie in the sky Libtard self-flagellation.

So I'm now going to have to apply the same artistic self discipline and make sure that I counteract that negativity with something more upbeat and hopeful in each "solution track". With climate change that'll take some fucking doing but hey ho let's go.

## The View from Nowhere

The negativity expressed in rants about the environment thus far comes from a very specific slice of humanity - people who are maybe more intelligent and sensitive than the average. They feel like a concerned minority railing against the stupidity of their fellow humans. But again, you can do better than that: you can take more steps away from the everyday commonplace and take a truly cosmic view of our situation. Things look terrible from a tiny spot where you're sitting, a certain time, a certain place, a certain cultural outlook, a certain set of morals, all these specificities contribute to your judgements, and if you find a way to step outside them, the fuel for your outrage dwindles and disappears. Step outside of your skull just a few inches and there are merely particles of (warming) air, blowing wherever they will, in serene vortices of ambivalence.

My view has always been that in art, like in science, one should endeavour to either take an entirely honest, personal view, where you discuss your thoughts feelings as honestly and as subjectively as possible, without trying to tailor them to what you think will be acceptable, or “the view from nowhere”<sup>6</sup>, where you attempt to stand as far outside of your immediate surroundings as possible and be completely objective.

It is impossible to do both of these things, obviously, but worth trying. The view from nowhere usually sheds a totally different light on our situation. Not necessarily a more comforting one, sure, but different. So the first view from nowhere is:

## Destroying the Planet is “Natural”

It's no surprise that we should find ourselves destroying things - it's not that something has gone fundamentally cosmically wrong, we have not upset nature's "balance", we ourselves are "natural". On the other hand, if you want to include the whole of the natural universe then we are extremely unnatural, along with all the life forms on earth. The natural state of the universe is a vast empty void with specks of sterile dust and gas floating in it. In some ways reducing the planet to a barren wasteland would reduce it to its "natural" state. Or, if you believe the cosmic inflation paradigm, the “natural” state would be exponentially, eternally exploding space and time dimensions, which doesn't sound a very secure environment to me.

Planetary destruction is natural in another sense: Humans are destroying the planet, simply because we haven't yet learned how *not* to. We make choices on a local scale that seem to make sense locally, and they often add up and have shocking and destructive outcomes on a global scale. Each one of these global problems takes a long and difficult battle to solve. As Laurie Anderson says: walking is just falling and catching yourself, over and over. You learn to walk by stopping yourself falling down. Humanity learns to walk by fucking up, and developing systems in response. Another banalpost I see in my mind's eye now: "we've not learned anything!"... yeah right, just rhetorical posturing. Maybe you haven't, but as a species we've learned a country fuck-ton, just not enough, yet.

If you give gorillas ice cream, they'll eat it until their teeth fall out. Just like people would, unless instructed otherwise. Every parent knows that you need to

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<sup>6</sup> Thomas Nagel

spend at least sixteen long, hard years brow-beating your trainee humans to brush their teeth, eat their greens, stop binging on sweets, say please and thank-you, not to run with scissors, not put lego in the washing machine, not pin their career plans on becoming a bloody DJ, over and over until you're blue in the face. We are just dumb monkeys who will dumbly satisfy our desires until the cows come home (or until the cows fart the atmosphere into a methane-blanketed death furnace).

Each of us privileged westerners live our perfectly "normal" lives that we were brought up to live, making the same decisions we feel we've always made in the way we've always made them. A flight to somewhere warm and beautiful. A tasty steak. A new synth. A cosy warm house. A relaxing sauna. A cup of coffee. Mmm. Nice thing. Me likey nice thing. Shury just one mwore wikkle nice thing won't hurt?

We do these things out of habit and out of normal everyday needs and wants. Turns out those "normal" things have the potential to destroy planetary ecosystems. But this news hasn't sunk in. Yes, you know it, but you don't really know it, you don't feel it in your bones yet. I kind of know it, I'm telling you it, I've spent twenty years thinking about it. But I don't really know it. Yesterday I ate a steak. I enjoyed it. Clearly I don't really know anything. We're sitting in what we think is a comfortable moral nest, on a familiar branch, in a tree we're chopping down.

So what are you to think? Are you evil? Are you, Mr(s) Human, deep down, some sadistic moral abomination bent on destroying the fragile beauty of nature? Are you an ecocidal maniac? Or are you just a person with an extremely limited cognitive sphere of perception and action?

If you gave that gorilla (or any other "natural" reasonably human-like mammal) the choice of having a warm bath over a freezing cold one, walking a hundred miles or being driven, a dry comfortable bed or a wet spiky one, a shiny new thing over an old scruffy thing, a sweet sugary pudding over a pile of stinky brussel sprouts, a bright, well lit airy living space over a dark cramped gloomy one, they would make all the same decisions we do. There's nothing very sinister here. It becomes a bit disturbing when you know that something is destructive and you do it anyway. It becomes even more sinister when you know your product is globally destructive and you carefully design your marketing propaganda to brainwash people into thinking the opposite. We'll get back to those people later. But I think one of the persistent myths, one of those cognitive biases that I keep banging on about, is that we are in control over our

actions 24 hours a day. We're not. If I were to estimate the hours of the day that I'm in control of my actions I'd say it would be around zero. If you really want to change your actions, you don't "take control of your actions", no, you take control of your habits, which is a very different thing. I recommend [this book](#) highly.

The balance of nature is a myth. The idea that mother nature is somehow "looking after" the planet and we are "upsetting" that pre-existing balance is, I suppose, an understandable thing to think - this is what is happening to a certain extent, but then leads you to think wrongly about how nature works. The perceived balance of nature is an illusion caused by the vastly differing rates of change of human change and natural change. If you watched a sped up movie of the evolution of the natural world over the past billion years, it wouldn't look balanced, it would look exactly as hectic and destructive as societal evolution.

I *get* the feeling though. It's hard to not watch a video of a walk through the Australian bush seeing thousands of dead bats on the ground - dead because of excessive heat - and not interpret it as an omen. It looks like a pointed message from nature telling us to sort ourselves the fuck out. I get that. It presses all the terrifying medieval portent buttons. Comets, burning bushes, dead birds... well biblical. During my psychotic episode in 2015 I walked out into my garden and there were thousands of dead snails all over our garden. Not hallucinated, real dead snails, hundreds, maybe thousands. I don't know if it was some bizarre synchronicity or just I was more open to visual information and I'd just never noticed them before. To me it was a crystal clear portent of our terrifying ecological future. Nature or God was clearly trying to tell me something, *personally*. But really? How exactly does that work? If this communication channel only works when you're having a psychotic episode, then how reliable is that messaging system? Not reliable enough to base any big decisions on I think. If you're so goddamn powerful, Nature-Goddess, just send me an email, not a literal snail mail.

There is no evidence for a guiding, nurturing, intelligent, spirit of nature. The bats died because they were too hot. It was more likely to be too hot due to higher average temperatures, likely due to more carbon dioxide in the atmosphere. There's no mysterious spiritual struggle here, just basic science. Does nature look after things? Not really, more than 99% of all species are extinct. So nature didn't do a very good job with them. For another, every individual creature dies, sometimes horribly, so she didn't do a very good job with them either. "The balance of nature" may be a self regulating system e.g.



Lovelock's Gaia hypothesis, but inferring an *intention* or *moral direction* onto that system doesn't stand up to a moment's scrutiny. Did you know that humans almost went extinct already? Due to *non*-anthropogenic climate change? Compare these two branches of the multiverse, one where we get sent extinct because we died out in some parched savannah 200,000 years ago, one where we die out in a hundred years time after this crazy techno-binge, which is better? Which night out would you rather have, one where you rave your heart out and expire on a stupendous drug cocktail having the goddamn time of your life, or one where you get run over having just set off from your front door?

Whilst I admit that it is perfectly possible that some kind of superintelligent mega-mind emerges through the interactions of the quintillions of organisms in the biosphere, it isn't clear what that mind could actually do, why it is currently letting itself be disrupted by a few of its offspring. If nature has some powerful unifying self-sustaining agency, then how can its creations "go against" it? Similarly with the whole Adam and Eve story. All the same old arguments about the existence of God apply. The same superstitions that give rise to the Christian God seem to give rise to New Age notions of nature spirits, and those Edenic memes fall apart in more or less the same way<sup>7</sup>.

I do often wonder about how staggeringly beautiful everything is. I find it hard not to stand on a tropical beach, looking at a sunset over the ocean, or look at the sunbeams falling through the branches in a forest, or look into my cats eyes, or watch even just a little sparrow picking up crumbs on the street, and wonder about how everything could have become just so beautiful, intricate and goddamn cute from a process as seemingly ruthless as Darwinian evolution. My Grandpa believed in God, and one day on a stroll on Bookham Commons this was exactly the reasoning that he gave me. How could a world so amazing have arisen by accident? And I totally see that. Given what the world *could* be like, this one seems extraordinarily pleasant right now. I do think this demands some explanation, and at some point I'll try to give it.

On the very day we became an item, my wife told me that she believed the beauty of nature to be far greater than anything produced by human beings, and that we should just stop trying to make art and technology because it just uses up more of the beauty to create more of our ugliness. Our courtship thus contained the classic conversation between the female principal and the male principal.... I, of course, being the man, and getting defensive over my chosen

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<sup>7</sup> The parallels between religious movements and the green far left are striking. They haven't started literally self flagellating yet, but give it time [Mike].

career as a musician *and* technologist, defended humanity against this claim. "It is in our nature to rebel against nature", I said pompously, and the Greek gods rustled in their slumber. This was the first of many ill-advised attempts to play devil's advocate in our matrimonial discussions, but that's another story. But it's getting harder every day to deny that she was right. The world's getting uglier. There are futures for humanity that would justify everything, these are remote, but I would like to spell out what that future could be. I think it's not too hard to justify the existence of our technological, artistic society, even with all its ugliness. But there are even stronger arguments that rest on our potential, not where we are now. I'll talk about this when I talk about the space program later.

## Humanity is not cancer or a virus

More banalposts on flappy-hand nature lover message board threads: humanity is often described as a cancer or a virus. Coronavirus is a wake up call sent by Nature/God to make us see the error of our ways. Yeah, yeah.

Again, why do Nature's/God's messages never actually work? Why do her/his/their wake up calls never actually wake anyone up? What's the rule that says that the communiques have to be so precisely ambiguous that the only people who get the message are the ones who were thinking that way anyway? And if Nature-God's biological twiddling powers are so great that he/she can design a message-pandemic, then why can't they just tweak the human brain to be one that is capable of working things out for itself without needing the occasional apocalyptic notification alerts that fall on deaf ears in any case?

So anyway. The analogy is that cancer is a bunch of cells that are reproducing as growing uncontrollably, with no regard to the health of the organism that it is a part of. And we humans also seem to be things that are reproducing uncontrollably, and destroying things in the process. Right, you do know how nature works, yeah? You do know that every single organism on earth is reproducing uncontrollably right now? You do know that evolution is all about self replication? This analogy is an apt one, in the "spreading uncontrollably" sense, but is also completely impotent, in that if it's flexible enough to describe humans, it also describes every single living thing. We aren't really anything like cancer. The key difference lies in diversity and creativity.

For most of Earth's history creatures have been born, reproduced and died virtually identically to previous generations. The only things that were passed

down to the next generation were genes. For most of human history people have done the same things as their ancestors, maybe slightly less so than animals. Then, with language, new things could be passed down to the next generation. New songs were written, new stories and jokes were told, new conversations were had. But still, your grandchildren's life was similar to your grandparents, not much changed. In the last few centuries, the game has transformed utterly. Each generation's experience is very different to the last. The world has transformed, a million new songs have been sung, a million books written, a million different gadgets produced. Cancer doesn't do that. Cancer doesn't design telescopes that go into orbit around cancer sufferers and look for other humans who might have interesting alien cancer living inside them. The tumour is an undifferentiated mass that is growing inside the more diverse and specialised cellular structure of a body. In contrast, each human is a completely different unique personality. We do far more different things in one week than many animals do in a lifetime. We do far more things in a minute than any cancer cell has ever done in the entire history of cancer. Does cancer make [sculptures from ferrofluid](#)? Does cancer slide down snowy slopes on skis<sup>8</sup>? Do viruses paint landscapes or construct cathedrals?

If we are a cancer, then it is a weird kind of cancer that is way more complex and intricate than its host, i.e. not cancer. If you value diversity and creativity, which I do highly, then it's hard to say that humanity is simply a disease. We are destructive, yes, but we are also creative. Thus far I think our creativity has outweighed our destruction, and if we play our cards right, creativity could outweigh destructivity on a truly cosmic scale.

## It takes a while to wake up

People who develop addictions usually don't notice that they've gone really wrong until something hits them in the face. Suddenly they realise that their drinking has meant they've lost their job and their partner. Suddenly you wake up in the hospital. Suddenly your doctor is telling you you need to sort your shit out otherwise you die. This is often how we are. This is exactly how I am. For me to actually do something about anything, it has to be physically or psychologically painful. Even pain, if it creeps up gradually, doesn't make me go to the doctor. It has to get to the point where I can't actually walk for me to see someone about my knee. It had to get to the point where my ears were screaming at me with the sound of a nuclear mosquito for me to get my ears

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<sup>8</sup> The closest I can think of is this video of a [crow inventing snowboarding](#). Which is awesome... but because crows have no linguistic culture, it will not be able to tell his mates how fun it was, and the brand new sport of crowboarding will be sadly lost to Corvid history.

checked out. And so it is with the environment. I know I need to do something, but I'm not sure what. It's easier to carry on as normal. Maybe flood will need to ruin my house, or a forest fire will burn it down before it will sink in. The waters of the Thames will have to actually pour into the House of Commons, dense smoke from the forest fires will need to prevent television programs being made, and the crops will have to actually die and the supermarket shelves will need to be almost entirely empty before anything substantial will be done. It wouldn't be surprising. That would be "normal", that would be understandable, that would be the default. It is actually solving the problem that is the exceptional, we have to do the exceptional, we have to achieve the unprecedented, over and over again.

My point is that saying we're destroying the planet is not the same as saying we're all evil, and the systems we've set up are evil. Stupid, maybe, inadequate, rather, but not evil.

The real mystery is that anyone ever got any global problems solved at all. We started making a hole in the ozone layer, somehow that got sorted out. That should surprise you. Not just the fact that people got together and effectively stopped the destruction, but even that we knew about it in the first place. It's impressive. I would advise you, when you are cynical and filled with despair, to actually try to go through a list of problems that have been solved by humans over the past few centuries. It will take you weeks, months, years, and by the end you will feel dazzlingly, blindingly optimistic. This feeling might be just as misguided as your previous pessimism, but at least it'll make a nice change. A good place to start is Steven Pinker's book *Enlightenment Now*, or Hans Rosling's *Factfulness*. These books go through in detail how many problems related to quality of life *have* got better. It always astounds me that the stuff in this book comes as such a shock to people. What? You mean progress *isn't* evil? Yeah, that's why we call it *progress*.

## Your Glitchy Moral Zoom Knob

Whenever news of some new environmental disaster occurs, there's always plenty of hand wringing and more banal posts to the effect that humanity deserves to be wiped off the face of the planet. I think the same thing myself, sometimes. I am tempted to join [VHMENT](#) (voluntary human extinction movement). Or maybe become one of those evil biotech scientists working on a virus that will wipe everyone out - I read *Oryx and Crake* and I wanted to be Crake. Sometimes you look around, say, Luton Airport and think: you know what? I could quite easily get rid of all these cunts and the world would be a

nicer place. Some small silly part of my brain wishes the Coronavirus could have been just a bit more... I do understand the sentiment.

But this turns out to be just a ridiculous brainfart. I mean, you wouldn't wipe out your friends and family would you? But somehow extending the destruction to *all* friends and *all* families makes the death of your family somehow all well and just... Another thought experiment for you: take the following two sentences: "Humanity needs to be exterminated" and "Everyone of Jewish descent needs to be wiped exterminated". I bet you the entire contents of my music studio that you find the latter statement more horrific than the former, you may even have said the former half or entirely seriously, and yet you would never dream of saying the latter even half seriously. And yet the former *contains* the latter, and the former is orders of magnitude *worse* than the latter, and there's absolutely no possible logic that could make it otherwise. So what in hell are you saying?

Another weird aspect of this nihilistic bent is the value system that you're drawing upon to make the damning judgement is very much a *human* value system. We find nature beautiful, but we're destroying it, therefore we should be destroyed in order to preserve the beauty for... for... wait, for who now? Who's idea of beauty are you using? Who's system of ethics? So you wipe humanity out, and once everyone is dead, which dead person would then congratulate you (you who is also dead) on having done the 'right' thing, when the notion of 'right' is also as dead as everyone else? Maybe you are saying that the knowledge we are doing the right thing now before we go extinct is important, but that seems jolly weird too: you're prioritising your own moral comfort against a potential multi-billion year future for human and post-human consciousness. Are you really so sure of your moral judgements that you're prepared to wipe out the only intelligent technological species in the known universe? Seems a bit *bold* to me.

It is often said that the Copernican revolution revealed that we are not the center of the universe. And this was also taken to mean, metaphorically, that human values are not absolute, and on a cosmic scale we are not the arbiters of what is meaningful. But that's actually not true at all, we still are. More than ever. I don't see anyone else doing it. If you seriously consider that we might be the only intelligent, moral, culture loving, knowledge gathering life in the universe, then it's hard to claim that we aren't the center of it<sup>9</sup>. I get extremely

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<sup>9</sup> Incidentally we are, quite literally, at the center of the observable universe, because we are the ones observing it. The edge of the universe is the region that light has had time to travel to us from. Sorry Copernicus, the observable universe is a sphere 30 billion light years across centered on your head.

annoyed when people use scientific discoveries as metaphors to determine our behaviour in other areas in direct contradiction to the scientific knowledge in those other areas.

So. Like it or not, we are the witnesses and judges of our own crimes.

OK, let me give you that choice again. In one universe, humanity never evolved, or went extinct early, and Earth lived out the rest of its days in peace, no cities, no roads, no cunts driving down them, no Auchswitz, no Global Warming. But also no science, no moon landings, no films, no electric guitars, no music, no festivals, no beer, no architecture, no Paris, no London, no New York, no you, no your family, no your friends. Forget about the future for a while, which history would you choose *up till now*? For me there's no question that I'd choose the universe with added humans, there's just too much fascinating complexity there, there is too much wonder and experience there, and goddamn it has *me and you* in it, and you're the one reading this and I'm the one writing it. OK, so what if we destroy ourselves tomorrow? Does that change the choice? Well, obviously you would choose the universe with humans, you can't say the history of earth up till now would have its value changed just because of some disaster in the future. What if we destroy all living beings? Well then it gets tricky, as you potentially have another 4 billion years of life, balanced against a mere few thousand years of human creativity. But get this through your head: there is absolutely *no chance whatsoever* that we will destroy *all* life on earth. We'll return to this.

So even if we turn out to destroy ourselves, why does that mean we should never have existed, or that we "deserved" it? I don't think we've deserved it until we've actually done it, and despite all the predictions, we haven't done so.

If you want to preserve the "amazingness" of nature it would be a good start to preserve the kinds of brains that can witness that amazingness in the fullest way possible - human brains<sup>10</sup>. So even if we did *deserve* to be wiped out, wiping us out would take the amount of deservingness and deserve-bestowingness in

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<sup>10</sup> There may be intrinsic beauty in nature, independent of humans. I admit that some animals may have the rudiments of aesthetic feelings. I imagine whales find their own songs beautiful, I can imagine eagles get some kind of kick out of soaring over the mountains, I'm certain that the reason flowers are beautiful is that bees have an aesthetic sense that they use to judge which one looks the most fantastic to land on and get inside. Maybe electrons feel some intrinsic sense of artistic rightness when they team up with other electrons in another atom to create a molecule. But eagles don't make underwater microphones to listen to whale songs and think it's cool. Whales don't study the ways that bees dance, and find that amazing. Bees don't strap go-pros to eagles and get a kick from coming along for the ride. Gorillas don't even know how to make bloody ice cream.

the universe to zero, so that's not much of a solution. Sorry, another nice simple solution down the drain.

And who is best placed to preserve the beauty of nature? Unfortunately it's also us. We're doing a terrible job so far, but there's really no one else to take over. You'd like to let "Mother Earth" do it? As mentioned, given that [99% of all species are extinct](#) I'm not totally convinced by her track record either.

When you say that humans should be wiped out, what's happened here is the limited Zoom-out function on your brain has broken something. You really cannot say one moment humans should be wiped out and then immediately hop on a train to go visit some of your bestest favorite human buddies that you love so much. It makes no sense. Unless you are drawing a line between "good" humans, who should stay alive, and "bad" humans who should be exterminated, in which case you are in quite hideous company, I'm afraid.

We have coherent morality within a certain local sphere. When we try to expand that sphere to planet size, everyday morality goes whoopsy wang-wang. Most people I know are pretty good about being nice to the people that they encounter every day. They smile, say please and thank-you, give each other birthday presents, they avoid dropping litter on the street, they tip the waitress. They feel guilty when a homeless person opens the door to a bank for them<sup>11</sup>. They do the right things, but only up to a certain scale. When you start thinking about morality at the distance scale of a planet, and the time scales beyond 50 years, things get glitchy. Part of the problem is that you have to spin the zoom knob quite fast, and then you overshoot the hundred years setting and end up at galactic, billions of years kind of scales, and then nothing seems to matter anyway: the Earth is going to be eaten by the sun regardless, I mean that's *proper* global warming innit, sod it. We're just bloody atoms, who gives a shit. Everything is meaningless. Eventually the heat death of the universe will kill everything and destroy the last traces of any organised information whatsoever etc. These nihilistic feelings of despair that afflict us sensitive people come from frustration and confusion manipulating this glitchy moral zoom knob, not from any proper handle on anything. It's another confusion of levels.

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<sup>11</sup> I, Mike Trollfield, do not, I just feel annoyed. I'm perfectly capable of opening the door, thanks. And you expect me to be somehow reminded that I have more money than you because I'm getting some of it out of a cash point. No, I was well aware of that before, thanks. The inanity of your begging technique has just cost you the value of my possible donation, a value which *in no way* will be rounded up to a multiple of ten just because ATMs provide it as such.

The glitchy moral zoom knob is the terrible trouble with Global Warming. It's too big for us to think about properly or act upon in a way that feels meaningful to us. 40 billion tonnes of CO2 per year. You can't imagine that. Let alone work out how to stop that. Can you really, actually mentally picture 40 dots on a page? Try it. OK, now are there really 40 or just "some"? OK now, can you imagine 40 billion dots? Can you imagine 40 billion tonnes of dotted paper? What if that paper was a gas? How big is the atmosphere? Is gas itself frustrated? What if warmth was greasy? Are you nodules pipsquillion bagpipes? You've no idea, your dumb humdrum brain's done gone numbed by numbers. Is it ice cream time yet?

It is idiotic to suffer from a lack of something that doesn't exist, right? So think about this: Feelings of meaninglessness imply that there *is* meaning in the world. The fact that you feel bad about life having no meaning means that life does actually have meaning. You can thank me later.

There is this huge disconnect in my head between the way I live my life, each day, doing the same stuff as everyone else, more or less, and what I think to myself when judging humans on a planetary scale. Generally, it's business as usual in one half of my brain, and existential cosmic despair in the other. There is simply no functioning connection between these two viewpoints right now. It's entirely ridiculous: it makes absolutely no sense for both of these mindsets to continue independent existence within one skull. Shit or get off the pot already. The task we all face is bringing these two mindsets together in a meaningful way.

So my advice would be, when you are feeling warmxiety or climangst or whatever dippy internet journalists call your melodramatic snivelling, just give yourself a break<sup>12</sup>. Admit that your moral zoom knob is glitchy. Admit that your mind is not really capable of thinking about ethics at these scales, or at least not capable of linking up these global problems with your personal feelings. Don't despair, don't get angry, don't get depressed. Your feelings are irrelevant.

Remember the slogan "Think globally, act locally"? To this I would add "Feel Locally", because "Feeling globally" will ruin you, and possibly the planet too, as we are about to find out thanks to Mike's, er, logic-shouting.

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<sup>12</sup> I had a typo here: "give yourself a beak". Would having a beak reduce your carbon footprint? I guess it depends if it was the curved meat-tearing kind of beak or the small triangle crumb-pecking kind of beak.



All the way from Germany, I can feel the warmth from Mike's fat freckled face as he reads this, so now, inevitably, we turn to our inflammatory pundit Mike Trollfield, and ask what he thinks. As if we even needed to ask. He'll tell us anyway. So, Mike, how exactly are you going to ridicule the Left on the question of climate when it's just so obvious who is on the right side of this debate? On the left we have people who want to save the planet, and on the right we have people who want to destroy it. Isn't it that simple, Mike? (lowers spittle shield)

## Woke Ideology and the Environment

*Mike Trollfield*

Well. Liberals of all flavours like to think that they're on the right side of the climate debate, but really, so many of their values conflict so blatantly with sustainability that it's hard to see them being any less culpable than anyone else.

Take personal freedom for instance. We believe it is wrong to forcibly limit other people's freedom - it's bad to limit people's lifestyle choices, or limit their reproductive choices, or impose your belief system on people of different cultures. But what if all of this is exactly what someone has to do to us to prevent us toasting the globe? We need to have limits on energy intensive habits, we need to have reproductive limits. Maybe more important we *need* a universally accepted scientific world view, otherwise people will be too scientifically illiterate to feel the need to do anything about problems that they don't understand. The way that is done should be as nice as possible, but it's not sounding "liberal" by any stretch of the imagination.

We find the evangelising of the Christian right distasteful and vulgar, but what if it will be precisely that unquestioning enforcement of moral strictures that will be necessary to save ourselves from ecological armageddon? Is climate puritanism what it will take?

When someone's belief is that climate change isn't happening, we become terribly conflicted and don't know what to do with ourselves. How do you tell them they're views are abhorrent without "forcing" your beliefs on them? How do you politely and gently tell someone that they're complicit in the most idiotic self harm in humanity's history, somehow without coming across as sanctimonious or evangelical, or even hysterical? How do you keep the conversation bright, beezy, and Britishly fuss-free whilst making it clear the

other party is complicit in destroying our world? We hope we can talk them round gently, but we also feel that time's running out for gentle reasoning.

All kinds of people on the Climate Strike march were campaigning for a rag-tag bandwagon of liberal policies that have nothing to do with climate change, or would even have negative effects, for example freedom of movement - er, whaaaaat? I.e. the right for people in poor low-emitting countries to move to rich high-emitting ones and make a better living there, flying back to see their families every year. Yeah, that'll help! Great call!

I don't like saying this<sup>13</sup>. I consider myself a classical liberal because I want all of us to be more tolerant, richer, and to have more freedom. I want everyone to make their own choices and live the way they want to live. I also want to preserve the beauty of our natural world. I'd love for those things to be compatible, on optimistic days I too wishfully think they may be, but barring some kind of miracle, it seems quite unlikely. Some things we hold very dear, perhaps even dearer than material comforts, will have to be compromised.

Liberals get terribly conflicted over freedom of *belief*. We've been brought up to acknowledge that other people are "entitled to their opinion", well, if those opinions lead to the collapse of the ecosystem and hence free civilization itself then maybe those people shouldn't be entitled to anything of the sort. We firmly believe that people should be free to practise their religion and refuse to tamper with their deeply held beliefs. Even if those beliefs fundamentally contradict everything we believe in, and even expressly vow to *destroy* everything we believe in, they're still sacred and inviolable. We are afraid that if we abandon our "tolerance of intolerance", then we become intolerant ourselves. But I'd rather have a specifically demarcated area of carefully thought out intolerance than an unchecked, rapidly spreading plague of virulent intolerance, thanks.

Even if the scientific argument for manmade global heating is won, don't kid yourself that everyone will sign up for trading their current wealth for a secure long term future for people they'll never meet. For a start, even if you try and calmly rationalise why we should protect the future of the planet, sooner or later you flounder on the fact that there's actually no solid rational argument why we should. In fact, viewed selfishly, it's completely *irrational* for you to live worse now so that people can live better after you're dead. I mean, why should you care? I care, because I, Mike Trollfield, think on grand scales and care about the future of the cosmos. But I'm weird. I'll never see that future, what's the

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<sup>13</sup> Not true actually. I love saying this. For me, Mike Trollfield, the highlight of my day is ruining yours.

sodding point? The current doomsday timetable more or less exactly coincides with my own doomsday timetable (Coincidence? Maybe not, I have a scary anthropic argument why this would happen). The planet will be disintegrating just about the same time my body does, so what? Does it make any sense that in my few precious remaining years on this planet I should struggle to save people from their own stupidity, or should I just relax, go with the flow and partake joyously, deeply and fully of the bountiful electricity flowing into my home?

It's quite possible the majority of people couldn't give a flying methane cloud. And it's really hard to precisely tell them why they should, without resorting to hand-wavey grand notions about legacy and virtue and handing on the baton and duty and descendants and legacy and all sorts of airy fairy pomposity. And remember we do still live in a democracy, and these people still have votes. It's possible that Liberal Democracy may actually be incompatible with the levels of social control necessary to live sustainably. As I said before, further enfranchising the ill-informed may not, actually, be the best way to save the world.

Strangely, the fact that global warming is happening so very shockingly fast may actually be helpful in this regard. This is now a completely different deal from when it was just something that might happen 100 years time. Now it's personal. It *will* make your life worse, it *might* burn your house down, it *will* make your children's life a hell of a lot worse, it will possibly threaten your grandchildren's existence, and these are people you will actually meet, know and love. It now affects you, so now maybe we'll see you acting.

## The Green New Deal

Or: Why we need to focus on actually saving the world and not "Saving The World"

It's pretty clear we need a Green New Deal of some kind. Both to save the planet and to raise levels of investment, create jobs, in the process reversing austerity to reduce inequality and resentment.

But. And there are many buts<sup>14</sup>... Green New Deals implemented in one or two places won't really work. It has to happen globally. For example carbon tax in one country won't work, and people will just go and emit their carbon where the

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<sup>14</sup> Releasing yet more methane, no doubt.

tax is low. Similarly with minimum wages and social security. You either impose this worldwide or you're asking for trouble.

And here we go again with something I'm afraid to say but I feel I must. It pains me to say this<sup>15</sup>, packaging up a Green New Deal with an explicitly redistributionist social justice agenda seems like a bad move to me. For multiple reasons.

It also pains me to start by discussing the U.S.A., but as it's releasing so much carbon, and as it's seemingly so utterly FUBAR, and as it seems determined to incessantly export it's FUBARedness to the rest of the world via it's social media platforms, I may as well start there.

As much as I dig the pledges in, for instance, Ocasio-Cortez's GND<sup>16</sup>, it seems inevitable that opponents will easily shoot it down at every opportunity. I can see the point of the boring centrist Democrats here. I fail to see how tackling global warming and social justice at the same time is an easier problem to solve than global warming only. If you are serious about solving climate change then you need to prioritise it above everything else, and yet the first thing you read in the GND is:

*"Guaranteeing a job with a family-sustaining wage, adequate family and medical leave, paid vacations, and retirement security to all people of the United States."*

This is good stuff. I agree with this as a policy. This supposedly "suicidally socialist" stuff works fine in Europe and I'd love to see the United States finally become a civilized country. That would be great for everyone. But... um... you have to admit that it is more or less irrelevant to the problem at hand, and *top of the list*, really? What about mentioning CO2? Carbon dioxide only comes fourth in the list.

Later on:

*"Providing resources, training, and high-quality education, including higher education, to all people of the United States."*

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<sup>15</sup> It's a very pleasing, smug and condescending kind of pain.

<sup>16</sup> Ooh, this dates me doesn't it. Nevermind you can apply it all to Biden's upcoming progressive bills too.

Again, super, *totally* down with that, education is one of the most important things for a functioning society. I've been saying that for yonks, but how does that cool the planet down? Your smarter, better educated children might start working on the problem in 15 years time. Too late.

Extinction Rebellion (big Mike sigh and massaging of temples here) is also in danger of having its message diluted by acquiescing to the agendas of factions that are (or claim to be) advocating for oppressed groups. I *know* this is a sensitive topic, I *know* I'm losing readers and friends and even hair as I write this, but try to maintain perspective. XR's mission, right now, is to get the world to admit we have a problem, for political parties to actually treat Global Warming with the respect and urgency it demands.

The [three demands](#) in the UK are: "Tell The Truth", "Act Now", "Beyond Politics".

And yet it turns out the US wing of XR explicitly adds this fourth item to the list of [demands](#):

“We demand a just transition that prioritizes the most vulnerable people and indigenous sovereignty; establishes reparations and remediation led by and for Black people, Indigenous people, people of color and poor communities for years of environmental injustice, establishes legal rights for ecosystems to thrive and regenerate in perpetuity, and repairs the effects of ongoing ecocide to prevent extinction of human and all species, in order to maintain a livable, just planet for all.”

Now activists are agitating to have that demand included in XR UK's agenda.

So I'd like to say a few words about this. What we have as far as I understand it is an explicit call for race reparations as part of the process of saving the world from Global Warming. *Woah* there, tiger. What? Maybe it's not, but to be honest all I actually read in that XR statement was “We demand blah blah reparations blah blah black and indigenous blah cultural relativism blah we took the least rigorous course in college blah blah justice blah”.

Wait, what, am I seriously arguing that this goal shouldn't be there? Yes. Am I saying it should be removed? Of course not, that would be explicitly offensive, so it's too bloody late.

Let's just step back a bit here. The reason for XRs existence is merely step one of the long and difficult process of saving us from overheating - to say that we

actually need to treat the problem as an emergency instead of ignoring it. This isn't even getting to step 2 which is deciding what the hell to do. And we're definitely some way away from step 27 where we start redistributing wealth on the basis of which groups suffered most or least. We're still struggling with the Munich agreement, and somehow we're already gearing up for the Nuremberg trials.

How can it possibly help to nail to the wall reparations for explicitly named ethnic groups - which is an immensely tricky, fraught and controversial topic (even amongst the groups in question, who don't even form coherent "communities" at all, I mean when was the last time the "poor community" hung out together? Dancing round the maypole at last year's harvest festival? Fuckssakes), to what is otherwise a quite clear and unambiguous set of demands? Do you think that those on the right will fail to see this as anything other than a power grab, how many fucked up conspiracies will this feed? Do you have to deliberately and gleefully run onto literally every single bayonet that conservatives hold out for you? Is this fourth item compatible with the third, "Beyond Politics"? Or the eight principle "We avoid blaming or shaming"? Do you think that if the UK branch of XR does agree to this fourth item they will have done it because it's a good idea, or just out of fear of being accused of racism? Maybe someone can explain this to me like I was a five year old. If you simply cave in to anyone who says "ah, but you didn't mention <insert very obviously bad thing>", then you will lose focus, and fail the people that you were trying to protect in the first place.

It should GO WITHOUT SAYING that Extinction Rebellion is trying to save those who will be most affected by climate change. THEY'RE OBVIOUSLY PROTESTING AGAINST PRECISELY THAT, so why bother?

You may say there's no harm in adding well meaning words to a list. But Extinction Rebellion in the UK has already been [accused of "feeding into the racist narrative"](#). Christ, seriously?

Thankfully in the Guardian article on this Benjamin Zephaniah chips in with some sensible words. But the bizarre thing was, I only noticed the sensible voices in this article the *second* time I read it, with a clear intention to find out what it really said. All that stuck in my head the first time were the accusatory scare words. Some small lazy part of my brain thought, ah, well they're racist, so that gives me a great excuse not to spend my precious vacation days in the

freezing cold glued to a boat, and I can stay in my nice warm house pissing about with my electronic gizmos without being a racist<sup>17</sup>. THANK FUCK.

Climate disasters will affect the poor and the global south disproportionately, that is absolutely correct. Climate injustice is real, and it will be increasingly terrible - the people who screw the world up the most won't be the ones living in the parts of the world that get most screwed up. This is a horrific crime in the making. But further oppression of the poor will be the *effect*. It isn't the *cause*. Try to slap your weeping, knee-hugging, glacial-meltwater-sodden neurons a bit and get them to reason effectively, please. We must invest in minimising the extent of that crime, not apportioning blame for it, or apportioning out preemptive reparations to specifically named groups of people. Climate injustice needs to be headed off at its source.

I'm not denying the crimes perpetrated by fossil fuel corporations against indigenous people. In Australia, Aborigines are being thrown off their land, and basically stripped of their rights, to make way for massive new coal mines. That's fucked isn't it? But it's two different problems. White people are only there because they colonised the whole goddamn place over a few hundred years. That's a bit fucked too, it's been a bit fucked for 200 years, which is why it's a wildly over ambitious idea to try and solve that deeper fuckedupness in the process of trying to solve the relatively simple fuckedupness of not starting new coal mines that make no fucking commercial sense anyway.

Maybe I'm wrong, but in terms of trickiness-of-solving to potential-for-human suffering ratio Global Warming currently dwarfs all the other issues, inequality of all kinds included, therefore it makes sense to focus on it. And then there's the rather awkward fact that:

## Reducing Inequality Might Actually Make the Problem Worse

Whilst the mega-rich clearly have immense carbon footprints, and some may indeed be, as you seem to think, sadistic sociopathic narcissists who want to watch the world burn, there just isn't enough of them to release that much carbon. Whilst I chuckled to myself at the meme that says eating 1 fortune 500 executive is better for the environment than going vegan for the rest of your life, in the end there's only 500 of them and even eating them all wouldn't change much... if the other 7 billion of us go vegan, now we're bloody talking.

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<sup>17</sup> As long as I avoid the ones with cancelled sync terminology.

The bulk of the carbon comes from the products and services purchased by, guess who, people like us. It's more the *average* citizen of rich countries, like you, me, and all those poor(ish) people at the bottom tier of rich nations that we on the left are trying to vote to make as rich as us.

Ah, but if we're all richer won't we be freer to make the sacrifices required on a personal level to reduce our own environmental impact? There's precious little evidence for that happening - the more money we have the more stuff we consume. Counterintuitively, the most well-meaning and progressive rich are still more destructive than the most selfish of the poor.

The main predictor of footprint is [not your virtuous intentions to be green, it's how rich you are](#).

So in other words the best way to reduce your carbon footprint is to lose your job, and be forced to move to an oppressively poor country. That's not sounding very "liberal" now, is it?

Whilst Monbiot makes the good point in [this article](#) that wealth is related to carbon footprint, what he then seemingly concludes is that we need to limit the wealth of the ultra-rich. Nah, not really. There's not many of them. We do *absolutely* need to do that, but not for environmental reasons. And then [other articles](#) go even further and try to claim that it's inequality *itself* that is to blame for Global Warming. This sappy rubbish makes no sense whatsoever. And then, [in his review of Michael Moore's latest film](#) (which to be fair is probably complete dross like all of Moore's stuff), it becomes obvious that Monbiot has lost the plot entirely, and has signed himself up to the "everything is racist" cult. Which is sad, because he is a decent columnist.

What's missing in these articles, and many others, is the fact that emissions are not *linearly* related to wealth. The curve is kind of S shaped, meaning that enriching a poor person will send them up the steepening part of the curve, whereas enriching a rich person will send them up the flattening part. In other words, a person twice as wealthy as the global average might have over twice the emissions, but someone 100,000 times as rich (and there really are such people) will not have 100,000 times the footprint. They simply don't have the time to do that much polluting. Even if Bill the Bastard Billionaire spends every single day flying around in his private jet eating Wagyu beef steaks for breakfast, lunch and dinner, he still wouldn't release as much carbon as Phil the Phabulous Philanthopist, who, by giving all his money away, doubled the wealth, and hence the ecological footprints, of 100,000 average people. It's this weird



idea that if we make poor people rich, they somehow don't become bad rich people, because rich people (as in *now* rich) are different and fundamentally worse kinds of people than what you get if you give a poor person money.

So a "just transition" to a clean economy needs to happen in a particular order. First clean, then just. Bumping up the median wage before the technology is in place results in a massive wedge of people who start going on holiday in foreign countries, buying more cars and buying bigger houses. So if anything, slapping in a successful redistributionist policy into your GND from the start will make global warming *worse* not better. Bummer.

The more freedom you have, the more you can do, the more you do the energy you need, the more energy you extract the more you increase entropy, the more entropy spewing out, the more everything else shrivels up and dies. You cannot have your cake and eat it *and* give the cake to the poor *and* have all the energy that went into making the cake fail to cause any harmful side effects. Sorry! This is not a nefarious Neo-Colonial jack-in-the-box that bad men tucked into the heart of "The System", this is the second law of thermodynamics, which applies to everything in the universe, your kinderkommunismus included. Anything we do now that increases the economic power of the contemporary average human being will almost certainly have negative consequences for non-humans and future humans.

The *only* two exceptions to this rule are radical technological changes or reducing the number of human beings. What about *really* reducing the number of people on the planet? Forced sterilisation and euthanasia? One child policies? Again, in direct conflict with liberal values. Problematic. Unacceptable. Taboo. Nazi. Bummer. We'll come back to this, because it's *juicy*.

So that leaves us with technological change. Like, *actual* solutions, like actual clean energy. Which I guess is what we've been saying all along, and I presume why this Cursor Miner song is a positive one about Clean Energy and not a negative one about capitalism.

There is the exact opposite argument - worth considering but I think faulty - that the people in the future will be so much richer than we are that they'll be able to cope with environmental damage, therefore we're better off helping poor people *now*, rather than those hypothetical rich people in the future. But without resources, and without a living ecosystem those people will *not* be rich. The estimates for how much the economy will "grow" if global warming really

kicks in is -20% year on year i.e. the biggest shrinkage and impoverishment in our entire economic history. Coronavirus will be nothing in comparison.

A Green New Deal that takes into account global inequality is essential, not because inequality is the cause of the problem, but simply because *increasing* inequality in a world that is becoming poorer via environmental devastation will lead to even more poverty and utter chaos. And it's hard to fix big shit if the organisations in charge of fixing big shit are degenerating into incoherence. As they are. Maybe we should have better safety nets in place to prevent disruptive technology changes causing disproportionate suffering for the least well off, but I would put that as maximum no. 7 on the list, beneath *the search for solutions*.

But to be honest I don't even think we are there yet. What I respected about XR in the beginning was the fact that they seemed clued up that it isn't really about suggesting solutions, it isn't really about blaming people, it's about answering the following question: *What would an institution capable of solving this problem look like?* Because right now it's plain as day that our current institutions are incapable of anything this significant. They would be incapable of finding a solution untainted by bias and wishful thinking, they would be incapable of implementing that solution on a global scale, they would be incapable of measuring and reporting on the outcome reliably. So step one is proposing how those institutions would work. This seems like it would waste precious time we don't have, but there doesn't seem any other alternative. Note that this is a very different project than some kind of magical system change, which XR seems to have degenerated into.

The presentation of Cortez's Green New Deal sends the message to many that party ideology is higher up their priority list than saving the planet, it's not a good look. And writing into the GND a commitment to make the average person materially richer in the process is more than a little irresponsible. And likewise with Extinction Rebellion's incessant messaging about inequality. I thought the whole point of the Extinction Rebellion was that they were a-political. And yet they constantly glue themselves not only to boats, but also to Rousseauesque Edenic superstition and leftist dogma.

If leftwing progressive parties keep tangling up their ideological wishlist and pet peeves (for this is how it appears to the opposition) with ecological rescue attempts, then we're screwed - even on the vanishingly small chance that they manage to gain power, everything will take too long to implement and become too complex and mired in political disagreements. You are selling planetary survival in a way that is palatable to only half the voting population.

Planetary survival should be the easiest fucking sell in history and yet you've somehow screwed it up. Sarcastic clap for you.

“House on fire” analogies are trending like crazy these days, so here is one. It's as if, when a house is on fire, the fire department turn up and say, we're going to rescue all these people from this burning building, oh and while we're there and things are burning anyway we'll take the opportunity to strip that ugly wallpaper off, oh and maybe as the kids are leaving the house we have an educational opportunity to give 'em a quick chemistry lesson about how fire is actually a reaction with the oxygen in the air? And then one fireman pipes up that he heard that latino maid in the burning house was grotesquely underpaid for the hours she works, so he says they should rescue her first... then another fireman chips in with something about how, no, the latino maid is paid exactly what the going market rate is and how the market should set wages and how he actually kinda likes that wallpaper, then someone objects to the word “man” in the title “fireman”, then someone says they should just let the straight wyt guy burn, and then they all start arguing<sup>18</sup>...

There isn't TIME for this, people. The building's ON FUCKING FIRE. FOCUS, GODDAMMIT!

No matter which side of the culture wars you're on, saving the planet makes sense, massive investment in green technology makes total sense, and via that investment you create new jobs. That's it! You've already killed two birds with one stone. Nice. Please do not make the list of birds to kill longer and longer until it sinks beneath the waves of bickering ideologues throwing stones at each other.

And, at its heart Global Warming is a very simple problem. There's just a few (well quite a lot of) very simple molecules being released into the air and reflecting infrared radiation. Simple. Social justice is fraught with philosophical grey areas and ill-defined concepts. We know precisely what "3 degrees hotter" means, but do we know how much a "family sustaining wage" really is? Do we know what "equality" really means? How do we know we have achieved "Justice"?

I'm scared that the left-right culture war is such a big thing in the States, that winning it becomes the only thing that matters, that the future of the planet is

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<sup>18</sup> Read "[Ship of fools](#)" by Ted Kaczinsky. Even a nutter can sometimes make a salient point.

another political football in yet another round of our favorite sport: "Tribal Feud". Can we just sort out the future of Earth first? Then, when we have some guarantee that the planet's life support systems will stay fairly functional for the next 100 years, we can then spend as much of that time as we like arguing about social justice. Again, I can imagine how shocking this sounds, because the injustices of our society have been made a sacred cause by the left - it is impossible to question it or prioritise it. (Similarly "you can't put a price on human life" and other meaningless platitudes). Well, you either prioritise it or fail. I'm reminded of the Eisenhower box. There are things that are urgent, and things that are important. Both climate change and social justice are important, but climate change is currently more urgent than social justice. You don't get to be social or just without a well functioning biosphere.

## Those gigawatts transformed our hearts

Hmm. I gather from this awful sappy lyric that Cursor Miner subscribes to the hippy dippy notion that there is some spiritual energy-within-energy that somehow links up the ecological and moral questions we're talking about here. Somehow plundering mother earth for her oil and coal has tarnished our souls and made us evil. A joule of fossil energy is tainted, whereas a few solar watts and a drop of hemp oil will clean up those chakras just fine. Conversely, any project that is undertaken with negative spiritual energy will end up being destructive and killing the planet. Not for any particular physical, chemical or biological reason, but just through dint of being *out of balance*. *Woooo*.

Sure, I read over and over that environmental concerns are deeply linked to social justice regarding the economically disadvantaged, indigenous people, gender, etc. And it's all "interlinked". But I've yet to see any coherent argument why this might be so. Really. Maybe I haven't found the article that explains it, if so please point me there, but I always find if I dig into it there's no real substance to the argument, it rests on some emotional intuition, or it implicitly or explicitly rests on yet more postmodern whiffle about how reality is constructed from power structures in language.

We *feel* like it is all part of the same problem. We *feel* that environmental destruction is a product of our greed, our negligence, our aggression, of our lack of respect, of man's tendency to dominate women, of our speciesist-imperialist wish to dominate and control everything including nature. I feel that feeling, yes, but unlike you I then think some thoughts. Thoughts like: *Is it* though? Can you explain the connection in a direct and unambiguous way? Can you explain it via causation, not just correlation? It feels like it is some spiritual malaise

that we need to change, but *is it*, really? What the fuck is a spiritual malaise anyway? I don't know about you, but last time I turned up my gas central heating, I don't think it was because of a malicious craving to subjugate the feminine cosmic spirit, I think I did it because my fingers were chilly. Not an especially *noble* motivation, for sure, but not exactly malignant.

I could quite confidently state that if everyone converted to Jainism, then our ecological impact could be dramatically reduced. They adhere strictly to a vegetarian diet and minimal, non-materialistic lifestyle. That's probably right. It wouldn't be a bad thing to do. But my thought process here was thinking of all the world's religions, and picking the one that I now know has the values that would most neatly alleviate our current problems. It doesn't mean that we're all somehow lapsed Jains, which was the one true religion all along. [Captain hindsight](#) to the rescue.

A favorite catch phrase for the Eco-Woke is “solving <eco thermodynamics problem> must be tied to solving <social justice thing>”. No, it mustn't. If we tie them together both problems will become *exponentially* harder to solve. My guess is that people who say this have never actually solved a single tricky problem in their life. I wonder how they manage in their daily lives... “The problem of tidying the lounge must be tied to the problem of doing the tax returns”, “The problem of removing viruses from my hard drive must be tied to the problem of my bike's slow puncture”. And then, inevitably: “the problem of lounge-tidy-tax-return must be tied to the problem of virus-puncture”. Problem solving hell. How does this make any of it easier? The most successful problem solving efforts *break down* big, tricky problems into smaller, more digestible chunks. Problem solving is about *decoupling* issues so that they become quantifiable and manageable. Saying that our environmental problems need to be tied to our social justice problems *guarantees* a shit show. If equality of outcome for the entire population of Earth is a prerequisite for maintaining it at a sane temperature then we might as well throw in the towel now.

It's not too hard to argue for social justice purely on its own merits, it's not too hard to argue for environmental protection on its own merits, but to pretend they're all part of “the same problem” is either pure magical thinking or disingenuous political sleight of hand that your opponents find painfully transparent and easy to exploit to maintain their hold on power, and you'll need that power if you want to tackle any of this.

I suspect this environment/justice same bag idea stems from a number of sources. One is a general New Agey type superstition that various forms of

oppression cause bad things to happen *as a result* of their immorality - not dissimilar to ancient religious ideas that environmental disasters were punishments of human sins by God(s). The second source is that politics is now about personality type not reasoning. The third is just sheer political opportunism. The fourth *is* actually an insightful one about meta-problems.

Regarding the first, there is seemingly some impossible hard to shake cognitive bias in the human mind that says that if there is evil in your heart (whatever that means), then your actions will surely bring about bad things. The climate disaster is somehow a punishment for being bad immoral people. Mother nature is punishing us for being disrespectful and greedy. Or something. Well, no. Mother nature *doesn't* judge in that way. Bad things happen as a result of actions that then make bad things happen, not the relative virtuousness of the souls who enact them. You can be a motherfucker, and inadvertently bring about something great (see the Winston Churchill debate). You can be a saint and inadvertently bring about great suffering (see the Jesus Christ debate). Morality, when it applies to global problems affecting billions of people, should be measured where the rubber hits the road, not by good intentions or spiritual purity in people's hearts.

Yes, it's all interconnected. Does that mean we have to solve every problem at once with a single unified blast of pure spiritual Gaia-energy? No, it doesn't. As I said, precisely *because* everything is interconnected and complex, that's *why* we need to reductionistically break problems into smaller sub-problems, because to do otherwise is simply to invite total catastrophic failure.

What the tie-it-together statement might reveal about those who utter it is that they can emotionally connect with <social justice problem> but not the <thermodynamics problem> so they stick the two together in order to gee themselves and others up a bit.

Another source of this belief is the obvious fact that the type of person who is concerned about the planet is also concerned about injustices of other kinds. I don't call that a deep link, but for sure, memes travel in clusters ("memeplexes"), and we tend to hang out with the kinds of people who swim in the same meme-pool. I am against oppression, I am against ecological destruction. They are linked because both of us are smart, compassionate beings and we believe in both. But that doesn't mean they're *causally* linked in the real world. It might be the case that if this particular meme-plex rises in popularity and influence, the other good stuff will come for the ride, and that will be a good thing. Maybe, if we were all hippies, the world would actually be better. Maybe, if we were all

female, none of this shit would have ever happened. Maybe. Actually, certainly, because without sperm we'd be extinct *already*. But are you sure that *all* the memes that are attached to your memeplex are a good idea? As you can tell, I'm not.

As always, in all major acts of stupidity there is always a germ of intelligence. If <thermodynamics problem> and <social justice problem> are both in turn caused by the same *meta* problem, for example game-theoretical dynamics that make short term profit more desirable than long term investment, or our global sensemaking apparatus having been captured by corporate interests, then *now* you have a good case. A good thinker to listen to regarding such things is [Daniel Schmachtenberger](#). My sense is that the insightful underlying critique of the meta-problem is indeed what originally drove the "let's put all the problems in a single big bag and stamp on them" movement, but the levels of misunderstanding and miscommunication around it are immensely distressing.

One of the major meme's that's coming along for the ride with global warming is anti-capitalism. Capitalism *clearly* being the meta-problem that is causing both inequality and environmental destruction. So let's dig into that.

## Smash Capitalism to Solve Global Warming!

A big motivation for the "tacking on" of other agendas might be the idea that, seeing as there's going to have to be a revolution *anyway*, we might as well get some more good shit done in the process. It's a kind of opportunistic, realpolitik pragmatism that is indeed tempting. If we get rid of The Man, then we can do all that other decent stuff he was stopping us doing. Let's go full in on THE REVOLUTION. This is an attractive and glamorous proposition. It's the kind of thing that gets people out of bed in the morning. It's the kind of thing that wins torrents of blue thumbs and red hearts (though I do worry that if our thumbs are blue, then our red hearts don't appear to be doing their job very well). And it could actually work, in that when one elite loses credibility and falls from power, a new elite with a new set of values can make sweeping changes to many areas of society. The political system of my adopted country is just such a system, it had to be redesigned from scratch after the previous one ran into, erm, "a few difficulties". To a naive europhile foreigner me it does indeed seem better than Britain's creaking, crusty old system. The declaration of independence also seems like it was a bit of a home run<sup>19</sup>. All hail the new memeplex.

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<sup>19</sup> Though starting a new country from scratch seems like a tricky proposition now. The only solution seems to be starting [a new country in space](#).

It's not without precedent, and I feel the appeal for sure. But what we're veering towards is the argument that "smashing the system" is the only way to save the planet. Wait a sec tho... As I said incessantly and boringly, the financial system is formed by a huge number of complex rules and regulations, money flows through these regulations, acting according to those regulations, or not. Regulations that we make, that we need to enforce. Slavery was one institution that arose under capitalism. The reason slavery is not common in capitalist societies now is because it became culturally unacceptable, and then it was abolished. You could quite easily have argued back then that it was necessary to "smash capitalism" to end the practise of slavery. But it actually wasn't. It was more a case of, well, actually stopping slavery<sup>20</sup>.

You could have argued that the hole in the Ozone layer was being caused by sinful capitalism. Our hubristic human greed for sweet smelling fresh food and sweet smelling fresh armpits was going to end up irradiating us all in a bath of killer U.V. rays, in an act of divine cosmic judgement...

Instead, it turns out that you can use other stuff in fridges and spray cans. Huh, waddyaknow! There were two sides to the fix. The first was the Montreal Protocol on substances that deplete the Ozone layer (the political will), the second was developing the alternative chemicals to CFCs (a technical solution), both components were necessary, without the political will the technical fix would have not been employed, but neither of these components involved giving up on refrigerators, and neither involved Smashing The System™, and neither of them involved putting up with smelly armpits. Our environmental

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<sup>20</sup> You could argue that "we're all still slaves, man!", but that would be pretentious melodramatic bollock-tears cried out from underneath the blinkers of your modern privilege. Either that or you are trying that dumb tactic of making a false equivalence between something vaguely bad now, with something genuinely terrible in the past. You would like to stop people becoming "slaves" to banks through debt, yeah, fine, so why not just say that? Otherwise you end up saying vacuous things like "slavery didn't go away, it just evolved". Yeah, like horse drawn carriages didn't go away, they just evolved. Whale oil lamps didn't go away, they just evolved. Flint axes didn't go away, they just evolved. Are you seriously suggesting that being forced to get a loan and struggling to pay it off is as bad as being forcibly separated from your family, chained with iron manacles and being regularly flogged to make you work harder? Are you really trying to tell me that we could re-legalize slavery and that people wouldn't actually be so much worse off? What amazes me about this flavour of argument is that people are trying to paint themselves as allies to the disadvantaged by equating them with the most oppressed people in history. Yep, me and the debt slaves and the real slaves, we're all here on this side, on the same team, aren't we, bruv? If you attack us you're attacking the real slaves! Seriously? You clearly know nothing whatsoever about the history of slavery if you can casually buddy up to it in that way. The real picture is that me and you and the developed economy debt slaves are all here on the same side, the side of historical privilege, and the real slaves are somewhere else, having led lives of suffering we can barely imagine. Aren't false equivalences like this are a deep insult to history and an insult to those people who suffered and genuinely put their lives on the line to create real progress?



problems are now on a much vaster scale than they were in the late 80s, but the structure of the solutions remain the same. International treaties, technological advance.

It's never very clear what parts of capitalism people want to smash. Presumably not the entire idea of exchanging goods and services. Good luck with your "build your own laptop from scratch!" carpentry workshop. Presumably not the idea of a fungible numerical measure of value in order to lessen the bureaucratic overhead of such exchanges. Presumably not specialization of labour. Presumably not economies of scale. Presumably not the idea of large investments of capital in future projects (green energy infrastructure requires precisely such investment). So once you have accepted all these ideas, we're largely arguing about regulatory details. And, surprise surprise, arguing about regulatory details is precisely what's needed. Not a petrol filled Club Mate bottle in sight. Yawn!

You might argue that "The corrupt capitalist elite will never let us change anything! We need to get rid of them before real change can happen!". This is a spectacularly poor argument, because you somehow assume that the capitalist elite will be more welcoming of being overthrown completely than of acquiescing to whatever change you say they're stopping you from doing. Says Mr Evil Capitalist: "No, I'll never submit to your demands to end fossil fuel subsidies! Never! Over my dead body! Oh, but completely overthrowing the entire societal edifice within which I gained all my power and influence? Fine, there you go, no problem at all. Have a lovely time with your new, what are you calling it, 'system', have a simply *super* time with that, won't you!"

Which brings us to the toasty old chestnut of what to put in its place once you've "smashed" it. If you know of another system that specifies in detail what seven billion people should all be doing next week and is *guaranteed* to work better than the current one please *don't* enlighten us, because it would take several lifetimes for you to describe it.

I know full well that capitalism has driven ecological destruction, but then any other system that makes increasing human material wealth a fundamental goal will also do that. It doesn't matter how evenly, justly and munificently that wealth is intended to be distributed, it will still have destructive side effects unless those side effects are specifically mitigated against. It's hilarious to see people handing out communist flyers on climate marches. As if China and the Soviet Union's ecological record was squeaky clean. Rrrriiight. In fact, it is way

worse than the capitalist west. The idea that some kind of "just system" will miraculously produce less carbon dioxide is a fairy story.

Take a look at the balance of private and state owned companies on this breakdown of the [biggest emitting corporations on the planet](#). State owned companies emit the most. So, what, that's private capital's fault, right? Or are all the states part of the "system" too? So we should have no economy *and* no government? Where are you going with this? And in case you think it's all the western, white, neocolonialist's fault, what about the entity at the top of the list? And number five, and number eight? And nine ten and eleven and etc. etc.? You can blame Britain for the industrial revolution, sure, but then you can blame Africa for the first use of fire.

My one question to anyone who thinks we need to get rid of capitalism to save the planet is this: How many times harder than Brexit do you think that task will be? Similar scale of challenge? Of course not, we're not just talking about international regulations between one country and the others, we're talking about almost everything that governs how the economy operates, everywhere. Ten times? Probably more than that, you'll be inventing a system from scratch, not just disentangling one system from another. What about 100 times? Still not, it would probably need to be implemented multi-nationally to have any real effect, we've got, oof, nearly 200 countries, all of which will have to be 100% on board. The number of different compound relationships between N countries is big. If a Brexit is a unit of measurement for massive complexity and disruption, smashing capitalism would be measured in the Kilobrexits (KB), Megabrexits (MB) or even the Gigabrexits (GB). And look how smoothly Brexit went.

"It's all the fault of X", or "if only they just did Y", or "vote for Z to make it all go away". Ever notice how it's always the biggest problems that people have the simplest solutions for? I think there must be some threshold of complexity where people just don't see it anymore. In their daily lives they look at something like, replacing their kitchen, and can visualise the pipes and electrics and cupboards and so on and more or less see how complex and difficult that would be. Replacing a whole kitchen, phew, seems hard! But when it comes to replacing a system involving a whole society of millions of people. Well, how hard can *that* be, right? I mean it just so fucking *obvious* what's wrong! Let's just pile in! Smash it! Replace that shit! If our microwaves were just more *equitable*, then they could cook our food, wash our dishes, refrigerate our food, and make brilliant coffee!

As planet cooling strategies go I would rank smashing capitalism alongside letting all our H-bombs off in areas with a lot of dark rocks. It could work, but the fall out would be far worse than the problem you're trying to solve.

I suspect buttonitis is at work again. The tool-tip you get when you hover over the capitalist button is "Click here to let market forces will sort everything out" and the tool-tip for the socialist button says "Click here to let the state sort everything out", and you may find one or other of those sorting-out machines to be more or less compelling. Unfortunately neither of these buttons work. When it comes to our biggest problems, no buttons yet work. This is why they're still problems. These are things without sorting buttons. We need to build new sorting-out-machines from scratch, and these new sorting machines will have to work alongside the old sorting machines that have indeed worked more or less OK till now.

No ideological belief button will sort all our problems out. We, the people, have to actually *do* it. Each new problem, each new injustice, each new prejudice, and each new industrial process with harmful side effects has to be combatted on its own terms, in the way best suited to solving that problem. All the "The System" needs to be is something that has enough surplus capital to fund research into the solution, and something that can enable those solutions, once found, to be put into law, enacted and automated as best possible without idiotic obstructions from vested interests. Embedding any kind of fixed superstitious ideology into that system will make it less flexible, and less able to solve those problems. That's not to say there aren't immense ideological barriers erected by capitalism that make solving problems hard, but there are also some particular things about capitalism that make solving problems easier. [You could argue that Buttonitis is a symptom of capitalism. But I think not. Religions are arch-buttonitists, and religion precedes capitalism by a good long while.]

Normal, sensible people understand, I think, both that finance is a useful system, but also that finance needs to be regulated. If my business model consists of taking money from people in exchange for not shooting them in the head, and lo and behold my business model is successful and as a side effect quite a few people get shot in the head, then this is not a failure of capitalism, it's a failure of *regulation*. It is the job of the state to ensure that my business model is illegal (or better still, unprofitable). If you think that the bad things that capitalism does is a result of the bad people that designed the system, you are quite frankly, in need of an education. If you want to see what happens when "the system" goes away there are plenty of things to study. The illegal drugs economy, for one. Drug cartels display exactly the kind of behaviour you'd

expect to emerge when the current system no longer applies to an economy. It is juicily ironic that the same people who argue for the decriminalization of drugs argue for the criminalization of every other business on the planet. If you get rid of capitalism, you won't end up with no capitalism, you'll end up with a worse capitalism: all the bad aspects of capitalism would be still there but many times more pathological if "the system" went away. And this is because the bad aspects of capitalism are not exclusive of capitalism, they are way more fundamental problems of how creatures like us struggle to obtain resources.

If a complex system seems to be behaving badly, there is a sliding scale of intervention (this also goes for legacy software systems btw):

- 1: "Ignore": pretend that everything is fine. The work then becomes a matter of propaganda to persuade people of that against the evidence.
- 2: "Tweak": try to improve the system incrementally, swap out small parts for something better. The risk is that the tweaks inherit the corruption of the system they're a part of.
- 3: "Trash": burn the whole thing and start from scratch.

I have to admit that my personality type is immediately attracted to the "Trash" option. There is a glamorous sheen to it, isn't there. Getting rid of everything sounds clean, smart, assertive. Starting something fresh sounds exciting and promising. We can surely avoid all the mistakes of the past now we have been bestowed with the omniscience of hindsight. Occasionally this *has* worked in history, but it always seems to involve either colonising a country or fighting a massive war or both.

The trouble is that whilst you can clearly see mistakes of the old system, you can't see the effectiveness of it. Whilst the flaws are glaringly visible, the bits that have worked seamlessly since the days of the Pharaohs are more or less completely invisible. There might not be a single human being alive who knows why some weird quirk in this system works, but it might still work. (There isn't even a word in English for a "bit that works", what is the opposite of a flaw?). Effective gizmos and widgets have accumulated within this system over hundreds of years of not going wrong. And every single one of these invisible but effective parts of the old messy system are all mistakes waiting to happen in your new shiny clean system. So as I get older I veer more towards the "Tweak" attitude (it is my ultimate ambition to end up at "Ignore").

An essential habit of thought to get into is this, whenever you have one of those days where "everything goes wrong" actually mindfully pay attention to how

many things could have gone wrong but didn't. You got some water from the tap, it didn't go wrong. You put the kettle on and the water boiled. Fine. You put the water in the cup. It's safely in there, brewing away. Your computer turned on. Every single one of the keys on the keyboard successfully inputted the correct letter into the text editor, all day. The front door locked and unlocked successfully. And let's hear it for your body: your ten fingers moved around, uncomplainingly doing stuff you asked of them, all day. Your lungs took many, many breaths, and your heart beat many many times, without which you would be dead within seconds. And what do I do? I moan about my aching knee. Let's have some appreciation here folks.

Even the disruption of the global pandemic, which is causing levels of upheaval and difficulty unprecedented in modern times, taken as a proportion of all the things that *could* go wrong is miniscule.

To change a *single* law from being unjust to just takes immense amounts of time and effort, it can take a team of lawyers decades to do. How many laws regulate what capitalist businesses can and can't do? Thousands? Millions? I have no blinking idea, and neither have Extinction Rebellion, but to improve the system takes effort to replace those laws with other laws that are at least as effective and robust, and that is what you are asking for when you want to "get rid of" capitalism. The job of making capitalism sustainable and equitable is *absolutely miniscule* compared to the job of replacing it with something else.

The whole eco-anti-capitalist thing reminds me a bit of the attitude to the police that some of us had in the 90's. Since we wanted to have fun and get high, and the drug laws were stupid, then the police were bad, and therefore fuck the police. We'd be better off without a police force, LOGICALLY. And, lo and behold, the kids of today are now calling for the same thing, but with regard to the thing they care most about, which for some strange reason isn't drugs anymore. No matter that the safety and security that enabled us students to have enough leisure time to smoke weed and chill out to The Orb came more or less as a direct consequence from living in a country with an effective rule of law and a relatively uncorrupt law enforcement system. Similar arguments apply today. If you defund the police then the people you are intending to protect will suffer *more*. My one simple request is that we just update the stupid law, please don't trash millennia of progress. (I vaguely remember our friend Chris used to say things like this in the 90's, we roundly derided him as sounding like a 45 year old Tory. Now here I am, 45 years old, Chrissing away like a total Chris. But if even *I'm* Chrissing then you have to wonder where Chris ended up. Probably not glued to a boat).

## Bullshit Capitalism is not Capitalism

So whilst it might seem that I have come at you like a proper sociopathic capitalist bastard over the past few pages, I agree that neoliberal free-market fundamentalism and rampant consumerism has been screwing many things up since the mid 70s. Not least music, not least the environment. But do not mistake free-market fundamentalist consumerism for something older and more moderate, this older system has been driving progress since the middle of the last millennium.

This older system *gave* us what we value on the left - the New Deal in the US, the Welfare State in the UK, brought better technologies to the masses, gave more leisure time to women and the working classes, and came with a huge increase in scientific and cultural knowledge. Are you *sure* you want to delete that? Maybe do a back-up first? Wiping your cultural hard drive is one of the easiest ways to get rid of viruses such as neoliberalism, but I suggest we put more mental work in, and actually delete just the virus, or better still install some anti-virus software that prevents similar things happening again.

Getting back to the subject, can you actually measure exactly how a toxic capitalist ideology affects carbon output? Maybe by comparing the per-person CO<sub>2</sub> output between countries like Sweden and the United States:

US: 15.53 tonnes PA

Sweden: 4.5 tonnes PA

Ahaa. So, very roughly we can say left-leaning "Nordic Model" type countries have about 1/3 of the carbon output of the free-market unconstrained consumption based ideology of the United States. That seems like a lot, doesn't it? It seems like we should actually think about that, doesn't it? Or am I missing something here? Would it be so terrible for Americans if they suddenly had their standard of living slashed to that of... Sweden?

This would seem to contradict the point earlier about wealth being more correlated with CO<sub>2</sub> emissions than anything else, but I think that relates to wealth distributions within countries rather than across countries. The "cultural norms and habits" of different countries would indeed appear to have a big effect on how harmful they are.

In fact a more meaningful measure of efficiency is to look at GDP-per-emissions (roughly how much wealth a country generates per amount of CO<sub>2</sub> released, or how effectively they turn fossil fuel energy into cash). Affluent but left-leaning countries such as Norway, Sweden, Iceland and France come 5th, 6th, 7th, and 9th respectively. The U.S.A comes 80th. Abysmal. And in case you still think good old communism would be helping anything here, check out how many of the worst offenders are ex-U.S.S.R countries. China, nominatively still a communist country, is 5th from the worst in the world.

The rough take home here is that *corrupt* bullshit-capitalist oligarchies and *corrupt* ex-communist oligarchies are shit at this game, and not-so-corrupt European countries that combine strong welfare states with well regulated capitalist economies do best. Which is what I'm arguing for here, and what I've been arguing for ever since Cursor Miner's stupid book started. But the winner of that game by a country mile is Chad. Go Chad! I don't know why it's Chad. But let's move all the hippies to Chad.

So there, staring us in the face is the fact that the US could reduce it's output by a third and still be no worse off than Sweden (where the median person probably has a higher quality of life anyway). If we're looking for a place to start, we could start with that obviously completely and utterly unnecessary 3 billion tonnes per year that simply comes from Americans being ignoramuses.

That said I think that it is still America and China that are our best hope for change. Because they're the only countries who seem to be able to do anything quickly round here, and if they succeed, the rest of the world will follow. And it's happened before.

## The American War Effort

It only takes a briefest glance at history or economics to see that post-70s American-style neo-liberal economic ideology is bullcrap. The Green New Deal, as well as making connections with the great depression, also makes obvious connections with the Second World War. I was struck when watching Ken Burn's documentary on America's WW2 by the insane economic statistics. The people building warships and planes and so on were working 70 hour weeks. *Intense*. On Sunday, their "day of rest", they only worked 8 hours. Their "rest" was what I call a hard day's work. That gives you a sense of the urgency of that project. The car factories, in the year before the war churned out over one million cars. For the duration of the war they made only 169. A massive nation,

a nation in love with cars, got by on a small carparkfull for that entire time. Why? Instead the factories were making war planes. The annual production of planes in 1939 was 3000, by the end of the war it was 300,000. An entire billion dollar industry turned on a dime in less than a year and produced a completely and utterly different product in vast quantities.

The speed and efficiency of that change is mind blowing. Why the fuck can't the energy industry do the same now? Wingey-wingey about market forces? Irrelevant. Wingey-wingey adapting to consumer demand? Blather. Wingey-wingey what about shareholder return on meh-meh? Not important. What about the invisible hand that blahs the inflation-bloviolate spewforth? Competently guided by a highly visible one, you incompetent spivs. What about whine-gripe competitive survival-bunk of the leanest entrepreneurial hogwash blather? Out-competed by unified cooperative focussed government coordinated effort. What about wasteful bureaucratic blah-whinge-drivel state red tape gripe-whinge-can-I-have-more-free-money-for-my-loss-making-coal-business-please-mr-government-state-inefficiencies-that-keep-me-rich?

*That* government was fully capable of being staggeringly effective, you lying scum. The reason that the government can't do that now is that *you* have corrupted it.

The extent of this mobilisation was astounding. A comparable effort would be if we forced all the car companies to stop making cars and start making wind turbines, solar panels and tidal generators. It sounds absurd, unthinkable, but something exactly like that *really happened*. It's really not so different in magnitude. The only reasons it seems unthinkable now are:

- 1: We have become so used to neo-liberal hogwash that tells us that human reason and basic good sense can have no say at all in what industry actually produces.
- 2: Because the "enemy" isn't a person and doesn't have a nasty little moustache we can't get all tribal and chest-thumpy about it.
- 3: If we do manage to get tribal about it, we end up arguing about irrelevant things like the intersectionality of deforestation and rape culture<sup>21</sup>.
- 4: The government has squandered so much of its credibility by now that nobody's going to do what it tells them anyway.

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<sup>21</sup> If you find a paper about that and read the *whole thing* you win a free copy of all my albums.



Despite all this "state interference" US manufacturing capability expanded by an enormous factor, the U.S. economy emerged from the war the strongest economy on the planet, their economy *doubled* in size during the war.

Let that sink in. By massive top-down government intervention, the economy doubled in size in less than a single presidential term.

Unemployment fell from 14% to 2%. Say what? What the actual renationalised fuck? In some ways the war solved the depression in the U.S. It seems to me that the American war effort completely exposes the imbecilic pernicious lie that government intervention damages the economy. And with any luck, the interventions required to rescue our economies after the pandemic will wake people up to this fact. I wouldn't hold your breath though.

And besides, if your big boy market forces are so wonderful and efficient and robust, then surely they can cope with a bit of government intervention? Or are they so fragile and pathological that they require consistent government handouts to function at all? Oh, look, what's this here? massive subsidies? Taxpayer bailouts? Who's doing the scrounging here? I say allow capitalist market forces to kill these bastards by their own rules. Because if competition is good, then let the corporations compete *against* the government, let them be judged by how well they actually serve the needs of their coerced "customers", rather than using the government as a crutch in order to limp on, wastefully burning the precious resources of this planet.

It is no secret that western governments are less competent than they were. But this is not an argument for getting rid of them. It's an argument for the exact opposite. I believe that capitalism is a powerful tool. But that tool has to be wielded intelligently.

The threat of Nazism is a lesser one than the threat of complete planetary ecological collapse, surely. And yet this kind of mobilisation is utterly absent. We are completely devoid of that sense of urgency. We are completely devoid of strong inspiring leadership. We are completely devoid of that sense of unified purpose. We are completely devoid of that conviction that we can pull together and collectively solve big problems. We have completely forgotten that by sheer act of will, we can as a society get to work on a common goal and lift ourselves beyond apathy and self indulgence and meet a terrifyingly difficult challenge together. It was done. Despite appearances, that generation were the same species as us, they did it. Likewise with the British NHS and the welfare state.

Likewise with Roosevelt's New Deal. They were all difficult, they were all done. Likewise the Green New Deal. It could be done. It has to be done.

## Places To Start

OK, so we've done a lot of moaning here, and of course it's far easier to moan about what other people are getting wrong than to suggest what they should be doing right. So now Mike and I will collaborate on actually making some more positive suggestions.

The only way to prevent ecological destruction is to incrementally *force* the capitalist system to conform to the limitations of the planet, and then allowing market forces to adapt to these incremental restrictions. And again, that's about introducing and enforcing rules and regulations, not about an exciting and glamorous political revolution (though it may be useful to *brand* the boring rule changes as an exciting and glamorous revolution, for the purposes of engagement and support, but careful which political fuses you light).

First, and most obviously, stop subsidising fossil fuels by five trillion a year. We're spending 5 trillion tax dollars a year on roasting the planet. I wish I had the writing chops to put into words how stupid this is, but words fail me. It's not just that evil fossil fuel companies are so profitable that we can't stop them, it's not just that the black stuff burners are so damn flush that they're giving out free money to everyone to make them fall in love with them, it's that OUR money, that could be spent on OTHER things (e.g. research into clean energy), is being GIVEN to the companies destroying the planet. FOR FREE. Every year we hand a stack of 100 dollar bills that's 2 metres high covering an area the size of five football pitches to people who spend it on a giant frying pan in which to flambe our grandchildren. Genius, mate.

We could just stop that tomorrow. Couldn't we? What's the problem here? Am I missing something? Why are we moaning about how complicated everything is when it's that fucking simple?

Fuel prices might go up, no shit Sherlock! Oooh so scary! Maybe they'll be positive instead of [negative](#)? But maybe that'll make you think twice before burning it. "But it'll hit the poorest the hardest". No it won't, people who are actually poor don't have fucking cars, or if they do, then that's probably why they're poor.

So then another place to start is making illegal the kind of lobbying that gives fossil fuel companies so much political power that enables them to keep this shit happening. The problem to solve there is preventing the power of capital from corrupting the power of the demos. That's not destroying capitalism, that's just making it sane again. We need to rebuild the fences around parts of society that are NOT FOR SALE. I've actually no idea why political lobbying is legal in the first place. What happened to the separation of church and state? Now money is our religion shouldn't the same apply? It seems like a massive oversight that should just be immediately addressed. Couldn't we? What's the problem here? Am I missing something?

Next we need to severely limit large corporations' power by raising corporation tax. I say "raising" but in some cases it's more like "reintroducing". Taxation is the way we funnel money and power around the system, and if the taxation system is screwed then everything else is screwed.

And speaking of tax, let's just tax the bejeesus out of carbon. We have to estimate how costly, over the next 100 years destruction caused by fossil fuels will be, and slap that cost on as tax. The mechanisms for doing this already exist (varying VAT rates etc) it's just a matter of passing the damn law. Not rocket science. We already have a tax system, let's use it. Let's radically tweak a few numbers within that system. And let's make calculating and putting the carbon footprint of a product on the packet mandatory, so you know just how destructive your heavily taxed purchase is. Not hard, we already put the nutritional content of food on the packet and that's probably far more complex, chemically speaking.

People will whinge about tax, but fuck them. Fuck the whingy fossil fuel industry, and and fuck the whingy Gilets Jaunes. If you want to pollute you have to pay for it. If your global empire relies on polluting, then fuck that, and if your small business model relies on polluting, then fuck that too. If you want to continue your business that requires a van, then you can get an electric van that will be heavily subsidised via the massive amounts of tax we've just raised. If you want to eat steak, then fine, but we will tax the fuck out of you. Tax tax tax. I love the word "tax" because it trolls the libertarian right so effectively. It trolls right off the tongue: TAX.

Read my lips: I will tax you until blood pours out of every single one of your most intimate orifices. It's one for you nineteen for green.  
TAXXXXXMAAAAANN.

Don't we tax things we want less of? Don't we do that already with loads of other things, like cigarettes? Wasn't that, like, a normal part of the way governmenty kinda stuff usually works? Isn't this kind of easy? What am I missing here?

But fundamentally, the real question to solve is how to make the economy carbon neutral. That is *the* question, everything else is just a fucking side show. In my head I'm always distracted from this question by melodramatic spiritual questions such as "ohhhhh, woe, how will sinful ignorant man become less greedy and destructive?" as I expressively prance around Primark in my red rags and my white face. But these questions of moral judgement waste time we don't have. You can say that we rich westerners live an extravagantly greedy lifestyle. But again, your moral zoom is limited: "Greed" is defined by what those around you do. By medieval, or sub-saharan African standards, we probably are showered with exorbitant luxuries. But by our standards, we're not. We just feel it's normal. If I go to the U.S. or Australia and I see seemingly everyone living in houses the size of my entire apartment block, and driving cars the size of my entire flat, I think it looks extravagant and wasteful. To those cunts it's normal. The problem with trying to solve global warming by greed-guiling is that you are asking several billion people to completely recategorise what they consider normal, moral behaviour, what they grew up with and take for granted, and that will take decades, or even generations, if it ever works at all. Coronavirus imposed unthinkable changes in consumer habits, a 90% reduction in air travel for instance, and everyone immediately thought, *yes this is exactly what we need*. Except no, when you look at the "massive" savings you see we're headed for a 5% reduction in CO2 emissions, in other words, we're back to the emission rate of maybe five years ago. Big woop. It is something, but decidedly underwhelming given the economic hit. So then: how much green infrastructure could you have built with the money that Coronavirus has cost us? Answer: if you go with one estimate that it's gonna cost *80 trillion* dollars (oof!): fucking loads, maybe even enough. In other words the cash you would waste by puritannically guilt-tripping people might well be enough to decarbonize the economy.

So persuading people to repent their sinful ways is not terribly effective, politically speaking, and it also looks like it wouldn't even be effective atmospherically speaking either. Though I will argue that it *is* absolutely your moral duty to reduce your personal emissions. But I believe that the essence of capitalism's success is in the admission of the fact that changing people's nature is a far harder problem than getting them to work together effectively. In exactly the same way, changing people's nature is a far harder problem than getting them to not destroy nature. Redesigning the *energy* production part of

the economy is easier than redesigning the *entire* economy. Why? Because part of a thing is smaller than the whole thing. Right? Surely that's not too hard to get your head around.

The most elegant solutions to the world's problems don't involve magic, they don't involve everyone "waking up" to some spiritual revolution (though that might indeed be nice I really wouldn't pin your hopes on anything that vague), they involve working in synchrony with the forces of nature, *including* the forces of human nature, to produce a system that works for most people, and most living things, in the present and the future.

If you have any respect for nature at all you need respect for human nature, and you need respect for the laws of nature.

If we really nail the problem of nuclear fusion (see next chapter), we have virtually unlimited clean energy and we will be much better off. This requires huge amounts of capital investment. If you have an anti-capitalist revolution, you will no longer have that capital, you won't be able to build fusion reactors or redesign energy infrastructure, and you will be fucked. And that is the last time I will mention capitalism<sup>22</sup>.

## We Still Have Hope

So I said I'd offer hope, and it may not seem like I have. Ha! But I have offered a few kinds of hope.

One hope I have given you is that the system we currently live in can make the changes necessary, because it already did things of similar magnitude.

My real hope isn't for us, or the poor fuckers who will see things falling apart and have to clean our godawful mess up, it's for the people on the other side, 150-300 years from now, the ones who've learned something. The ones who live under the systems of governance that were formed in response to the crisis. The ones who'll sift through our digital detritus and find out exactly what we did wrong. The ones who will benefit from the creativity and innovation exhorted during the times of extreme duress. The ones who will be true responsible custodians of our amazing living natural world. The ones who transcend our destructiveness and create intelligences and wisdoms beyond ours. The ones

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<sup>22</sup> C'mon Mike you know that's not true.

who will venture out into the rest of the universe and create countless more living, diverse and beautiful ecosystems on other worlds.

I still believe *that* world, or rather *those worlds*, will be better ones. And this is something I'd like to talk about next. I'm already going to break my rule that I have two songs about each topic. Because "energy" is kind of trending right now<sup>23</sup>, it gets three.

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<sup>23</sup> Energy is always conserved, therefore cannot "trend". Jeez.