

Jon Spooner: [00:00:02](#) Hello and welcome to Live from The Space Shed, a podcast all about space and science hosted by me, Jon Spooner, and me

Mini Jon: [00:00:10](#) You mean me

Jon Spooner: [00:00:12](#) Sorry. Yes, I mean you.

Mini Jon: [00:00:14](#) Mini Jon!

Jon Spooner: [00:00:16](#) Mini Jon! Long story short, a few years ago, I accidentally set up my own space agency based out of the shed at the bottom of my garden. Turns out that if you go around telling people you're the Director of Human Space Flight Operations for the Unlimited Space Agency, wearing an orange space suit, more people than you might think want to play along. And now the British astronaut with Tim Peake is our patron and he took me with him to space.

Mini Jon: [00:00:37](#) He took *me* with him to space

Jon Spooner: [00:00:39](#) Yeah, yeah alright, he took you with him to space. So Mini Jon became UNSA's first astronaut.

Mini Jon: [00:00:45](#) Woohoo!

Jon Spooner: [00:00:47](#) Since then we've been touring in UNSA's mobile headquarters The Space Shed to festivals like Latitude and Blue Dot, telling stories, talking to some super cool space and science people, and we've recorded our chats so you can find out about their amazing work as well. So the thing is that at the time of recording, it's nearly the end of the summer 2019 and in the UK we've just recorded the hottest temperature ever for a bank holiday weekend, which sounds great, right? Except it isn't, because at the same time in South America, huge sections of the Amazon rain forest are being destroyed by raging fires. The nation of Iceland just a few weeks ago held a funeral for the first glacier lost due to climate change. So for at least these next few episodes of the podcast, we're getting a bit more serious, we're turning our focus away from space and back to earth where we need to really urgently deal with this climate crisis, because it's all our fault. The science is clear that we humans are responsible for the global heating that has caused this climate emer- *knock knock knock* -gency. Uh, yes?

Mini Jon: [00:02:02](#) Helloooo

Jon Spooner: [00:02:05](#) Mini Jon?

Mini Jon: [00:02:06](#) Let me in!

Jon Spooner: [00:02:06](#) Ok. Ok. Coming. Coming. *opens door* Where have you been? I'm recording for the podcast.

Mini Jon: [00:02:14](#) What were you talking about?

Jon Spooner: [00:02:16](#) Oh, ur I was just going to talk about how we're running out of time to save the planet because of global heating caused by humans burning excessive amounts of fossil fuels. And that only by radically rethinking and restructuring our societies and the prevailing global economic systems might we have even the slimmest chance of surviving as a species and not wiping out all other life on earth in the process.

Mini Jon: [00:02:34](#) Huh?

Jon Spooner: [00:02:34](#) Too intense?

Mini Jon: [00:02:35](#) It sounds scary.

Jon Spooner: [00:02:37](#) Yeah, well it is scary.

Mini Jon: [00:02:40](#) So, what are we going to do?

Jon Spooner: [00:02:41](#) That's a really good question, MJ. What are we going to do?

Mini Jon: [00:02:44](#) We recycle loads

Jon Spooner: [00:02:46](#) Yeah, you're really good at recycling.

Mini Jon: [00:02:48](#) And we never put the heating on

Jon Spooner: [00:02:50](#) Well, you don't feel the cold, do you? So we don't need to put the heating on, and my space suit keeps me nice and warm.

Mini Jon: [00:02:56](#) I'm scared

Jon Spooner: [00:02:56](#) Well, talking about it is a good start, like we are now. And I've been talking to some brilliant climate scientists and activists this summer who have loads of great ideas about how we might be able to save the planet.

Mini Jon: [00:03:08](#) Huh?

Jon Spooner: [00:03:09](#) Well for this episode, Rupert Read visited us when The Space Shed landed back in the Faraway Forest at Latitude Festival.

Rupert is an Associated Professor of Philosophy - sounds fancy - at the University of East Anglia. He's an author, he's a blogger and most passionately, he's a climate and environmental campaigner, often acting as a spokesperson for Extinction Rebellion.

- Mini Jon: [00:03:33](#) Huh?
- Jon Spooner: [00:03:33](#) Extinction Rebellion? Would you like to find out more about who they are and how you could get involved with their mission to fight the climate crisis?
- Mini Jon: [00:03:39](#) Yeah!
- Jon Spooner: [00:03:41](#) Ok then, let's get into it with Rupert Read representing for Extinction Rebellion in this episode of Live from The Space Shed.
- Jon Spooner: [00:04:02](#) Waheeeeey! Good morning Latitude Festival! Welcome, welcome. My name is Jon, Jon Spooner. I am the Director of Human Space Flight Operations, obviously, here at the Unlimited Space Agency. Welcome to UNSA's HQ, The Space Shed. Come on, give it up for The Space Shed [audience cheers]. Yeah! Ok. Who thought it was going to take off?
- Rupert Read: [00:04:20](#) [Laughs].
- Jon Spooner: [00:04:21](#) Why do people laugh at that? Like... Genuinely trying to get it off the ground. Um, yeah, I'm Jon. Today, we've got a really extraordinary program of things happening in The Space Shed. At two o'clock, I'm going to be telling a story, it's called How To Save the Planet, if you're interested in that stuff - I think some of you might be. Um, at four o'clock, then, because today is the 50th, the actual 50th anniversary of the Apollo 11 moon landings. Woo! [audience cheer] So we have Dr Alice Bunn here later this afternoon, who's the International Director of the UK Space Agency. She's going to be talking about the future moon missions that may be being planned at the moment that the UK is involved in. Then we've got a live set from the electronic musician, Minotaur Shock. We're showing a film In The Shadow of the Moon all about those- but before then, right now, uh, one of my favourite things about my job, this is my job, is I get to meet some really, really interesting people and one of those people is here with us this morning. They are a thinker, a philosopher, based locally here in the East of England. They're also here today representing Extinction Rebellion. Would you please give a massive Faraway Forest welcome to Rupert Read!

Jon Spooner: [00:05:31](#) [audience cheer] Come on up here, Rupert. Well look, I never get the walk in music right. Hey Rupert, thank you so much for joining.

Rupert Read: [00:05:45](#) Alright!

Jon Spooner: [00:05:45](#) Close the door there. We don't wanna let all the heat out. See imitative behavior. Um, hi!

Rupert Read: [00:05:55](#) Hi!

Jon Spooner: [00:05:55](#) Thank you so much for coming down. I'm going to press this button.

Rupert Read: [00:05:58](#) What is it? Does it do something nasty to me?

Jon Spooner: [00:06:01](#) Well, it depends. I can never remember what order things go in. It should just turn the music- yeah, it did. Just turn the music off, great. You are here this weekend, uh, you've got, you're working just up the hill from us here, aren't you?

Rupert Read: [00:06:13](#) Well, so I'm a philosopher at UVA, so yeah, I've got a bit of a toe hold in the tent up there.

Jon Spooner: [00:06:18](#) Yeah.

Rupert Read: [00:06:18](#) I'm also with the brilliant Extinction Rebellion dudes in the tent just over there [audience cheer].

Jon Spooner: [00:06:22](#) Yeah.

Rupert Read: [00:06:23](#) And yeah! And if anyone likes the kind of things that I'm going to be saying in the next 40 minutes or so, I urge you to go to the Extinction Rebellion tent and get signed up cause we're going to be touching on that stuff.

Jon Spooner: [00:06:35](#) Yes we are, because this week- the Unlimited Space Agency, we're all about space and also this last year we've turned our focus really sharply to the climate crisis. What, what's your preferred words to use? There's a lot of language that is important around this issue. What do you use?

Rupert Read: [00:06:53](#) So I think climate crisis is ok. I think the long ecological emergency is quite descriptive. Climate breakdown is also quite descriptive. We've all seen what's happening to our weather over the last few years and that is the first stages of climate

chaos and climate breakdown. Unless we stop it, it's going to take everything down within probably the next 10 to 15-

- Jon Spooner: [00:07:14](#) Let's not, let's not, let's not, let's not open with that, because we want people to stay. We are aware that it's you know, it's midday on a Saturday morning at Latitude - stick around. We're going to come to the end of the world. [laughs] So the space agency all about space, climate crisis is our new thing, but particularly because it's the anniversary of the Apollo moon landings, the Apollo 8 mission, the astronaut Bill Anders took a very famous photograph called Earthrise, which was the first time we'd been able to see the entirety of our planet from space. But I know that you've got some thoughts on why, what is it about seeing our planet from space that has infected the climate movement?
- Rupert Read: [00:07:56](#) Yeah, so when I think about space travel, I have a very, um, bifurcated view of it. Right? On the one hand, you might not, you might want to close your ears for the next minute, so. On the one hand, uh, we've got the terrible danger that people think forth, it's like, "well, maybe we can go and live on the moon or Mars", and so it doesn't matter if we destroy the earth. A thought which infects a lots of, um, scientists, uh, and a lot of science fiction. It's the premise, for example, of Christopher Nolan's appalling film, Interstellar.
- Jon Spooner: [00:08:27](#) Well, we can argue about this one. I mean, let's get into this just momentarily. Why is it awful? You can't make, can't say that.
- Rupert Read: [00:08:33](#) But look, I've written about what a brilliant filmmaker I think Christopher Nolan is, I've published on it, but I think this, this film, he really gets it totally wrong because he really buys into the idea that there's nothing sacred, there's nothing unique about our planet. We might as well pitch ship and go onto another one, and then if we've done that once, then why not do it again. It's central to, to the, the plot trajectory of interstellar.
- Jon Spooner: [00:09:02](#) Ok. No, fair enough, actually, and this is interesting because of course this is the angle that you and Extinction Rebellion, lots of people are trying to force us to focus on, because often the conversations I have coming from that space background is that Interstellar, the science is really good in it actually, which is strange for a sci-fi film, but actually the message is really, really bad.
- Rupert Read: [00:09:21](#) Yeah.

Jon Spooner: [00:09:22](#) Ok, cool.

Rupert Read: [00:09:23](#) And the, another, just for half a minute more that you might want to close your ears for, another thing about space travel of course, which is hugely dangerous, is the idea that well maybe there's going to be more and more of it, maybe we can have space tourism, Richard Branson and others want to have space tourism. We're in a climate and environment emergency, in an emergency, it doesn't make any sense at all to blow vast amounts of fossil fuels firing ourselves into space for fun. So those are some of the massive downsides of space travel from my perspective. But then there's this massive upside, which you alluded to right. When we first saw the earth from space, when we had the Earthrise photo and the photo of the whole globe from space, two of the most famous photos in human history, it became possible for us to appreciate more deeply than we ever had before, the preciousness and vulnerability of our home. So as I say, I think it's no coincidence that these are two of the most famous photos in history. I think they're really beautiful and I think they're very, very important to us. Um, shall I mention also the, the films that I'm interested in in this regard?

Jon Spooner: [00:10:29](#) Yeah yeah yeah.

Rupert Read: [00:10:30](#) So I've just trashed Interstellar, but I think there are some very, very great films about space travel. What do I think those films are? So, um, and actually I've written about them in, in the, in a book, which I'm gonna show you, not one of those ones.

Jon Spooner: [00:10:42](#) Another book?

Rupert Read: [00:10:43](#) Another book, yeah. This book- don't buy this book, right. This, this book is by me, it's called a film philosophy of ecology and enlightenment. But I can warn you, it is very, very expensive. It will come out in paperback next year. If you want to read it beforehand, get it from your library, don't buy it. Um, it's got lots of good stuff in it. And among the films that I discuss in it, are- the film I consider to be obviously the greatest fantasy film about space travel ever, 2001: A Space Odyssey. No controversy there.

Jon Spooner: [00:11:12](#) Well I don't know. I mean, Armageddon [laughter].

Rupert Read: [00:11:15](#) I'm getting out of here.

Jon Spooner: [00:11:16](#) It's literally the seventh best film ever made.

Rupert Read: [00:11:20](#) [laughs] Um, the best fiction film in my opinion about space travel, more controversial this, in my opinion, it's Cuarón's 3D masterpiece, Gravity.

Jon Spooner: [00:11:30](#) Yes.

Rupert Read: [00:11:30](#) Um, and the best, um, fact-based, space travel film, in history, Apollo 13. Now what are all these three films have in common? Can anyone spot it? 2001: A Space Odyssey, Gravity, Apollo 13. Anyone spot what they've got in common?

Audience: [00:11:46](#) [explicit] happened

Rupert Read: [00:11:48](#) [explicit] happened. Yeah [explicit] happened, that's right. And, and what, what do we do-

Jon Spooner: [00:11:54](#) Sorry, sorry

Rupert Read: [00:11:54](#) In each of those films? Sorry, sorry, youngsters, [explicit] happened.

Jon Spooner: [00:11:57](#) You've never heard that stuff at home anyway. Have you? I have.

Rupert Read: [00:12:00](#) Shall I, shall I tell you and once I tell you, I think it'll make sense to most people. They're all films about coming home, right?

Jon Spooner: [00:12:08](#) Yes.

Rupert Read: [00:12:09](#) They're the opposite of Interstellar, in 2001: A Space Odyssey, the clues in the name, right? It's based on home as Odyssey. It's about coming back home again, and that's the crucial thing that happens at the very end of 2001: A Space Odyssey. And Gravity, the whole thing's about coming home and it's about the preciousness of this earth. I wish we were sitting on the ground, I'd like to touch the earth at this point, but anyway, the earth is close to us all here, as it always is. Um, and Gravity of course, again, the clues in the title, right? Gravity is about literally being drawn back to earth, but also metaphorically, psychologically, emotionally being drawn back to earth as our home. Um, and in Apollo 13, I think it's, I think it's a wonderful thing that our greatest, true story of space travel is not about going to the moon, it's not about going to Mars or whatever, it's about being able to get back home after [explicit] happened. So I think that really tells us something important, that those three great films of fantasy fiction and fact are all about the draw of us back to this beautiful, unique planet. Uh, and, and all of them, of

course, feature at one point or another shots very similar to those great photos.

- Jon Spooner: [00:13:20](#) I really agree with you. And I think there's something about the literal perspective that you gain all the-
- Rupert Read: [00:13:26](#) Yeah
- Jon Spooner: [00:13:26](#) -all the accounts that those people that travel into space have of that experience-
- Rupert Read: [00:13:30](#) The overview affect.
- Jon Spooner: [00:13:31](#) Yeah. Yeah.
- Rupert Read: [00:13:32](#) And it's very common among astronauts, many astronauts that are coming back to earth say, "wow, I've been, I've woken up. I understand now". Some of them became environmentalists, many of them went through profound spiritual transformations. Um, you know, that should tell us something. So that for me is the big, uh, the big upside of space travel. It's given us that opportunity and I think it's vital to us at this moment in history that we fully harness that.
- Jon Spooner: [00:13:56](#) Yeah. I mean I will add to that if I'm allowed a few things as well. I mean there's a huge amount of technology, and I know that technology is not the solution to the climate crisis, at the same time, there is a huge amount that space has allowed us to do. So the development of solar and photovoltaic energies in particular would not have been where it is, where it is now. Extremely efficient, very affordable. And that's due to its development as a technology for use in space, which might be part of the solution to the climate breakdown crisis emergency. Um, how, how bad is it, Rupert?
- Rupert Read: [00:14:26](#) It's pretty bad.
- Jon Spooner: [00:14:26](#) Yeah?
- Rupert Read: [00:14:26](#) It's pretty bad. So shall I wave these books at this point?
- Jon Spooner: [00:14:29](#) Yeah.
- Rupert Read: [00:14:30](#) These books you can buy if you want. They're not madly expensive. This one is called Facing up to Climate Reality by my think tank Green House. The subtitle gives you a bit of a clue, 'honesty, disaster and hope'. And then this one is a little bit

more full on. This is, uh, my newest little book, it's called This Civilisation is Finished. Um, just before you all get super depressed-

Jon Spooner: [00:14:52](#) You would have called it something else, wouldn't you? Civilisation is f-, yeah. [laughter].

Rupert Read: [00:14:59](#) Just more before you get super depressed. The meaning of the title is that, it's my opinion based on hard evidence and I work alongside the climate scientists at UVA. Um, and let me just tell you one thing about the climate scientists at UVA. They publish these papers saying, "well, it looks really bad", right? But if you get them talking in the bar about what they really think, then they'll usually say, "well, actually it's worse than the papers" because science is inherently a conservative process, right? Science is inherently a process where they never want to go beyond the evidence. But what they actually think 9 times out of 10 is that things are worse than we can prove on the basis of the evidence. So the meaning of the title of my book, This Civilisation is Finished, is that the stage we've reached now, the only way we're going to be able to avoid a collapse, is if we transform everything so deeply and so fast that what comes out of it will look completely different to what we have. So this civilisation in anything like the form that we have it, is over. The only, the only choices are either we collapse or we change everything really fast and produce something beautiful and new, which will be very, very different, much more local, much more energy descended, etc.

Jon Spooner: [00:16:14](#) Well, let's, um, just for clarity because I've read your paper in response to Jem Bendell, Bendell? Yeah. Jem Bendell's paper, which is about deep adaptation, which is the most bleak read or it's on, it's recorded as a talk on YouTube as well, it's terrifying. Um, but you've written a response to that, which feels a little more hopeful. But I think for anyone that doesn't know that civilisation is likely to collapse, could you just, um, describe a little bit for- what do you mean by that?

Rupert Read: [00:16:39](#) Yeah. Ok. So a lot of people when they think- well firstly let's contextualise a bit more broadly. We talk a lot about climate, right? But actually the ecological crisis is much deeper and much broader. The pollinators for example, maybe you'll know, the pollinators are really under threat. Um, and if we lose the pollinators, we're going to have some kind of societal or civilisational collapse because many of our crops are completely dependent upon them. The climate is only one part of a much broader problem. The reason we focus on climate so much is as far as we can tell, it's the one that is likeliest to get us first. Um,

and while other species are being wiped out willy nilly, I mean, a truly terrifying and appalling fact is that we are sending one species to extinction about every 10 minutes. Right, so by the time this talk is over, four more species will have gone extinct. But we care most of all, so it seems, about our own existence and in terms of our own existence, climate is the most uh, um, pressing threat. Um, and the threat is extremely severe. People worry about rising sea levels and so on, but we talk, we hear about global overheat and the sea levels gradually going up, and we hear about the temperature gradually rising, but those aren't the things to worry about the most. Yeah, sure, sea level rise is a terrible problem if you look into the medium to longer term and it's very worrying in terms of things like for example, the nuclear power stations that we have, which are all on the coast, great work team, [laughs] really clever. But there are things which are likely to get us much sooner than that. So think of last summer for example, last summer we had an unprecedented heat wave which lasted until July and many crops in this country lost 30-40% of their yields. Now if that heat wave had gone on until August or September, that figure would have gone up to 50-60% and we'd have been really feeling it and really seeing it in massively elevated food prices. But we assume that we're always going to be able to buy in food from abroad because we in this country can't feed ourselves, another absurd fact, we only produce 60% of our own food now. Um, we assume we're going to be able to buy food from other countries always, right? We are, we're rich. Well, thinking about if that kind of crop collapse occurs across a much broader swath of the earth, we're not going to get that and we're not going to go to, um, a France or, um, uh, Russia or whoever and say, well, you know, you've got to give us some food because we're starving. If they can say in response, "well, we're going to starve too if we give you that food", right? People think it's about sea level rise or it's about, you know, the poor people in Bangladesh and so on. And of course those people are feeling it much worse right now, already. But just because we're in a so-called developed country does not mean we're immune at all. So what Jem Bendell and I are both saying is that within the next, 5-10 years, it is entirely possible that there'll be a major civilisational collapse event in countries like this. Um, and that's how bad things are. The difference between Jem and myself is the while he says he thinks this is pretty much certain. I still think there is hope that we may be able to hit it off. And that hope has just experienced an enormous boost this year. The first real boost it's had for a hell of a long time, and it's because of those flags that are flying, now can you give them a wave? [Audience cheer] Extinction Rebellion is the first evidence, if you will, that we have that there is hope, that we've had for a long time. The

way that we, we planned what we were trying to do in April, and I was very worried, many of us were worried that it wasn't gonna work. Um, we thought we'd be crushed by the media and crushed by the police, but it did work. 1,100 heroes got arrested and the mood of the whole country was transformed in a fortnight and after that fortnight you had 63% of people in Britain saying "yes, there is a climate emergency". 73% of people in Britain saying "I'm going to be willing to vote differently on the basis of that emergency". The environment went up as an issue from like way down to being the third most important issue on the agenda, according to the polls. Ahead of immigration and ahead of the economy.

- Jon Spooner: [00:20:52](#) Wow!
- Rupert Read: [00:20:54](#) Environment, a bigger issue than the economy. That's weird, that's transformative. Um, you've got the parliament of course saying that there is the climate, environment emergency. Many other things I could site. Huge transformative effect. It's the first real evidence we have of hope that we may be willing and able to make the kind of huge rapid changes we need to make if we're going to avoid civilisational collapse. The first real evidence of that we've had for a long time.
- Jon Spooner: [00:21:18](#) And I agree. I think it's, I think it's probably my duty to go, yes, Extinction Rebellion, we're big fans, big supporters. And also, there are other people that have been forging a path for very, very long time.
- Rupert Read: [00:21:28](#) Of course, absolutely.
- Jon Spooner: [00:21:28](#) It's, it's not entirely- there is a mood and there is an understanding that has been- and I think the school strike for climate.
- Rupert Read: [00:21:33](#) Totally.
- Jon Spooner: [00:21:33](#) Possibly even, in conjunction with, and possibly even more than Extinction Rebellion, which I think because it's led by adults and because it's causing the sort of problems that if the school strikes hadn't also been happening, I think it would've been worse- I mean it's a difficult thing to know, so. But basically-
- Rupert Read: [00:21:48](#) You can't really know, and absolutely the climate school strikes have been crucial and my opinion is that Greta Thunberg is a world historical figure. I mean that quite seriously, I think she's as important a figure in human history as Gandhi or Martin

Luther King. Uh, I think she's completely remarkable. What she started is utterly remarkable. The thing is this though, the climate school strikers, they, they've completely kind of tugged at our heartstrings and they've made a lot of adults feel, um, grief and feel guilt and been sort of primed to be ready to change. But I think that Extinction Rebellion was crucial in, as it were, pushing people over the edge because what Extinction Rebellion did is something which you can't- what the climate school strikers do is wonderful when they go on strike every Friday or every one Friday a month, etc. But it's actually quite easy for the authorities in the final analysis to handle a march or a one day event, etc. What's difficult for them to handle is mass civil disobedience, mass non-violent direct action. When you get out into the streets and you don't just stay there for a day and you stay there for a week and then you stay there for another week. That's when it gets hard, and that's when it starts to have economic effects. And that's when they, and the elites get worried about it. And that's what we did in April. And that's what we're planning to do again in October. So as I say, if you like this talk and if you feel the sense of the emergency, please come and join us in London in October. Put October 7th in your diaries and also head over to the XR tent just over there.

Jon Spooner:

[00:23:19](#)

Who here has already taken part in any Extinction Rebellion action, civil disobedience? There's quite a lot- Latitude's that kind of a place, isn't it? It's like we're all here, we are Extinction Rebellion, but we're going to enjoy it while, while it lasts, while civilisation is still- [laughs] It's a lesson. Um, so that's good. Uh, and I think I agree with that, the persistence part of that and keeping it front and centre is really important. Um, so what, how- in case people haven't, really answered, maybe all you see is you've read it in the newspapers, Extinction Rebellion is doing this thing, they're blocking the roads, but what, what is Extinction Rebellion doing to make the climate- to fight the climate crisis? How do you do it?

Rupert Read:

[00:24:00](#)

Well, we've got three demands, right? And we're trying to put pressure most of all on the government, but also on all institutions. Um, so we're, we're, uh, we're putting pressure on the media, um, and we're increasingly working with people in all walks of life actually. And the demands are firstly, tell the truth, tell the truth about how severe the problem is, and that's what I'm trying to do in these books, and that's what XR is trying to do generally. The second demand is, holds the mass extinction by 2025 and go carbon net zero by 2025. And that obviously is absolutely crucial. That's the act now demand, we've got to act really fast, really swiftly if we're actually gonna make it through, uh, this, and it's really crucial that it is swift. So 2025. So you

probably have heard that among the results of Extinction Rebellion this year and the school strikes and so forth, um, is that the government has astonishingly legislated for a carbon net zero target of 2050 and we say that target is way too far off in the future. It's almost like kicking it into the long grass, really. Here's a way of thinking about what's wrong with that target. If you say, we're gonna go carbon net zero by 2050, and if you say we're in a climate emergency, then what you're saying is it's an emergency. Let's act really fast. Let's stop making things worse in 31 years time, right? Because every year when we're not carbon net zero, we're making things worse. We're putting more of these weapons of mass destruction, which are fossil fuels, up into the atmosphere. That can't be right to say, yeah, it's an emergency, we'll stop making the emergency worse in 31 years time. So we say, no, we've got to stop making it worse, absolutely as quickly as possible. And we reckon it could be possible to do it within six years. And very interestingly, actually, the first reports come out today from, um, uh, from a university, um, saying that, uh, that may be necessary and possible, by the great economist, uh, Tim Jackson, who is a colleague of mine in, uh, in Green House. Um, so exciting times for people waking up to the possibility that maybe this is necessary and maybe we're going to make it happen.

Jon Spooner: [00:26:06](#)

Do you think it will? How optimistic are you about that?

Rupert Read: [00:26:08](#)

Well, as I say, um, Extinction Rebellion gives us in the context that we're in, of the weather collapse, of the climate school strikers etc. Gives us, I think the first, if you will, evidence-based hope you've had a long time. I mean, for the last few years I'd been running on empty, I've been running on kind of pure hope and pure faith that maybe something wonderful is going to happen. And I've been giving these, these, uh, somewhat gloomy talks, with titles like 'This Civilisation is Finished', saying the only way we're gonna make it through is if we change everything really fast. We don't show the evidence that we're going to do that, but now something's changed. So now I've got more hope than I've had for a long time. More hope than I've had for a long time. But I think that's true of a lot of people. In Extinction Rebellion, I think that an awful lot of us are in it because we know we have to do the right thing, which is a different thing from thinking that we actually are going to win, right? Though it's not about kind of making sure you get the results, it's about being honest and absolutely doing your best, but it's great to be in a situation where one can finally think after what happened late after that transformation, maybe we are going to be able to pull this off and if we are going to do so, we need it to be much bigger still in October. So, if you weren't

there in April, do you come and be with us in October. You don't have to be arrested by the way. There's lots of things that you can do which are helpful, which are not being arrested. You need loads and loads of people to support any person who gets arrested. But having said that, mass non-violent direct action, including people being arrested and ultimately being in prison, that is an essential part of it. That is how the suffragettes succeeded. That is how the Indian independence movement succeeded. It's how the civil rights movement succeeded. This struggle is even bigger and harder, but it's going to, how it's going to work if it is going to work.

Jon Spooner:

[00:27:54](#)

And particularly because a lot of those laws that are, that, uh, that allow you to be arrested are there in order to suppress freedom of speech and to make sure that we don't cause trouble. I mean, they're pretty oppressive laws that get used to go, "well you're in, you're sat down in the road. Nicking you" and now you've got a criminal record is extraordinary. Um, the third demand... or the third-

Rupert Read:

[00:28:17](#)

So the third demand is create a real democracy in order to bring the second demand into reality. What we mean by real democracy? Well, part of our thinking is that it's obvious that our democratic institutions have basically failed us, right? We wouldn't be in this incredible mess if they hadn't. That isn't to say that the failure is necessarily completely terminal, but something pretty radical needs to change. Representative democracy is not rising to the challenge of this crisis. So, yeah, it's brilliant that after our April rebellion parliament said there is a climate environmental emergency, that superb. But what action have they taken on that since then? Have they started to act now to end the biodiversity crisis and the climate crisis? No. So what we say is we've got to enhance our democracy and we say put some of the power back directly in the hands of people, through creating citizens assemblies, and what citizens' assemblies would be, it's a bit like a jury, but on a larger scale, uh, and with a broader remit. So juries are drawn from the general public and citizen's assembly will be drawn in the same way from the general public like democracy was in its beginnings actually in Athens. And you would make sure that it was a representative sample of the public. You would then give them super expert advice across the spectrum from everybody who's well informed about the science of the crisis, about the things we could do about it etc. You then leave them to deliberate about it in a way that would probably somewhat kind of calmer and a less influenced by big money and so on and so forth. And then debates are in, in parliament and in government. And then the cit- what the citizen's assembly

comes up with, that would be the basis for changes that we then made, radical changes that we then made. And one of the tricks here, one of the beauties of this, is that it gives politicians some cover, right? Because there actually are quite a lot of politicians- my role in Extinction Rebellion is to be part of the group of political liaison, which means that I meet with, well I met last week, the Lib Dem leadership candidates. Uh, I met the week before that with uh, with Michael Gove and some of his colleagues. I'm meeting on Monday with the Shadow Treasury team and so on and so forth. There are quite a lot of politicians who want to do the right thing, but what they often say to us is things like we're under such pressure from corporate lobbying and we're under such pressure from citizens who aren't necessarily ready to make the kind of changes in their lifestyles that need to be made. So if we do any citizen assemblies, right, what we can have is a bunch of citizens coming together and say, these are the changes that need to be made, and the politicians would say, look, it's not us saying this, right? It's you. It's for citizens. Well informed citizens deliberating, thinking about it. So that's the, the the kind of clever trick really about the citizen assemblies. It's a way of enhancing and deepening our democracy in a way that may be able to help politicians who do want to do the right thing, to do the right thing.

Jon Spooner:

[00:31:04](#)

And it sounds like a really sensible, smart, uh, egalitarian idea, but this is not without its- and I agree with it, I think it's great, but it's not without its criticisms as well, right? You talk about a representative spectrum of people and this is, and there is, and I think it's useful, in the same way where it's useful to talk about the issues around, uh, climate breakdown and how that makes us feel, what the impacts really are. Um, but also some of the criticisms that come at Extinction Rebellion. So how do you create a truly representative spectrum of people cause you were talking as well about we need to then look to be creating a future, this beautiful future potentially, where it's different from how it is now, but it has to include everybody. And there is some criticism of XR for not at the moment being very active, including everybody.

Rupert Read:

[00:31:48](#)

Yeah. I don't know. I'm not very convinced by that criticism to be honest. Um, firstly I think you have to look to who those criticisms have come from. So some of those criticisms have come from, for example, uh, radical climate activists from ethnic minority groups. Okay. I think we should listen carefully to those criticisms. But many of those criticisms you're talking about come from people like Adam Bolton on Sky News and Jacob Rees-Mogg on LBC. Um, and these people are not to put too fine a point on it, upper class twits, right? And when upper

class twits turn round to me and say, "how dare you middle class people teach us how to live", I say, well who the hell are you to lecture anybody, you know? With your, with your six children, all at private schools and so on and so forth. Where do you get off criticising middle class climate activists? And actually going beyond that, it just isn't true that Extinction Rebellion is a middle class dominated movement. My experience of it is, it is actually quite diverse, certainly compared to other organisations that I've been very active in before. Like I'm, I'm in the Green Party for example, and the Green Party does have some problems getting enough working class people involved. But for example, when I was on the Lambeth bridge with Roger Hallam and others, uh, last, uh, last autumn blocking that bridge, that was the first big civil disobedience that we did. Five thousand of us blocking the bridges in London. How many people were on the bridges? Quick show of hands. Yeah. A bunch of people here, brilliant. Wasn't it amazing? That's one of the things actually people don't necessarily understand about Extinction Rebellion, about non-violent direct action until they've done it. It's mostly really fun and incredibly liberating. It's incredibly liberating to break the law in a good cause with a lot of other people and find out that when there's loads of you doing it, it's really hard for the police to stop you. Um, anyway, so what I was getting at was that when I was on the Lambeth bridge at the start, before we blocked the bridge, I was speaking with a lot of the people who are assembling there, and I was struck by the incredible diversity of them. There were, there were, there were people from all over the country. They were from Merseyside, people from the North East, etc. There were students, there were teachers, there were old age pensioners, there were agricultural workers. Um, there were, um, there was somebody from like a call centre. It was really, really genuinely quite diverse. And again, frankly, with the people who say "Urgh Extinction Rebellion is dominated by middle class white people", they've never been on an Extinction Rebellion demonstration. Never talk to those people, and as I say, most of the people who say it are upper class white people and why the hell should we listen to them?

Jon Spooner:

[00:34:22](#)

Okay, well it's good to know that at least that's being heard as well, paid attention to. And I think like any democracy, it's just worth making sure that when we talk about representation, that we ensure that that happens as well, so. I'm gonna open it up in just one moment because I'm going to guess that there are some questions you might have. Rupert, who is really across a lot of the science and the activism of this, and then particularly now with Extinction Rebellion. Uh, I'm going to imagine there are some questions, but before, just before we

do, inside all of this, this collective- what can, the big question that we've been dealing with at the Space Agency, what can I do? What can individuals do? What do you say in response to that question?

- Rupert Read: [00:35:02](#) Well, again, I'm going to turn that question around a bit because I think the most important thing that we can do as individuals is join other people in a mass movement, right? We need system change individual-based change is not going to be enough. We need system change. That is the most important thing you could do. The most important thing you do is much more important than what you eat or whether you fly or not or whatever, or even whether you go to space. The most important thing that you can do is turn out with us and be there on the streets from October 7th onwards. But of course it's also good to make changes in your own life, to experience a bit more of what the future might be like, to maybe show bit of leadership, to try to model the kind of change that you want to describe. So in my own case, for example, I eat, um, a mostly a vegan diet. I'm a sort of freegan. Um, I've just pledged-
- Jon Spooner: [00:35:52](#) I'm a, I'm a vagan.
- Rupert Read: [00:35:54](#) Yeah [laughs]
- Jon Spooner: [00:35:55](#) I think that's a good one to do.
- Rupert Read: [00:35:56](#) [laughs]
- Jon Spooner: [00:35:56](#) Particularly at festivals.
- Rupert Read: [00:35:58](#) Yeah. I've just pledged to give up, uh, flying. I have a car but I share the car and I don't use it very much. I mostly cycle and take the train, and you know, all this is, all this is good. But much more important than kind of worrying about your own footprint and so on, is make sure that we join together to together reduce use our collective footprint. Absolutely, massively. Cause even if you live some kind of really, really low impact lifestyle alone in the woods or whatever, that doesn't get in the way of the juggernaut, which is coming to destroy us all, yeah? There won't be, there won't, it'll be, there won't be anywhere to hide, if society collapses. I mean some people are better off than others and I'm not saying, you know, it's not a bad idea to do a little bit of prepping. I do a little bit of uh, prepping, uh, myself. I've got a load of food and candles and stuff in my uh-

Jon Spooner: [00:36:48](#) Don't tell people! You'll be, you'll be the- when the looters come, you'll be the first. I mean, I have as well, but I would never tell anyone, I've got like-

Rupert Read: [00:36:55](#) I think this lot are going to be very nice looters, I think it's alright.

Jon Spooner: [00:36:58](#) We're recording it for a podcast!

Rupert Read: [00:37:00](#) Yeah, true. That's good point. So yeah, do a little bit of prepping. It also makes it real. It makes it psychologically real. You think, yeah, I'm doing this because I, I think that possibly this may be needed, but be under no illusions, unless we stop collapse, they'll, it'll be very, very difficult for, for very much to, to survive it. And also there's another thing in terms of preparing for collapse. If you are talking about preparing, again, the best way to do it is collectively, if we, if we're serious and that's part of what Jem Bendall is talking about, where I completely agree with him. If we're serious about thinking collapse is quite likely, right, some kind of collapse, then we need to prepare for it collectively. By, for example, making safe all the nuclear waste. I mean, imagine a collapsed society where no one is taking, taken care of in advance of that collapse of all these nuclear power stations, of all the nuclear waste. Do you know what happens in nuclear waste if it's untended? I mean, high, high degree, high, uh, high level nuclear waste?

Jon Spooner: [00:37:54](#) Bad [explicit].

Rupert Read: [00:37:54](#) Bad [explicit]. Bad [explicit]. For the next, um, the spent nuclear fuel rods need to be kept cool for hundreds of years, basically. Um, so you're- they're in these cooling pools, yeah? Uh, and if those pools go, go dry, um, which they will do very quickly if they're not continually kept cool. That's why all the, um, nuclear power stations are on the coast mainly, they need that water to cool it all the time, right? Um, they, they spontaneously ignite and then they'll burn, um, toxic, highly toxic radioactive fires into the atmosphere for decades or possibly hundreds of years. So you're thinking "oh, I'm going to survive collapse in my, in my lovely little cottage in the woods", well, unless we manage to work collectively to make sure that there isn't, there aren't mega toxic time bombs all over the place, you're not going to have a great time in your little cabin in the woods. So even in terms of preparing for collapse, actually the most meaningful stuff that we can do to guard ourselves against the very real possibility of collapse is collective.

Jon Spooner: [00:38:52](#) Well, particularly given how good the government are preparing for stuff at the moment... We can, we can rely on them.

Rupert Read: [00:39:01](#) That's again why we need citizen assemblies.

Jon Spooner: [00:39:02](#) A couple of months towards the B word.

Rupert Read: [00:39:04](#) Yeah.

Jon Spooner: [00:39:04](#) Well prepared...

Rupert Read: [00:39:06](#) Citizens' assemblies, again, should be there to help us prepare for collapse as well as to help us try to stop, collapse.

Jon Spooner: [00:39:13](#) Cool cool cool. I'm gonna send it out here. Um, this is your opportunity to ask Rupert representing Extinction Rebellion, any questions you might have today. Okay. We're gonna come across, we're just going to go straight across like that I think and skip you until a bit later.

Rupert Read: [00:39:28](#) [laughter] Nah, you're alright.

Audience: [00:39:32](#) Um, it's really interesting what you're talking about and sort of terrifying and, inspiring at the same time. What is the strategy for engaging corporations in this? You've talked a lot about citizenship and also governments, but my concern is that really, I'm just interested in what your perspective is.

Rupert Read: [00:39:51](#) Yeah, that's a great question. It's a tough question and I think we haven't in XR done as much of that yet as we should have done. I'm going to be having my first meet with a bunch of, um, corporates in, um, September. Um, and they said to me, can we pay you to, uh, to come and speak to us about the challenge and so on. And I said, no, I can't take your, your money and Extinction Rebellion can't take your money, but I will come and talk to you very frankly about the kind of thing I think you ought to be doing if you really want to hear it. And so the kind of thing I'm going to say to them is, um, you should be giving away your firm to your employees or becoming a co op or something like that. Um, and you should be, um, evaluating your business with uh, an ecological and climate bottom line. And if that bottom line is unreachable, um, you should be, um, declaring yourselves insolvent. And that's the kind of change that we need to have on a legal level. And my colleague, my academic colleague, uh, Richard Murphy, the well known accountant, there aren't very many well known accountants, uh-

Jon Spooner: [00:40:55](#) [Laughs] Just straw poll, who's heard of Richard? That's two people, not that well known

Rupert Read: [00:40:59](#) [inaudible] -called the joy of tax. He's quite a kind of PR savvy accountant. He's got this idea that that should, the law should change in this way. In other words that firms that cannot demonstrate that they have a plan basically to go carbon neutral and biodiversity safe by maybe 2025, um, would face having to be wound up. That's the kind of radical change, uh, that we need. In terms of what's going to happen in October, there's internal discussion at Extinction Rebellion about what we're going to target. My argument is that part of what we target in October should be, um, large corporations or maybe especially large financial institutions. And I think it's quite possible that that will happen. So, watch that space or maybe get involved with, with that side of what we're going to be trying to do on the streets in October.

Jon Spooner: [00:41:48](#) But I wonder as well if it shouldn't be left again, it's a collective responsibility that we have. We can't leave it to you because you've put yourself or been able to get into a position where people are asking you for those conversations. If any of us work in any of those places-

Rupert Read: [00:42:01](#) Oh absolutely. Absolutely.

Jon Spooner: [00:42:01](#) -that's the sort of thing that even if we don't have a share or a stake, that making it clear that this is our position, we want to see this change and it is a bold thing to do and it can be a scary thing to do because your literal job and livelihood is at risk, but I think if what Rupert's saying is something we're going to accept, then there's more at risk not to.

Rupert Read: [00:42:20](#) That's right. And then the real risk is that we get to say 2035 and society's collapsing and we look back and think, God, we could have done more. I could've done more. Yeah. You don't want to be in that position.

Jon Spooner: [00:42:34](#) And this comes down to not just businesses and corporates, sorry Rupert-

Rupert Read: [00:42:36](#) Yeah it's alright.

Jon Spooner: [00:42:36](#) -schools as well. Um, universities, all those other organisations that simply aren't doing enough to reduce the amount of energy they use. Making, uh, climate and energy use the highest on the priority list of function. If it's discussed at board meetings, if any

of you go to a board meeting and climate isn't on the, uh, the agenda, make sure that it is.

- Rupert Read: [00:42:57](#) Absolutely, and loads of people, so many people, are now waking up to this. I mean the whole situation is transformed from where it was even six months ago because of the factors we discussed earlier. So I did give a- actually it's not the first thing I've done with a big businesses. I did one little thing with Viva a few months ago and I must admit I was really surprised by the, by several people in the Viva HQ, um, who were really kind of turned onto the issue. And one of them even said, "should I give up my job and just come and join Extinction Rebellion full time?" And I said "well, maybe, but also there are potentially really valuable things you can do from the inside as well. So yeah, don't think that I'm the only person who's thinking of this. You're not anymore, you know, I mean, look around, there's lots of people, there's lots of people here, and there's people all over the country waking up and the silence is being broken. So if we all break that silence and we all tell the truth, that has an enormous power.
- Jon Spooner: [00:43:49](#) And we had Alice Bell in yesterday from 10:10, she was like, "yeah, there's a lot of businesses and organisations that are actually doing really good work on this". The ones we really need to go for are the big fossil fuel extraction companies. So the BPs, the Shells, they're the ones that are going to continue to really break things.
- Rupert Read: [00:44:07](#) Yeah. It's very hard for them to go carbon neutral.
- Jon Spooner: [00:44:08](#) Yes. Uh, Flight Director has, has overridden my suggestion for how we navigate this- ok, excellent.
- Audience: [00:44:17](#) Um, Extinction Rebellion have done very, very good job of raising awareness in the UK and democratic society, but environment is global and I come from a, an area of the world, Asia, where it's not so democratic, so how, how are you going to address that challenge of around the world, the global addressing of, of this environmental challenge?
- Rupert Read: [00:44:38](#) Yeah, that's a crucial question, obviously. First thing I'll say about it is, uh, it's really, really important not to allow that to be an excuse for inaction. A lot of people, I don't think this is your motivation, but a lot of people say that kind of thing. What they're really looking for is an excuse for saying, "well, it's pointless us trying to do anything cause you know, look at China or something", that is completely unacceptable. We have to act because we started the industrial revolution, we started this

mess. We should take a leadership role on it, because we're still a very rich country, we're still consuming way, way more than we should and way more than most people in most of those, uh, Asian countries. And simply because we can, the responsibility is on everyone to do what they can. Now, here's the exciting bit. We are actually, um, we are actually with Extinction Rebellion and with the climate school strikes and, and with, I would say, for example, the huge, uh, upswing of support for the Green Party in the May elections, which I was very excited to see. We are actually leading the way a bit now, um, in this country, in Britain, at least among, uh, so-called, uh, developed countries, yeah? Um, and other countries are looking to us for some leadership. So I have some context, for example, in Extinction Rebellion USA, some quite strong contacts there, and they are literally looking to try to kind of use what we've done as a model, um, to, uh, make similar changes in the States or at the federal level, uh, in the US. Now, imagine if that happens, right? If we manage to actually help a huge transformation start in the United States, which would presumably start with the ejection of Trump, but then go on kind of way, way beyond that into the transformation of their economic, and so forth, systems, which are even more damaging than ours, that would be hugely significant. In terms of China and India, the crucial thing is don't allow anyone either here or there, the excuse of being able to say, "well, Britain's not changing, so why the hell should we", right? If we, if we tried to change and if we tried to show that a better future is actually possible in this direction, but that's one of the, the, one of the beautiful secrets here, I call it the beautiful coincidence, that many of the things that we need to do in order to stop the collapse are the very same things that we need to do in order to improve our lives, better community, healthier food, healthier living, more exercise, less loneliness, etc. That's the future that we could have if we drastically reign in our fossil fuel consumption. And we need to be saying also to people in India say, "you know, you think you want to be like us, but actually we're not all that we're cracked up to be, you know, did you know that we have this huge mental health epidemic, this obesity epidemic, etc. etc.", right? Those things could be turned around if we move in the kind of direction that we need to move in anyway. So that's the beautiful coincidence. We can actually, if we get, if we, if we act smartly, we can actually improve our lives at the same time as we manage to stop ourselves from destroying the future.

Jon Spooner:

[00:47:42](#)

I agree. I like the idea of the ejection of Trump. I'm imagining a big comfy chair that he's led to. He said, "here have a can of

Coke, President, and sit down", the button is pushed. That would be good space travel, right?

Rupert Read: [00:47:54](#)

Yeah.

Jon Spooner: [00:47:57](#)

[Makes sound effect] Um, yeah. Hi.

Audience: [00:48:02](#)

Hi. Um, so you talked about, uh, other countries like India and China changing and you talked about, uh, zero carbon net emissions in the UK, but we want to aim for that on an international level.

Rupert Read: [00:48:13](#)

Yeah.

Audience: [00:48:13](#)

But how'd you deal with that when you've got presidents like Donald Trump who don't believe in climate change and other developing countries where their economies rely on burning fossil fuels and things like that, and they're not as rich as the UK?

Jon Spooner: [00:48:26](#)

We eject them into space.

Rupert Read: [00:48:29](#)

We eject them into space. [laughter] Yeah. Uh, you know, obviously Trump has to go and that one sign of changing times is that climate is featuring in a serious way in an American presidential campaign for the first time ever. So a terrible mistake that Al Gore made when he ran in 2000 was not putting climate essentially in his campaign, cause as a result, it's terrible mistake cause you know, obviously it should have been central anyway, but it was also terrible mistake because it meant that he wasn't being authentic, he wasn't being true to himself, right? And people could tell that he seemed like a robot on the, on the stump, cause he wasn't talking about the stuff that you really cared about. In this US president presidential campaign, we have a bunch of Democrat candidates who clearly do care about it and even the ones who don't are trying desperately now to jump on board. So that's a huge, a huge positive sign. In terms of the so-called developing countries. I keep saying so called by the way, because this concept of development is a highly dubious concept. Did you know it was basically invented by an American president, Truman, who said, "look we are developed and there are these other countries that are developing, they're trying to become like us. None of these other countries, which are underdeveloped and they're sort of at the bottom of their feet." I mean, it's unbelievable kind of hubris and arrogance that says that we've got everything sorted. We're in a, how could we have everything sorted where

not only do we have an obesity epidemic and a mental health epidemic, where we are on the point of destroying the entire planet. Um, so I don't like these, uh, these words that are developing and developed etc., but so called developing countries, the, the global majority countries, the global South, etc. One of the encouraging things about this moment in history is that actually many of them are not as fully bought into fossil fuels as we are. So one of the crucial things we have to do is we have to help them be able to leap frog past the fossil fuel stage of so-called development, to a kind of cleaner future. So for example, many African countries actually are very low emitters. One of the absolutely obvious things we should be doing from the point of view of justice, but also from the point of view of providing ourselves a future across the planet, right, is giving away green technology to them, right? We ought to, we ought to provide loads of renewable energy technology and other clean green technology to these countries for free. That would make much more sense than most of the aid that currently happens. Um, and uh, and yeah, it's just a no brainer

- Jon Spooner: [00:50:49](#) As opposed to, for example, uh, supporting and propping up, uh, oil rich regimes in the middle East so that they can continue to mine and drill and then sell that oil cheaply to those so-called developing countries.
- Rupert Read: [00:51:03](#) Yeah.
- Jon Spooner: [00:51:03](#) So there's- it's all connected, isn't it? This below- all the activism needs to come together to demand those things.
- Rupert Read: [00:51:08](#) Yeah.
- Jon Spooner: [00:51:08](#) Did that answer your question? [audience member answers] It's difficult though, isn't it? Take the ejection into space one. That's the, that's clear, right?
- Rupert Read: [00:51:17](#) Yeah.
- Jon Spooner: [00:51:19](#) Uh, yes. Hi.
- Audience: [00:51:22](#) Hi. Could you say a little bit about the British media and how they act as a barrier to the truth getting out because the guardian, bar the guardian, I just see there's just no representation of XR and their activities. So other people. yeah, so people, there's a huge barrier.

Rupert Read:

[00:51:39](#)

Yeah. So that's the question I'm, I'm very interested in, and I've been quite involved in but I'll try to be brief. Um, we are campaigning directly, as I say, with regard to the media and we're starting to see reason for, to believe that that campaigning is having success. So yesterday we targeted the Mail and also the Independent. Um, and what you find is that actually there's a lot of journalists even on a newspaper like the, like the Mail, um, who are sympathetic and certainly loads of journalists inside the BBC who are sympathetic. And the BBC has changed a lot for the better over the last year. Um, so, uh, some of you may be aware that, uh, last summer I spearheaded a campaign to stop the BBC featuring climate change deniers as balance. Um, and that campaign was successful, uh, and they changed their, their policy as of last September. They now no longer have Lord Lawson and these other morons on to, just about nonsense, about, uh, about the climate and so forth. Um, and then of course have the David Attenborough program, which again was conveniently timed during the April rebellion. Um, and that was another new departure of the BBC, a program, which is really is, it wasn't perfect by any means, that program, there's all sorts of critiques I could make of it, but my goodness, it was by far the best thing the Beeb have done on climate yet. Um, the BBC, are moving in the right direction, but they need to be continually pressured by everybody to continue moving in that direction. So I would say to everyone here, whenever you notice for the BBC doing anything problematic, you know, make your views known, get on social media about it. If it's a clear enough instance, it's worth making complaints to the BBC about it, cause sometimes those complaints work. The complaints around Lawson did ultimately, uh, work. Um, what we also need to be doing is creating our own media. Don't just think, oh well we're stuck with this media system. There's a really interesting idea being floated now for uh, an XR newspaper. Wow. Now that would be a real challenge to the Daily Mail. Um, so if there are people here who are journalists or who would like to be involved in creating alternative media, come and have a word with me, or better still try to get in touch directly with the people already doing this, cause I'm not actually involved in those groups. There are so many of these diverse things now, there's XR journalists, there's this XR NASA newspaper group and so on and so forth. Um, do get involved. Uh, and of course it doesn't need to be through XR either, you know. As you were saying, there's all sorts of good organisations. One of the things that XR is trying to do is to, is to create a broader space for others, you know, our, an essential part of our mission is to make what people think politically impossible, politically possible. That's one of the reasons I think that the green vote shot up in May because people suddenly

thought, well that just makes sense, given this new context. But it applies to all sorts of things. I'm hoping that all sorts of lobbying organisations and NGOs and so on and media organisations which are trying to do the right thing, will have more space now to do that right thing in. So you know, don't be a passive consumer in this. Let's see if we can make it happen.

- Jon Spooner: [00:54:43](#) And those demands spread out across other things. So there was a really interesting audit by BAFTA recently where they looked at how many times climate was mentioned in things like ongoing serials, soap operas, dramas. Climate crisis mentioned less in all of those things than rhubarb, [laughter] and 20 times less than the event that will happen in October, more likely. So...
- Rupert Read: [00:55:06](#) Something that we desperately need is more good art about this. So that'll be another plea if there are, there are artists, especially narrative artists in the audience. We need writers, filmmakers, dramatists, etc. to really work on this. So this, this book of mine, The Film Philosophy of Ecology and Enlightenment is about that. It's about the films that we already have that do that. So the ones I mentioned earlier, plus other films, which I think have really hit the nail on the head, such as, uh, Melancholia, uh, Never Let Me Go, The Road, uh, Avatar. Um, but we need more. Um, one nice example, which kind of did this a few years ago, I would say that the greatest ever TV, um, sci-fi series Battlestar Galactica the remake.
- Jon Spooner: [00:55:49](#) Just- you can't say, you can't come into The Space Shed and make massive sweeping- because what is the best sci-fi film-
- Rupert Read: [00:55:56](#) I'll defend it, I'll defend it.
- Jon Spooner: [00:55:56](#) -it's the... Okay
- Rupert Read: [00:55:56](#) Battlestar, the new Battlestar Galactica if you haven't seen it-
- Jon Spooner: [00:55:59](#) Have you seen The Expanse?
- Rupert Read: [00:56:00](#) I haven't
- Jon Spooner: [00:56:02](#) Ahhh... This is a whole other thing. We'll do this another time.
- Rupert Read: [00:56:04](#) Let me just finish on Battlestar Galactica because part of the reason I think it's so great is it's about ecology in space. Uh, and it's once again, like the three films I mentioned, like 2001 and Gravity and Apollo 13, it's about coming home. It's ultimately

about coming home to earth. It's very beautiful and very moving in that way. But we need so much more. We need really, we need intelligent moving, gripping dramas, narratives, etc. All kinds that get people to think about this and get them to see different possible scenarios. So many of you perhaps are aware of Years and Years, have we all seen Years and Years? Very, very good.

- Jon Spooner: [00:56:38](#) It's on BBC iPlayer. I still, I think it's really good. Russell T. Davis.
- Rupert Read: [00:56:41](#) But not enough about climate or ecology.
- Jon Spooner: [00:56:44](#) I agree.
- Rupert Read: [00:56:44](#) What we need is something like Years and Years, which is more climate and ecology focused and I would say, which is also combined with Sliding Doors, has anyone seen Sliding Doors? We have the two different scenarios. The kind of good future and the bad future.
- Jon Spooner: [00:56:58](#) This is just, this is just a pitch now. Is anyone here a commissioner?
- Rupert Read: [00:57:00](#) This is a blatant pitch.
- Jon Spooner: [00:57:01](#) Anyone commissioning?
- Rupert Read: [00:57:02](#) But I can't write it, I need you to write it. I'm not an artist.
- Jon Spooner: [00:57:05](#) Yeah. If anyone here is a commissioner, they are keeping well shtum going, I know this place is full of artists.
- Rupert Read: [00:57:10](#) If we had a, if we had a sort of Sliding Doors version of Years and Years with an ecology and climate focus, if it became a big thing, if everyone started to see and think, oh my God, yeah, we could have this collapse or we could have this future that is actually okay. And if they started to see some of the steps, I think it'd be so valuable. It's criminal that doesn't, it hasn't happened yet.
- Jon Spooner: [00:57:27](#) I am trying to get commissioned at the moment a climate musical, uh, and, uh, my flight director literally laughing at me. It's a good idea- It will be great, right. Sorry. Uh, it is, we're getting, we've overrun a little bit from what we intended, but this is a really, really great conversation. Um, just quick show of hands, who else has a questions they want to ask Rupert? And don't be shy, put your hand up. Yeah, there's a couple. Let's do

these two and then, uh, I think we need to- so, um, excellently shirted human in the middle here.

- Audience: [00:57:59](#) Thank you.
- Jon Spooner: [00:58:00](#) Hi.
- Audience: [00:58:01](#) Um, I guess I'm just wanting to ask a question about communicating about the climate crisis, um, particularly with people who you care a lot about but perhaps aren't too well-informed, and you want to find the right way to inform them without enforcing things on them. Cause I think everybody's been in a position where they weren't well informed and they, I guess everybody here who is now better informed having been here, it's been a long term kind of process themselves.
- Rupert Read: [00:58:25](#) Yeah.
- Audience: [00:58:25](#) And looking back on what happened with me, I don't think it would have been helpful to have someone shoving things in my face. But to some extent that's, it's easy to avoid.
- Jon Spooner: [00:58:36](#) What did happen to you? What brought you to it?
- Audience: [00:58:40](#) Um, reading, um, The Uninhabitable Earth was quite a big one for me. And then also just seeing what was happening with Extinction Rebellion in April and seeing that there was hope.
- Rupert Read: [00:58:50](#) Yeah, good.
- Audience: [00:58:52](#) And that there was stuff that we could do ourselves.
- Rupert Read: [00:58:53](#) Yeah.
- Audience: [00:58:55](#) Um, yeah. But I, I have lots of friends from different backgrounds and I don't think they're going to take the same process. I'm not going to tell them to read The Uninhabitable Earth, necessarily, cause I don't think necessarily it would...
- Rupert Read: [00:59:05](#) Yeah. It's a good-
- Jon Spooner: [00:59:06](#) How about This Civilisation is Finished, would they go for that?
- Audience: [00:59:10](#) Um... probably they'd say...
- Rupert Read: [00:59:10](#) If this, although, it's perhaps worth a little plug at this point. Uh, when we do finish I will be selling some of my books if anyone

wants them. Um, and if you've got, if you're talking, cause it's different strokes for different folks, right? With a certain kind of person, they may want like rigorous kind of, um, detailed scientific, philosophical, etc. information. And if they want that, then you could do a worse thing than give them one of these books, Facing up to Climate Reality or This Civilisation is Finished. That might be helpful. Different, different kinds of people might like different kinds of things. I think for some people art could be very powerful in the way I just described. Um, some people killer facts can kind of work. So try one or two of the ones I just mentioned, for example. Um, did you know that we're sending one species extinct every 10 minutes? Did you know that on the government's, um, new target for carbon neutral by 2050, great that we've got that, we didn't have it before, but that means we're making the crisis worse for the next 30 years and it's an emergency. Did you know, and this is a really mind blowing one, this is a really terrifying one. Um, did you know just how potent fossil fuels are? Just how disastrous the greenhouse effect is? Let me give you a little illustration, and this is, this is one you can share with people that really opens or blows their mind. Um, so you've got a lump of coal, right? You burn that lump of coal, you get some heat from it, cause you want to heat up your house or whatever, yeah? Or you're heating up, you're in a coal fired power station. You get some, you get some heat from that coal. That lump of coal also releases some carbon into the atmosphere and carbon stays there a long time. Probably stays there on average about a 100 years, maybe a couple a 100 years. It stays there a long time. How much more heat gets trapped in the atmosphere as a result of the greenhouse effect than the heat generated from burning the coal? Does anyone know? What do you think? Is it, is it maybe, is it 5 times as much? Is it 10 times?

Jon Spooner:	01:01:05	I don't know, Rupert. Is it 5 times as much?
Rupert Read:	01:01:08	[laughs] Shall I tell you?
Jon Spooner:	01:01:09	Yeah.
Rupert Read:	01:01:09	Higher, higher.
Jon Spooner:	01:01:09	10!
Audience:	01:01:09	30
Jon Spooner:	01:01:09	100. Higher, lower? Done at a 100. 100?

Rupert Read: [01:01:18](#) It's 100,000 [noises from audience]. If you burn a lump of coal, the carbon that goes in the atmosphere, is the greenhouse effect, which is 100,000 times as strong as the heat you get from burning that coal. You might think, oh thank goodness I don't burn coal anymore. Well, the thing is it's only a bit better for oil and gas. For oil it's about 40,000 times, but gas is about 25,000 times. That's still a lot. These are weapons of mass destruction. If we burn these things much longer, we are going to kill ourselves and most other species with us. That's just fact. So maybe that's a helpful one. Did you know that the greenhouse effect is so strong that if you burn a lump of coal, it produces 100,000 times as much heat in the atmosphere just from you burning that one lump of coal.

Jon Spooner: [01:02:08](#) Is that- I mean, having this conversation, I would honestly recommend just talking about it and if it's with specific people thinking a little, spending a little bit of time thinking about how do I talk about it with them?

Rupert Read: [01:02:20](#) Yeah.

Jon Spooner: [01:02:20](#) And even if you talk about your feelings about it, I think at least then it's a conversation that's in the room and then they get to choose what their response to it is. I think that's the first step.

Rupert Read: [01:02:28](#) -your feelings are very strong, especially if you, if you're not just talking about that, but actually showing them, right. If you can actually like, um, one of the media performances that I've done, which people seem to find most powerful is when I went on Channel Five during the April rebellion and I spoke about how the climate school strikers are begging for their lives. These young people are begging for the right to have a life at all. And I've always kind of cracked a little bit and I think a lot of people were just like, oh my God, yeah, that's it. You know, that like gets you right here, etc. That's it, that's another thing if you can like really actually show your friends or family, whoever it is, I'm really scared about this, or I'm really sad about this, grief stricken, you know, that can be enormously powerful in breaking people's barriers.

Jon Spooner: [01:03:11](#) Final question. Uh, because Rupert, you're not going to run away.

Rupert Read: [01:03:17](#) No, I'm going to be here to sell my books.

Jon Spooner: [01:03:17](#) We can continue this conversation. We got Flight Director overruling me again, like really subtly, but definitely, fine. Two more questions. [laughs]

Audience: [01:03:25](#) Uh, this is not unrelated to the previous question, and I think it came up when you were talking with Richard Murphy at the Quakers Hall in Norwich. I wasn't there, so this is for my benefit really. At the tactical level, um, if Extinction Rebellion does things like picket uh, Heathrow so people can't get away with less on holidays. There's a high risk of alienation of the large percentage of the population. How do you advocate dealing with that tactically?

Rupert Read: [01:03:56](#) Okay. So this the big Heathrow question. [laughs] Fine, yeah. [Jon laughs] Um, two different, two different aspects to that. Firstly, I think it's absolutely clear that Heathrow is a completely legitimate target, right? Remember, 70% of the flights are taken by 15% of the people in this country. Flying is overwhelmingly a thing done by the rich. 80% of inhabitants of the earth have never flown. I mean, the human's not the animals [laughter]. Uh, yeah. Uh, if we expand the, uh, the third runway at Heathrow, and that's what the plan process is about, um, by XR, which may happen in September. Um, if we expand the third runway at Heathrow, that alone ensures that it is completely impossible for us to attain 2025 or even 2030 for carbon net zero. You know, Heathrow alone basically can, can take out everything that this country is allowed as it were or should be allowed to emit. Having said that, I have some sympathy with your question. So there's an internal argument going on about this within XR right now and anyone who is here is actually from XR, I would urge you to make your views known about this, make them known in your, uh, in your local group. Make them known on social media. Um, I've got a pamphlet which I've just written about this, which I've put out it out on Twitter, and in this pamphlet I say, yeah, Heathrow is a completely legitimate target, but it will be difficult not to alienate people if we target Heathrow. Maybe there are smarter targets, so my suggestion is that the smartest thing for us to do in September, if we're going to target an airport, is to target London City Airport. London City Airport is a very interesting airport. London City Airport has a short runway. It only, it only has planes take off from it, which are not huge jumbo jets. In other words, it basically is used by, um, by the elite. It's used by people in private jets and small and small planes taking, uh, taking flights, which are the worst flights of all, you know, short haul flights are the worst flights of all because most of the damage of flying is done by the takeoff. Um, and because obviously short haul flights you could take a train or whatever instead. Um, London City Airport is in a

deprived area of London, virtually no one living around uses it. Um, it's, it's horrible for noise pollution and air pollution cause it's right in the centre of London. It would be relatively easy to shut down cause it's small. There's all these things in favour, it seems to me, of targeting London City Airport rather than Heathrow. And London City Airport also wants to expand even more than Heathrow does. It plans to double it's size essentially, absolutely crazy, in the next 10 years. So my um, pragmatic recommendation to fellow rebels is let's, if we're going to shut down an airport, let's go for London City Airport. Um, if you do go, if we do go for Heathrow instead, I'll be totally backing that. As I say, I think it's completely legitimate, but I think we can be a little smarter and we do need to be smart as we move into the next stage of our rebellion because the government and the police are going to be more ready for us next time.

- Jon Spooner: [01:06:57](#) They are now that you've told them what your doing [laughter].
- Rupert Read: [01:06:58](#) And this is going to be on the podcast!
- Jon Spooner: [01:07:02](#) House is full of stuff that you will need and he's going to be at London City Airport October, October time.
- Rupert Read: [01:07:08](#) So you go in the house then, yeah. [laughter] Very good point.
- Jon Spooner: [01:07:13](#) Final question for now. Hi.
- Audience: [01:07:16](#) Hi. Hello. Um, I would like to replace my boiler with um, some kind of sustainable-
- Jon Spooner: [01:07:21](#) This is cool. We've turned into-.
- Audience: [01:07:24](#) But I don't know how, it's so expensive to do. What, when will I be able to afford to do that?
- Rupert Read: [01:07:28](#) Yeah.
- Jon Spooner: [01:07:28](#) What a great question. Fantastic final question at Latitude.
- Rupert Read: [01:07:33](#) Sadly I'm not an engineer. All I can say to you is, firstly, obviously move to a renewable energy tariff and we should be trying to back renewable energy in this country. We've got to be moving away from, uh, gas. Um, uh, and secondly, um, I'm going to dodge the question by saying that this question, like many others, which I don't know what the answers are, would be the kind of thing that citizens' assembly should help to solve. In other words, ordinary people like you, but with the very best

advice. That's the, that's the crucial thing about the citizens' assemblies. Parliament too often occupy, what's the word? Uh, operates in a kind of vacuum, right? Um, often, um, the chief scientist says X and parliament says Y and the government actually does Z. Um, right? I think that a citizens' assembly would really listen to the best expertise, including engineering expertise for the kind of stuff that we should be doing. XR is not here with a detailed policy manifesto. XR is not a political party. XR is saying, let's tell the truth. Let's act now to save ourselves and save the future. And in terms of how we act. Let's do it democratically on the very best advice including to ask the questions like, how are we going to do our boilers?

- Jon Spooner: [01:08:42](#) Nice, what a great answer, right?
- Rupert Read: [01:08:45](#) Honest answer.
- Jon Spooner: [01:08:45](#) Um, Rupert, if people aren't already, uh, get involved with or signed up to XR, how does anyone get involved with XR?
- Rupert Read: [01:08:53](#) So first obvious thing, go to the XR tent. Get yourself some stickers, sign up on the mailing list, etc. Um, if you want to, obviously you can also do it online and so on. There are XR groups all over the country now, many of them very substantial and robust. If there isn't one where you live, then for goodness sake, create one. Um, also there's, there's obviously loads of stuff you can do online, you know, follow Extinction Rebellion on Twitter, follow me on Twitter, etc, etc.
- Jon Spooner: [01:09:16](#) What is your Twitter handle?
- Rupert Read: [01:09:17](#) Green Rupert Read is the best one. And Rupert Read is r e a d, as in book.
- Jon Spooner: [01:09:22](#) Cool. And it's extinctionrebellion.earth, I think, isn't it?
- Rupert Read: [01:09:25](#) Uh, you're talking about the website?
- Jon Spooner: [01:09:27](#) Yeah.
- Rupert Read: [01:09:27](#) No, it's uh, it's, I think it's just rebellion.earth.
- Jon Spooner: [01:09:32](#) We don't know what the website is.
- Rupert Read: [01:09:33](#) Is the website rebellion- yeah. The website is just rebellion.earth.

Jon Spooner: [01:09:37](#) Use your internet search engine of choice and it will take you there. Um, brilliant. Uh, we are on @untheatre on all of the socials. Uh, The Space Shed is an Unlimited Theatre project. You can follow us, tag us into anything that you're doing. Check out the Live from The Space Shed podcast. It's got loads of really cool people that come into Space Shed and are extremely interesting.

Rupert Read: [01:09:57](#) And obviously if you want to, if you're thinking, oh, I wish so and so had been here, you can, you'll be able to share that with them.

Jon Spooner: [01:10:02](#) Yes, absolutely. And you're not going to run away, so if you didn't get to answer, uh, ask a question, you wanted to continue a conversation with Rupert, he's going to be sticking around. Come and grab him. Don't actually grab him.

Rupert Read: [01:10:13](#) I'm selling these for a very reasonable price.

Jon Spooner: [01:10:14](#) Yes, and of course the books. Uh, if you want to learn more about the work. But for now, would you please give a massive Latitude Faraway Forest round of applause for Rupert Read! Thank you Rupert! [applause]

Mini Jon: [01:10:29](#) Can we join the rebellion?

Jon Spooner: [01:10:29](#) We totally can join the rebellion, MJ! As Rupert was saying, the next big event starts on the 7th of October, and you can find out more by searching up 'international extinction rebellion'. Check out their website, rebellion.earth.

Mini Jon: [01:10:44](#) Sick!

Jon Spooner: [01:10:44](#) And if any of you, like me and Mini Jon, really want to get involved in helping to save the planet but don't really know what to do, we've made a website to help - howtosavethe.earth. That's howtosavethe.earth. It's got loads of suggestions for things that you can do right now, things you can do with a little more effort this week or this year. It's even got tips for you if you want to dedicate your life to fighting climate breakdown. howtosavethe.earth. And as always, you can connect with us on any of the social media's, were @untheatre. That's untheatre on Twitter, Instagram, and Facebook. And if you're enjoying our podcast, please help us spread the word. Tell everyone you know to subscribe to Live from The Space Shed.

Mini Jon: [01:11:31](#) Who's in The Space Shed next time?

Jon Spooner: [01:11:36](#) Next up in The Space Shed, MJ, is the brilliant Chaitanya Kumar. He's a senior policy advisor for the Green Alliance. He's been doing amazing work for years. He'll be chatting with me about how we've gotten into this mess and what big changes we can expect in the future as we try to save ourselves from the worst effects of climate breakdown.

Mini Jon: [01:11:56](#) Onwards and upwards!

Jon Spooner: [01:11:56](#) Onwards and upwards indeed, MJ. Thanks for listening to this episode. If you enjoyed it, like I say, please subscribe to Live from The Space Shed on Apple Podcasts, Spotify, Google Play, wherever you get your podcasts. If you'd like, please leave us a review. It really helps. Live from The Space Shed is an Unlimited Theatre production, with season one brought to you in association with the Science and Technology Facilities Council, the Cockcroft Institute, The Space and Arts Council England. With special thanks to Dr Rob Appleby of Manchester University. Our theme music is "Go!" by Public Service Broadcasting used with their extremely kind permission. Our sound engineer and editor is Andy Wood with additional sound design by Elena Pena. The show is produced by Jon Spooner and Alice Massey with support from our friends at Storythings. Live from The Space Shed is an Unlimited Theatre production on behalf of the Unlimited Space Agency. See you for more...

Mini Jon: [01:12:40](#) Live from The Space Shed!

Jon Spooner: [01:12:40](#) Live from The Space Shed soon!