

Rationally Speaking #232: Tyler Cowen on “Defending big business against its critics”

Julia: Welcome to Rationally Speaking, the podcast where we explore the border lands between reason and nonsense. I'm your host, Julia Galef, and today's guest is Tyler Cowen.

Tyler probably needs no introduction to my audience, but in a nutshell, he is an economist at George Mason University, a blogger at marginalrevolution.com, host of the excellent podcast Conversations With Tyler, font of endless knowledge about everything from the best new economics papers to the best restaurants, and of course the author of many thought provoking books, including “The Great Stagnation” -- and just in the last few weeks, “Big Business: a love letter to an American anti-hero.”

Tyler is what I like to call a “high entropy thinker,” which means that it's unusually hard to predict what his position is going to be on any one particular issue, just from knowing his positions on other issues. Which means he's always interesting to talk to.

Tyler, so great to have you on the show.

Tyler: Thank you for having me, Julia.

Julia: The immediate impetus for this episode was the publication of your new book, “Big Business,” which I found to be a great read -- unsurprisingly, because it, in Tyler's style, makes a bunch of counterintuitive but compelling arguments about important things.

So, we're going to start by talking about Big Business, and then I have this queue that's built up, of other things I've been itching to ask you about. So, we'll transition to that at some point in the episode. Sound good?

Tyler: Sure.

Julia: Okay, cool. Big Business starts from the premise that, as you say, we don't love business enough. And also that that's especially true recently. What are some of the trends you were noticing that made you say that?

Tyler: I think if you look at either the left wing or right wing in American politics, there's much more hostility to business right now than there had been 10 years ago. So, Donald Trump will tweet against CEOs. His policies on immigration and trade are mostly unpopular with business. He's unpredictable, and he makes everything about himself. None of which are popular policies with businesses, even businesses which might in some ways favor him.

On the left you have Bernie Sanders and Elizabeth Warren. A few decades ago Sanders wanted to nationalize basically all of American big business. He's now disavowed that, but he gladly calls himself a socialist. Elizabeth Warren wants to break up big tech. There's just so much anti-business rhetoric. Some of it's on social media. And I thought it was time for what I call "a contrarian book that ought not to be contrarian at all."

Julia: Right, yep, well played. One thing that I found interesting about the book is that it's not just an empirical argument that you're making, about why business doesn't deserve the criticism that it's getting, it's also making a ... I don't know whether to call it a moral, or a normative argument? That we should have a different attitude towards business than we do. And we should be more grateful for business, or afford it higher status than we do. Is that an accurate comment?

Tyler: Absolutely, yes.

Julia: Yeah. And I actually kept thinking back to my episode last year with Rob Reich, who I know you know, because you wrote a column about him. He wrote Just Giving, he's a critic of big philanthropy. And his argument was in some ways a mirror image of this. He was arguing that big philanthropists deserve less gratitude, and trust, and status. And your argument is that business deserves more gratitude and trust.

Tyler: That's right. He may be correct about big philanthropy of course.

Julia: Okay, yes, good good. The problem that I had in talking to him, that I also sort of had when reading your book, is that I feel like I don't know how to think about this question of how much status or gratitude some group "deserves." What does that mean? How do you think about that? Or, why do you think it matters how much status or gratitude some entity like business gets?

Tyler: Well, I would start with the notion of factual claims. So, I can wake up any morning and look at my Twitter Feed, and see a fairly large number of factual claims about business of tech that I think are wrong.

So, what I tried to do in this book was just assemble the evidence and evaluate it. Usually when I write a book, I start off very hard trying to be original. And this book in a way was the opposite, I started off determined not to be original at all. Just to look at evidence and assess it. By the time I finished the book, I found I was saying a lot of things no one else was saying.

So, I think there's a general presumption that we should say things that are supported by the evidence, and that's really what I'm directing my discussion toward.

Julia: Well, I guess... okay, so in the episode with Rob when we were talking about the attitude we should have towards philanthropy, it actually seemed like we didn't disagree that much on the facts about the benefits that philanthropy has had, potential harms of philanthropy. But we didn't feel the same about the status question. Or I guess, in that case, his view is that they should get less status, and my view is sort of "I don't understand why does this matter?" Or, "Why is this even a question?"

I'm guess I'm wondering if you think the facts solely determine the status question, or is there something more? Like, I don't know, you might hold the view that we should afford status to entities in society in proportion to how much benefit they give society. And then the facts would imply that businesses should get more status. Is that your view?

Tyler: Sure. And the higher the status the businesses have, the more readily they can attract talented people. I was just looking at the homepage of the New York Times... I think I saw four pieces which were extremely critical of big tech, four maybe out of a total of seven on the opinion page. And big tech is actually in the advertising market, the main competitor of the New York Times, and basically has been beating the New York Times in some critical ways.

Julia: You mean social media?

Tyler: That's right. Newspapers are ailing in part because of competition from Facebook and Google. And the notion that the New York Times takes reader information and sells it to advertisers to use -- most people who read the New York Times, I don't think they're really aware of this, when they read say New York Times criticism of Facebook. But I think we're actually eating into the seed capital of the innovativeness of American business, and willingness of people to support and work with the system.

One of the pieces in the New York Times was a guy saying he didn't want to work for Google any more.

Julia: Because of the harm he felt they were doing?

Tyler: That's correct. So I think Google is having a very strong net positive. There are some significant issues there, which I think are worth discussing in the public sphere. But nonetheless I see a lot of very negative polemic and not enough balanced treatment.

Julia: I see, that starts to pull things together for me -- because my crux I guess was that ... I sort of think of status as a way that society incentivizes people to do things that they're not really being compensated for, but that are beneficial to society overall. Like, we exalt teachers because they're providing this valuable service to the future of our civilization, and they're

not getting paid very well. And we valorize soldiers for putting their lives on the line for not much pay, and so on.

And it seemed to me that big business was getting compensated quite handsomely with -- certainly money and influence, but also a fair amount of status, despite the criticism, often undue criticism, from media.

I guess that's why it was hard for me to get that enthusiastic about a quest to increase businesses' status. But a crux for me would be if it was actually unfairly harming businesses' ability to recruit talent, for unjustified reasons.

Tyler: Also our politics may be on the verge of starting a war against big business. And I also think there's simple value in just knowing the truth, how good is big business? Even if there's no practical ramifications from that.

Julia: Yeah, I agree. Let's jump to your last chapter first. This is the chapter that sets out to answer the question, "If big business is so beneficial, why is it so disliked?"

And your answer is basically that we instinctively judge business by the standards that we apply to people. And we feel betrayed, or wronged when businesses don't live up to those standards. Is that a fair summary?

Tyler: Yes. I think there are multiple motives. Some people view big business as a bit like their parents. It's done too much for them, and they resent it. Other people want it to be their friend, and then they're left waiting on the helpline for 27 minutes which it really just should have been two minutes for a very simple question. And that becomes a personal resentment. It's hard for us to gear our understanding of what can be a quite impersonal order of laws and economic principles.

I think also there are just periodic waves of business hostility in American history. When some bad things happen to the country, some of which might even partly be the fault of business, we tend to take it out on big business disproportionately. And of course that's happened to us in the past.

Julia: So, the story about our unfair anthropomorphized expectations of business -- is that a story that explains the recent increase? Like, has that story actually changed in the last decade, that would explain the recent increase in hostility towards business? Or is the recent increase a separate cause?

Tyler: Well, I think it's both. But a lot of the hostility is directed towards consumer-facing businesses. So, Amazon, Facebook, Google, which we all deal with every day. And that to me suggests some of it, it does come from personal interactions.

There are some good criticisms you could make of Boeing, for instance. [But] it hasn't really resonated with people. And that's because while we fly on planes, we're not confronted with Boeing as a company. So, I think that's one piece of evidence that there is a personal element to the growing dislike of business.

Julia: My skepticism about that story was that it seemed to me that people are actually pretty positive about individual corporations. Not all of them, but if you look at ... there's some poll called the Axios Harris Poll, and they have people rate their attitudes about 100 of the main companies in our economy. Under dimensions like "ethics," or "products and service," and things like that. So I looked at this year's Axios Harris Poll, and most of the companies got a rating of good or excellent.

I don't know, maybe you doubt that poll, maybe it doesn't match other evidence you've seen? But at the same time, you're right about growing opposition to capitalism. I've seen those statistics, especially among millennials.

But what that contrast suggests to me is that the thing that people are mainly angry about is not individual companies who they feel are wronging them, or mistreating them -- it's failures of the system. Which we can talk about.

Does that make sense?

Tyler: Yes, I think people are very far from being consistent in their attitudes. You also could just look at product usage. The number of people that will just climb into an Uber. I think it's really not that they trust that particular driver whom they've never made, but they trust the company Uber to somehow have made sure that this will all work out in the end. So, we're a conflicting mass of intuitions.

But I would stress the biggest and most vocal anti-business forces are media and intellectuals, and people on social media. And the problem is disproportionately concentrated in that. So, if there are polls saying, "Joseph Smith from Kentucky is fine using Google," I don't for a moment doubt that. Clearly something like that is true, or Google would not be profitable.

But nonetheless, in the American intellectual sphere I think you can see a big shift.

Julia: When I read millennial complaints about capitalism, they usually take the form: "The system has failed us. Wages aren't keeping up with cost of living. We have all this student debt. We can't afford healthcare." They

look the sites like GoFundMe turning into a site for people trying to raise money to pay their healthcare costs, to survive.

And then they look at Canada, or Scandinavia, which are less capitalist than the US, and that looks pretty good to them. And so they blame capitalism.

Do you think that they're wrong? Which part of that story is wrong?

Tyler: It's a big, complicated story.

When it comes to student debt, keep in mind the rate of return on higher education, even with debt, is still fairly positive compared to the alternatives. So, I do think we've been doing student debt wrong, but it's not quite the catastrophe people make it out to be.

People do look at Sweden, but they rarely point out that per capita income in West Virginia right now is about the same as that in Sweden. The state that's supposed to be our biggest train wreck is about as rich as Sweden. I'm not saying the quality of public goods is always as high in West Virginia, but I think that fact is not nearly widely enough known.

So, I do think wage growth has been too slow. That's one reason why millennials are disillusioned with many institutions. We should try to address that. What I suggest in the book is the companies paying high wages, are what are sometimes called the super companies -- large companies, very productive. That's how you boost wages, is to have more super companies. So, if you're concerned about slow wages, which I think is a totally genuine issue, you want to be more pro-business, and asking "How can we have more of these wonderful, large, influential companies?"

Julia: What about healthcare?

Tyler: I don't cover healthcare in my book. I think it needs a book all of its own and then some. It's one of the areas in the American economy where government is the most involved. So, supposedly we have a private healthcare system, but our government spends more per capita on healthcare than does France, which has a kind of single payer system. So, I don't think it's anything close to actual capitalism.

I talk about there being too much monopoly in hospitals, I think we should introduce more anti-trust there. But other than that I just made a deliberate decision to keep it out of the book.

Julia: Even if government is involved significantly in healthcare in the US, and even if that is in large part to blame for the high costs, potentially... isn't it still kind of a "No true Scotsman," or "No true capitalism" defense? If this

is our attempt at a capitalist healthcare system, and then it's doing worse than the healthcare systems that are single payer, or even nationalized?

Tyler: Well, for one thing they're not small interventions. The government role in the sector is very, very large.

But I don't think American healthcare is so terrible, per se. So, if you look at the group of people in the world who live the longest, it seems to be Japanese women who live in New Jersey. Not Japanese people living in Japan.

So, adjusting for a number of demographic features, US healthcare is far too expensive, but it doesn't do so terribly. If you look at life expectancy and you take out guns and automobile crashes, US seems to be number one in the world. I'm not sure how much of that comes from our healthcare system. But again, you very often hear a lot of misconceptions that in no way are our indicators better, and we're simply spending more money.

So, I'd say it's a highly mixed system. It's pretty good for a significant chunk of Americans, somewhat terrible for others. I do think we need to reform it, but again, those issues just seemed too complicated for what was constrained from the outset to be basically an 80,000 word book.

Julia: Yeah.

I saw that you commented on wage growth, and said that the main reason it's been so slow is slow productivity growth?

Tyler: Yes.

Julia: From what I read, that's still an open question among many economists, who offer explanations like inflation, or the decline of unions. Do you understand why you disagree with other economists, about how confident we should be that productivity is the main thing?

Tyler: I think those are debated questions on social media and on the internet, but in the actual research literature over the medium to long term, virtually all economists will identify low productivity growth as the main problem.

So, economic discourse has become somewhat politicized. You know, there's a union premium at most of 10 to 15%, and some of that is taken out of workers on the back end through higher prices. And at the 10 to 15% higher wages, fewer people are hired. So, that unions could be the main factor behind slow wage growth since 1973, I don't think that's plausible.

We could talk through the other options, but I think there is a near consensus on the research side that slow productivity growth is the main culprit.

Julia: Okay. As I was reading your book I was trying to think about, If I were a millennial dissatisfied with capitalism, would these arguments convince me? Or would I still have remaining objections?

And one remaining objection that popped up for me is climate change. I think a lot of millennials feel like climate change denial is being primarily fueled by businesses who don't want to suffer the effects of regulation. Who are both, A, pressuring congress to be against regulation, or to deny climate change, and B, funding this kind of climate denial industry.

Do you think that that's wrong? And do you think that that's not a legitimate thing to blame big business for?

Tyler: Well, I think climate change is a grave problem, and I absolutely favor the US government taking aggressive action to do whatever it can to counter it. But keep in mind a lot of the progress we've made has been through fracking, which has replaced coal. And government's had a role in that, but it's essentially a business development. Electronic cars and solar show a lot of promise. Again, I absolutely favor the government aid there, but we will need business being very actively involved to bring those to fruition.

So, what I see is a tendency to kind of villainize or demonize companies, like we somehow have to clear companies out of the way. But companies have to be the biggest part of the solution.

In terms of actually the blame, I think you can blame consumers as much as business. We could also stop eating meat and drivings cars and doing all kinds of things which are not green. And many people do. That's wonderful, if they can manage it.

Julia: I mean, that seems like a small, or an inefficient approach compared to passing regulations.

Tyler: Oh, sure. But I'm just saying if you're going to blame businesses for producing, it's not so different from blaming consumers for consuming.

Julia: Hm. I had one more thought about the reasons support for capitalism might be declining, recently -- which is that for several decades during the Cold War, capitalism might have just been ... like, support for capitalism might have been artificially inflated. Because all of the framing of that period was "communism is the bad guy, capitalism is the good guy."

So, whatever the natural, or base level, of support for capitalism would have been, the actual level was much higher, because of the fight. And so now we're far enough out of that period that that artificial boost has worn off.

What do you think of that theory?

Tyler: That's likely absolutely correct. But keep in mind the artificial boost was, in a sense, bringing us closer to the truth. It's a case of two errors offsetting each other.

Julia: Unjustified true belief.

Tyler: Yeah. Today could be the Martin Gurri thesis -- just as the internet makes people more skeptical of their politics, it could be making them more skeptical or cynical about many other things, including big business.

Which I don't think he wrote about. But I wouldn't rule that out, as yet another explanation for why anti-big business sentiment is on the rise. So, it's really multiple causes.

Julia: Okay. All right, so going back to Big Business -- you have a chapter, I guess a chapter and a half, about increasing market concentration. Like, increasing monopoly power on the part of companies, as one of the fears that people have about business.

And you make the interesting argument that increasing market concentration is not actually bad for consumers -- in most industries, you excepted healthcare from that. Why is that?

Tyler: Well, if you compare today to, say, 20 years ago, in almost every sector you have many more different ways of buying things, many more different things you can buy. Prices are lower, or they haven't gone up much, for almost every item in the economy. Again, healthcare is a big exception. Higher education textbooks are exceptions. But your channels of getting things -- people travel more abroad, you can buy things in other countries. It's just seen remarkable improvements over the last two decades.

So, there are very few sectors where actual market concentration, as a problem, has gone up.

Julia: Yeah, so I found that pretty compelling, but I'm curious how it connects to your thesis in another recent book of yours, *The Complacent Class*. Which came out in 2017, and it was about how Americans' appetite for risk and for change has gone down, and that's a big reason why our economy is stagnating.

So, in that book you seem more concerned about the consequences of concentration. You point out that the rate of new startups has been going down -- since the '80's, I think it's fallen by half or something. And you say that big companies are increasingly risk averse and not innovating.

And you say, "What is driving these developments? Most likely, some leading firms have the ability and intent to launch well known national brands backed by extensive marketing and product development. And other small firms can't match their pace. The result is that some markets have a greater element of winner-take-all. Companies would rather buy up other already established companies than try to succeed with new ideas or their own new product lines."

So, this sounds like it's in contradiction with the model in Big Business -- is it not? Or did your view change?

Tyler: Well, in Complacent Class I do stress that the tech sector has not at all been complacent, where you live, and that's a wonderful thing. And they have dragged a lot of us into this much better world, almost against our will. Or we've been pulled into that world, in a very lazy way.

But I now think, I've looked at more of the evidence on market concentration, and what I say in Complacent Class is too negative, or too pessimistic. And what I say in Big Business is closer to being correct.

There's a lot of evidence, that in many sectors, there are fewer competitors. So, the number of major airlines has gone down to four. And that looks like a kind of concentration.

But it now turns out -- this is what I hadn't known, say, three years ago -- if you look at how many airlines are flying on a particular route in the United States, that hasn't gone down at all. And airlines seem to be at least as competitive as they were before.

So, that's something I learned between writing the two books. And there's a similar kind of truth that applies to many different sectors.

Julia: That makes sense. But, unless I'm not remembering it, you don't really talk about entrepreneurship in Big Business.

Tyler: Well, it's all about entrepreneurship.

Julia: Oh sorry, I meant, in this particular context, "Is entrepreneurship a casualty of increasing market concentration?"

Tyler: No, I think it's more a casualty of slower productivity growth and higher barriers to entry.

Julia: I see. How could we tell the difference?

Tyler: I think if you look at actual markets, you will see prices are not moving against consumers. Again, healthcare is a notable exception. So, you might have a dominant brand, like most people use Google as their search engine. But there's no complaint about the dollar price, right? You may be unhappy with some features of Google.

So, having very large firms, it's not like old style monopoly where they restrict output and raise price. That just doesn't seem to be the problem. Again, outside of healthcare.

Julia: So, just to make sure I understand -- the model there is that people just naturally won't want to try to compete with big businesses, like big established titans, if those established titans are producing well-liked products for low prices?

Tyler: The slowing down of startups seems to be strongest in retail. And probably the most accurate model we have is of these large retailers. Take Nordstrom, which somewhat appeared like dinosaurs. But they have very good data on what consumers want, so they update their product lines.

Where, maybe in the 1980s a company like Nordstrom at some point would have ossified, and simply have fallen behind the market, the way Sears Roebuck did. But a lot of these big retail chains, they just keep on changing and morphing.

I'm not sure how good or bad a bargain that is. I don't discuss it in Big Business. I think in Complacent Class I'm a little skeptical of it, that there's not more true disruption in some way. I think you could argue that either way.

Julia: Okay, all right, cool. I'm going to transition to a different topic right now. A thing that I often wanted to ask you about is the epistemic status of your statements -- not just in Big Business, just in general.

Tyler: Sure.

Julia: So, you've talked multiple times about this idea of "radical uncertainty." I just pulled a quote from a Blogging Heads interview back in 2008 with Will Wilkinson, because I liked the way you described it. You said:

"My most absurd belief, perhaps, is the extent to which I think people should be truly uncertain about almost all of their beliefs. And it doesn't sound absurd when you say it, but I don't on the other hand know anyone who agrees with it. Take whatever your political beliefs happen to be; obviously, the view you hold you think is most likely to be true, but I think

you should give that something like 60:40. Whereas in reality most people will give it 95:5, or 99:1, in terms of probability that it's correct."

So, my question is -- when you speak, or when you write, you sound very confident in your statements. Even when they're about complex models of how the world works, and lots of other smart people and experts disagree with you. You don't come off as someone who's radically uncertain.

I'm just curious, is that intentional? Resolve the apparent inconsistency for me.

Tyler: Well, what does it mean, not to sound very uncertain? Recently I had someone say to me, "Well there's something disconcerting about how you speak. You answer the questions so quickly, I would rather you paused and did a lot of aah and um, because then I would sound more uncertain." But it just means I've thought about it for many years. I'm putting forward what I think is my best shot.

But I would say this: In my Big Business book I think I'm coming closest to common sense, and generally accepted research, than in most of the other things I write. So, I would say I'm somewhat more confident in it. As I said earlier, I set out to write a deliberately unoriginal book.

Julia: Well, but surely there's debate about the causes of wage stagnation. I know there's debate about CEO pay, are CEOs overpaid. It's not totally uncontroversial.

Tyler: Sure. I would say the CEO pay chapter is one of the more controversial, and the chapter on big tax is one of the more controversial.

Julia: Yeah, okay, but that's kind of beside my original point. What I meant by "uncertain" was not the social performance of uncertainty, where you're stammering and using a humble tone, and stuff like that. I don't think that's necessary at all.

But just ... if I were going to advance a claim that seemed like my best guess, but really who knows, I'd be like, "Well, one possibility is X." Or I might say, "Really hard to say, but the most likely thing is X."

But it seems like you, the way you express your claims doesn't ... it sounds the same whether you're saying something that you have 90% confidence in, versus something you might put 10% on but it's your best guess.

Is that right?

Tyler: Well, I think there's plenty of variation in certainty throughout the book. So, when I talk, say, about privacy in the tech chapter, I express a lot of

worries that particular developments may not turn out very well. That would be one example. Different motives for why people don't trust big business.

I think in the book, also in this interview, I express a lot of uncertainty. Well, there's many causes, we don't know exactly how much it's this, how much it's that.

Some claims people make -- "Well there's much more market power everywhere" -- that does seem to me weaker. I'm not sure it's untrue, but I'm pretty sure the best evidence we have right now does not support it. And I'm more skeptical of that than I would be on some of the other issues.

But I would make the more general point... you know, you write things, and what you can write on a blog is very different from how something turns out in either a column or a book. In the latter cases, there are collaborators, and you have to write for the medium. And I actually would prefer it if I could write everything the way I write on my blog. The world does not entirely cooperate. To some extent you can blame business for that, I would add.

Julia: Okay, a related question I've been wanting to ask you is: Let's talk about Straussianism.

Tyler: Sure.

Julia: What is it, and why do you support it, or employ it to the extent that you do?

Tyler: People mean many things by that term. So, there's what Strauss actually taught, which was a complex bundle of views. The value of elites, the mix of, you know, Greek tradition and the Hebrew tradition. A kind of historical pessimism, some would say a skepticism, about democracy.

In general those are not my views, so if someone wants to say I'm not a Straussian, they're on perfectly good grounds.

But the element of Strauss that I buy into is the notion that often you have people writing and not saying exactly what they actually think. And that in general, a close reading of classic texts is an activity with very high return, even if they don't have secret meanings coded into them.

And in those regards, I'm very much a fan of Strauss. So, I would say I sort of fail 80% of the Straussian test, but the parts I like, I don't know any other or better word than to call it Straussian.

Julia: Well -- okay, I don't know if you are going to be at liberty to answer this question, but...

Tyler: I think I am.

Julia: Okay. Well, I think a lot of people are under the impression that you are Straussian not just in how you read texts, but in how you write them. That you are intentionally building in hidden meanings into what you write, that will not be picked up by everyone who reads what you write.

Is that wrong?

Tyler: Well, "hidden" is a tricky word. I think books should be intelligible on multiple levels. The very best books of our civilization, that's certainly the case. The Bible, Homer, I don't pretend to have come anywhere close to that exalted level of writing.

But I do think a lot of my books, especially starting with my early books -- "In Praise of Commercial Culture," "What Price Fame" -- there's a way you can read those as having an anti-commercial message in them as well, in that they're a call for a kind of new cultural elevation of the status of commercialism, so we can revitalize the tradition. That's arguably part of the Straussian reading of those books.

But I don't think it's hidden, or tricking anyone. Writing ought to aspire to be rich and have different levels at which you can learn things from it.

Julia: So now I'm going back over what you said in my head and trying to figure out if what you're *really* saying is that... you know.

I mean, the thing that I think people think is going on, when you write sometimes, is that there are things that you think you can't say. At least not explicitly. And you can only say them as subtext. So you're disavowing that?

Tyler: Absolutely.

Julia: Okay.

Tyler: And on sort of all these controversial issues that people don't want to talk about, my true views on those are not anything that would get me in trouble.

But there is a kind of Straussian reading of Big Business. If you read the last chapter carefully, it is in some way saying the world of business doesn't give us nearly as much freedom as it pretends to. It does in some ways deliver the goods, but it's not some kind of libertarian paradise.

We're all a bit trapped in it, and we talk ourselves into being happy enough with that, because we don't know any other way of getting the goods.

So there's a kind of "deflationary toward business" underlying philosophy, in the whole book. And you could say the subtitle... Well, a "love letter"? It's called an anti-hero; should it be a "like letter"? Is it actually a love letter? Why is it this anti-hero? There are definitely Straussian readings in there.

But again, for me, they're not at all secret. I sort of expect readers are up to that, and if someone asks me, as you have, I'm as forthcoming as I can manage to articulate about that.

Julia: Okay, that's fair. I just want to ask you one more question about your epistemic or communication style:

Are you sometimes, slightly... trolling? I don't know how else to ask that, but I think sometimes it comes across that you're not just plainly and straightforwardly saying the thing that you think is true. You're sort of, you know, slightly mischievously saying a thing that you know, provokes, or...

Tyler: Oh, of course. You might even take out the word "slightly."

Julia: Okay. I wasn't sure how gingerly I had to be.

Tyler: I think it was Megan McArdle who once praised me as being, you know, the greatest troll she knew.

Julia: Oh okay, so I didn't need to be gentle at all, there.

Well, okay, so I'm curious if that... Do you do that because you think that is, like, conducive to discourse? Or do you do it just because it amuses you, and you're not really trying to evaluate whether it's conducive to discourse?

Tyler: I think it amuses me, but it also keeps me motivated and interested, and it's an alternative to being polemic.

Julia: Why is it...

Tyler: Well, take someone like Paul Krugman. There's like the bad people -- typically they're republicans, whatever -- and they're just bad. And the writing is so full of adjectives. To me, it's so non-subtle. And just disappointing, even if you agree with some parts of it.

So I think to try to make points of criticism in a way that are more complex, or stimulate more thought about different ways of reading the text -- it's just more interesting, somehow, to me a better way to write.

I don't really know what works in discourse or not. Like if I knew, here was the best way to have discourse, I'd be more inclined to do it. But I don't. But I sort of know what keeps me going. So I pursue that.

Julia: Okay.

Tyler: And you know, I'm very open to having like open comment section on my blog, responding to emails.

Julia: Yeah, very.

Tyler: Doing a lot of podcasts with people who aren't necessarily those I totally agree with, appearing in debates and public forums. So I think I'm like, very willing to put it out there and respond, so I figure that's the best I can do.

Julia: Okay. So, moving on -- you have an ongoing kind of interesting disagreement with two of your GMU colleagues, Robin Hanson and Bryan Caplan, about whether people should be willing to bet on their beliefs.

Tyler: Yes.

Julia: They argue that, yes, you should. Betting is a way of demonstrating that you're not just bullshitting. It's a way of keeping track of how accurate people are.

And you're not as enthusiastic about the idea. Why is that?

Tyler: Well, as I often say to Bryan, I'm a huge fan of true betting on beliefs, and that's called running a hedge fund. And I know a fair number of people who run or work for hedge funds. They're many of the smartest people I know, and I greatly admire them for betting on beliefs.

But this notion that you're gonna find some people who, every now and then, utter a mistake, and like bet them 35 cents, and have this real macho view that you're out there "standing your ground for truth" -- to me, that's pretty silly.

I would say, let's truly bet on our beliefs. Most people, including Bryan and Robin, are not really willing to do that. That's fine, doesn't bother me. I also do buy and hold in the stock market. But they don't actually bet on their beliefs. It's a kind of affectation.

Julia: Well --

Tyler: The biggest way you can bet on your beliefs, as an intellectual, is to choose a topic and work on it, right? And anyone who's productive does that all the time. It's a way bigger bet than like, the 35 cent bet on, oh like, "Will Britain leave the European Union by this date?"

Julia: Well, oh. There's a bunch of stuff I want to push on there. One thing is that the... It seemed to me that the whole point of making bets --

Tyler: I was trolling Bryan and Robin in that answer, by the way. Just to get back to your earlier question.

Julia: Oh, okay...

Tyler: In case you're wondering.

Julia: Well, okay -- well, then, I mean I'm just going to go back to the trolling and discourse question. Because one of the points against the trolling style, in my view, is just that -- you know, people spend a while trying to figure out... Like, they assume you're serious. And so they update their model of you, and they spend time trying to rebut you. But if you never meant it in the first place, then --

Tyler: No, I meant it, absolutely. You can mean something and still be trolling.

Julia: Oh. Then we're using different definitions of trolling, I guess.

Tyler: Yeah. Okay.

Julia: You just meant, like, your tone was kind of...

Tyler: I'm saying it in a way to provoke them. So I said like, "35 cent bet." They actually bet more than 35 cents.

Julia: Yeah. Got it, okay, okay.

Tyler: You know, it might be 50 dollars or something. But that's my way of sort of belittling them, but in a deliberately jokey way. They know that I know it's not 35 cents. But it feels that way to me, relative to these multi-billion dollar hedge funds. That's my troll there.

Julia: Right. Okay.

Tyler: But I meant what I said.

Julia: Cool, cool, cool. All right.

Well then, getting back to what I was going to say: I thought the whole point of betting on beliefs was that, for most beliefs we have, and most claims that we make publicly, there just isn't a way to, you know, buy a stock or run a hedge fund. Or something that would be a way to put your money where your mouth is on that claim.

There's just a very small subset of beliefs about the world that we have built-in ways to bet on, naturally. So we have to like, do this somewhat artificial way of betting on our beliefs.

Tyler: Your reputation does that much more effectively than these small sums. Like, Nouriel Roubini became famous because he predicted the crash. He would be far less famous and probably far less well-off had he not. So he bet on his belief, and at least once he won big time.

Julia: So that seems... Well, for a specific-enough claim, that seems like it's fine, and that we don't need to set up artificial bets. I mean, I'm sure you're familiar with Tetlock's work on forecasting, and so on.

Tyler: Sure. Great, great stuff.

Julia: Yeah, and so the whole motivation there, for the superforecasting work, was that most experts, even very well respected experts, don't actually... Either they don't state their beliefs precisely enough – like, they leave themselves wiggle room. So there's always ways to claim that they weren't actually wrong, they weren't actually disproven, et cetera, et cetera. And there's no one keeping track, either.

So I felt the whole point was that your reputation doesn't really suffer, as an intellectual, even if your beliefs are actually quite wrong. Unless we're doing this explicit, put-it-down-in-words unambiguously, kind of thing.

Tyler: Well, maybe leaving some wiggle room is in fact the best understanding. But your reputation does suffer. Keep in mind over 99% of people out there just have no positive reputation whatsoever. So those reputations have suffered. The people who get somewhere typically have been partly right about something, at least once, in a significant way, even if it was only luck. So I think the market for reputation works a bit better than the betting advocates think.

But my solution to all this -- I've never been part of Tetlock's tournaments. I don't like his very simple categories of what you're supposed to check.

But I've been blogging every day for 16 years, on every topic I can manage to cover. And there's an open search function on the blog, and I don't delete old posts. And anyone can go back and look at what I said.

And maybe it was super-hedged, and here's you know, seven different scenarios with uncertain probabilities -- but they can still go back and think, gee, did that guy have a good understanding of this or not? And you know, often the matter was that I didn't. But it's there, and that's a kind of record too.

So, I don't see why betting is necessarily better than doing that.

Julia: And you're including making unambiguous predictions, without actually a bet attached, as betting?

Tyler: Most of my predictions are somewhat ambiguous, but I think they should be. The world has a significant ambiguous element.

Julia: And you think that even if everyone's following that policy, it'll still, despite all the ambiguity, it'll still be pretty clear who's got a better understanding of what they're talking about, than other people?

That might just be the crux.

Tyler: Well, I think maybe as clear as it can be. So after the Brexit referendum, I said within a week, you know, "I'm not at all sure this is actually going to happen." That's a totally hedged phrasing.

Julia: Yeah.

Tyler: If I had simply barked out "This ain't gonna happen," that would have been more wrong, right? I didn't know. I still don't know.

Julia: Well yeah, I mean you can put a...

Tyler: But I do think I added to the understanding by making the hedged claim. And maybe I even trolled people a bit at the time. And people started thinking well, maybe there are paths where this doesn't happen.

Julia: Mm-hmm, yeah.

Tyler: And you know, in a Tetlockian tournament, I didn't even enter a clear guess.

Julia: Yeah.

Tyler: But I don't wish I had redone that.

Julia: Okay. Well, one thing you've said about betting -- I don't actually know if this was intended as a troll or not, but I agreed with it -- you said that

betting seemed like it was about comeuppance, like forcing comeuppance on people who are wrong. And that this wasn't productive.

And -- well, I guess I shouldn't say I "agree," period, but I've become pretty sympathetic to the point about the comeuppance nature of betting. Because I think a big problem with betting on beliefs publicly is that losing a bet is only a very small piece of evidence about your judgment. Unless, I guess, it was a very confident bet that you got wrong.

But I think people are justifiably concerned that it will be taken as a large piece of evidence, and made out to be more than it actually is. And so I've come to believe that unless you have confidence that your audience is going to interpret the bet, and update on the bet results appropriately, it's pretty reasonable to not want to bet.

Tyler: And here's the trolling part of me again: I'll say, let's take betting super seriously, and ask, does any major hedge fund out there want to bet on you, by hiring you and giving you money to manage? And if they don't: I mean, there's some betting market that's ruled against you.

And you know, everyone out there who's making these bets is not being hired by the hedge fund. So if we really apply betting at every level of evaluation, you still end up with a somewhat grim prognosis of their understanding.

Julia: Well, it still seems like what they care about would be a small subset of the beliefs -- Like, I don't know, if I'm a psychologist talking about my views of psychology or something, it's not clear how a hedge fund would translate that into...

Tyler: Sure, but current affairs, economics, you know -- a macro hedge fund, if they had a better sense of what would happen, that would be very valuable to them.

Julia: Yeah.

Tyler: Not if you're betting on say, small scientific experiments. But a lot of the betting out there is about like, the world.

Julia: Yeah. Yeah. So your claim is that... Is it that hedge funds can tell who is accurate and who isn't, even if no one has made predictions? And if they're not hiring you, then that is like a sign that you're not accurate? Or is it that hedge funds would... Yeah, what's the claim?

Tyler: I wouldn't say the hedge funds can tell. I'm just suggesting if you take betting to be the standard, you then want to ask: are other people betting on the superior bettors? And if they're not, you know, maybe the superior

bettors are some mix of luck, or temporary skill. Or they're not that impressive after all.

Now you could say, "Oh, but whether or not other people bet on you doesn't mean that much." I'm perfectly happy to accept that conclusion. But then you're down on betting after all. You want to be like, high on betting when you win, but when no one bets on you, all of a sudden betting doesn't matter so much anymore. To me that's a big inconsistency. People want to have it both ways, and be rather selective.

Julia: Okay, I have one more question about the betting issue for you, and it comes from your past self.

Tyler: It's always my past self.

Julia: Yeah. You have many past selves.

This is from the Bloggingheads conversation that I quoted from earlier, from 2008 with Will Wilkinson. So this is Tyler-sub-2008. Quote:

"I want to pin people down and get a sense for how sure they are, and interpret these probabilities as betting odds, if you want. Let's say there's a lot of dying, starving children in India, or Sub-Saharan Africa. And you're offered to bet, and you know that the money won on these bets will go to feed these children and save their lives, and so you have to name what odds you're gonna bet at. And you can name a number. You want to name the best number you can, because you want to save the lives of these children. So I'm not going to allow any evasion here. I don't see why there's not always some pick of a number that's better than a lot of other picks. You're not gonna get it right, so computationally it's hopeless, but look; you've got to give it your best guess." End quote.

So I read that recently, and I was like: That sounds like something I would say! And that sounds like the sort of thing that Bryan and Robin were arguing for, that you were pushing back against.

So have your views changed? Or are those two discussions of betting, or putting odds on your beliefs, different?

Tyler: Well, I'd need to revisit the context for what I said, but I think – again, this could be wrong, if you looked at the whole transcript. I was simply saying it's very useful when people give explicit probabilities. Which I would still agree with.

And with a lot of rhetorical flourish -- I'm not sure I was saying people should bet on them. But just, you can imagine like, what if the lives of these children depended on your numbers? And you can use that as a kind

of mental exercise, to tell yourself, well, you ought to give some numbers. So when people ask me now, "What's the chance of Brexit happening?" I do actually give them a number.

Julia: Oh you do, okay.

Tyler: And my number is 50/50.

Julia: Okay.

Tyler: Maybe that sounds weird, that it's exactly 50/50.

Julia: Nah.

Tyler: But I actually think it's about 50/50. And I think it's good discipline that I give it that number.

Julia: Got it. Okay, so this is useful, this is clarifying. The difference is just that you think it isn't always... That sometimes giving the kind of super-hedged uncertain thing is actually communicating what you want to communicate, in a way that being forced to give a number wouldn't.

Tyler: Yes.

Julia: Okay. Great, excellent. That was helpful, thank you.

So a different topic I wanted to ask you about is this concept that I have dubbed "optimism-ism," which is the belief that optimism is good, and useful, and should be promoted in society.

So you have talked in the past about wanting to reignite some of this post-war American techno-optimism. A quote I pulled from an interview you did with Luigi Zingales, I think, was --

Tyler: Yes.

Julia: "Our whole world..." -- you're talking about the ethos here, of the post-war period -- "That our whole world can be different and better and gleaming, and glorious in some way." Which is a great line. And to get that feeling back, we could really use another grand project like the space program in the post-war period.

This is a strong belief among many of my techno-optimist friends in SF right now -- which maybe originated in large part with you, I'm not sure -- that these positive visions of the future that people had in the 50s and 60s were a big driver of innovation and growth. And so to restart our engine, we need to promote a positive vision like that again.

Tyler: This is my Straussianism, another part of my Straussianism coming out.

Julia: How so?

Tyler: I think successful societies have to be based on some amount of false belief. Now, some of the false belief becomes a self-fulfilling prophecy, so it's by no means totally false. If we were more excited about big projects, we probably would pull more of them off, and that probably would be a good thing.

But nonetheless, there's a bootstrapping element, and if society believed everything that was true, it would be dangerous. Now I don't view myself as going along with a lie, I view myself as a person you can read or listen to, and get something like the true take on things.

Julia: Okay.

Tyler: So maybe my influence isn't beneficial.

Julia: Yeah, that does seem like a difficult needle to thread.

Tyler: Like, I'm a determinist, but if people actually truly believe determinism, society probably wouldn't function very well. I don't worry when I preach determinism. Somehow I know people won't really be swayed.

Julia: Okay, so before I get to the object level stuff about optimism, I'm curious -- would you be fine with other people using the same approach in society?

Like, if they think there's a belief that is not yet quite true, but if people believed it, it would be self-fulfilling... do you think it's fine for them to then promote that not-yet-true thing?

Tyler: Well, "fine" is too simple a word, but to give another example: I'm not myself religious at all. But I'm glad we have religion. And when people promote religion, I think on average they're doing the world good, and I certainly don't try to discourage them.

Julia: Yeah, although deciding not to discourage someone who is making a claim you think is false, is very different from advancing a claim that you think is false.

Tyler: Well, but I'll come out and say, look, I don't believe in this religion, but I also think it's a good thing that it's out there. So I'm trying to show people both sides of the dilemma. And I think belief in grand projects is a bit like religion. It's positive. And it has self fulfilling aspects.

Julia: But in order to get the self-fulfilling benefits, would you need someone else who's not you to go out and say this thing?

Tyler: Oh, of course. If everyone were me, that would really be the nightmare.

Julia: But you do, then, endorse the policy of having some people go out there and say a thing that's not yet true, because it's good for society?

Tyler: I don't know if the word "endorse" is right. I recognize it's necessary. A part of it offends me.

Julia: Okay.

Tyler: I would say I try to explain all sides of the picture. I see the cost-benefit calculus as broadly positive, but I'm not trying to cover up what I see as the negative side of that. So I don't just want to say "endorse."

Julia: Okay. Okay. Right, so, back to optimism-ism:

One question I have is, when you've been talking about this ethos in the past, you've often emphasized the importance of physical innovation in particular. So in that interview with Zingales, you talked about how we need grand projects like the space program to, quote, "Embody our will to alter the physical world."

Is there any reason you value physical innovation over digital?

Tyler: Well, personally, I value digital actually much more. I think there's a subset of the population -- maybe it's 10%, but well under half -- I call them infovores. They love information, they tend to be intellectuals, people in media, people in universities.

Julia: Yeah.

Tyler: And if there's a lot more readily available information, they're much much better off. Clearly I'm one of them, I'm pretty sure you're one of them.

But for most people, kind of subbing in, you know, taking away network TV and giving them Facebook -- I guess they're better off, but not by that much. And they really would prefer more physical goods. And I think those are the people who have not been doing so well, and the infovores have been making out like bandits.

So at the margin I'd really love to see more physical innovation.

Julia: Cool, okay.

Tyler: But not for selfish reasons.

Julia: Yeah, no. Interesting. I wouldn't have guessed that.

Tyler: I would say, for me, bring on a better internet.

Julia: I want to investigate this causal model of techno-optimism causing growth. Because I've been thinking about it, and I'm not quite sure I buy it. It seems to me like the techno-optimistic spirit of the 50s and 60s was more likely an effect of technological growth, as opposed to a cause of it.

So just, you know, looking at a cursory glance, the technology that we associate with that mid-century era, like jet planes or space travel, or nuclear power -- it was invented earlier, right? Often out of military competition. And then I guess another big part of the story is economic growth, which I don't think was... I think it started before the techno-optimism, for other explainable reasons, like winning the war.

And so the story that seems correct to me is: economic growth plus technological innovation causes techno-optimism. Do you think that there's evidence for the opposite causal story, of techno-optimism causing growth, or innovation?

Tyler: When you have these kinds of macro forces, it's very hard to prove. But I think usually the causality runs both ways. So yes, growth boosts optimism, but optimism in turn strengthens growth.

So I think we had some optimism in the 18th century, before growth was high. That's not a proof that causality runs both ways. But I can even remember back to being a kid, like when I was seven -- people asked me, what did I want to be? I just said, "a scientist." I didn't even really know what that was. But I knew the character of the professor on Gilligan's Island, I knew Mr. Spock. It seemed to me scientist was the thing to say.

And someone like me, at age seven now, I think is much less likely to say that. Because the culture has changed. And as a result we probably will get less growth. Can't prove that, but again, I believe the causality goes both ways. Chicken and egg.

Julia: Okay, yeah, so it's significantly a, like, "a priori, common sense" model. "This makes sense." Rather than "look at these technologies, they resulted from techno-optimism."

Tyler: Deidre McCloskey tries to argue, like, ideology is primary, and I don't agree with that either. There's just some kind of murky origin where it's a lot of luck, and a bunch of positive developments end up operating at the

same time, and they get you some kind of takeoff. And then it's self-propelling for some while, and eventually exhausts itself.

Julia: Does boosting techno-optimism seem like a more tractable lever to push on, than other things that plausibly influence innovation?

Tyler: I don't know about that. But you know, I live in the world of ideas. So I'm not going to actually build something, so that's the lever I have.

Julia: Okay, fair.

Tyler: You know, will Elon Musk do more good by actually doing things? Probably. Almost certainly. But I can't do that.

Julia: Okay. I wanted to copy a thing that you did in a Conversations with Tyler episode that I thought was really cool. You called it a “prisoner's dilemma”-style interview, and the way it worked is, you had two guests, Brink Lindsey and Steven Teles -- I hope I pronounced that right.

Tyler: Yes.

Julia: Oh good. They co-authored the book “The Captured Economy” together. And you interviewed them separately, and asked them the same questions, so that listeners could compare their answers. Which was very cool. And so I'm hoping I can do something a little like that with you.

But first, to check: did you happen to listen to my episode a few months ago, with Rob Wiblin?

Tyler: No, I haven't. But I know what it is. And I know Rob, of course.

Julia: Okay, good. No, that's what I was hoping you would say, because I want to ask you the same question that I asked Rob, and then we can compare your answers.

Tyler: Great.

Julia: I asked him -- I'm just gonna read it to you. So it's a nice tight experiment -

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"You did a great episode a few months ago with Tyler Cowen, who wrote the book *Stubborn Attachments*, that was Tyler's argument for longtermism. But the main intervention that he promoted in his book, to promote longterm welfare, was increasing economic growth. As opposed to reducing global catastrophic risk” -- which is Rob's focus, and that's what we had been talking about. “Did you, Rob, feel by the end of the episode,

that you understood why your prescription and Tyler's prescription for maximizing longterm welfare were so different?" End quote.

So, how would you answer that? Do you understand why you and Rob disagree about that?

Tyler: I'm still not sure of the extent of our disagreement. My idea of maximizing long run growth is sustainability of long-run growth, so with an expectation. So that will actually weight catastrophic risk quite highly, to the extent that risk is present.

I'm not sure to what extent I communicated to Rob well that I thought we didn't disagree that much. Am I playing this game correctly, with that kind of answer?

Julia: That's fine. I mean, any answer is fine, if that's your best guess about the nature of your disagreement.

Tyler: My best guess is that at the time I wasn't sure how much I convinced him we weren't that far apart.

Julia: Okay, well I'll tell you now what Rob said. So Rob said basically that you guys seemed to agree 90%.

Tyler: Okay.

Julia: But the divergence seemed to him to come down to two main things, and I'm paraphrasing now.

First, that you think it's more tractable for people to increase growth than to reduce existential risks, which is why you focused on that, or in part why you focused on that, instead of on reducing risks. And I think he disagrees about that.

And then second: you were, it seemed, basically assuming that increasing economic growth wasn't going to be harmful to the "reducing existential risk" cause.

Tyler: Right.

Julia: And sort of treating the two as functionally independent. And saying, yeah, I'm focusing on this; we should also have other people focusing on reducing risk. But treating them as basically independent.

Whereas I think Rob thinks that's not a settled question, and a very important thing to figure out before you go definitively promoting economic growth.

Tyler: And a third answer I would suggest, I may or may not have mentioned it then, is simply there are a number of good books on existential risk, and I didn't think I had much to add to them. Whereas on the growth topic, I thought I had some things to say that other people weren't saying.

Julia: Right, yeah.

Well Tyler, before I let you go, at the end of each episode I like to ask my guest to nominate some book or blog or article or just a person who has influenced their thinking in some interesting way. Changed your mind, or introduced you to some hypothesis that you never considered before.

I'm sure you have many things in that category, but what would you like to nominate?

Tyler: I would like to nominate a region, and that's your region. You know, broadly the Bay Area. And there's not quite a single person who embodies it, but of course you're one of them under the rubric. Scott Alexander would be another. A lot of the people in tech with varying views, Peter Thiel, Patrick Collison, Mark Andreessen. You know many of these people. But they've created some general way of attacking problems that is quite unique and powerful, and the world doesn't see yet like as an intellectual contribution, and that has influenced me greatly.

And I'm not even sure what to call it, or where to tell someone to go who's looking for it. But like, any book I could name, someone else has already named, so what's the point? So I want to name a region, and the kind of regional intelligence of the Bay Area as something really quite extraordinary that right now nowhere else in America is matching. It's a kind of openness, willingness to consider, dig in quickly, rapid back and forth, pretty high level of trust. Willingness to share information pretty openly.

Julia: Do you see it as a culture that has been created in the Bay Area, or is it just like the type of people who like to have conversations like that also end up in the Bay Area?

Tyler: Oh I think it's both. You know, causality both ways. And it's still at the self-reinforcing point, which is wonderful. But you've had particular individuals do a lot to help create it. And again, you're one of them, right?

Julia: Oh well, it's a lovely thought. Is there anything in particular that you think differently about? You don't necessarily have to be able to explain exactly how, but kind of like a general topic area that you think differently about as a result of your interactions with the Bay Area community?

Tyler: Maybe I'm not allowed to say "everything," but just a broader sense of the possibilities --

Julia: No, I'm trying so hard to pin you down!

Tyler: -- in many different areas. And I understand that's not entirely concrete, but what is not taken for granted in Bay Area discussions is maybe the most important contribution they make. So Washington DC discussions, which are their own topic, but they take so much for granted. And that can be useful too. I've learned a lot from those, but Bay Area discussions take far less for granted.

Julia: Like assumptions about how the world works, or about what the other person must believe?

Tyler: That's right, and what can be done, what are the limits, what are the constraints?

Julia: Ah, I see. Interesting.

Tyler: And that can be dangerous too -- again, this is not a complete endorsement. But I think it's something quite fantastic. And most of the world does not really have access to it. [Except] through these imperfect channels, through different blogs or writers -- who again, communicate parts of it, that's fine.

Julia: Yeah.

Tyler: But the thing as a whole is still fairly amorphous, and I'd like to somehow see it be systematized or concretized, in a way that is sort of more enduring, or easier to pass along to people.

Julia: Well, Tyler, thank you again for coming on the show. This has been an excellent conversation. And I want to remind all of our listeners to check out Tyler's new book, *Big Business*, a love letter to an American anti-hero. And I'll link to *Marginal Revolution* and *Conversations with Tyler* -- which, if you like this podcast you'll definitely like *Conversations with Tyler*. And to some of the articles that we mentioned during the conversation.

Tyler, thank you so much.

Tyler: Thank you, it's been a real pleasure.

Julia: This concludes another episode of *Rationally Speaking*. Join us next time for more explorations on the borderlands between reason and nonsense.